# **SIEMENS**

System variable manual Index

# SINUMERIK 840D sl/840Di sl SINUMERIK 840D/840Di/810D

**List of System Variables** 

**Parameter Manual** 

### Valid for

### Control

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#### **SINUMERIK®** Documentation

#### **Printing history**

Brief details of this edition and previous editions are listed below.

The status of each edition is shown by the code in the "Remarks" column.

Status codes in the "Remarks" column.

A .... New documentation.

B .... Unrevised reprint with new Order No.

C .... Revised edition with new status.

Edition	Order-No.	Remarks
03.04	6FC5298-7AE10-0BP0	Α
10.04	6FC5298-7AE10-0BP1	С
04.05	6FC5298-7AE10-0BP2	С
03/2006	6FC5397-6AP10-0BA0	С
11/2006	6FC5397-6AP10-1BA0	С

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#### Liability disclaimer

We have checked that the contents of this document correspond to the hardware and software described. Nonetheless, differences might exist and therefore we cannot guarantee that they are completely identical. The information contained in this document is, however, reviewed regularly and any necessary changes will be included in the next edition.

11/2006 Edition Preface

# **Preface**

#### Structure of the documentation

The SINUMERIK documentation is organized in 3 parts:

- <sup>2</sup> General documentation
- <sup>2</sup> User documentation
- <sup>2</sup> Manufacturer/service documentation

An overview of publications (updated monthly) indicating the language versions available can be found on the Internet at:

http://www.siemens.com/motioncontrol

Select "Support" -> "Technical Documentation" -> "Overview of Publications"

The Internet version of the DOConCD (DOConWEB) is available at: http://www.automation.siemens.com/doconweb

Information about training courses and FAQs (Frequently Asked Questions) can be found at the following web site:

http://www.siemens.com/motioncontrol under menu option "Support"

#### **Target group**

This documentation is intended for project engineers, commissioning engineers, machine operators, service and maintenance personnel.

#### **Benefits**

The Parameter Manual enables the intended target group to evaluate error and fault indications and to respond accordingly.

With the help of the Parameter Manual, the target group has an overview of the various diagnostic options and diagnostic tools.

#### Standard version

This Parameter Manual only describes the functionality of the standard version. Extensions or changes made by the machine tool manufacturer are documented by the machine tool manufacturer.

Other functions not described in this documentation might be executable in the control. This does not, however, represent an obligation to supply such functions with a new control or when servicing.

Further, for the sake of simplicity, this documentation does not contain all detailed information about all types of the product and cannot cover every conceivable case of installation, operation or maintenance.

Preface 11/2006 Edition

#### **Technical Support**

If you have any questions, please get in touch with our Hotline:f

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Phone	+49 180 5050 - 222	+86 1064 719 990	+1 423 262 2522						
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Internet	http://www.siemens.de	http://www.siemens.de/automation/support-request							
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#### Note

Country telephone numbers for technical support are provided under the following Internet address:

http://www.siemens.com/automation/service&support

#### Questions about the documentation

If you have any queries (suggestions, corrections) in relation to this documentation, please fax or e-mail us:

Fax	+49 9131 98 - 63315
E-Mail	mailto:docu.motioncontrol@siemens.com

Fax form: See the reply form at the end of the document.

### **SINUMERIK Internet address**

http://www.siemens.com/sinumerik

### **Objective**

The Parameter Manual is intended for programmers. This manual uses the same data source as the relevant software version. A new List of System Variables manual is delivered with the new software versions.

#### EC declaration of conformity

The EC Declaration of Conformity for the EMC Directive can be found/obtained

"on the Internet:

http://support.automation.siemens.com

under product/order no. 15257461

"at the relevant regional office of the Siemens AG division A&D MC.

11/2006 Edition Preface

#### **Safety Instructions**

This Manual contains information which you should carefully observe to ensure your own personal safety and the prevention of material damage. The notices referring to your personal safety are highlighted in the manual by a safety alert symbol, notices referring to property damage only have no safety alert symbol. The warnings appear in decreasing order of risk as given below.

#### **Danger**

Indicates an imminently hazardous situation which, if not avoided, **will** result in death or serious injury or in substantial property damage.

#### Warning

Indicates that death or severe personal injury will result if proper precautions are not taken.

#### Caution

with a warning triangle indicates that minor personal injury can result if proper precautions are not taken.

#### Caution

without a warning triangle indicates that property damage **can** result if proper precautions are not taken.

#### **Notice**

indicates a potential situation which, if not avoided, **may** result in an undesirable event or state.

If several hazards of different degrees occur, the hazard with the highest degree must always be given priority. A warning notice accompanied by a safety alert symbol indicating a risk of bodily injury can also indicate a risk of property damage.

#### **Qualified Personnel**

The associated device/system may only be set up and operated using this documentation. Commissioning and operation of a device/system may only be performed by qualified personnel. Qualified persons are defined as persons who are authorized to commission, to ground, and to tag circuits, equipment, and systems in accordance with established safety practices and standards.

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System variable manual

### 1.1 List of system variables

#### Properties of system variables

You will find the information below in the table entries of the system variables:

1st line: Data type, identifier, in some cases with index 1, index 2, short name (may not be defined as yet), reference to literature

2nd line: Description

3rd line: Description of field limits [index 1, index 2]

4th line: Axes, NCK version number for introduction of system variables

5th line: Unit, minimum value, maximum value

6th line: Headings of properties with the entries listed below:

- · Preprocessing: Update is performed during preprocessing
- · Main run: Update is performed during main run
- PreProc stop: Preprocessing stop
- MR sync: Main run synchronization
- PP: Use in part program possible
- SA: Use in synchronized actions possible
- OPI: Access possible via operator panel interface
- OEM: Access possible from OEM compile cycles
- Level: Access level required for writing system variables

7th line: read: read properties; possible if X is set

8th line: write: write properties; possible if X is set

9th line: Headings of properties with the entries listed below:

- Attributes
- · Global (refers to all channels)
- Block search
- Link

10th line: Values of attributes

### 1.1.1 Arrangement of system variable information

Туре	Identific	er[Field lin	nit 1,Field	l limit 2]				descriptio n:	1 CICICIO
									e to literature
description	<u>.                                    </u>								interature
Descripti									
description	n of field li	imits:							
Descripti	on of field	d limit 1							
Descripti	on of field	d limit 2							
axis	Axis typ	e 1			NCK ver	rsion:	)		
identifier:	Axis typ								
unit:	Unit	min.:	Minimum	n value		max.: Maximum value			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х	Х	
write:	Х	Х	Х	Х	Х	Х	Х	Х	Access level
attributes:	global	block sear	rch		link	L			
	Х	Search r	un conditi	on	Link co	ndition			

# 1.1.2 R parameters

DOUBLE	R[n]								descripti	0
									n:	
description	<b>า</b> :									
Array var	iable Rn	or R[n] is a	an arithme	etic variable	e of type I	Real and	l is user-d	lefinable.		
				able in the						
				ariable in a			tion.			
				SRAM and				ng the dat	a backup	feature.
description										
The maxi	mum nur	mber of R	variables i	is defined i	in \$MC N	M NUM	1 R PAR	AM.		
axis						NCK ver	sion:	06.00.0	0	
identifier:								00.00.0	•	
unit:	-	min.:	DBL_MIN	٧		•	max.:	DBL_MAX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х	Х	
write:	Х					Х		Х	Х	7
attributes:	global	block sear	rch	•		link				
		Program	sensitive			No rest				

# 1.1.3 Channel-specific synchronized action variables

INT	\$AC M	ARKER[n]							descripti	0	
	-								n:		
description	n:										
Array var	iable \$A	C MARKE	R[n] is us	ed to store	applicati	on-relate	ed integer	arithmetic	results.		
The varia	able is sto	ored in DR	AM or in S	SRAM dep	endina or	SMC N	1M BUFF	ERED AG	MARKE	R. The	
		the variabl							_		
description					,						
The dime	ension is	defined in	MD \$MC_	_MM_NUM	I_AC_MA	RKER.					
axis						NCK ver	sion:	43.02.0	0		
identifier:											
unit:	=	min.:	INT_MIN	l		•	max.:	INT_M	4X		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х			Х	Х	Х	Х		
write:	Х	Х	Х			Х	Х		Х	7	
attributes:	global	block sear	rch	•		link					
		Not class	sified			No restrictions					

INT	\$AC S	YSTEM_M	<b>ARKER</b> [n	1		descripti				
	<b>4</b>			•				n:		
descriptior	1:			<u>.</u>				•	•	
Array var	iable \$A	C_SYSTEM	M_MARK	ER[n] is used t	o store applic	ation-relat	ed integer	r arithmeti	c results.	
The varia	ble is re	served for	SIEMENS	applications.						
The varia	ble is st	ored in DRA	AM or in S	SRAM dependi	ng on \$MC M	M BUFF	ERED AC	C MARKE	R. The	
array ele	ments of	f the variabl	e in volati	ile memory (DI	RAM) are set	to 0 on a l	Reset.	_		
description	of field I	imits:		•	•					
The dime	nsion is	defined in	MD \$MC_	MM_NUM_AC	C_SYSTEM_N	ARKER.				
axis					NCK vei		46.00.0	00		
identifier:										
unit:	-	min.:	INT_MIN	I		max.:	INT_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х		Х	Х	Х	Х	J	
write:	Х	Х	Х		Х	Х		Х	7	
attributes:	global	block sear	ch		link					
		Not class	sified		No restrictions					

DOUBLE	\$AC_P	ARAM[n]							descripti	0	
	. –								n:		
description	n:										
Array var	riable \$A	C PARAM	[n] is used	d to store a	pplication	n-related	Real arith	nmetic res	ults.		
-		ored in DRA			• •					. The array	
		ariable in v					_	_			
description			olatile frie	inory (Brox	arc 3		i a reset.				
			NAD @NAC	NANA NILINA	AC DAI						
	ension is	defined in	MD \$MC	_IVIIVI_INUIVI	_AC_PAI						
axis						NCK version: 43.0			02.00		
identifier:											
unit:	-	min.:	DBL_MII	N			max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access	
										rights	
read:	Х	Х	Х			Х	Х	Х	Х		
write:	Х	Х	Х			Х	Х		Х	7	
attributes:	global	block sear	ch								
		Not class	sified			No restrictions					

DOUBLE	\$AC SY	STEM_PA	ARAM[n]						descriptio	
		_							n:	
description	า:									
variable i	s reserve	d for SIEM	ŒNS app	lications.		• •			thmetic res	
The varia	ible is sto	red in DRA	AM or in S	RAM depe	ending on	\$MC_M	M_BUFFI	ERED_AC	_PARAM.	The array
elements	of the va	riable in vo	olatile me	mory (DRA	AM) are se	et to 0 or	n a Reset.			
description	n of field lir	nits:		-						
The dime	ension is o	defined in I	MD \$MC_	MM_NUM	I_AC_SYS	STEM_P	ARAM.			
axis identifier:						NCK ver	sion:	46.00.0	00	
unit:	-	min.:	DBL_MIN	V			max.:	DBL_M	IAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:	Х	Х	Х			Х	Х		Х	7
attributes:	global	block sear	ch	1	ı	link	1	l .	1	

No restrictions

Not classified

### **1.1.4** Frames

FRAME	\$P_UIFF	R[n]							descriptio		
	*	-11							n:		
description	า:										
Array var	iable \$P_	UIFR[n] is	used to p	orogram se	ettable da	ta manag	gement fra	mes. G50	0, G54 G	3599 can	
be used t	to activate	e the corre	sponding	data mana	agement f	rame. Th	ne data ma	anagemen	t frames a	re stored	
in SRAM	and can	be read in	and out u	ising the d	ata backu	p feature	<b>)</b> .	-			
description	n of field lir	nits:				-					
\$MC_MN	_NUM_L	JSER_FR	AMES is ι	used to pro	gram the	number	of settable	e frames.			
axis		<del>-</del>				NCK vers	sion:	06.00.00			
identifier:											
unit:	-	min.:					max.:				
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access	
										rights	
read:	Х					Х		X			
write:	Х					Х		Х		7	
attributes:	global	block sear	ch	•							
		Not class	sified			No restrictions					

FRAME	\$P_CHE	EDINI							descript	io l
	∌F_CΠE	orkliij							n:	
description	n:									
Array var	iable \$P_	CHBFR[n	] is used t	o program	channel-	specific	basic fram	nes in the	data man	agement
system. (	G500, G5	4 G599	can be us	ed to activa	ate the da	ata mana	agement f	rames. All	active ba	sic frames
									managem	ent frames
			be read i	n and out ι	using the	data bad	ckup featu	re.		
description	n of field lir	nits:								
	/_NUM_E	BASE_FRA	AMES is u	sed to pro	gram the			el basic fra	ames.	
axis						NCK ver	sion:	16.00.0	0	
identifier:		Tracia :	1				T			
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
		1								rights
read:	Х					Х		X		
write:	Х					Х		Х		7
attributes:	global	block sear	ch	,		link				
		Not class	sified			No rest	rictions			

FRAME	\$P_SET	FR							descriptio n:	
descriptio	n:								1	
Variable	\$P SETF	R is used	to prograr	n the syste	em frame	in the da	ta manag	ement syst	em for pre	set actual
								tivated by		
								out using th		
feature.	ŭ							J		•
On a Re	set, the sy	stem fram	ne can be	cleared by	/ configuri	ng Bit 0 i	in			
\$MC_CH	ISFRAME	_RESET_	CLEAR_I	MASK.						
axis	GEOAX					NCK ver	sion:	41.00.00		
identifier:	CHANA	(								
	MACHA	X								
	SPINDLE	Ξ								
unit:	-	min.:	DBL_MIN	١		ı	max.:	DBL_MA	·Χ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:										rights
	Х					Х		Х		
write:	Х					Х		Х		7
attributes:	global	block sear	rch			link				
		Not class	sified			No restr	rictions			
T-12 A N / 1					1				Lelenemintie	
FRAME	\$P_EXT	FR							description:	
descriptio	n:								j	
Variable	\$P FXTF	R is used	to prograi	m the syst	em frame	in the da	ata manac	gement sys	tem for the	e external
								es are store		
		using the								
		stem fram				ng Bit 1 i	in			
		_RESET_				Ū				
axis	GEOAX					NCK vers	sion:	41.00.00	)	
identifier:	CHANA	(								
	MACHA	X								
	SPINDLE	Ξ								
unit:	-	min.:	DBL_MIN	1		•	max.:	DBL_MA	·Χ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights

Χ

Χ

No restrictions

read:

write:

attributes: global

Χ

Χ

block search
Not classified

Χ

Χ

7

FRAME	\$P PA	RTFR						descript	io
	<b>V.</b>							n:	
description	n:							•	
√ariable	\$P PAF	RTFR is use	d to progi	ram the system	frame in the	data man	agement	system fo	r TCARF
	_			e manipulated			•	•	
			,	AM and can be			,		
axis	GEOA)				NCK ver		41.00.0	<u>'</u>	
identifier:	CHANA	=						•	
	MACHA								
	SPIND								
unit:	01 11121	Imin.:	DBL MII	NI		max.:	DDI M	IAV	
uriic.	-		_		DBL_IVI				
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X		Х		
write:	Х				Х		Х		7
attributes:	global	block sea	rch	<u> </u>	link	<u> </u>	I		
		Not class	sified		No rest	rictions			
					I				L
	\$P_TO	OI FR						descript	io
FRAME								-	

FRAME	\$P_TO	OLFR							description	1
									n:	
description	n:									•
and TOF	RAME. 7	This frame	should on	ram the syst ly be manipı AM and can	ulated a	nd activa	ated by the	e system t	function. Th	ne data
axis identifier:	GEOAX CHANA MACHA SPINDL	X X				NCK ver	sion:	41.00.0	00	
unit:	-	min.:	DBL_MIN	V		•	max.:	DBL_M	IAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х		
write:	Х					Х		Х		7
attributes:	global	block sear	rch			link	· ·	1	1	
		Not class	sified			No rest	rictions			

rights

7

Χ

Χ

Χ

Χ

No restrictions

link

### 1.1 List of system variables

FRAME	\$P_WPF	FR							description:	
descriptio	n:				1					
reference	e points. T	Γhe data n						ement sys n be read		
	kup featu									
		stem fram			/ configuri	ing Bit 4 i	in			
		_RESET_	_CLEAR_	MASK.		INCK vers	-!			
axis identifier:	GEOAX					NCK vers	SION:	44.00.00	)	
identiliei.	CHANA	=								
	MACHA SPINDL									
unit:	-	min.:	DBL MII	V			max.:	DBL MA	ΑX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х		
write:	Х					Х		Х		7
attributes:	global	block sea	rch	I	ı	link	1		1	
		Not class	sified			No restr	rictions			
FRAME	IAD OVO	·FD			1				description	n I
1 TO UVIL	\$P_CYC	,FK							n:	
descriptio	n:				•					
										ycles. This
							ta manag	ement frar	nes are st	tored in
		read in a								
		stem fran			/ configuri	ing Bit 5 i	in			
	ISFRAME	_RESET_	_CLEAR_I	MASK.						
axis	GEOAX					NCK vers	sion:	44.00.00	)	
identifier:	CHANA	X								
	MACHA									
	SPINDL	E								
unit:	-	min.:	DBL_MII	N		•	max.:	DBL_M/	4X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
	1	1	1	1	1	1	1	1	1	Last and a Alice

read:

write:

attributes: global

Χ

Χ

block search

Not classified

FRAME	\$P TRA	FR							description	0	
	φι_ιινΑ	11 IX							n:		
description	n:								•		
Variable	\$P_TRAF	R is used	to progra	m the syst	em frame	in the d	ata mana	gement sy	stem for		
				ly be mani							
•	nent fram	es are sto	red in SR	AM and ca	an be read			he data b	ackup feat	ture.	
axis	GEOAX					NCK ver	sion:	50.00.0	0		
identifier:	CHANA	=									
	MACHA										
	SPINDL	E									
unit:	-	min.:	DBL_MIN	V			max.:	DBL_M	AX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access	
										rights	
read:	Х					Х		X			
write:	Х					X X				7	
attributes:	global	block sear	rch		I	link					
		Not class	sified			No resti	rictions				
		•				II.				•	
FRAME	\$P ISO	1FR							description	0	
	\$P_ISO	1FR							description:	0	
description	n:								n:		
description Variable	 n: \$P_ISO1	FR is used		am the sys					n:	G code	
description Variable G51.1 mi	n: \$P_ISO1 irroring.TI	FR is used	should onl	y be manip	pulated a	nd activa	ted via the	e system f	n: or the ISO function. T	G code he data	
description Variable G51.1 mi manager	n: \$P_ISO1 irroring.TI ment fram	FR is used his frame s les are sto	should onluded in SR.	y be manip AM and ca	pulated ar an be read	nd activa d in and d	ted via the out using t	e system f	n: or the ISO function. T	G code he data	
description Variable G51.1 mi manager On reset	n: \$P_ISO1 irroring.TI ment fram , the syste	FR is used his frame s les are sto em frame d	should onl red in SR can be de	y be manip AM and ca leted via th	pulated ar an be read	nd activa d in and d	ted via the out using t	e system f	n: or the ISO function. T	G code he data	
description Variable G51.1 mi manager On reset \$MC_CH	l SP_ISO1 \$P_ISO1 irroring.The ment fram the systen ISFRAME	FR is used his frame stoem frame of ERESET	should onl red in SR can be de	y be manip AM and ca leted via th	pulated ar an be read	nd activa d in and duration of	ted via the out using to bit 0 in	e system f the data b	n: or the ISO unction. T ackup fea	G code he data	
description Variable G51.1 mi manager On reset \$MC_CH axis	n: \$P_ISO1 irroring.TI ment fram , the syste ISFRAME GEOAX	FR is used his frame s les are sto em frame d E_RESET_	should onl red in SR can be de	y be manip AM and ca leted via th	pulated ar an be read	nd activa d in and d	ted via the out using to bit 0 in	e system f	n: or the ISO unction. T ackup fea	G code he data	
description Variable G51.1 mi manager On reset \$MC_CH	splants  \$P_ISO1  irroring.TI  ment fram  the syste  ISFRAME  GEOAX  CHANA	FR is used his frame sees are sto em frame central E_RESET_	should onl red in SR can be de	y be manip AM and ca leted via th	pulated ar an be read	nd activa d in and duration of	ted via the out using to bit 0 in	e system f the data b	n: or the ISO unction. T ackup fea	G code he data	
description Variable G51.1 mi manager On reset \$MC_CH axis	splace of the system of the sy	FR is used his frame soles are stolem frame of RESET	should onl red in SR can be de	y be manip AM and ca leted via th	pulated ar an be read	nd activa d in and duration of	ted via the out using to bit 0 in	e system f the data b	n: or the ISO unction. T ackup fea	G code he data	
description Variable G51.1 mi manager On reset; \$MC_CH axis identifier:	splants  \$P_ISO1  irroring.TI  ment fram  the syste  ISFRAME  GEOAX  CHANA	FR is used his frame so are sto em frame of ERESET	should onl red in SR, can be de CLEAR_I	y be manip AM and ca leted via th MASK.	pulated ar an be read	nd activa d in and duration of	ted via the out using t bit 0 in sion:	e system f the data b	n: or the ISO unction. T ackup fea	G code he data	
description Variable G51.1 mi manager On reset \$MC_CH axis	splace of the system of the sy	FR is used his frame soles are stolem frame of RESET	should onl red in SR can be de	y be manip AM and ca leted via th MASK.	pulated ar an be read	nd activa d in and duration of	ted via the out using to bit 0 in	e system f the data b	n: or the ISO function. T ackup fear	G code he data	
description Variable G51.1 mi manager On reset; \$MC_CH axis identifier:	splace of the system of the sy	FR is used his frame so are sto em frame of ERESET	should onl red in SR, can be de CLEAR_I	y be manip AM and ca leted via th MASK.	pulated ar an be read	nd activa d in and duration of	ted via the out using t bit 0 in sion:	e system the data b	n: or the ISO function. T ackup fear	G code he data ture.	
description Variable G51.1 mi manager On reset, \$MC_CH axis identifier: unit:	spinol sp	FR is used his frame sees are sto em frame cegres FRESET	should only red in SR, can be de CLEAR_I	y be manip AM and ca leted via th MASK.	pulated ar an be read	nd activa d in and curation of	ted via the put using to bit 0 in sion:	e system fine data b	n: or the ISO function. T ackup fear	G code he data ture.	
description Variable G51.1 mi manager On reset. \$MC_CH axis identifier: unit:	spindle	FR is used his frame sees are sto em frame cegres FRESET	should only red in SR, can be de CLEAR_I	y be manip AM and ca leted via th MASK.	pulated ar an be read	nd activa d in and d uration of	ted via the put using to bit 0 in sion:	e system fine data b	n: or the ISO function. T ackup fear	G code he data ture.  access rights	
description Variable G51.1 mi manager On reset, \$MC_CH axis identifier: unit:	spinology of the system of the	FR is used his frame sees are sto em frame cegres FRESET	bhould only red in SR, can be de CLEAR_I	y be manip AM and ca leted via th MASK.	pulated ar an be read	nd activa d in and curation of	ted via the put using to bit 0 in sion:	e system fine data b	n: or the ISO function. T ackup fear	G code he data ture.	

No restrictions

Not classified

is frame ent frame	R is used should or es are stor	nly be ma		tem frame	o in the d			n:	
is frame ent frame	should or es are sto	nly be ma		tem frame	in the d		_		
is frame ent frame	should or es are sto	nly be ma		tem frame	in the				
ent frame	es are sto		nipulated a		: III III <del>C</del> C	ata mana	gement for	or the ISO C	368
		red in SR		and activa	ited via t	ne system	function.	The data	
ha avata			AM and ca	n be read	l in and o	out using t	he data b	ackup featu	ıre.
ne syste	m trame of	can be del	eted via th	e configu	ration of	bit 0 in		·	
				J					
SEOAX					NCK ver	sion:	66.00.0	0	
CHANAX	,								
ЛАСНАХ	(								
PINDLE	<u> </u>								
	min.:	DBL_MIN	١		ı	max.:	DBL_M	AX	
un-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
Х					Х		X		
Х					Х		Х		7
lobal	block sear	ch			link	<b>.</b>		<u>'</u>	
	Not class	ified			No restr	ictions			
									•
P ISO3	FR							descriptio	
_								n:	
A. SI	EOAX HANAX ACHAX PINDLE  n-in X X obal	EOAX HANAX ACHAX PINDLE min.: n-in main run X X Dobal block sear Not class	EOAX HANAX ACHAX PINDLE    min.:   DBL_MIN n-in   main run   runin stp   X         X         Dbal   block search       Not classified	HANAX ACHAX PINDLE    min.:   DBL_MIN   n-in   main run   runin stp   Mrun syn     X	EOAX HANAX ACHAX PINDLE    min.:   DBL_MIN   n-in   main run   runin stp   Mrun syn     X	EOAX HANAX ACHAX PINDLE    min.:   DBL_MIN   n-in   main run   runin stp   Mrun syn   PP   X	NCK version:   Nax.:   NCK version:   N	NCK version:   66.00.0	NCK version:

Variable \$P\_ISO3FR is used to program the system frame in the data management for the ISO G68 3DROT. This frame should only be manipulated and activated via the system function. The data management frames are stored in SRAM and can be read in and out using the data backup feature. On reset, the system frame can be deleted via the configuration of bit 0 in

\$MC_CH	SFRÁME	_RESET_	CLEAR_I	MASK.	J				
axis identifier:	GEOAX				NCK ver	sion:	66.00.0	0	
identilier.	CHANA								
	MACHA	X							
	SPINDL	E							
unit:	-	min.:	DBL_MIN	N		max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х		Х		
write:	Х				Х		Х		7
attributes:	global	block sear	rch		link			,	
		Not class	sified		No resti	rictions			

FRAME	\$P ISO4	IFR							descriptio	
	l -								n:	
descriptio										
									r the ISO	
									on. The da	
								he data b	ackup feati	ure.
				eted via th	ne contigu	iration of	DIT U IN			
axis	GEOAX	_RESET_	CLEAR_I	VIASK.		INCK vers	sion:	00.00.0	^	
identifier:	CHANA	,				I VOIC VOIC	51011.	66.00.0	U	
	MACHA									
	SPINDLI	=								
unit:	SPINDLI	=  min.:	l							
uriit.	-		DBL_MIN					DBL_M		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х		rigino
write:	Х					Х		X		7
attributes:	global	block sear	rch			link				
		Not class	sified		No restrictions					
FRAME	\$P_NCB	FR[n]							descriptio	
descriptio	n·								n:	
		NCBER[n	l is usad t	o program	alohal ha	sic frame	e in the c	lata mana	gement sy	etam
									asic frames	
									agement fr	
				d out usin				aata man	agomont n	arrioc aro
	n of field lir				9					
\$MN MN	NUM C	SLOBAL E	BASE FR	AMES is ι	used to pro	ogram th	e number	of NCU b	asic frame	S.
axis	GEOAX					NCK vers		16.00.0		
identifier:	CHANA	(								
	MACHA	<								
	SPINDLI	<b>=</b>								
•										
unit:	-	min.:					max.:			
unit:	- run-in	min.: main run	runin stp	Mrun syn		PP	max.:	OPI	OEM	access
unit:			runin stp	Mrun syn					OEM	access rights
read:	Х		runin stp	Mrun syn		X		X	OEM	rights
read:	X	main run	·	Mrun syn		X			OEM	
read:	X		rch	Mrun syn		X	SA	X	OEM	rights

FRAME	\$P_UB	FR							descript n:	io
description	1 <u> </u>								J	
Variable	\$P UBF	R is used to	o program	the 1st ba	asic frame	e in the d	lata mana	gement s	system. G	500. G54
		d to activate								
		M and can								
\$P CHB										
Application										
		ns(x,10) : cr	ot(z,45)							
\$P UBFI			( , ,							
axis	GEOAX					NCK ver	sion:	13.00.0	00	
identifier:	CHANA	X								
	MACHA	λX								
	SPINDL	.E								
unit:	-	min.:	DBL_MI	V			max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				Ĭ
write:	Х					Х				7
attributes:	global	block sear	ch			link		I .		
		Not class	sified			No rest	rictions			
FRAME									Idogorint	iol
FRAIVIE	\$P_SE	FRAME							descript n:	.10

FRAME	\$P_SET	ETFRAME   de  n:							description:	0
description	n:				I.				· ·	
Variable scratchin	_	RAME is	used to pr	ogram the	active sy	stem fra	me for pre	eset actua	l value me	emory and
			,	m frame d	lepends o	n the foll	owing ma	chine dat	a:	
	_	ET_MODE	_							
	/IC_CHSF	FRAME_R	ESET_M/	ASK						
axis	GEOAX					NCK ver	sion:	41.00.0	0	
identifier:	CHANA	(								
	MACHAX	X								
	SPINDLE	Ξ								
unit:	-	min.:	DBL_MIN	N			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					X		Х		
write:	Х					Х				7
attributes:	global	block sear	ch	•	I.	link		•	•	
		Not class	ified			No resti	rictions			

FRAME	\$P_EXT	FRAME						descript	tio
dooorintio								n:	
description									
				ogram the act					et.
				m frame depe	nds on the fol	lowing ma	achine dat	a:	
		ET_MODE							
3it1 in \$N	ис_chs	FRAME_R	RESET_M	ASK					
axis	10504	,			INCK ver	cion:	41.00.0	•	
dentifier:	GEOAX				NOR VEI	0			
dentinei.	CHANA								
	MACHA								
	SPINDL	.E							
unit:	=	min.:	DBL_MI	V		max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х		Х		
write:	Х				Х				7
attributes:	global	block sea	rch		link		I.	I .	
		Not class	sified		No rest	rictions			
	•	•			•				•
FRAME	\$P_PAI	RTFRAME						descript	tio
description	<u> </u>							n:	

FRAME	\$P_PAF	RTFRAME							descript	io
									n:	
description	า:									
Variable	\$P_PAR	TFRAME o	letermines	s the active	system t	frame for	r TCARR	and PAR	OT.	
On a Res	set, the a	ctivation of	the syste	m frame de	pends o	n the fol	lowing ma	chine dat	a:	
Bit0 in \$N	IC RES	ET MODE	MASK		•		•			
	_	ESĒT MOI	_							
		ESET VAL								
axis	GEOAX					NCK ver	sion:	41.00.0	0	
identifier:	CHANA									
	MACHA									
	SPINDL									
unit:	_	min.:	DBL MIN				max.:	DBL M	AX	
	run in	main run	_			IPP	SA	OPI	TOEM	1000000
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х		
write:	Х					Х				7
attributes:	global	block sear	rch	I		link		1	1	
		Not class	sified			No rest	rictions			

FRAME	SP TO	OLFRAME						descript	io
	ψ •	· · · · · · · · · · · · · · · · · · ·						n:	
descriptior	า:							•	•
Variable :	\$P TOC	LFRAME (	determine	s the active sys	stem frame fo	r TOROT	and TOF	RAME.	
				em frame deper					
		ET_MODE		•		J			
		ESET MOI							
		ESET VAL							
axis	GEOAX		[]		NCK ver	sion:	41.00.0	00	
identifier:	CHANA						11.00.0		
	MACHA								
	SPINDL								
unit:	01 11101	Imin.:	DDI MI	\1		max.:	DDI M	14.7	
uiiit.	-		DBL_MI				DBL_N		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X		Х		
write:	Х				Х				7
attributes:	global	block sear	rch	1	link		I		
		Not class	sified		No rest	rictions			

FRAME	\$P_WPI	FRAME							descript	io
	. –								n:	
description	n:									
Variable	\$P_WPF	RAME is u	ised to pro	ogram the a	ctive sys	stem fran	ne for wo	rkpiece re	ference p	oints.
On a Res	set, the a	ctivation of	f the syste	m frame de	pends o	n the foll	lowing ma	chine dat	a:	
		ET MODE	•				Ū			
Bit4 in \$N	ис <sup>-</sup> снѕ	FRAME R	ESET M	ASK						
axis	GEOAX					NCK ver	sion:	44.00.0	00	
identifier:	CHANA	Χ								
	MACHA	X								
	SPINDL	E								
unit:	-	min.:	DBL_MIN	١			max.:	DBL_N	IAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х		
write:	Х					Х				7
attributes:	global	block sear	rch	<u> </u>		link		1		
		Not class	sified			No rest	rictions			

FRAME	\$P CY	CFRAME						description	)
	-							n:	
description	า:								
Variable	\$P_CYC	CFRAME is	used to p	rogram the acti	ive system fra	ame for cy	cles.		
On a Res	set, the a	activation of	fthe syste	m frame deper	nds on the fol	lowing ma	achine dat	a:	
Bit0 in \$N	AC RES	SET MODE	MASK	•		·			
		SFRAME_R		ASK					
axis	GEOA>	_			NCK ver	sion:	44.00.0	0	
identifier:	CHANA	λX							
	MACHA	ΑX							
	SPINDI	LE							
unit:		min.:	DBL MII	N.	l l	max.:	DBL N	ΙΔΥ	
	run-in	main run	runin stp	Mrun syn	IPP	SA	OPI	IOEM	access
	Tull-III	Illiaili Iuli	ται ιιι σιρ	Wildir Syll	' '	57	011	OLIVI	rights
read:	Х				X		X		rigino
write:	X				X				7
		1	<u> </u>						,
attributes:	global	block sear	rcn		link				
		Not class	sified		No rest	rictions			
		I							
FRAME	¢D TD	AFRAME						description	)
	Ψι _ ι ι ν	ALIVANIE						n:	
description	j.							•	

frame is configured as follows when a transformation is selected with TRANSMIT or TRACYL:

\$MN\_FRAME\_GEOAX\_CHANGE\_MODE = 1 oder 2

\$MC\_TRANSMIT\_ROT\_AX\_FRAME\_1 = 2 \$MC\_TRANSMIT\_ROT\_AX\_FRAME\_2 = 2 \$MC\_TRACYL\_ROT\_AX\_FRAME\_1 = 2 \$MC\_TRACYL\_ROT\_AX\_FRAME\_2 = 2

axis	GEOAX	(			NCK ver	rsion:	50.00.0	0	
identifier:	CHANA	·Χ							
	MACHA	λX							
	SPINDI	.E							
unit:	-	min.:	DBL_MI	N		max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х		Х		
write:	Х				Х				7
attributes:	global	block sear	ch		link				
		Not class	sified		No rest	rictions			

FRAME	\$P_CH	BFRAME[r	ո]						descript n:	iio
description	n:			L					1	
On a Res Bit0 and	set, the a Bit14 in		f the basic ET_MODE	frame depe	ram the nth a ends on the fo					
description	n of field l	imits:								
The dime	ension is	defined in	\$MC_MM	_NUM_BAS	SE_FRAMES					
axis identifier:	GEOAX CHANA MACHA SPINDI	XX AX			NCK	ver	sion:	16.00.0	00	
unit:	-	min.:	DBL_MII	V	<u> </u>		max.:	DBL_M	IAX	
	run-in	main run	runin stp	Mrun syn	PP		SA	OPI	OEM	access rights
read:	Х					X		Х		
write:	Х				2	X				7
attributes:	global	block sea	rch	1	link		I	1	1	
		Not class	sified		No r	esti	rictions			
FRAME	\$P NC	BFRAME[r	n]	İ					descript	io

FRAME	\$P_NCB	FRAME[n	]						description:	'
description	l:								111.	
Array var	iable \$P_	NCBFRAI	ΛΕ[n] is u	sed to pro	gram the	nth active	e global ba	asic frame	Э.	
On a Res	et, the ac	tivation of	the basic	frame de	pends on	the follow	ing mach	ine data:		
		MC_RESE	_	E_MASK						
		_RESET_	MASK							
	of field lim			NII INA OI	ODAL D	40E ED	A			
		etinea in s	\$IVIN_IVIIVI	_NUM_GL	-ORAL_B	ASE_FRA				
axis identifier:	GEOAX	,				INCK vers	SIOI1.	16.00.0	0	
	CHANAX									
	MACHAX									
	SPINDLE									
unit:	-	min.:	DBL_MIN	١			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:								· · · · · ·		rights
	Х					Х		Х		
write:	X					Х				7
attributes:	global	block sear	ch			link				
		Not class	ified			No restr	ictions			

FRAME	\$P_ACT	BFRAME							n:	
description	า:								ļ11.	
Variable	\$P ACTE	BFRAME d	letermines	the active	e chained	overall b	asic fram	e. This fra	me is prod	uced by
								all valid (se		•
									alculated w	hen a
basic frai	ne is activ	vated.								
On a Res	set, the ac	tivation of	the basic	frames de	epend on	the follow	ving mach	nine data:		
Bit0 and	Bit14 in \$	MC_RESE	ET_MODE	_MASK						
		_RESET_								
	IBFRAME	_RESET_	MASK							
axis	GEOAX					NCK vers	sion:	16.00.00	)	
identifier:	CHANA	(								
	MACHA)									
	SPINDLE									
unit:	-	min.:	DBL_MIN	١			max.:	DBL_M/	٩X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
rood										rights
read:	Х					Х		Х		
write:										
attributes:	global	block sear	ch			link				
		Not class	sified			No restr	ictions			
		•				•				•
FRAME	\$P_BFR	AME							descriptio	
description	l								n:	
		MF is use	ed to prog	ram the 1s	st active b	asic fram	e in the c	hannel. Th	ne variable	is
		CHBFRAM								
		tivation of		frame de	pends on	the follow	ving mach	nine data:		
		MC RESE			ı		Ü			
		RESET		_						
axis	GEOAX					NCK vers	sion:	13.00.00	)	
identifier:	CHANA	(								
	MACHAX	<								
	SPINDLE									
unit:	-	min.:	DBL_MIN	1		I.	max.:	DBL_M/	4X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
rood:	.,					.,				rights
read:	Х					Х		Х		
write:	Х					Х				7
attributes:	global	block sear	ch			link				
		Not class	sified			No restr	ictions			

FRAME	\$P IFR	AME						descript	tio
	¥1 _11 1							n:	
descriptio	n:			<u> </u>					
Variable	\$P IFRA	AME is use	d to progra	am the active s	ettable frame	. A settab	le data m	anageme	nt frame
				ole frame on ex				J	
				ble frame depe				ıta:	
		SET MODE							
	_	ESET MO	_						
_	_	ESET VAL							
axis	GEOA				INCK ver	sion:	13.00.0	١٨	
dentifier:							13.00.0	,0	
	MACHA								
	SPIND								
.,	SPINDI	<u> </u>	1			1			
unit:	-	min.:	DBL_MI	N		max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х		Х		<u> </u>
write:	Х				X				7
attributes:	global	block sea	rch	<u> </u>	link		ı		
		Not class	sified		No rest	rictions			

FRAME	\$P_PFR	AME							descripti	0
	. –								n:	
description	1:									
Variable	\$P PFRA	AME is use	ed to prog	ram the ac	tive progi	rammabl	e frame.			
	_			on a Reset				is configui	red:	
\$MC_PF	RAME_R	ESET_MC	DE = 1							
axis	GEOAX					NCK ver	sion:	13.00.0	0	
identifier:	CHANA	X								
	MACHA	X								
	SPINDLI	E								
unit:	-	min.:	DBL_MIN	V		•	max.:	DBL_M	IAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					X		X		
write:	Х					Х				7
attributes:	global	block sear	ch			link		1	l	
		Not class	sified			No rest	rictions			

FRAME									Ideacriptic	7
FRAME	\$P_ACT	FRAME							descriptio n:	
description	n:				ı				1	
The varia	able \$P_A	CTFRAMI	E determii	nes the ac	tive chain	ed total t	frame. Th	e active tot	al frame is	;
		ne following								
								\$P_ISO1FI		
								_TOOLFRA		
\$P_WPF	RAME: \$	P_TRAFF	RAME: \$F	P_PFRAM	E : \$P_IS	O4FRAM	1E:\$P_C	YCFRAME	-	
	frame is	recalculate	ed each tir	ne a fram	e belongir	ng to the	frame cha	ain is activa	ated and u	pon a
reset.						INCKvor	oion:	T		
axis identifier:	GEOAX	_				NCK ver	Sion:	06.00.00	)	
identinei.	CHANA	-								
	MACHA)									
	SPINDLI									
unit:	-	min.:	DBL_MIN	1			max.:	DBL_MA	λX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	.,					.,		.,		rights
	Х					Х		Х		
write:										
attributes:	global	block sear	rch			link				
		Not class	sified			No resti	rictions			
	I	1				I.				.1
INT	\$P_UIFF	RNUM							descriptio	
description	).								n:	
'		NII IM ie ue	od to data	ormino tho	numbor	of the act	tivo cottab	ole frame. A	\ cottable	data
	· —							ution of G5		
	UIFRN		v[ii] becoi	nes me a	suve seua	ibie irairi	e on exec	ution of GC	000, G54 tt	J G099.
	_UIFRNI									
	_UIFRNI									
			the settal	ble frame	depends	on the fo	llowing m	achine data	a·	
		ET MODE		olo ilalilo	аоронао	011 1110 10		domino dan	<b>.</b>	
		SET MOI								
		SET VAL								
axis						NCK ver	sion:	06.00.00	)	
identifier:								00.00.00	•	
unit:	-	min.:	0				max.:	99		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	V					V			1	rights
write:	Х					Х				
	alah al	blaskasss				limie				
attributes:	giodai	block sear	CU			link				
		Not class	sified			No resti	rictions			

INT	\$P NC	BFRMASK							descripti	0
		_							n:	
description	n:				•					
overall ba	asic fram	BFRMASK in the SP_ACT in the SP_ACT in the SP_SET in the SPESET in the S	BFRAME. selected. (	. The varia	ble is imp	lemente	d in the fo			
axis identifier:						NCK ver	rsion:	16.00.	00	
unit:	-	min.:	0				max.:	0xFFF	F	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	· II	I.	link			u u	
		Not class	sified			No rest	rictions			
		Not class	sified			No rest	rictions			

INT	\$P CHB	FRMASK							description	)
	-								n:	
description	n:									
Variable	\$P_CHBF	RMASK is	s used to	define the	channel-	specific b	asic fram	e included	d in the cal	culation of
the overa	all basic fr	ame \$P A	CTBFRA	ME. The v	ariable is	impleme	nted in th	e form of	a bit mask	in which
the basic	frames c	an be sele	cted. On	a Reset, tl	he mask i	s initialize	ed by			
\$MC_CH	IBFRAME	_RESET_	MASK.				•			
axis						NCK vers	sion:	16.00.0	0	
identifier:										
unit:	-	min.:	0				max.:	0xFFFF		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	•		link	•		•	
		Not class	sified			No restr	ictions			

INT	\$P_CHS	FRMASK							descript	io
									n:	
description	า:									
Variable	\$P CHSI	FRMASK i	s used to	define the	channel-s	specific s	system fra	me inclu	ded in the	calculation
of the ove	erall fram	e \$P_ACT	FRAME.	The variab	le is imple	emented	in the for	m of a bit	t mask in v	vhich the
										ET MASK.
axis				•		NCK ver		51.03.		_
identifier:										
unit:	-	min.:	0				max.:	0x7FF		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	1	I	link	1	ı	1	
		Not class	sified			No rest	rictions			

DOUBLE	\$P AD	[34]						descript	io
		,						n:	
descriptio	n:								
\$P_AD[n	n]								
Active to	ol offsets	3							
n: Param	neter nun	nbers 1 - 31	1						
n = 1-25	\$TC DI	P1 to \$TC_	DP25						
n = 26									
n = 27	\$TC DF	·Η							
n = 28									
n = 29									
n = 30									
n = 31									
descriptio									
n: Param	neter nun	nbers 1 - 31	1						
axis					NCK vei	rsion:	06.00.	00	
identifier:									
unit:	-	min.:	DBL_MII	V		max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	rch		link	1		1	
		Program	sensitive		No rest	rictions			

DOUBLE		Γ[34]							descript n:	io
description	n:									
\$P_AD[n	]									
Active to	ol offsets	transforme	ed							
n: Param	eter num	bers 1 - 31	1							
n = 1-25	\$TC_DF	P1 to \$TC_	DP25							
n = 26	\$TC_DP	CE								
n = 27										
n = 28										
n = 29										
n = 30										
n = 31										
description										
	eter num	bers 1 - 31			-	NOL		1		
axis identifier:						NCK ver	sion:	43.00.0	00	
unit:	-	min.:	DBL_MI	N			max.:	DBL_N	MAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•		link	•	•	•	
	1	Program	sensitive			No rest	rictions			

INT	\$P_DL	NO							descriptio	
d									n:	
descriptio										
\$P_DLN		ffa a t m , mala a	- DI - O F	با برمومید اد	مر حادم مدا	dua af				
		ffset numbe SUMCORF				liue of				
axis	VI_IVIA∧_ T	SUNCORF	C_FER_C	UTTEDGE		NCK vei	rsion:	20.00	20	
identifier:						I TOIL VOI	01011.	20.00.0	00	
unit:	-	min.:	INT MIN			ı	max.:	INT M	AX	
	run-in	main run	_	Mrun syn		PP	SA	OPI	OEM	access
			·	-						rights
read:	Х					Х				
write:										
attributes:	global	block sear	rch		l	link				
	-	Not alone	:f: _ d			No soot	wietie we			
		Not class	sinea			No rest	rictions			
18.11					•					+
INI	\$P_TO	OL							descriptio n:	
descriptio	n:									
\$P TOO										
		g edge D0 -	D'max.'; '	max'= valı	ue of \$MN	I MM N	IAX CUT	TING ED	GE NO	
axis	`	0 0				NCK vei		06.00.0	_	
identifier:			1				ı			
unit:	-	min.:	INT_MIN				max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	\									rights
	Х					Х				
write:										
attributes:	global	block sea	rch			link				
		Not class	sified			No rest	rictions			
INT	\$P_TO	OI NO							descriptio	
		02.110							n:	
descriptio										
\$P_TOO										
									ction is acti	ve
		hould not ge	•		•		•	is active.		
		manageme							II T = 1 am	0
		amming alw SMC CUTT							JLT=-1, or>	0.
		echanism is						iu enois i	can occur.	
								\$P TOO	LNO (the T	no of the
		hich the cu				)L_DL\	, , , , , , , , , , , , , , , , , , ,	Ψι_ισσ	L110 (tile 1	110. 01 1110
			(ET (the c	hanged	tool) can i	return diff	ferent T nun	nbers.		
								olholders/sp		
axis						NCK vei		06.00.0		
identifier:										
unit:	<u> -</u>	min.:	<u>L.</u>				max.:	32000		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
road:	<u> </u>									rights
read:	Х					Х				
write:										
attributes:	global	block sear	rch			link			4	1

Not classified

No restrictions

INT	\$P_TOC	DLP							descriptio	
									n:	
description										
\$P_TOO										
		tool numb						managem	ent).	
		nnot be us								
		nanageme				e used i	nstead.			
		larm delay								
	number =	-1 if the pr	eceding 1	address l	has been					
axis						NCK ver	sion:	20.00.0	0	
identifier: unit:		min.:	1				max.:	20000		
unit.	-							32000		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:										
attributes:	global	block sear	rch			link				
attributoo.	giobai									
		Program	sensitive			No resti	rictions			
					_				_	
DOUBLE	\$P_TOC	DLL[3]							descriptio	
									n:	
description										
\$P_TOO		41.								
Active to description	oi totai ie	ngtn mite:								
		iiilo.								
n: Length	11-3					NCK ver	eion:	00.00.0		
identifier:						NOIX VEI	31011.	06.00.0	10	
unit:	mm	min.:	DBL MI	J		I	max.:	DBL M	IAX	
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	IOEM	access
			. а о ср				0, 1		02	rights
read:	Х					Х				
write:										
attributes:	alobal	block sear	reh			link				
attributes.	giobai	DIOCK Seal	CII			IIIIK				
		Not class	sified			No resti	rictions			
l .										
DOUBLE	\$P TOO	DLO[3]							descriptio	
		• •							n:	
description										
\$P_TOO										
Active to	ol orienta	tion								
description										
n: Compo	onents 1	- 3				NCK ver	oion:	1	_	
identifier:						NCK VEI	51011.	44.00.0	00	
unit:		min.:	DBL MI	J			max.:	DBL M	IAY	
	run-in	main run	_	Mrun syn		IPP	SA	OPI	OEM	access
	i ui i-ii i	Illalii Iuli	ruiiii sip	IVII UIT SYIT		i- F	34	071	OLIVI	rights
read:	Х					Х	+			rigino
write:										-
	L	<u> </u>	<u> </u>			<u> </u>				
attributes:	global	block sear	cn			link				
		Not class	sified			No resti	rictions			

DOUBLE	\$AC TO	OOLO_AC	T[3]					descript	io
	<b>,</b>		-1-1					n:	
description	า:								
\$AC_TO	OLO AC	T[n]							
		orientation							
description	n of field I	imits:							
n: Compo	onents 1	- 3							
axis identifier:					NCK vei	rsion:	51.00.0	00	
unit:	-	min.:	-1.0			max.:	1.0		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х	Х	Ĭ
write:									
attributes:	global	block sear	rch	<u> </u>	link		П	I	
		Not class	sified		No rest	rictions			

DOUBLE	SAC TO	OOLO_EN	D[3]					descripti	0
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	JULU	-[-]					n:	
description	n:			•					•
\$AC_TO	OLO EN	ID[n]							
		active bloc	ck						
description	n of field li	mits:							
n: Compo	onents 1	- 3							
axis identifier:					NCK ver	rsion:	51.00.0	0	
unit:	-	min.:	-1.0		•	max.:	1.0		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		X	Х	Х	Х	
write:									
attributes:	global	block sear	rch		link			1	
		Not class	sified		No rest	rictions			

DOUBLE	\$AC TO	OLO_DIF	F						description	0
		_							n:	
description	า:									
\$AC_TO	OLO_DIF	F								
Remainir	ng angle o	of tool orie	ntation in	active bloc	ck					
axis						NCK ver	sion:	51.00.0	0	
identifier:										
unit:	deg.	min.:	0.0				max.:	360.0		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	Х	Х			Х	Х	X	Х	
write:										
attributes:	global	block sear	ch	1	I	link	<u> </u>			
		Not class	sified			No resti	rictions			

DOUBLE	SVC T	OOLO[3]						descripti	0
	<b>-</b>   -	0020[0]						n:	
description	n:			•					
\$VC_TO	OLO[n]								
Actual or		1							
description	n of field I	imits:							
n: Compo	onents 1	- 3							
axis					NCK vei	rsion:	51.00.0	10	
identifier:							01.00.0		
unit:	-	min.:	-1.0		•	max.:	1.0		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х	Х	3
write:									
attributes:	global	block sear	rch		link				
		Not class	sified		No rest	rictions			
					I.				ı
DOUBLE	\$VC T	OOLO_DIF	F					descripti	0
	<b>+</b> -		-					ln:	

DOUBLE	\$VC TO	OOLO_DIF	F					descript	io
								n:	
description	n:								
\$VC_TO	OLO_DI	FF							
Angle be	tween co	ommand an	nd actual o	orientation					
axis					NCK ver	sion:	51.00.0	0	
identifier:									
unit:	deg.	min.:	0.0			max.:	180.0		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		X	Х	X	X	
write:									
attributes:	global	block sear	rch	•	link	1	1	1	
		Not class	sified		No rest	rictions			

INT	\$VC T	OOLO_STA	<b>Α</b> Τ					descript	io
								n:	
description	า:			•				•	
\$VC TO	OLO ST	ΓAT							
		ion of actua	al orientat	ion					
axis					NCK ver	sion:	51.00.0	0	
identifier:								•	
unit:	-	min.:	-1			max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		X	Х	Х	Х	
write:									
attributes:	global	block sear	rch	I I	link				
		Not class	sified		No rest	rictions			

rights

### 1.1 List of system variables

									ī	
INT	\$P_TC							descriptio n:		
descriptio	n.							11.		
\$P TC										
Active to	olholder									
axis	I				INCK ve	rsion:	20.00.0	20		
identifier:							20.00.0	00		
unit:	-	min.:			l .	max.:	999999			
	run-in	main run	runin stp	Mrun syn	IPP	SA	OPI	IOEM	access	
									rights	
read:	Х				Х					
write:										
attributes:	alohal	block sea	rch		link					
attributes.	giobai	DIOCK Sea	ICII		IIIIK					
		Not class	sified		No rest					
					<u> </u>					
INT	\$AC_T	C						descriptio		
		•						n:		
descriptio										
\$AC_TC										
Active to	olholder									
axis					NCK ve	rsion:	49.00.0	00		
identifier:		Landar .	1			1				
unit:	-	min.:						999999		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access	
									rights	
read:	X	X	Х		X	X	X	X		
write:										
attributes:	global	block sea	rch	I I	link			II.		
		NI.C.I.	··c· · · ·		No restrictions					
		Not class	sitiea							
INT	\$P_TC	NUM						descriptio		
docorintia								n:		
descriptio										
\$P_TCN										
	of availa	ble toolholo	ders in the	channel	INCK	!				
axis identifier:					NCK ve	ISION:	52.00.0	00		
unit:		lmin.:			J	max.: 99999999				
	-		mumber -4:	IMmum accord	IDD				I	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access	

Χ

No restrictions

link

read:

write:

attributes: global

Χ

block search

Not classified

DOUBLE	\$P_TC	ANG[2]							descriptio		
description	n:								n:		
P_TCA	NG[n]										
Active ar	igle of a	toolholder	axis								
description		limits:									
n: Angle	1 - 2					TNOW		r			
axis dentifier:						NCK vei	rsion:	16.00.00			
unit:	_	min.:	DBL MII		1	max.:	DBL N				
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	IOEM	access	
										rights	
ead:	Х					Х					
vrite:											
attributes:	global	block sea	rch	<u> </u>		link					
		Not class	sified			No rest	rictions				
		1101 0100				140 1000					
OOUBLE	¢D TC	DIEELSI							descriptio		
		DIFF[2]							n:		
description											
P_TCD											
		en calculate			f a toolho	older axis	3				
vith angl lescription	e incren	nentation (F	firth tooth	system)							
n: Angle		iiiiiiio.									
i. Angle	1-2			NCK version: 20 00			0.00.00				
dentifier:									20.00.00		
ınit:	-	min.:	DBL_MII	١		max.: DBI			BL_MAX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
ead:	Х					Х				J	
vrite:											
attributes:	global	block sea	rch			link				1	
	3.0.0					No restrictions					
		Not class	sitiea			ino rest	rictions				
NIT	T								Idooorintio		
NT	\$P_TCSOL								descriptio n:		
description	n:								1	<u> </u>	
P TCS	OL										
		ons when a									
		e toolholder									
		o 2 solution	s, the rele	vant value	;						
s returne		:- 0b 4	م طمعین می ما		aa ia iafiu	:4-					
		is 3 when to specified (T									
s always	-	specified (1	COADO),	ine numbe	ei oi soiu	110113					
axis	, 					NCK version:		43.00.00			
dentifier:				45.00							
ınit:	-	min.:				max.: 3					
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
ead:	Х					Х				J	
write:	<del>                                     </del>					1					
attributes:	alohal	block sea	rch			link					
ຜແຕ່ເນີນເຮວ.	910001										
		Not class	sified			No restrictions					

INT	\$P_TCS	TAT			descriptio						
desemble the									n:		
description											
\$P_TCS											
				toolholder							
The varia	able is bit-	coded with	n the follo	wing bit m	eanings:						
0x1											
0x2	The second axis of rotation exists										
0x4	The angles used in the calculation are acquired from an orientation in the frame direction										
0x8	The angles used in the calculation have been specified absolutely										
0x10	The pol	ar axis ang	gle is unce	ertain with	the toolho	older orie	entated in	the frame	direction		
0x1000	The polar axis angle is uncertain with the toolholder orientated in the frame direction  Only the tool is rotatable (kinematic type T)										
0x2000	Only	the workpi	ece is rot	atable (kin	etmatic ty	pe P)					
0x4000	Tool	and workp	iece are r	otatable (k	kinematic	type M)					
The bits	specified	here are n	ot current	ly assigne	d.						
axis				· · · ·		NCK ver	sion:	49.00.0	00		
identifier:											
unit:	-	min.:					max.: INT_MAX				
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access	
										rights	
read:	Х					X					
write:											
attributes: global block search link									L		
		Not class	ified			No restr					

DOUBLE  \$P_TOOLR								descript	io	
								n:		
description	า:									
\$P_TOO	LR									
Active to		(total)								
axis		•			NCK ver	sion:	06.00.00			
identifier:										
unit:	mm	mm min.: DBL_MIN				max.:		DBL_MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				X					
write:										
attributes:	global	block sear	ch	1	link					
		Not class	sified		No rest	No restrictions				

INT	¢D TOO	NDI2200	201		I				descriptio	1
	\$P_100	)LND[3200	נטכ						n:	
description	n:				I				L	1
\$P_TOO										
Number (	of tool ed	ges of tool	t							
description										
t: T numb	per 1 - 32	000								
axis identifier:						NCK ver	sion:	13.00.0	0	
unit:	_	min.:	INT MIN				max.:	INT MA	X	
	run-in	main run	runin stp	Mrun syn	l	IPP	SA	OPI	TOEM	access
	l'air iii	III alli Tall	rumin stp	I wil dir Syri		l	O/ C		OLIVI	rights
read:	Х					Х				
write:										
attributes:	global	block sear	rch Th			link				
	9.000.									
		Not class	sified			No resti	rictions			
500										
BOOL	\$P_TOC	DLEXIST[3	2000]						descriptio n:	
description	l n:								111.	<u> </u>
\$P TOO		1								
		T no. t exi	ist							
description	n of field lii	mits:								
t: T numb	oer 1 - 32	000								
axis						NCK ver	sion:	13.00.0	0	
identifier: unit:		min.:	I=41.0=				max.:	TOUE		
unit.	-		FALSE			100		TRUE	TOE!	T
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	X					Х				rigitis
write:										
	alobal	block sear	roh			link				
attributes:	giobai									
		Program	sensitive			No resti	rictions			
INT	\$P_D								descriptio	
description	u. 								n:	
\$P D										
	med D nı	ımber in IS	C 2 lang	uade mod	<b>e</b>					
						illlina). If	no tool of	fset is acti	ve, the val	ue 0 is
output.										
	offset car	n be select	ed with D	or H. How	ever, this	variable	only ever	contains	the D value	€.
axis					· · · · · · · · · · · · · · · · · · ·	NCK ver		18.00.0		
identifier:		Inches .	T				I			
unit:	-	min.:	INT_MIN				max.:	INT_MA		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х		
write:	1		1					1		
1	i .	i								
attributes:	global	block sear	ch			link				

INT	\$P_H								descriptio	
description	u.								n:	
\$P H										
	med H nu	mber in IS	O 2 land	uage mod	<b>6</b>					
						illlina) If	no tool o	ffset is act	ive, the val	ue 0 is
output.		10 1001 0111	oc name	), III 100 II	.000 = (	97	110 1001 0	11001 10 401	110, 1110 141	40 0 10
	offset can	be select	ed with D	or H. How	ever, this	variable	only eve	r contains	the H value	e.
axis						NCK ver		18.00.0		
identifier:										
unit:	-	min.:	INT_MIN				max.:	INT_MA	λX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
rood										rights
read:	Х					Х		Х		
write:										
attributes:	global	block sear	rch			link	•	•	•	
		Program	sensitive			No rest	rictions			
		i rogiaiii				110 1001				
INT	¢A TOO	LMN[320	001						descriptio	i I
	\$A_TOC	LIVINISZU	ooj						n:	
description	n:								III	_1
\$A_TOO	LMN[t]									
Magazine	e number	of tool t								
-	n of field lir									
	per 1 - 320	000				1				
axis identifier:						NCK ver	sion:	13.00.0	0	
unit:		min.:	INT MIN	<u> </u>			max.:	INT MA	ΔΥ	
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	TOEM	access
	l'air iir	maiii ran	Turnir stp	Wildir Syll			O/ t		OLIVI	rights
read:	Х	Х				Х	Х	Х	Х	<del>                                     </del>
write:										
attributes:	global	block sear	rch			link				-
		Not class	rified			No rest	rictions			+
		NOT Class	Silieu			140 1630	IICIIOIIS			
INT	¢A TOO	I MI NICOO	0001						descriptio	ı T
	\$A_TOC	LMLN[32	oooj						n:	
description	n:									
\$A_TOO										
Magazine	e location	number o	f tool t							
description										
	per 1 - 320	000				INIOIZ				
axis identifier:						NCK ver	'sion:	13.00.0	0	
unit:	_	min.:	INT MIN	<u> </u>			max.:	INT MA	ΔX	
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	OEM	access
		- Indin ruii	. armir stp	, wil dir Syri		[ .			J C LIVI	rights
read:	Х	Х				Х	Х	Х	Х	
write:	1	1	Ì	1		Ì			1	1

attributes: global

block search

Not classified

No restrictions

INT	\$A_MY	MN[32000]							descriptio n:	
description	l 1:								11.	
\$A MYM	N[t]									
Number (	of home r	magazine o	of tool with	n T no. t.						
(A magaz	zine beco	mes the h	ome maga	azine of th	e tool if th	ne tool is	being loa	ded onto a		
magazine	e location	of kind 1	(\$TC_MP	P1=1).)						
Resulting	value =	0 = tool is	not loade	ed (if \$A_T	OOLMN>	0, then	manual to	ol).		
Resulting	value =	-1 = tool m	nanageme	ent is not a	ctive					
		-2 = tool w	ith T no. t	does not	exist.					
description										
t: T numb	er 1 - 32	000					_			
axis						NCK ver	sion:	41.00.00	)	
identifier: unit:		lmin.:	LINIT NAIN	1			lmax.:	INIT NAA	V	
uiii.	-		INT_MIN		1	IDD		INT_MA		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:		Х					Х	Х	Х	
write:										
attributes:	global	block sear	rch		1	link	L		_ I	
		Not class	sified			No resti	rictions			
						•				
INT	\$A_MYI	MLN[3200	0]						descriptio n:	
description	n:				1					
\$A_MYM	LN[t]									
		me magazi								
(A magaz	zine locat	ion becom	es the ho	me magaz	zine locati	on of a to	ool if the to	ool is being	loaded or	nto a

magazine location of kind 1 (\$TC\_MPP1=1).)

Resulting value = 0 = tool is not loaded (if \$A\_TOOLMLN> 0, then manual tool).

Resulting value = -1 = tool management is not active

Resulting value = -2 = tool with T no. t does not exist. description of field limits:

### t: T number 1 - 32000

axis					NCK ve	rsion:	41.00.0	0	
identifier:								-	
unit:	-	min.:	INT_MIN			max.:	INT_MA	١X	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:		Х				Х	Х	Х	
write:									
attributes:	global	block sear	rch		link	<del>.</del>	•	•	
		Not class	sified		No res	trictions			

DOUBLE	\$A MC	NIFACT						descript	ÍO
	ψ, ι							n:	
description	n:			•					
\$A MON	IIFACT								
		monitoring	1						
axis identifier:					NCK ve	rsion:	13.00.0	0	
unit:	-	min.:	DBL_MII	V	JI .	max.:	DBL_N	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			X	X	X	X	
write:	Х	Х	Х		X	Х		Х	7
attributes:	global	block sear	rch		link	<u> </u>	l .	l.	
		Not class	sified		No rest	rictions			

INT	\$P_TO	OLNG							descript	io
	<b>V</b> · _ · · ·								n:	
description	n:				•					•
\$P TOO	LNG									
_		d tool grou	os assign	ed to the c	hannel					
OPI bloc		•								
axis	T .					NCK ver	sion:	42.00.0	0	
identifier:									-	
unit:	-	min.:	INT_MIN				max.:	INT_M	AX]	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х		ľ
write:										
attributes:	global	block sear	ch	1		link				
		Not class	sified			No rest	rictions			

INT	\$P_TO	OLNT						descript	io
	-							n:	
descriptio	n:								
\$P_TOO	LNT								
Number	of define	d tools ass	igned to th	ne channel					
OPI bloc	k type=	TV							
axis					NCK ver	sion:	42.00.0	0	
identifier:									
unit:	-	min.:	INT_MIN	I		max.:	INT_M	4Χ]	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X		X		
write:									
attributes	global	block sear	rch	1	link		L	I	
		Not class	sified		No rest	rictions			

INT	\$P TO	OLT[600]						descript	iio
	-							n:	
descriptio	n:								
\$P TOO	LT[i]								
ith tool nu	umber T								
OPI block									
description	n of field I	imits:							
i= 1,, \$	P_TOOL	.NT							
axis					NCK ver	sion:	42.00.0	0	
identifier:									
unit:	-	min.:	INT_MIN	I		max.:	INT_M	AX]	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X		X		
write:									
attributes:	global	block sea	rch	1	link	-1	I		
		Not class	sified		No rest	rictions			

INT	\$P_TOO	DLD[32000	,12]						descript n:	io
description	n:									
\$P_TOO	LD[t,i]									
ith D no.	of tool wi	th T no. t;	i=1,2							
If t is the	value of	an undefin	ed tool, -2	is returned						
If i is a va	alue outsi	de the per	missible ra	ange, 0 is re	eturned					
OPI block	k type= T	0								
description	n of field li	mits:								
t = 1,,	32000									
i = 1,	., \$P_TO	OLND								
axis						NCK ver	sion:	42.00.0	0	
identifier:			ı				1			
unit:	-	min.:	INT_MIN				max.:	INT_M	AX]	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х		X		
write:										
attributes:	global	block sear	ch	1		link	Į.		1	
		Not class	sified			No restr	rictions			

INT	\$P USI	EKT						descript	io
	ļ00.							n:	
description	n:								
\$P USE	KT (= US	SE Kind of	Tool)						
Is a bit-co	oded val	ue	,						
All tools v	whose pa	arameter \$	TC TP11	has set one of	the bits of \$F	USEKT			
			_	nges. The valu		_	lent conte	nt of	
'all bits a			9	3					
OPI block	k= C/S								
axis					NCK ver	sion:	43.00.0	10	
identifier:							10.00.0		
unit:	-	min.:	INT_MIN			max.:	INT_M	٩X	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	X				X		X		
write:	Х				Х				7
attributes:	global	block sear	rch		link		l .	l	

П	NI	\$P_TOOLNDL[32000,32000]	descr	iptio	
			n:		

description:

\$P\_TOOLNDL[t,d]

Number of DL offsets of D offset specified by T no. t and D no. d

>0 Number of DL offsets

0No DL offset for this D offset

-1Additive offset function not active

-2t is the value of an undefined tool

-3 d is the value of an undefined D offset

OPI block type= TOS; TOE description of field limits:

t = 1, ...., 32000

32000 d = 1.

u – ı,	1., 0_00				INCK v	oroion:	1.0.00.0		
					INCK V	ersion.	43.00.0	00	
identifier:									
unit:	-	min.:	INT_MIN			max.:	INT_M	AX]	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
			·	-					rights
read:	Х				X		Х		
write:									
attributes:	global	block sear	rch	<u> </u>	link		I	<b>I</b>	
		Not class	sified		No res	strictions			

INT	\$P_MA	GN							descriptio	
									n:	
description	n:									
\$P_MAG	iN									
Number	of define	d magazine	es assigne	ed to the ch	nannel.					
> 0Succe	essful rea	ad access	_							
0No mag	azine de	efined								
-1WZMG										
OPI bloc	k= TM									
axis						NCK ver	sion:	43.00.0	0	
identifier:										
unit:	-	min.:	INT_MI	N			max.:	INT_M	4X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х		
write:										
attributes:	global	block sear	rch	I I		link	1			
		Not class	sified			No rest	rictions			

INI	\$P_MA	G[32]						description	
description	). 							n:	
•									
\$P_MAG									
ith maga:									
> 0Succe	essful rea	ad access							
0i is outs	ide the p	ermissible	range						
-1WZMG	is not a	ctive							
OPI bloc	k= TM								
description	า of field I	imits:							
i= 1,, \$	P MAGI	N							
axis					NCK ver	sion:	43.00.0	00	
identifier:									
unit:	=	min.:	INT_MI	V		max.:	INT_M		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х		Х		
write:									
attributes:	global	block sear	ch	<u>, l</u>	link	1	1	1	
·		Not class	sified		No rest	rictions			

INT	\$P MA	GNDIS[320	000.32000	)1				descript	io
			,	•				n:	
descriptio	n:								
P_MAGN	NDIS[ n,	m ]							
Number	of magaz	zines conne	ected to lo	cation m of	internal magazi	ne n.			
> 0Succe	essful rea	ad access							
0No mag	jazine is	connected	to the buf	fer location					
-1WZMG	is not a	ctive							
-2n is no	t the nun	nber of an i	nternal ma	agazine					
-3m is no	t the nui	mber of an	internal m	agazine loca	ation				
OPI bloc									
descriptio	n of field l	imits:							
					load magazine				
	max. nu	mber of a lo	ocation in	the specified	d internal maga				
axis					NCK ve	rsion:	43.00.0	00	
identifier: unit:		Imin.:				Imov :			
uriit.	-		INT_MIN			max.:	INT_M		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
read:									rights
	Х				Х		X		
write:									
attributes:	global	block sear	rch	•	link	•	•		
		Not class	sified		No res	trictions			
					•				
NT	\$P MΔ	GDISS[320	000 321					descript	io

INT	\$P_MAGDISS[32000,32]	descriptio	
		n:	
description	n'		

P\_MAGDISS[I, i]

Number of ith magazine connected to location I of the buffer magazine.

> 0Successful read access

0i is outside the permissible range

-1WZMG is not active

-2m is not the number of a buffer magazine location

-3 no buffer magazine defined

OPI block TPM

description of field limits:

I= 1,..., max. number of a location in the buffer magazine

i= 1,..., \$P\_MAGNDIS[ no. of buffer magazine, refLoc ]

axis					NCK ver	sion:	43.00.0	0	
identifier:									
unit:	-	min.:	INT_MIN	١		max.:	INT_M	λX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х		Х		
write:									
attributes:	global	block sear	rch	•	link				
		Not class	sified		No rest	rictions			

write:

attributes: global

1.1 List of system variables

INI	\$P_MA	GDISL[320	000,32]					n:	5
descriptio	n:								
P_MAGE	DISL[ I, i	]							
Number	of ith ma	igazine con	nected to	location I of th	ne load magaz	ine.			
> 0Succe	essful re	ad access							
		permissible	range						
-1WZMG									
			_	zine location					
	-	gazine defir	ned						
OPI bloc		limita							
descriptio			4! ! 41						
				ne load magaz gazine, refLoc					
ı– τ,, φ	F_IVIAG	NDIS[ NO. C	i ioau iiia	gazirie, reiloc	NCK vei	sion.	43.00.0	10	
identifier:					1.0.0.0	0.0	43.00.0	,0	
unit:	-	min.:	INT_MII	V		max.:	INT_M	4Χ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X		Х		
write:									
attributes:	global	block sea	rch	1	link	l.			
		Not class	sified		No rest	rictions			
	•	•			<u> </u>				
INT	\$P MA	GNS						descripti	0

	φr_iviΔ	GNO							n:	
descriptio	n:			l l					ı	
\$P_MAG	SNS									
Number	of spindl	e locations	/ toolhold	er locations i	in the b	uffer assi	gned to t	he chann	nel.	
> 0Succe	essful rea	ad access								
0No spin	idle locat	tions define	d							
-1WZMG	is not a	ctive								
-3No buf	fer maga	azine define	d							
axis						NCK vers	sion:	43.00.	00	
identifier:										
unit:	-	min.:	INT_MIN	٧			max.:	INT_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				

link

No restrictions

block search

INT	\$P_MA	GS[20]						descript	io
	_							n:	
descriptio	n:								
\$P_MAG	S[ n ]								
nth numb	per of spi	ndle / of to	olholder ir	n buffer					
> 0Succe	essful rea	ad access							
On is out	side the i	permissible	range						
-1WZMG			3 -						
-3No buf	fer maga	zine define	d						
descriptio									
n= 1 r	nax. tool	holder num	ber						
axis					NCK ver	sion:	43.00.	00	
identifier:							10.00.	00	
unit:	-	min.:	INT_MIN	٧		max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:									
attributes:	global	block sear	rch	1	link	1	1	I	
		Not class	sified		No rest	rictions			

IIN I	\$P_MAG	NREL[20]	]						descriptio	
									n:	
description										
\$P_MAG	NREL[ n ]									
Number of	of buffers	assigned t	to the spir	ndle numb	er / toolho	lder nun	nber n			
> 0Succe	ssful read	access								
0No buffe	er location	assigned	to spindle	location						
-1WZMG	is not act	ive	•							
-2n is not	the numb	er of a sp	indle loca	tion						
		ine define								
	of field lim									
n= 1,, r	nax. toolh	older num	ber							
axis						NCK vers	sion:	43.00.0	00	
identifier:										
unit:	-	min.:	INT_MIN	1			max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:										
attributes:	global	block sear	ch	I		link	1			

No restrictions

IINI	SP_MAG	3REL[20,6	500]						uescriptio	
docorintio									n:	
description		_								
P_MAGF										
		r of nth spi	ndle numl	per / toolho	older num	ber				
> 0Succe	essful rea	d access								
0m is out	side the	permissible	e range							
-1WZMG	is not ac	tive								
-2n is not	the num	ber of a sp	indle loca	ition						
-3No buff	er magaz	zine define	ed							
description	n of field li	mits:								
n= 1 r	nax. tooll	nolder num	nber							
m= 1,,										
axis	<del>*** _**** ***</del>					NCK ver	sion:	43.00.0	10	
identifier:								10.00.0	,,,	
unit:	-	min.:	INT_MIN	١		•	max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:										
attributes:	global	block sear	rch	•	l	link	- II		<b>,</b>	
		Not class	sified			No rest	rictions			
		•				•				
INT	\$P MAG	GNH							descriptio	
	. –								n:	
description	1:									

\$P\_MAGNH

Number of defined magazine location type hierarchies assigned to the channel.

> 0Successful read access

0No loca	tion type	hierarchie	s are defir	ned					
-1WZMG	is not a	ctive							
OPI block	k= TT								
axis identifier:					NCK ver	rsion:	43.00.0	00	
unit:	-	min.:	INT_MII	N	•	max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X		Х		
write:									
attributes:	global	block sea	rch		link	<u> </u>	L	I	
		Not class	sified		No rest	rictions			

INT	\$P MAG	GNHLT[MI	SLMAX	HIERAR					descript	io
	CHYNU	_	_						n:	
descriptio	n:								II.	
\$P_MAG										
Number	of defined	d location t	ypes in th	e nth defir	ned hierar	chy				
		d access								
		defined ran								
-1Function	on 'Locati	on type hie	erachy' or	TMMG is	not active					
OPI bloc										
descriptio										
n= 1,, S	P_MAG	NH								
axis						NCK ver	sion:	43.00.0	0	
identifier: unit:		min.:	LINIT NAIN				max.:	INIT NA		
uiiit.	-		INT_MIN			IDD		INT_MA		
l	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	Х					Х	+	X		rights
write:	^					^		^		
attributes:	global	block sear	rch			link				
		Not class	sified			No rest	rictions			
	I									<u> </u>
INT	¢ρ ΜΔ	GHLT[MD_	SIMAYE	IIER ARC					descript	io
		BER,MD_							n:	
	YENTRI	. –		LIVAIVOIT						
descriptio										
•	··· HLT[ n, m	1								
		। of hierarch	v n· n= 1	¢Ρ ΜΔ	GNH: m=	. 1	MAGNIH	ΙΙΤ		
		d access	y 11, 11— 1,	, ψι _ινι/-	CIVII, III-	΄ 1,, ψι	_IVIACINI	IL I		
		defined rar	nae							
		on type hie		TMMG is	not active					
		no defined								
OPI bloc				,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						
	n of field li	mits:								
n= 1,, S	BP MAGI	NH								
m= 1,,										
axis	<u> </u>					NCK ver	sion:	43.00.0	0	
identifier:										
unit:	-	min.:	INT_MIN	1			max.:	INT_MA	АX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	X					X		X		rights
write:	_ ^		-	-	-	_ ^		^		
	ļ.,	<u> </u>	<u> </u>							
attributes:	global	block sear	rcn			link				
		Not class	sified			No rest	rictions			

INT	\$P_MA	GNA						description	)
								n:	
description	n:								
\$P_MAG	iNA								
Number	of define	d adapters	assigned	to the chann	nel.				
> 0Succe	essful rea	d access							
0No ada	oters defi	ned							
-1'Adapte	er' function	n or TMM0	G is not a	ctive					
OPI bloc	k= AD								
axis					NCK vers	sion:	43.00.0	0	
identifier:									
unit:	-	min.:	INT_MIN	٧		max.:	INT_MA	ΑX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X		X		
write:									
attributes:	global	block sear	ch	<u> </u>	link				
	1	Not class	ified		No restr	ictions			1

1111	\$P_MA	GA[600]						n:	
description	<u> </u> 1:							111.	
\$P MAG	A[ i ]								
ith adapte		er							
•		d access							
Di is outs	ide the p	ermissible	range						
		on or TMM		ctive					
OPI blocl									
description	n of field li	mits:							
i= 1,, \$l	P_MAGN	۱A							
axis					NCK ver	sion:	43.00.0	00	
identifier:									
unit:	-	min.:	INT_MI	N		max.:	INT_M	4X	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X		Х		rigitio
write:		1							
attributes:	global	block sear	ch	1	link	I	I	I	
		Not class	sified		No rest	rictions			

Comparison   Com	INT	\$P_MTI	HSDC							descripti	0
\$P_MTHSDC Master toolholder no. or master spindle no. with reference to which the active tool is determined for D offset selectionOSuccessful read access 0No master toolholder or master spindle available. The next D offset works with T01TMMG not available.  If read as an OPI variable, this is valid for the status in the current main run block axis identifier:		. –								n:	
Master toolholder no. or master spindle no. with reference to which the active tool is determined for D offset selection.  >OSuccessful read access ONo master toolholder or master spindle available. The next D offset works with T01TMMG not available.  If read as an OPI variable, this is valid for the status in the current main run block  axis identifier:  unit:  - min.:  -1  run-in main run runin stp Mrun syn PP SA OPI OEM  read: X X X X  write:  attributes: global block search link  Not classified No restrictions  DOUBLE \$AC_MONMIN  Relation between tool monitoring actual value and setpoint.  Threshold for tool search strategy "Load only tools with an actual value higher than threshold"  axis identifier:  unit:  - min.: DBL_MIN  max.: DBL_MAX  run-in main run runin stp Mrun syn PP SA OPI OEM  read: X X X X X X X X X X X X X X X X X X X	-										
D offset selection. >OSuccessful read access ONo master toolholder or master spindle available. The next D offset works with T01TMMG not available.  If read as an OPI variable, this is valid for the status in the current main run block  axis identifier:  unit:  -   min.:   -1   max.:   20    read:   X                              write:                              attributes: global   block search   link    Not classified   No restrictions    DOUBLE   \$AC_MONMIN                description: \$AC_MONMIN                  Threshold for tool search strategy "Load only tools with an actual value higher than threshold"  axis identifier:  unit:   -   min.:   DBL_MIN   max.:   DBL_MAX    read:   X   X   X   X   X   X    write:   X   X   X   X   X   X    write:   X   X   X   X   X    attributes: global   block search   link    link	_										
>0Successful read access 0No master toolholder or master spindle available. The next D offset works with T01TMMG not available.  If read as an OPI variable, this is valid for the status in the current main run block axis   NCK version:   48.00.00				ter spindle	e no. with re	eference	to which	the active	tool is de	termined	for the ne
ONo master toolholder or master spindle available. The next D offset works with T01TMMG not available.  If read as an OPI variable, this is valid for the status in the current main run block  axis identifier:  unit:  - min.:  -1  run-in main run runin stp Mrun syn PP SA OPI OEM  read: X X X X  write:  attributes: global block search link  Not classified No restrictions  DOUBLE \$AC_MONMIN  Relation between tool monitoring actual value and setpoint. Threshold for tool search strategy "Load only tools with an actual value higher than threshold"  axis identifier:  unit:  - min.: DBL_MIN											
The next D offset works with T01TMMG not available.  If read as an OPI variable, this is valid for the status in the current main run block  axis identifier:  unit:  - min.:  -1  run-in main run runin stp Mrun syn PP SA OPI OEM  read:  X X X X  write:  attributes: global block search link  Not classified No restrictions  DOUBLE \$AC_MONMIN  Relation between tool monitoring actual value and setpoint.  Threshold for tool search strategy "Load only tools with an actual value higher than threshold"  axis identifier:  unit:  - min.:  DBL_MIN  run-in main run runin stp Mrun syn PP SA OPI OEM  read:  X X X X X X X X X X X X X X X X X X X											
-1TMMG not available.  If read as an OPI variable, this is valid for the status in the current main run block  axis identifier:  unit:  -   min.:   -1   max.:   20    read:   X     X   X   X    write:   attributes: global   block search   link    Not classified   No restrictions    DOUBLE   \$AC_MONMIN    description:  \$AC_MONMIN    Relation between tool monitoring actual value and setpoint.  Threshold for tool search strategy "Load only tools with an actual value higher than threshold"  axis identifier:  unit:   -   min.:   DBL_MIN   max.:   DBL_MAX    read:   X   X   X   X   X    read:   X   X   X   X   X    write:   -   min.:   DBL_MIN   PP   SA   OPI   OEM    read:   X   X   X   X   X    write:   X   X   X   X   X    write:   X   X   X   X    attributes: global   block search    link	0No mas	ter toolh	older or ma	aster spind	dle availabl	e.					
If read as an OPI variable, this is valid for the status in the current main run block  axis identifier:  unit:  -   min.:   -1   max.:   20  run-in   main run   runin stp   Mrun syn   PP   SA   OPI   OEM    read:   X     X   X   X    write:                          attributes: global   block search   link    Not classified   No restrictions    DOUBLE   \$AC_MONMIN   description:    \$AC_MONMIN   Relation between tool monitoring actual value and setpoint.    Threshold for tool search strategy "Load only tools with an actual value higher than threshold"    axis   identifier:   NCK version:   18.00.00    identifier:   Inin:   DBL_MIN   max.:   DBL_MAX    run-in   main run   runin stp   Mrun syn   PP   SA   OPI   OEM    read:   X   X   X   X   X   X    write:   X   X   X   X   X   X    attributes: global   block search   link	The next	D offset	works with	T0.							
Axis identifier:   Indicate   I	-1TMMG	not avai	lable.								
Identifier:		an OPI	variable, th	nis is valid	for the sta	tus in the			block		
Unit:							NCK vei	rsion:	48.00.0	0	
run-in main run runin stp Mrun syn PP SA OPI OEM  read: X			Tanalia .	1 .				I man a s s s			
read: X	unit:	-	min.:	-1				max.:			
write: attributes: global block search link  DOUBLE SAC_MONMIN  description:  \$AC_MONMIN  Relation between tool monitoring actual value and setpoint.  Threshold for tool search strategy "Load only tools with an actual value higher than threshold"  axis identifier:   NCK version:   18.00.00      write:                                read:                              read:                            write:                          attributes: global   block search		run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
attributes: global block search llink  Not classified No restrictions  DOUBLE \$AC_MONMIN  description: \$AC_MONMIN  Relation between tool monitoring actual value and setpoint. Threshold for tool search strategy "Load only tools with an actual value higher than threshold"  axis identifier: unit: - min.: DBL_MIN max.: DBL_MAX  run-in main run runin stp Mrun syn PP SA OPI OEM  read: X X X X X X X X X X X X X X X X X X X	read:	X					Х		X		
DOUBLE SAC_MONMIN  description:  \$AC_MONMIN  Relation between tool monitoring actual value and setpoint.  Threshold for tool search strategy "Load only tools with an actual value higher than threshold"  axis identifier:  unit:  -   min.:   DBL_MIN   max.:   DBL_MAX    run-in   main run   runin stp   Mrun syn   PP   SA   OPI   OEM    read:   X   X   X   X   X   X    write:   X   X   X   X   X   X    attributes:   global   block search   link	write:										
DOUBLE \$AC_MONMIN  description:  \$AC_MONMIN  Relation between tool monitoring actual value and setpoint.  Threshold for tool search strategy "Load only tools with an actual value higher than threshold"  axis identifier:  unit: -   min.:   DBL_MIN   max.:   DBL_MAX    run-in   main run   runin stp   Mrun syn   PP   SA   OPI   OEM    read:   X   X   X   X   X   X    write:   X   X   X   X   X   X    attributes:   global   block search   link	attributes:	global	block sear	rch			link				
DOUBLE SAC_MONMIN  description:  \$AC_MONMIN  Relation between tool monitoring actual value and setpoint.  Threshold for tool search strategy "Load only tools with an actual value higher than threshold"  axis identifier:  unit:  - min.: DBL_MIN  run-in main run runin stp Mrun syn PP SA OPI OEM  read: X X X X X X X X X X X X X X X X X X X			Not class	sified			No rest	rictions			
description:  \$AC_MONMIN Relation between tool monitoring actual value and setpoint.  Threshold for tool search strategy "Load only tools with an actual value higher than threshold"  axis identifier:  unit:  - min.:  DBL_MIN  run-in main run runin stp Mrun syn PP SA OPI OEM  read:  X X X X X X X X  write:  X X X X X X X X X X  attributes: global block search											
description:  \$AC_MONMIN Relation between tool monitoring actual value and setpoint.  Threshold for tool search strategy "Load only tools with an actual value higher than threshold"  axis identifier:  unit:  - min.:  DBL_MIN  run-in main run runin stp Mrun syn PP SA OPI OEM  read:  X X X X X X X X  write:  X X X X X X X X X X  attributes: global block search	DOUBLE	¢AC M	ONIMIN		i					descripti	0
\$AC_MONMIN Relation between tool monitoring actual value and setpoint. Threshold for tool search strategy "Load only tools with an actual value higher than threshold"    Axis   Identifier:   Identif	200222	∌AC_IVI	CINIVIIIN								
Relation between tool monitoring actual value and setpoint.  Threshold for tool search strategy "Load only tools with an actual value higher than threshold"    NCK version:   18.00.00	description	n:			I						
Threshold for tool search strategy "Load only tools with an actual value higher than threshold"    Axis   Identifier:   Identifi	\$AC MO	NIMN									
Threshold for tool search strategy "Load only tools with an actual value higher than threshold"    Axis   Identifier:   Identifi			tool monito	oring actu	al value an	id setpoin	ıt.				
an actual value higher than threshold"           axis identifier:         NCK version:         18.00.00           unit:         -         min.:         DBL_MIN         max.:         DBL_MAX           run-in         main run         runin stp         Mrun syn         PP         SA         OPI         OEM           read:         X         X         X         X         X         X           write:         X         X         X         X         X         X           attributes:         global         block search         link											
NCK version:   18.00.00											
identifier:         Imax:         DBL_MAX           unit:         -         min.:         DBL_MIN         max.:         DBL_MAX           run-in         main run         runin stp   Mrun syn           PP         SA         OPI   OEM             read:         X         X         X         X         X           write:         X         X         X         X         X           attributes:         global         block search         link							NCK vei	rsion:	18.00.0	0	
Tun-in   main run   runin stp   Mrun syn   PP   SA   OPI   OEM											
read:         X <td>unit:</td> <td>-</td> <td>min.:</td> <td>DBL_MIN</td> <td>V</td> <td></td> <td></td> <td>max.:</td> <td>DBL_M</td> <td>AX</td> <td></td>	unit:	-	min.:	DBL_MIN	V			max.:	DBL_M	AX	
read:         X <td></td> <td>run-in</td> <td>main run</td> <td>runin stp</td> <td>Mrun syn</td> <td></td> <td>PP</td> <td>SA</td> <td>OPI</td> <td>OEM</td> <td>access rights</td>		run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
attributes: global block search link	read:	Х	Х				Х	Х	Х	Х	3 11
attributes: global block search link	write:				1				+		7
3								^		^	'
	allibutes:	giobai	DIOCK Seal	ICH			IIIIK				
Not classified No restrictions			Not class	sified			No rest	rictions			
		1									
INT   \$P_VDITCP[SLTOMA_MAX_NUM_F	INT	¢D VDI	TCDISI TC	MA MAX	/ NIIM E					Idescripti	0
REE_PARAM]					\_I\UIVI_I						
	al a a a minati a m		ANAWIJ								
	•										
description:	_										
\$P_VDITCP[n]				nagement	: ın VDI inte	erface					
\$P_VDITCP[n] Free parameters for tool management in VDI interface	-		mits:								
\$P_VDITCP[n] Free parameters for tool management in VDI interface description of field limits:		1 - 3									
\$P_VDITCP[n] Free parameters for tool management in VDI interface description of field limits: n: Index 1 - 3	axis						NCK vei	rsion:	06.00.0	0	
\$P_VDITCP[n] Free parameters for tool management in VDI interface  description of field limits:  n: Index 1 - 3  axis   NCK version:   06.00.00											
\$P_VDITCP[n] Free parameters for tool management in VDI interface  description of field limits:  n: Index 1 - 3  axis identifier:    NCK version:   06.00.00			lmin :	LINET AGE				Imay :	1817 81	A > /	
\$P_VDITCP[n] Free parameters for tool management in VDI interface  description of field limits:  n: Index 1 - 3  axis identifier:  unit: -   min.:   INT_MIN   max.:   INT_MAX		-		_							laccess

read:

attributes:

X

block search

Not classified

global

Χ

Χ

No restrictions

rights

7

DOUBLE	\$P_ATF	PG[9]							descriptio	
description	l n:								n:	
\$P ATP	G[n]									
Current t	ool-relate	ed grinding	data							
description	n of field li	mits:								
	eter num	nbers 1 -9								
axis						NCK ver	sion:	13.00.0	00	
identifier: unit:		min.:	DDI MIN	. I		<u> </u>	max.:	DDI N	1 A V	
urne.	-		DBL_MIN		T	IDD		DBL_N		1
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sea	rch			link				
		Not class	sified			No rest	rictions			
						1				.1
STRING	\$P TO	DLENV[1]							descriptio	
									n:	
description										
\$P_TOO										
		e of the too		nent store	d under t	he (interr	nal)			
		ot refer to								
		string is re			- 4b					
		, i.e. less tl r of data bl								
		TOOLEN								
description	n of field li	_TOOLLIN	, an alai	iii is genei	aicu.					
•		per of tool e	environme	ents can be	e configur	ed via				
axis						NCK ver	sion:	45.00.0	20	
identifier:								.0.00		
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	X					X				rights
write:		+								
attributes:	global	block sear	ch			link				
		Not class	vificed			No rest	riotiono			1
		NOL CIASS	silleu			No rest	TICUOTIS			
INT	lan =0.				ı				descriptio	1
IINI	\$P_100	DLENVN							n:	
description	n:				l				1	1
\$P_TOO	LENVN									
		ber of defi	ned data l	olocks for o	defining					
tool envir										
axis identifier:						NCK ver	sion:	45.00.0	00	
unit:	-	min.:					max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	OEM	access
					<u></u>					rights
read:	Х					Х				
write:		1		1						1
attributes:	global	block sear	ch	1		link			1	<del>                                     </del>

No restrictions

DOUBLE	\$P AP								description	
									n:	
descriptio	n:									
\$P_AP										
	med angl	e with pola	r coordina	ates in deg	grees					
axis						NCK ver	sion:	43.00.00	)	
identifier: unit:		min.:	l				Imay :			
uriit.	-		DBL_MIN				max.:	DBL_MA		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read: write:	Х					Х				
attributes:	global	block sear	ch			link				
		Not class	sified			No rest	rictions			
AXIS	d	14							description	,
AXIO	\$P_AXN	N1							n:	ή
descriptio	n:									1
Variable	\$P AXN	1 supplies	the currer	nt address	of the ge	ometry a	xis for the	abscissa.		
axis	<del>•                                 </del>	. саррсс			oo go	NCK ver		06.00.00	)	
identifier:								00.00.00	,	
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:										
attributes:	global	block sear	ch	I	I.	link				
		Not class	sified			Not clas	ssified			
AXIS	\$P_AXN	12							description:	)
descriptio	n:									1
Variable	\$P_AXN	2 supplies	the currer	nt address	of the ge	ometry a	xis for the	ordinate.		
axis						NCK ver	sion:	06.00.00	)	
identifier:								00.00.00	•	
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				Ĭ
write:										
attributes:	global	block sear	ch	ı	ı	link	1	1	ı	
		Not class	ified			Not clas	ssified			

AXIS	\$P_AX	N3							descriptio	
description	l n:								n:	
•		I3 supplies	the currer	nt address	of the ge	ometry a	axis for the	e applicat	e.	
axis	i					NCK ve		06.00.		
identifier: unit:		Imin.:					max.:			
uriit.	-								10511	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					X				
write:										
attributes:	global	block sea	rch			link				
		Not class	sified			Not cla	ssified			
						· ·				1
AXIS	\$P_AC	TGEOAX[3	3]						descriptio	
description	u. 								n:	
•		GEOAX[n]	supplies t	he curren	t aeometi	v axis id	entifier de	nendina (	on the plane	ı
									) values. Th	
		also change								
description	n of field l	imits:								
Array ind	lex 1-3 fo	or 1st - 3rd	geometry	axis						
axis						NCK ve	rsion:	13.00.	00	
identifier: unit:		lmin.:					max.:			
	run-in	main run	runin stp	Mrun syn	1	IPP	SA	OPI	IOEM	access
		main run	runin sip	Wirum Sym			SA	OFI	OEIVI	rights
read:	Х					X				
write:										
attributes:	global	block sear	rch			link		•	•	
		Not class	sified			Not cla	ssified			
	L					I.				
INT	\$P GG	[MAX_GGI	ROUP1						descriptio	
-li-ti		. =							n:	
description										
\$P_GG[r		antina of C	function of	Th	a !malass a	f th = O f	atian ia	اممائممان	م مام مسئام م	مطاعمت ا
		ide Fundan							as describe	ı iii tiie
		es the index								
(11110 01101	o matom	,	· output u				ga.oa a	ioooi aii igi	37	
Example	:									
;Check fo	or G55									
IF \$P_G	G[8] == 3	GOTOF L	ABEL_G	55						
description										
	er of G fu	unction gro	up			INCK ve	roioni	1		
axis identifier:						NCK ve	rsion:	06.00.	00	
unit:	_	min.:	0			I.	max.:	INT M	IAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	Х		1	1	-	X				rights
write:	_ ^	1	-	-	-			-		
	alokal	block	roh		]	link				
attributes:	giobai	block sear				link				
		Not class	sified			Not cla	ssified			

n: Number of G function group

run-in

min.:

main run

Χ

block search
Not classified

runin stp

Mrun syn

axis

read:

write:

attributes: global

identifier: unit: \$P\_EXTGG[MAX\_EXT\_GGROUP]

				_					n:	
description	n:									
\$P_EXT										
							e. The index		function is	supplied
as descri	ibed in the	<b>Function</b>	Description	on "ISO Di	alects" Se	ection "	G command	is".		
(This also	o matches	s the index	coutput at	the PLC i	nterface v	vhen co	onfigured ac	cordingly)		
Example	:									
;Check fo	or G55 in	ISO Dialed	ct T							
		== 2 GOT		L G55						
· –										
description	n of field lir	nits:								
n: Numbe	er of G fu	nction grou	aL							
axis			•			NCK ve	ersion:	16.00.00		
identifier:										
unit:	-	min.:	0				max.:	INT_MAX	X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:										
attributes:	global	block sear	rch			link				
	9.000.									
		Not class	sified			Not cla	assified			
		•				•				•
INT	\$A GGI	MAX GG	ROUP1						descriptio	
	·								n:	
description										
\$A_GG[r	-									
							on The inde			
as descri	ibed in the	e Program	ming Guid	de Fundam	nentals, S	ection '	List of G fur	nctions/pre	eparatory f	unctions".
(This also	o matches	s the index	coutput at	the PLC i	nterface v	vhen co	onfigured ac	cordingly)		
Example	:									
;Check fo	or G55 in	synchroniz	zed action	l						
		== 3 DO .								
description	n of field lir	nits:								

NCK version:

Not classified

max.:

Χ

SA

16.00.00

INT\_MAX

Χ

OEM

Χ

access rights

OPI

BOOL	\$P_SE	ARCH							descript	0
d									n:	
descriptio										
\$P_SEA		\ '6 la la al a		. (*						
Returns	TRUE (1	) if block se	earch is a	ctive						
axis						NCK vei	sion:	06.00.0	00	
identifier:								00.00.	00	
unit:	-	min.:	FALSE			-	max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:										
attributes:	global	block sea	rch			link				
		Not class	sified			Not clas	ssified			
BOOL	\$P_SE	ARCH1							descript	0
									n:	
descriptio										
\$P_SEA		\ : <b>f</b>  -								
Returns	TRUE (1	) IT DIOCK SE	earch with	calculation	is active	€.				
axis						NCK vei	sion:	06.00.0	00	
identifier:								00.00.	00	
unit:	-	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:										
attributes:	global	block sear	rch			link				
		Not class	sified			Not cla	ssified			
		•								
BOOL	\$P_SE	ARCH2							descript	0
descriptio	n·								n:	
\$P_SEA										
		) if last sole	acted coar	ch type was	s "block	coarch v	vithout cal	culation"		
Retuins	INOL (I	) II Iasi sele	cieu seai	cir type was	S DIUCK	Scarcii v	vitilout ca	cuiation .	•	
axis						NCK vei	sion:	06.00.0	00	
identifier:										
unit:	-	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:										
attributes:	global	block sear	rch			link				
		Not class	sified			Not cla	ssified			

INT	\$P_SEA	RCHL							descriptio	
									n:	
description										
\$P_SEA										
		elected se								
	-	s to PI serv	ice _N_FI	NDBL)						
0 : No se	arch									
1 : Searc	h without	calculation	n							
2 : Searc	h with ca	Iculation or	n contour							
3: Reser	ved									
4 : Searc	h with ca	Iculation at	t end of bl	ock						
5 : Searc	h in exte	nded progr	am test							
axis						NCK ver	sion:	16.00.0	10	
identifier:										
unit:	-	min.:	0				max.:	5		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Χ				
write:										
attributes:	alobal	block sear	rch			link				
allibules.	giobai	DIOCK Seal	CII			IIIIK				
		Not class	sified			Not class	ssified			
										Į.
BOOL	\$P_SUE	DAD[n]							descriptio	
	ψι _ <b>50</b> L	n Ardiil							n:	
description	n:								•	l .
\$P SUB	PAR[n]									
Interroga	te whethe	er paramet	ter n was a	actually pr	ogramme	d (TRUE	e) on subr	outine		
		r transfer,								
	er (FALSE			,		•				
description										
n: Param	eter num	bers 1 to r	accordin	a to definit	tion in PR	OC instr	uction			
axis				J		NCK ver		14.00.0	10	
identifier:								11.00.0	.0	
unit:	-	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
				•						rights
read:	Х					Х				
write:										
attributes:	dlobal	block sear	rch			link				
allibules.	giobai	DIOCK Scal	CII			IIIIK				
		Not class	sified			Not class	ssified			
	L									<u>I</u>
BOOL	\$P_CTA	BDFF							descriptio	
	φr_C17	IDDLI							n:	
description	n:									l.
Variable	\$P CTAI	BDEF dete	rmines wh	nether a cu	urve table	definitio	n is active	<b>)</b> .		
axis	<u> </u>					NCK ver		13.00.0	10	
identifier:								10.00.0	.0	
unit:	-	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
			- 4							rights
read:										
.ouu.	Х					Х				

attributes: global

block search

Not classified

BOOL	\$P_IPTR	LOCK							descripti	0
description	u.								n:	
\$P IPTR										
· <del>-</del>		or undating	n the inter	ruption po	inter (OP	l block In	terruntion:	Search)		
				OCK/IPTR					O IPTR	l OCK.
				dated whe				,,,,,o_,, ,o ,	<u></u>	200.
				the interru			u. 0			
axis					- p	NCK vers	sion:	52.00.0	0	
identifier:								02.00.0		
unit:	-	min.:					max.:	1		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					X				
write:										
attributes:	global	block sear	ch	ı	l .	link	Ļ	I .	II.	
		Not class	sified			Not clas	sified			
						l				
BOOL	\$P DEL	AYFST							descripti	0
	-								n:	
description										
\$P_DEL/										
				is active o	r not dep	ending or	າ part proເ	gram com	mand	
	STON/DE	LAYFSTO	DF.							
Note:										
	•	•		32 can be	•	ted only l	by a synch	nronized a	action	
due to th	e restriction	on to motion	on blocks	and dwell	times					
	_DELAYI									
FALSE (	0) -> Dela	y stop are	a is not a	ctive						
TRUE (1	) -> Delay	stop area	is active							
axis						NCK ver	sion:	54.00.0	0	
identifier:										
unit:		I !	1							
driit.	-	min.:	FALSE				max.:	TRUE		
unit.	- run-in	min.: main run	FALSE runin stp	Mrun syn		PP	max.: SA	TRUE OPI	OEM	access
read:	run-in			Mrun syn		IPP X		_	OEM	access rights

Χ

Not classified

link

Χ

block search

Not classified

write:

attributes: global

BOOL	\$AC D	ELAYFST						descript	10
	-							n:	
lescriptio	n:								
SAC DE	LAYFST								
_			d actions v	whether delay	stop area is a	ctive or no	ot due to		
				N/DELAYFST(					
Note:	ji airii oori	illiana BEE	3111 010	III DEEXIII OIX	31 01 000 170	.002.			
		T in upond a	sutaida av	nobronized co	tions in the na	rt program	<b>~</b>		
				nchronized ac				4	
	•	_		e delay stop a			/G332 car	inot	
			restriction	n to motion blo	cks and dwell	times			
	DELAYF								
FALSE (	0) -> Del	ay stop are	a is not a	ctive					
TRUE (1	) -> Dela	y stop area	is active						
axis					NCK ver	rsion:	54.00.0	0	
identifier:									
unit:	-	min.:	FALSE			max.:	TRUE		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	X	Х	X	
write:									
attributes:	global	block sear	rch	1	link	1	1	I	

INT	\$P_MC							descriptio	
	** _***							n:	
description	1:								
\$P_MC									
Status of	modal su	broutine o	all						
FALSE (0	)) -> no m	odal subr	outine cal	l					
TRUE (1)	-> moda	I subroutir	ne call act	ive					
axis					NCK vers	sion:	06.00.00	)	
identifier:									
unit:	-	min.:	FALSE			max.:	TRUE		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	X				Х				
write:									
attributes:	global	block sear	ch	1 1	link	1	1	1	
		Not class	sified		Not clas	sified			

INT	\$P_REF	EPINF					description				
									n:		
descriptio											
\$P_REP			::. DED								
		ositioning					C C. II				
		cannot be		nea with R	KEPUS CO	mmana	tor tollow	ing reason	IS		
		in an Asu			l : 41 D		_				
		an Asub t					3				
		an Asub tl				noue					
axis	) -/ AXIS	can be rep	ositioneu	WILLI KEP	<i>J</i> S	NCK ver	sion.	12.00.0	3.00.00		
identifier:						11011101	0.011.	13.00.0	U		
unit:	-	min.:	FALSE				max.:	TRUE			
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	IOEM	access	
										rights	
read:	Х					Х					
write:											
attributes:	global	block sear	rch			link					
		Not class	sified			Not clas	sified				
	II.	II.									
BOOL	\$P_SIM								description	P	
d a a a wine ti a	<u>_</u>								n:		
descriptio	n:										
\$P_SIM	TDUE (4)	:::									
axis	TRUE (1)	if HMI sim	iulation is	running		NCK ver	sion.	100.00.0	^		
identifier:						TOIL VOI	01011.	06.00.0	U		
unit:	-	min.:	FALSE			max.: TRU					
	run-in	main run	runin stp	Mrun syn		PP	SA OPI		OEM	access	
										rights	
read:	Х					X					
write:											
attributes:	global	block sear	rch	ı	I	link		·			
		Not class	sified			Not clas	ssified				
		1.101 0.00								1	
BOOL	\$P_DRY	/DIIN							description	) I	
	∌Γ_DK	INON							n:		
descriptio	n:										
\$P_DRY											
	TRUE (1)	if dry run	feed is se	lected, or e	else FALS	SE (0).					
axis						NČK ver	sion:	06.00.0	0		
identifier: unit:		min.:	FALSE				max.:	TRUE			
	run-in	main run	runin stp	Mrun syn	1	IPP	SA	OPI	OEM	access	
	Tull-III	Illialli Tuli	Turiir Sip	IVII UIT SYTT			SA	OFI	OLIVI	rights	
read:	Х					Х				I i gi i i c	
write:											
attributes:	global	block sear	rch	1	<u> </u>	link	1	Ĺ			
		Not class	sified			Not classified					
	1	Not classified				Trot oladoliloa					

DOUBLE	\$P_OFI	FN							descripti	0
descriptio	l n:								n:	
\$P OFF										
		et contour i	normal:							
axis						NCK ver	rsion:	17.00.0	00	
identifier:			•				ı			
unit:	-	min.:	DBL_MIN				max.:	DBL_N		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:										
attributes:	global	block sear	ch	ı	ı	link	ļ	<u> </u>		
		Not class	sified			Not clas	ssified			
DOUBLE	\$PI								descripti	0
									n:	
description			ماده ماده	atant DI -	2 444500	7				
axis	\$PI dete	rmines the	circie con	stant Pi =	3.141592	7. NCK ver	rsion:	06.00.	00	
identifier:								00.00.	00	
unit:	-	min.:	3.141592	27			max.:	3.1415	927	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	X					X				rights
write:										-
attributes:	global	block sear	rch			link				
	9.000.						riotiono			
		Independ	Jeni			No rest	rictions			
INT	¢D DD	OC EVEN	_		i				descripti	οİ
	PL_LK	OG_EVENT	ı						n:	
descriptio										
		SP_PROG_							been	
		y by an eve		red with \$	SMC_PRC	G_EVE	NT_MASK	< or		
		RUN_MODI ENT supplie		aor voluo l	hotwoon (	and Ev	with			
the follov			es an inte	ger value i	between t	and 5 v	VILLI			
		on by NC S	tart or Ası	ıb Start vi	a VDI or					
Asub inte		u , u								
1: Implici	t activati	on by "Part	program	start" ever	nt					
		n by "Part								
		on by "Oper		I reset" ev	ent					
		on by "Boot								
	activation	n after out	put of last	action blo	ck after a	block se		1		
axis identifier:						NCK vei	SIOH.	42.00.0	00	
unit:	_	min.:	0			ļ	max.:	5		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	X					X				rights
write:										
attributes:	global	block sear	ch		]	link				
		Not class				Not clas	eeifiad			-
	1	INUL CIASS	mcu			LINOT CIA	oonii <del>c</del> u			1

STRING	\$P_PRC	GPATH							descriptio	
description	u. 								n:	
\$P PRO										
		where the	nrogram (	currently b	eina nroc	essed is	stored in t	he file svs	tem	
Oupplies	ine pain	WIICIC LIIC	program	carreintly b	ornig proc	00000 10	Stored iii	ine me aya	torri.	
Example										
		_WKS_DIF	R/ N WEL	LE DIR/	N MYSL	JB SPF"	is runnina			
		eturns the								
· <del>-</del>			0 _			_				
axis						NCK vers	sion:	06.00.00		
identifier:		Lasta					T			
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:										rights
	Х					Х				
write:										
attributes:	global	block sear	rch	•		link		•		
		Not class	sified			Not clas	sified			<u>†                                      </u>
		1101 0100	J			Trot oldo				
STRING	¢D DD	A CININA A V	TH FOTA	CIZI					descriptio	
0111110	\$P_PRC	G[INMAX	FILESTA	CKJ					n:	
description	n:								<u> </u>	
\$P_PRO	G[n]									
Supplies	the name	e of the pro	ogram on	program le	evel n.					
Example										
\$P_PRO										
Supplies	the name	e of the pro	ogram on	program le	evel 0 = m	nain progi	ram name			
description	n of fiold li	mito:								
•			former subject	. محمد مطاه ما						
n: Deline	s the pro	gram level	Irom whic	in the pro	gram nam	INCK vers		147.00.00		
identifier:						NOIL VEIS	51011.	17.00.00	)	
unit:	-	min.:				ļ	max.:			
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	IOEM	access
						.	] .			rights
read:	Х					Х				<u> </u>
write:							+		+	+
attributes:	alobal	block sear	rch	1	<u> </u>	link	1		1	+
atti ibutos.	910001									
	I	Not class	sified			Not clas	sified			I

INT	\$P_ST	ACK						descript	io
	<b>V</b> · ·							n:	
description	n:								
\$P STA	CK								
_		ıram level o	n which t	he current pa	art program is r	running.			
axis identifier:					NCK ve	ersion:	17.00.	00	
unit:	-	min.:	0		•	max.:	11		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				T T
write:									
attributes:	global	block sear	rch	1	link	1			
		Not class	sified		Not cla	assified			

INI	\$P ISO STACK	descriptio	
	· = = -	n:	

description:

\$P\_ISO\_STACK

The variable supplies the current program level in ISO mode. Unlike Siemens mode, not every subprogram or macro call changes the program level in ISO mode.

Subprogram/macro calls and their effect on \$P ISO STACK:

M98 Pxx ,subprogram call\$P\_ISO\_STACK remains the same

G65 Pxx ,non-modal macro\$P ISO STACK is incremented

G66 Pxx ,modal macro\$P\_ISO\_STACK is incremented

M macro substitution\$P ISO STACK is incremented

M subprogram substitution\$P ISO STACK remains the same

T substitution\$P ISO STACK remains the same

G substitution\$P\_ISO\_STACK is incremented

802S/C:Value range = [0,5]

axis						NCK vers	sion:	52.00.0	00	
identifier:										
unit:	-	min.:					max.:	11		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:										
attributes:	global	block sear	ch	•	•	link	*	•	1	
		Not class	ified			Not clas	sified			

STRING	\$P_PAT	TH[INMAX	FILESTA	CK]					descriptio n:	
description	n:								10.	
\$P PATH	-I[n]									
		where the	program l	being proc	essed on	program	level n is	stored in	the file sys	stem.
Example										
\$P_PATI	H[0] supp	olies the dir	ectory of t	the main p	rogram, e	e.g. "/_N_	_WKS_DI	R/_N_WE	ELLE_WPD	/".
¢D DATI	JICO CT	ACK 11 a	unnlina the	o noth of th	ممااامم	nroarom				
φr_raπ	п[фР_S I	ACK - 1] si	upplies the	<del>z</del> paul oi u	le calling	program				
description	n of field li	mits:								
	s the pro	gram level	from which	ch the prog	gram path					
axis						NCK ver	sion:	17.00.0	00	
identifier: unit:		Imin.:					max.:			
	run-in	main run	runin stp	Mrun syn	I	IPP	SA	OPI	IOEM	laccess
	Turi-iri	IIIaiii Tuii	ται ιιι ειρ	IVII UIT SYTT			SA	OFI	OLIVI	rights
read:	Х					Х				Juguno
write:										
attributes:	global	block sear	rch			link				
		Not alone	ifi a d			Not clas	a:final			
		Not class	silled			Not clas	silled			
BOOL	AD 40				ı				descriptio	1
BOOL	\$P_AC	110[16]							n:	
description	n:				l .				1	1
Variable	\$P_ACT	ID[n] deter	mines whe	ether the fi	irst 16 mo	dal sync	hronized a	actions w	ith ID n are	
program										
description										
Index 1 -	16 corre	sponds to	the nth mo	odal synch	ronized a	ction. INCK ver	-!	1		
identifier:						NCK ver	SIOH.	06.00.0	00	
unit:	-	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	IOEM	access
			· ·							rights
read:	Х					Х				
write:										
attributes:	global	block sear	rch	ı	I .	link	I	I		

Not classified

INT	\$AC_S	TAT						descriptio	
	_							n:	
description	n:								
\$AC_ST	AT								
-1: Invalid	d								
0: Chann	el in Res	set state							
1: Chann	el interru	upted							
2: Chann	el active								
axis					NCK vers	sion:	13.00.0	0	
identifier:									
unit:	-	min.:	-1			max.:	2		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:		Х				Х	Х	Х	3
write:									
attributes:	global	block sear	rch	<u>l</u>	ink	<b>.</b>			
		Not class	sified		Not clas	sified			

INT	\$AC_PI	ROG						descripti n:	0
description	l n:							111.	
\$AC PR	OG								
-1: Invalid									
0: Progra		set state							
1: Progra									
2: Progra									
3: Progra									
4: Progra									
axis		•			NCK ver	sion:	13.00.0	0	
identifier:									
unit:	-	min.:	-1			max.:	4		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:		Х				Х	Х	Х	
write:									
attributes:	global	block sear	rch	1	link	1	1	1	
		Not class	sified		Not clas	ssified			

\$AC\_SYNA\_MEM

1.1 List of system variables

descriptio

									n:	
description	n:								•	•
number o	of elemer	NA_MEM onts is configured from the p	gured by \$	MC_MM_	NUM_SY	NC_ELE	MENTS.	ion eleme	ents. The r	maximum
axis identifier:						NCK ver	sion:	13.00.0	0	
unit:	_	min.:	0			ļ	max.:	INT MA	λX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	J 12
write:										
attributes:	global	block sea	rch			link				
		Not class	sified			Not clas	ssified			
INT	\$AC_IP	O_BUF							descripti	0
description	n:									
Variable	\$AC_IPC	D_BUF det	ermines th	ne current	fill level o	f the inte	rpolator b	uffer.		
The value	e is read	from the p	art progra	m without	a preprod					
axis identifier:						NCK ver	sion:	13.00.0	0	
unit:	-	min.:	0				max.:	INT_MA	λX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х				Х	Х	Х	Х	
write:										
attributes:	global	block sea	rch	<u> </u>		link				

Not classified

INT	\$AC_BLOCKTYPE	descriptio	
	. =	n:	
-l			

#### description:

Variable \$AC\_BLOCKTYPE determines the type of the current main run block.

The following values are possible:

- 0: Block is programmed block (main block).
- 1: Block was generated by the system as an intermediate block.
- 2: Block was generated by chamfers/rounding
- 3: Smooth approach and retraction (SAR)
- 4: Block was generated by tool offset
- 5: Block was generated by smoothing
- 6: Block was generated by TLIFT (tangential follow-up)
- 7: Block was generated by path segmentation
- 8: Block was generated by compile cycles
- 9: Block was generated due to orientation changes on path-relative interpolation of tool orientation (ORIPATH/ORIROTC)
- 10: Block was generated by pole treatment of orientation transformations which is activated by the the machine data \$MC\_POLE\_ORI\_MODE

axis identifier:					NCK v	ersion:	51.00.0	00	
unit:	-	min.:	0			max.:	9		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:		Х				Х	Х		
write:									
attributes:	global	block sear	rch		link			<u> </u>	
		Not class	sified		Not cl	assified			

INT	\$AC_BL	OCKTYPI	EINFO						descriptio	
descriptio	l n:								n:	
		AC_BLOC	KTYPFIN	FO can be	e used to i	nterrogate	e more			
		n about va				monogan	3 111010			
		value of s				YPF vari	ous value	es can he		
returned:		value of o	yotom van	lαbic ψ/ to		<u>L</u> , va	ouo value	o oan be		
		lly genera	ted block:	\$AC BLO	CKTYPE	= 1				
		EINFO = 1					1			
		ng: \$AC E			J Idi a Idi	iioiiiiatioi				
2001: Sti		.g. ψ/ ιΟ_L	DECORT							
2001: Gti	•									
		CKTYPE	= 3							
	_	ith straight								
		ith quadra								
		ith semicir								
		ion: \$AC		/PF = 4						
		ock after S		11 6 - 4						
	•	blocks if ir		noint not	found					
		ircle on inr				v)				
		e (or conic				у)				
		ocks with			1013					
		ocks on re			ition					
		ue to exce			ition					
		on blocks			(tool vect	or II area	vector)			
		BLOCK		ioc iiiiiiiig	(100) 700	or II area	vooloi,			
		ontour by		G641						
		contour by								
		contour by								
		contour by								
		OCKTYPE		0011						
		with linea		nt of tang	ential axis	and withou	out lift mo	tion		
		with nonli								
	out lift mov					(ро.)				
		with lift m	otion, tand	nential axi	s motion a	nd lift mo	tion			
	ultaneous		otioni, tang	gorraar aza	0 111011011 0					
		with lift m	otion tand	nential axi	s starts fir	st if specif	ic lift			
	s reached		otioni, tang	gorraar aza	o otarto in	or ii opooii				
1 *		ion: \$AC_	BLOCKTY	/PF = 7						
	-	d path seg			ctive nun	china/nibb	lina			
		d path seg								
		nternally g				. 3/	,			
		\$AC BLC								
					INFO con	tains the I	ID of the o	compile cy	cles	
		created the					00 .	pc c)	0.00	
		erpolation		entation (	ORIPATH	ORIROTO	C)			
		of tool ori		,		011111011	<b>O</b> )			
		of rotation								
	•	for orients	•		•					
		d of position				ransforma	ations			
		ck for trav	•					ns.		
axis	T TOO DIO	CK 101 tlav	Croing tric	poic con	c at onem	NCK versi		54.00.00		
identifier:								34.00.00		
unit:	-	min.:	0				max.:	INT_MAX	<	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:		Х					Х	Х	]	
write:	1	1	1	l	1		1	+	<del>                                     </del>	<del>                                     </del>

write:

attributes:	global	block search	link	
		Not classified	Not classified	

		Not classified	Not classified		
INT	SAC SP	LITBLOCK		descriptio	

description:

System variable \$AC\_SPLITBLOCK is capable of detecting all blocks generated internally and programmed blocks which were truncated as a result.

It can return the following values:

\$AC\_SPLITBLOCK

- = 0 : It is an unchanged programmed block (a block generated by the compressor is viewed here as a programmed block).
- <> 0: Block has been truncated or is an internally generated block, the variable can assume the following values (variable is bit-coded):
- = 1: It is an internally generated block or a truncated original block
- = 3: It is the last block in a chain of internally generated blocks

or truncated original blocks

axis identifier:					NO	CK vers	ion:	54.00.0		
unit:	-	min.:	0				max.:	3		
	run-in	main run	runin stp	Mrun syn	PF	P	SA	OPI	OEM	access rights
read:		Х					Х	Х		
write:										
attributes:	global	block sear	rch	1	lin	ık	1			
		Not class	sified		No	ot clas	sified			

DOUBLE	SAC TA	NEB							descripti	0
	<b>*</b> * * * * * * * * * * * * * * * * * *								n:	
description	า:									
path tang	ent at the	e start of th	e next blo	ck. This va	ariable sh	ould onl	he end of t y be applie t block is a	d to progr	ammed m	
axis identifier:							NCK version: 51.00.00			
unit:	-	min.:	-180.0				max.:	180.0		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:		Х					X	Х	Х	
write:										
attributes:	global	block sear	ch	1		link	<u> </u>	L		
		Not class	sified			Not cla	ssified			

DOUBLE	\$AC_S	YNC_ACT_	LOAD					descript n:	io		
description	1:			<b>,</b>				· I	· ·		
	_	NC_ACT_I in the char		plies the curre	nt runtime fo	or synchron	ized actio	ns of the I	ast		
axis identifier:					NCK v	ersion:	54.00.0	0			
unit:	-	min.:	DBL_MIN	V		max.:		DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights		
read:		Х				Х	Х	Х			
write:											
attributes:	global	block sear	rch		link	<u> </u>	L				
		Not class	sified		Not cla	assified					

DOUBLE	\$AC S	YNC_MAX	LOAD					descript	0
	*****							n:	
descriptio	n:							•	
Variable cycle in t	_		LOAD su	oplies the longe	est runtime fo	r synchroi	nized actio	ons of an i	nterpolato
axis					NCK ver	sion:	54.00.0	0	
identifier:									
unit:	- min.: DBL_MIN					max.: DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			Х	Х	Х	Х	
write:	Х	Х			Х	Х		Х	7
attributes:	global	block sear	rch	<u>'</u>	link	•	•	•	
1		Not class	sified		Not clas	ssified			

DOUBLE	\$AC S	YNC_AVE	RAGE LO	DAD				descripti	IO	
			_					n:		
description	n:									
Variable	\$AC_SY	NC_AVER	AGE_LOA	AD supplies the	e average run	time per ii	nterpolato	r cycle for	•	
synchron	ized acti	ons in the	channel.							
axis					NCK ver	sion:	54.00.0	0		
identifier:										
unit:	-	min.:	DBL_MIN	N	·	max.:	DBL_MAX			
<del></del>	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х	Х			Х	Х	Х	Х		
write:	Х	Х			Х	Х		Х	7	
attributes:	global	block sear	rch		link					
		Not class	sified		Not clas	ssified				

INT	\$AC_IW	STAT							descriptio		
description	 n:								n:		
-		STAT des	cribes the	;							
					sformatio	n-specific	) for carte	esian PTP	travel.		
		evant only									
axis						NCK vers	sion:	19.00.00	)		
identifier: unit:		min.:	LINIT NAINI				max.:	INIT NAA			
driit.	-		INT_MIN runin stp	Mrun syn	T	IPP	SA	INT_MA	X TOEM	access	
	run-in	main run	runin sip	IVII UIT SYTT		FF	SA	OFI	OEIVI	rights	
read:	Х	Х	Х			Х	Х	Х	X	ge	
write:									+		
attributes:	global	block sear	rch			link					
attributes.	giobai										
		Not class	sified			Not clas	sified				
INI	<b>.</b>										
INI	\$AC_IW	_TU							descriptio n:		
description	l 1:								ļii.		
Variable	\$AC IW	TU descri	bes the po	osition info	rmation o	f the axe	s (MCS) f	or cartesia	ın PTP trav	vel.	
		evant only									
axis						NCK vers	sion:	19.00.00	)		
identifier: unit:		min.:	LINIT NAINI			max.:					
unit.	-		INT_MIN		1	l D D		INT_MA	OPI IOEM		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х			Х	Х	Х	Х		
write:											
attributes:	global	block sear	ch			link					
		Not class	sified			Not clas	sified				
		1401 01030	med			140t Glas	onica				
INT	¢AC TD	ANS_SYS	2		l				descriptio		
	ΦAC_IR	ANS_ST	•						n:		
description	n:								•	•	
	ANS_SYS										
		for transla		cartesian ı	manual tra	avel					
		ual trav. ad	ctive								
		v. in BCS									
		v. in WCS	5								
3: Cart. n	nanuai tra	v. in TCS									
Only ann	ronriate ir	o connecti	on with tra	neformati	one which	eunnort	cart man	ual travel.			
axis	Topriate ii	1 COITICCI	OII WILII LIE	insionnau	Olio Willon	NCK vers		46.00.00	)		
identifier:								+0.00.00	,		
unit:	-	min.:	0		·	· · · · · · · · · · · · · · · · · · ·	max.:	3			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access	
read:			\						<u> </u>	rights	
writo:	Х	Х	Х			Х	Х	Х	X	<u> </u>	

Not classified

block search

Not classified

attributes: global

INT	\$AC JC	G_COOR	D						descripti	0
	<b>*</b> * * * * * * * * * * * * * * * * * *								n:	
description	า:									
Variable	\$AC JO	G COORE	) is used t	o set the c	coordinate	system	frame for	manual tr	avel.	
The follow	wing valu	es are pos	ssible:			•				
0: Manua	al travel ir	n WCS								
1: Manua	al travel ir	n SZS								
axis						NCK ver	sion:	50.00.0	0	
identifier:										
unit:	=	min.:	0			•	max.:	1		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	X					Х		X		rigitis
	^					^		^		
write:	Х					X		X		7
attributes:	global	block sea	rch			link	•		•	
		Not class	sified			Not clas	ssified			
	1									

\$AC RO	OT SYS							description	)
_	_							n:	
1:									
T_SYS									
e system	for orienta	ation with	cartesian i	manual tra	avel				
oec. man	ual trav. ad	ctive							
nanual tra	av. in PCS								
nanual tra	av. in TCS								
ropriate i	n connecti	on with tra	ansformati	ons which	noggus	t cart. mar	nual travel		
-	min.:	0				max.:	3		
run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
									rights
Х	X	Х			Х	X	X	X	
global	block sear	ch			link				
	Not class	sified			Not clas	ssified			
	n: T_SYS se system spec. man nanual tra nanual tra nanual tra ropriate i	T_SYS  e system for orientate pec. manual trav. an nanual trav. in BCS nanual trav. in PCS nanual trav. in TCS  ropriate in connection  - min.: run-in main run  X X  global block sear	T_SYS  re system for orientation with opec. manual trav. in BCS  renanual trav. in PCS  renanual trav. in TCS  repriate in connection with travel in travel	T_SYS  T_SYS  T_SYS  T_SYS  T_SYS  T_SYS  TO SEE System for orientation with cartesian reports the cartesian reports and t	T_SYS  se system for orientation with cartesian manual trapec. manual trav. active nanual trav. in BCS nanual trav. in PCS nanual trav. in TCS  ropriate in connection with transformations which  - min.: 0 run-in main run runin stp Mrun syn  X X X X  global block search	T_SYS  se system for orientation with cartesian manual travel opec. manual trav. active nanual trav. in BCS nanual trav. in PCS nanual trav. in TCS  ropriate in connection with transformations which support NCK ver  - min.: 0  run-in main run runin stp Mrun syn PP  X X X X X X  global block search link	T_SYS  T_	T_SYS  T_	T_SYS  T_

INT	\$AC_MI	EA[2]						descripti	0
								n:	
description	n:			<u> </u>					
\$AC ME	A[n]								
Probe wi	th numbe	r [n] has s	witched if	TRUE (1)					
description				. ,					
n: Numbe	er of prob	e							
axis					NCK ve	rsion:	13.00.0	0	
identifier:									
unit:	-	min.:	INT_MIN			max.:	INT_MA	λX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:		Х	Х			Х	Х	Х	
write:									
attributes:	global	block sear	ch	<u> </u>	link	I.			
		Not class	sified		Not cla	ssified			

INT	\$AC_TR	AFO							description:			
description	<u> </u> n:								III.			
\$AC_TR												
		ctive trans	formation									
				FO TYPE	n							
according	g to macm	ine data y	.wo	0_111 =	_''							
Note sne	cial mean	ing in the	case of na	arameteriz	ed nersis	tent trans	sformation	hit 1 of				
		DE MASI			ca persis	tont trans	Sioiiiiatioi	1 (511 1 01				
				insformatio	on are ret	urned in t	the case o	of TRACO	N Niero	turned if		
		transform			on arc ici	unica in	uic case c	) 11VACC	14. 01310	turricu ii		
axis		u ansionn	alion is ac	JUVC.		INCK vers	sion:	06.00.00	1			
identifier:								00.00.00	J			
unit:	-	min.:	INT_MIN				max.:	INT MA	X			
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	OEM	access		
				,						rights		
read:	Х	Х	Х			Х	Х	Х	Х	Ť		
write:												
attributes:	dlohal	block sear	rch			link						
attributes.	giobai											
		Not class	sified			Not clas	sified					
	AD								description			
INT	\$P_TRA	FO							uescriptio	7		
	-	FO							n:			
description	n:	F0								<u>'</u>		
description	n: FO											
description \$P_TRAI Code nur	n: FO mber of pi	rogramme								<u> </u>		
description \$P_TRAI Code nur	n: FO mber of pi	rogramme		mation FO_TYPE	_n							
description \$P_TRAI Code nur according	n: FO mber of pi g to mach	rogramme ine data \$	MC_TRAI	FO_TYPE	_			4.11.4.5				
description \$P_TRAI Code nun according . Note spe	n: FO mber of pi g to mach	rogramme ine data \$	MC_TRAI	FO_TYPE	_	tent trans	sformatior	n (bit 1 of		<u> </u>		
description \$P_TRAI Code nun accordin . Note spe \$MC_TR	n: FO mber of pi g to mach cial mean AFO_MO	rogramme ine data \$ ing in the DE_MASI	MC_TRAI case of pa < set to 1)	FO_TYPE arameteriz :	ed persis				n:			
description \$P_TRAI Code null according . Note spe \$MC_TR The first	n: FO mber of pi g to mach cial mean AFO_MO chained ti	rogramme ine data \$ ing in the DE_MASI ransforma	MC_TRAI case of pa < set to 1)	FO_TYPE	ed persis				n:			
description \$P_TRAI Code null according . Note spe \$MC_TR The first transform	n: FO mber of pi g to mach cial mean AFO_MO	rogramme ine data \$ ing in the DE_MASI ransforma	MC_TRAI case of pa < set to 1)	FO_TYPE arameteriz :	ed persis	TRACO	N. 0 is ret	urned if or	n:			
description \$P_TRAI Code null according . Note spe \$MC_TR The first transform axis	n: FO mber of pi g to mach cial mean AFO_MO chained ti	rogramme ine data \$ ing in the DE_MASI ransforma	MC_TRAI case of pa < set to 1)	FO_TYPE arameteriz :	ed persis		N. 0 is ret		n:			
description \$P_TRAI Code null according . Note spe \$MC_TR The first transform axis identifier:	n: FO mber of pi g to mach cial mean AFO_MO chained ti	rogramme ine data \$ ning in the DE_MASI ransformat ctive.	MC_TRAI case of pa < set to 1) tion is retu	FO_TYPE arameteriz : urned in th	ed persis	TRACO	N. 0 is ret	43.00.00	n:  nly the pe			
description \$P_TRAI Code null according . Note spe \$MC_TR The first transform axis	n: FO mber of progression of progression mach cial mean AFO_MO chained transtion is a	rogramme ine data \$ ing in the DE_MASH ransformative.	MC_TRAI case of pa < set to 1) tion is retu INT_MIN	FO_TYPE	ed persis	TRACON	N. 0 is ret	43.00.00	n: nly the pe	rsistent		
description \$P_TRAI Code null according . Note spe \$MC_TR The first transform axis identifier:	n: FO mber of pi g to mach cial mean AFO_MO chained ti	rogramme ine data \$ ning in the DE_MASI ransformat ctive.	MC_TRAI case of pa < set to 1) tion is retu	FO_TYPE arameteriz : urned in th	ed persis	TRACO	N. 0 is ret	43.00.00	n:  nly the pe	rsistent		
description \$P_TRAI Code nui according . Note spe \$MC_TR The first transform axis identifier: unit:	n: FO mber of progression of progression mach cial mean AFO_MO chained transition is a	rogramme ine data \$ ing in the DE_MASH ransformative.	MC_TRAI case of pa < set to 1) tion is retu INT_MIN	FO_TYPE	ed persis	TRACON	N. 0 is ret	43.00.00 INT_MA	n: nly the pe	rsistent		
description \$P_TRAI Code nui according . Note spe \$MC_TR The first transform axis identifier: unit:	n: FO mber of progression of progression mach cial mean AFO_MO chained transtion is a	rogramme ine data \$ ing in the DE_MASH ransformative.	MC_TRAI case of pa < set to 1) tion is retu INT_MIN	FO_TYPE	ed persis	TRACON	N. 0 is ret	43.00.00	n: nly the pe	rsistent		
description \$P_TRAI Code null according . Note spe \$MC_TR The first transform axis identifier: unit:  read: write:	n: FO mber of pi g to mach cial mean AFO_MO chained to nation is a	rogramme ine data \$ ing in the DE_MASI ransformative.	MC_TRAI case of pa	FO_TYPE	ed persis	NCK vers	N. 0 is ret	43.00.00 INT_MA	n: nly the pe	rsistent		
description \$P_TRAI Code nui according . Note spe \$MC_TR The first transform axis identifier: unit:	n: FO mber of pi g to mach cial mean AFO_MO chained to nation is a	rogramme ine data \$ ing in the DE_MASH ransformative.	MC_TRAI case of pa	FO_TYPE	ed persis	TRACON	N. 0 is ret	43.00.00 INT_MA	n: nly the pe	rsistent		

DOUBLE	\$AC T	RAFO_PAI	R[n]						descriptio			
			<u> </u>						n:			
descriptio												
\$AC_TR	_											
Selection	n parame	ters of activ	ve transfo	rmation								
		ecial mean				nation is	configure	d				
		_TRAFO_N										
		ers of the fir					d in the ca	ase of TRA	ACON.			
		f only the p	ersistent t	ransforma	ition is ac	tive.						
descriptio												
n: Numb	er of para	ameter				INCK vei	roion:	1.0.00.0				
identifier:						NCK VEI	51011.	43.00.0	0			
unit:	_	min.:	DOUBLE	MIN		1	max.:	DOUBL	E MAX			
	run-in	main run		Mrun syn		IPP	SA	OPI	IOEM	access		
	Turi-iri	I I I I I I I I I I I I I I I I I I I	Turiir Stp	I wildir Syll		' '	OA .	011	OLIVI	rights		
read:	Х	Х	Х			Х	Х	Х	Х	<u> </u>		
write:												
attributes:	global	block sear	ch			link						
		Not class	rified			Not cla	ecified					
		NOT Class	Silieu			NOT CIA	SSIIICU					
DOUBLE	¢D TD	AFO DADI	m1		İ				descriptio	1		
DOOBLE	ֆP_IK/	AFO_PAR[	nj						n:			
descriptio	n:				I.							
\$P_TRA	FO_PAR	![n]										
Selection	n parame	ters of prog	grammed :	transforma	ation							
		ecial mean				nation is	configure	d				
`	-	_TRAFO_N	_		,							
		ers of the fir					d in the ca	ase of TRA	ACON.			
		f only the p	ersistent t	ransforma	ation is ac	tive.						
descriptio	n of field l	imits:										

	o. o. pa								
axis identifier:					NCK ver	rsion:	43.00.00		
unit:	-	min.:	DOUBLE	E_MIN	•	max.:	DOUBLE_MAX		
	run-in main run	runin stp Mrun syn	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				X		Х		
write:									
attributes:	ibutes: global block search		link	link					
		Not class	sified		Not clas	ssified			

INT \$AC\_TRAFO\_PARSET | descriptio | n:

description:

\$AC TRAFO PARSET

Number of active transformation data block

Variable is '0' is no transformation is active

Please note special meaning when persistent transformation is configured

(Bit 1 of \$MC TRAFO MODE MASK is set to 1):

The number of the data set of the first chained transformation is returned in the case of TRACON. is returned.

0 is returned if only the persistent transformation is active.

axis identifier:					NCK ve	ersion:	44.00.0	44.00.00			
unit:	-	min.:	INT_MIN	I	•	max.:	INT_MAX				
	run-in	n-in main run	runin stp Mr	Mrun syn	PP	SA	OPI	OEM	access rights		
read:	Х	Х	Х		Х	Х	Х	Х			
write:											
attributes:	global	block sear	rch		link						
		Not class	sified		Not cla	assified					

T	NT	\$P_TRAFO_PARSET	descriptio	
			n:	

description:

\$P TRAFO PARSET

Number of programmed transformation data block

Variable is '0' is no transformation is active

Please note special meaning when persistent transformation is configured

(Bit 1 of \$MC\_TRAFO\_MODE\_MASK is set to 1):

The number of the data set of the first chained transformation is returned in the case of TRACON. is returned.

0 is returned if only the persistent transformation is active.

axis identifier:		<u>, , , , , , , , , , , , , , , , , , , </u>			NCK ver	rsion:	44.00.0	44.00.00		
unit:	-	min.:	INT_MIN			max.:	INT_MAX			
	run-in main run	runin stp Mrun syn	Mrun syn	PP	SA	OPI	OEM	access rights		
read:	Х				Х		Х			
write:										
attributes:	global	block sea	rch	<u>'</u>	link			•		
		Not class	sified		Not clas	ssified				

INT	\$AC_LIF	TFAST							descriptio	
	_	11 701							n: .	
description	1:									
\$AC_LIF	TFAST									
Informati	on about	execution	of rapid lif	t.						
0: Initial s	state.									
1: Rapid	lift has be	en execut	ed.							
The varia	ble is set	internally								
to "1" by	the NC at	the begin	ning of the	e rapid lift	process.					
The varia	ble must	be reset to	its initial	state						
(\$AC_LIF	TFAST=	0) by the e	valuating	program (	(if one is o	configure	d)			
	ny subsec	quent rapid	lift proce	ss can be	detected					
axis						NCK ver	sion:	13.00.00		
identifier: unit:		Imin :	ı				Imav			
uriit.	-	min.:					max.:	1		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	X	Х	Х			Х	Х	Х	Х	
write:	Х	Х	Х			Х	Х		Х	7
attributes:	global	block sear	ch	I.	l	link		I.	I.	
		Not class	ified			Not clas	sified			
INT	\$P_LIFT	FAST							descriptio	
	· –								n:	
description										
\$P_LIFT										
		execution	of rapid lif	t.						
0: Initial s										
		en execut	ed.							
		internally								
		the begin								
		be reset to								
by the ev	aluating p	orogram (if	one is co	nfigured):	so that ar	ny subsec	quent			

rapid lift process can be detected again.
The variable is reset by writing \$AC LIFTFAST!

THE Valle		SCL Dy WIILI	ing ΨΛΟ_L							
axis identifier:					NCK ver	sion:	44.00.	44.00.00		
unit: _	-	min.:				max.:	1			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х					
write:										
attributes:	global	block sear	rch		link		· ·			
		Not class	sified		Not clas	ssified				

INT	\$AC_ASUP	descriptio	
	· -=	n:	

description:

\$AC ASUP

Code number for the reason for activating an Asub. The reasons are bit-coded

and have the following meaning:

BIT0: Activation due to: user interrupt "ASUB with Blsync"

Activation by: VDI signal, digital-analog interface Continued by: Freely selectable Reorg or Ret BIT1: Activation due to: User interrupt "ASUB"

To continue the program with Repos, the position immediately prior

to the interrupt is stored.

Activation by: VDI signal, digital-analog interface

Continued by: Freely selectable

BIT2: Activation due to: user interrupt "ASUB from channel state Ready"

Activation by: VDI signal, digital-analog interface

Continued by: Freely selectable

BIT3: Activation due to: user interrupt "ASUB in a manual mode

and channel state not READY"

Activation by: VDI signal, digital-analog interface

Continued by: Freely selectable

BIT4: Activation due to: Activation due to: User interrupt "ASUB".

To continue the program with Repos, the current position at the moment

of interrupt is stored.

Activation by: VDI signal, digital-analog interface

Continued by: Freely selectable

BIT5: Activation due to: Cancelation of subroutine repeat

Activation by: VDI signal

Continued by: Execution of system Asub REPOS

BIT6: Activation due to: Activation of decoding single block

Activation by: VDI signal (+OPI)

Continued by: Execution of system Asub REPOS

BIT7: Activation due to: Activation of delete distance to go

Activation by: VDI signal

Continued by: Execution of system Asub Ret

BIT8: Activation due to: Activation of axis synchronization

Activation by: VDI signal

Continued by: Execution of system Asub REPOS

BIT9: Activation due to: Mode change

Activation by: VDI signal

Continued by: Execution of system Asub REPOS or RET (see MD.)

BIT10: Activation due to: Program continuation under TeachIn or after TeachIn deactivation

Activation by: VDI signal

Continued by: Execution of system Asub Ret BIT11: Activation due to: Overstore selection

Activation by: Pi selection

Continued by: Execution of system Asub REPOS

BIT12: Activation due to: Alarm with reaction 'offset block with Repos' ( COMPBLOCKWITHREORG)

Activation by: Internal

Continued by: Execution of system Asub REPOS BIT13: Activation due to: Retraction with G33 and Stop

Activation by: Internal

Continued by: Execution of system Asub Ret

BIT14: Activation due to: Activation of dry run feedrate

Activation by: Vdi

Continued by: Execution of system Asub REPOS

BIT15: Activation due to: Deactivation of dry run feedrate

Activation by: Vdi

Continued by: Execution of system Asub REPOS BIT16: Activation due to: Activation of block suppression

Activation by: Vdi

Continued by: Execution of system Asub REPOS

BIT17: Activation due to: Deactivation of block suppression

Activation by: Vdi

Continued by: Execution of system Asub REPOS BIT18: Activation due to: Activate machine data

Activation by: Pi

Continued by: Execution of system Asub REPOS BIT19: Activation due to: Activate tool offset

Activation by: Pi " N SETUDT"

Continued by: Execution of system Asub REPOS

BIT20: Activation due to: System Asub after search type SERUPRO has reached the search target.

Activation by: Pi "\_N\_FINDBL" Parameter == 5 Continued by: Execution of system Asub REPOS

axis identifier:	dentifier:				NCK ve	ersion:	13.00.00			
unit:	-	min.:	INT_MIN	I		max.:	INT_MAX			
	run-in	ın-in main run	runin stp Mrun	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х		Х	Х	Х	X		
write:										
attributes:	global	block sea	rch		link					
		Not class	Not classified			Not classified				

BOOL	\$P_IST	EST						descript	io
	Ųv.							n:	
description	n:			•				•	•
\$P ISTE	ST								
		) if progran	n test is a	ctive.					
	•	, , ,							
axis					NCK vei	rsion:	13.00.0	00	
identifier:									
unit:	-	min.:	FALSE			max.:	TRUE		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:									
attributes:	global	block sea	rch		link	<u> </u>	1	1	
		Not class	sified		Not cla	ssified			

STRING	\$P_MN	1CA						descript	io
								n:	
description	n:								
\$P_MMC	A								
Task ack	nowledg	gement for I	MMC com	mand					
axis					NCK vei	sion:	13.00.	00	
identifier:									
unit:	-	min.:				max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	rch	1	link	_!			
		Not class	sified		Not cla	ssified			

BOOL	\$A PRO	OTO							descripti	0
	<b>*</b>								n:	
description	า:									
\$A_PRO	TO									
Activate /	deactiva	ate logging	function f	or the first	user. Co	respond	s to \$A_P	ROTOC[0	0].	
axis						NCK ver	sion:	13.00.0	0	
identifier:										
unit:	=	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:	Х	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sear	rch			link	•		•	
	Х	Not class	sified			Not clas	ssified			

BOOL	\$A_PRO	OTOC[EX_ ]	MAX_NU	IM_PROT					descripti n:	10
description	n:									
\$A_PRO	TOC									
Activate /	/ deactiva	ate logging	function f	or a user. (	Correspoi	nds to O	PI variabl	e protocU	serActive.	
description	n of field li	imits:								
Index of t	the user	of the loggi	ing function	on.						
axis identifier:						NCK ver	sion:	42.00.0	0	
unit:	-	min.:	FALSE			•	max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:	Х	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sear	rch	I I		link	1	1		
	Х	Not class	sified			Not clas	ssified			

BOOL	\$A_PRO ROT_US	T_LOCK[ SER]	EX_MAX	_NUM_P					descripti n:	0
description	1:									
\$A_PRO	T_LOCK									
Disable /	enable lo	gging fund	ction temp	orarily for	a user					
description	n of field lir	nits:								
0 - EX_M	AX_NUM	1_PROT_U	JSER-1, l	JSER						
axis						NCK ver	sion:	51.04.0	0	
identifier:										
unit:	-	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:	Х	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sear	ch			link	•	•	•	
		Not class	sified			Not clas	ssified			

DOUBLE  \$AC FIFO1[n]	de	escriptio	
,	n:		

description:

Variable \$AC\_FIFO1[n] is a stack with first in first out characteristics. This stack memory can be used for cyclic measuring operations.

\$MC NUM AC FIFO is used to define the number of FIFO variables \$AC FIFO1 - \$AC FIFO10.

The elements of the stack memory are saved in R variables. The length of all FIFO variables is configured with \$MC\_LEN\_AC\_FIFO.

\$MC\_START\_AC\_FIFO is used to specify the number of the start R variable, from which the FIFO elements are stored.

R variables assigned to FIFO areas should not be written elsewhere.

The number of R variables must be set in machine data \$MC\_MM\_NUM\_R\_PARAM such that all FIFO variables can be accommodated:

\$MC\_MM\_NUM\_R\_PARAM = \$MC\_MM\_START\_FIFO + \$MC\_NUM\_AC\_FIFO \* (\$MC\_LEN\_AC\_FIFO + 6)

The FIFO variable is an array variable.

Indices 0 - 5 have special meanings:

n = 0: When written with index 0, a new value is stored in the FIFO.

When read with index 0, the oldest element is read and removed from the FIFO.

- n=1: Access to the first element read
- n=2: Access to the second element read
- n=3: Total of all FIFO elements if Bit0 in \$MC MM MODE FIFO is set.
- n=4: Number of elements available in the FIFO
- n=5: Current write index relative to the start of the FIFO
- n=6: Oldest element
- n=7: Second oldest etc.

description of field limits:

THE UITH	1131011113	denned in	φίνιΟ_LLI	<b>1_</b>					
axis identifier:					NCK ver	sion:	13.00.0	0	
unit:	-	min.:	DBL_MIN	V		max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х	Х	
write:	Х	Х			Х	Х		Х	7
attributes:	global	block sear	ch		link				
		Not class	sified		Not clas	ssified			

DOUBLE  \$AC FIFO2[n]	descript	0
	n:	

description:

Variable \$AC\_FIFO2[n] is a stack with first in first out characteristics. This stack memory can be used for cyclic measuring operations.

\$MC\_NUM\_AC\_FIFO is used to define the number of FIFO variables \$AC\_FIFO1 - \$AC\_FIFO10.

The elements of the stack memory are saved in R variables. The length of all FIFO variables is configured with \$MC\_LEN\_AC\_FIFO.

\$MC\_START\_AC\_FIFO is used to specify the number of the start R variable, from which the FIFO elements are stored.

R variables assigned to FIFO areas should not be written elsewhere.

The number of R variables must be set in machine data \$MC\_MM\_NUM\_R\_PARAM such that all FIFO variables can be accommodated:

\$MC\_MM\_NUM\_R\_PARAM = \$MC\_MM\_START\_FIFO + \$MC\_NUM\_AC\_FIFO \* (\$MC\_LEN\_AC\_FIFO + 6)

The FIFO variable is an array variable.

Indices 0 - 5 have special meanings:

n = 0: When written with index 0, a new value is stored in the FIFO.

When read with index 0, the oldest element is read and removed from the FIFO.

- n=1: Access to the first element read
- n=2: Access to the second element read
- n=3: Total of all FIFO elements if Bit0 in \$MC MM MODE FIFO is set.
- n=4: Number of elements available in the FIFO
- n=5: Current write index relative to the start of the FIFO
- n=6: Oldest element
- n=7: Second oldest etc.

description of field limits:

THE UITH	1131011113	denned in	φίνιΟ_LLI	<b>1_</b>					
axis identifier:					NCK ver	sion:	13.00.0	0	
unit:	-	min.:	DBL_MIN	V		max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х	Х	
write:	Х	Х			Х	Х		Х	7
attributes:	global	block sear	ch		link				
		Not class	sified		Not clas	ssified			

DOUBLE  \$AC FIFO3[n]	de	escriptio	
,	n:		

description:

Variable \$AC\_FIFO3[n] is a stack with first in first out characteristics. This stack memory can be used for cyclic measuring operations.

\$MC NUM AC FIFO is used to define the number of FIFO variables \$AC FIFO1 - \$AC FIFO10.

The elements of the stack memory are saved in R variables. The length of all FIFO variables is configured with \$MC\_LEN\_AC\_FIFO.

\$MC\_START\_AC\_FIFO is used to specify the number of the start R variable, from which the FIFO elements are stored.

R variables assigned to FIFO areas should not be written elsewhere.

The number of R variables must be set in machine data \$MC\_MM\_NUM\_R\_PARAM such that all FIFO variables can be accommodated:

\$MC\_MM\_NUM\_R\_PARAM = \$MC\_MM\_START\_FIFO + \$MC\_NUM\_AC\_FIFO \* (\$MC\_LEN\_AC\_FIFO + 6)

The FIFO variable is an array variable.

Indices 0 - 5 have special meanings:

n = 0: When written with index 0, a new value is stored in the FIFO.

When read with index 0, the oldest element is read and removed from the FIFO.

- n=1: Access to the first element read
- n=2: Access to the second element read
- n=3: Total of all FIFO elements if Bit0 in \$MC MM MODE FIFO is set.
- n=4: Number of elements available in the FIFO
- n=5: Current write index relative to the start of the FIFO
- n=6: Oldest element
- n=7: Second oldest etc.

description of field limits:

THE UITH	1131011113	denned in	φίνιΟ_LLI	<b>1_</b>					
axis identifier:					NCK ver	sion:	13.00.0	0	
unit:	-	min.:	DBL_MIN	V		max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х	Х	
write:	Х	Х			Х	Х		Х	7
attributes:	global	block sear	ch		link				
		Not class	sified		Not clas	ssified			

DOUBLE  \$AC FIFO4[n]	de	escriptio	
,	n:	:	

description:

Variable \$AC\_FIFO4[n] is a stack with first in first out characteristics. This stack memory can be used for cyclic measuring operations.

\$MC\_NUM\_AC\_FIFO is used to define the number of FIFO variables \$AC\_FIFO1 - \$AC\_FIFO10.

The elements of the stack memory are saved in R variables. The length of all FIFO variables is configured with \$MC\_LEN\_AC\_FIFO.

\$MC\_START\_AC\_FIFO is used to specify the number of the start R variable, from which the FIFO elements are stored.

R variables assigned to FIFO areas should not be written elsewhere.

The number of R variables must be set in machine data \$MC\_MM\_NUM\_R\_PARAM such that all FIFO variables can be accommodated:

\$MC\_MM\_NUM\_R\_PARAM = \$MC\_MM\_START\_FIFO + \$MC\_NUM\_AC\_FIFO \* (\$MC\_LEN\_AC\_FIFO + 6)

The FIFO variable is an array variable.

Indices 0 - 5 have special meanings:

n = 0: When written with index 0, a new value is stored in the FIFO.

When read with index 0, the oldest element is read and removed from the FIFO.

- n=1: Access to the first element read
- n=2: Access to the second element read
- n=3: Total of all FIFO elements if Bit0 in \$MC MM MODE FIFO is set.
- n=4: Number of elements available in the FIFO
- n=5: Current write index relative to the start of the FIFO
- n=6: Oldest element
- n=7: Second oldest etc.

description of field limits:

axis identifier:							sion:	13.00.0	13.00.00		
unit:	-	min.:	DBL_MIN	V			max.:	DBL_M	AX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х			Х	Х	Х	Х		
write:	Х	Х				Х	Х		Х	7	
attributes:	global	block sear	rch	•		link	•	•	•		
		Not class	sified			Not clas	sified				

DOUBLE  \$AC FIFO5[n]	de	escriptio	
**************************************	n:		

description:

Variable \$AC\_FIFO5[n] is a stack with first in first out characteristics. This stack memory can be used for cyclic measuring operations.

\$MC NUM AC FIFO is used to define the number of FIFO variables \$AC FIFO1 - \$AC FIFO10.

The elements of the stack memory are saved in R variables. The length of all FIFO variables is configured with \$MC\_LEN\_AC\_FIFO.

\$MC\_START\_AC\_FIFO is used to specify the number of the start R variable, from which the FIFO elements are stored.

R variables assigned to FIFO areas should not be written elsewhere.

The number of R variables must be set in machine data \$MC\_MM\_NUM\_R\_PARAM such that all FIFO variables can be accommodated:

\$MC\_MM\_NUM\_R\_PARAM = \$MC\_MM\_START\_FIFO + \$MC\_NUM\_AC\_FIFO \* (\$MC\_LEN\_AC\_FIFO + 6)

The FIFO variable is an array variable.

Indices 0 - 5 have special meanings:

n = 0: When written with index 0, a new value is stored in the FIFO.

When read with index 0, the oldest element is read and removed from the FIFO.

- n=1: Access to the first element read
- n=2: Access to the second element read
- n=3: Total of all FIFO elements if Bit0 in \$MC MM MODE FIFO is set.
- n=4: Number of elements available in the FIFO
- n=5: Current write index relative to the start of the FIFO
- n=6: Oldest element
- n=7: Second oldest etc.

description of field limits:

THE UITH	1131011113	denned in	AINIO_LLI	<b>1_</b>						
axis identifier:					NCK vei	NCK version:		13.00.00		
unit:	-	min.:	DBL_MII	V		max.:	DBL_M	DBL_MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х		X	Х	Х	Х		
write:	Х	Х			X	Х		Х	7	
attributes:	global	block sear	rch	<u>'</u>	link					
		Not class	sified		Not cla	ssified				

DOUBLE  \$AC FIFO6[n]	de	escriptio	
**************************************	n:	:	

description:

Variable \$AC\_FIFO6[n] is a stack with first in first out characteristics. This stack memory can be used for cyclic measuring operations.

\$MC\_NUM\_AC\_FIFO is used to define the number of FIFO variables \$AC\_FIFO1 - \$AC\_FIFO10.

The elements of the stack memory are saved in R variables. The length of all FIFO variables is configured with \$MC\_LEN\_AC\_FIFO.

\$MC\_START\_AC\_FIFO is used to specify the number of the start R variable, from which the FIFO elements are stored.

R variables assigned to FIFO areas should not be written elsewhere.

The number of R variables must be set in machine data \$MC\_MM\_NUM\_R\_PARAM such that all FIFO variables can be accommodated:

\$MC\_MM\_NUM\_R\_PARAM = \$MC\_MM\_START\_FIFO + \$MC\_NUM\_AC\_FIFO \* (\$MC\_LEN\_AC\_FIFO + 6)

The FIFO variable is an array variable.

Indices 0 - 5 have special meanings:

n = 0: When written with index 0, a new value is stored in the FIFO.

When read with index 0, the oldest element is read and removed from the FIFO.

- n=1: Access to the first element read
- n=2: Access to the second element read
- n=3: Total of all FIFO elements if Bit0 in \$MC MM MODE FIFO is set.
- n=4: Number of elements available in the FIFO
- n=5: Current write index relative to the start of the FIFO
- n=6: Oldest element
- n=7: Second oldest etc.

description of field limits:

THE UITIC	113101113	acililea ili		<b>1_</b>						
axis					NCK ver	NCK version:		13.00.00		
identifier:						_				
unit:	-	min.:	DBL_MIN	٧		max.:	DBL_M	DBL_MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access	
			·	-					rights	
read:	Х	Х	Х		X	Х	Х	Х		
write:	Х	Х			Х	Х		Х	7	
attributes: gl	global	block sea	ch		link	link				
		Not class	sified		Not clas	ssified				

DOUBLE  \$AC FIFO7[n]	de	escriptio	
**************************************	n:		

description:

Variable \$AC\_FIFO7[n] is a stack with first in first out characteristics. This stack memory can be used for cyclic measuring operations.

\$MC NUM AC FIFO is used to define the number of FIFO variables \$AC FIFO1 - \$AC FIFO10.

The elements of the stack memory are saved in R variables. The length of all FIFO variables is configured with \$MC\_LEN\_AC\_FIFO.

\$MC\_START\_AC\_FIFO is used to specify the number of the start R variable, from which the FIFO elements are stored.

R variables assigned to FIFO areas should not be written elsewhere.

The number of R variables must be set in machine data \$MC\_MM\_NUM\_R\_PARAM such that all FIFO variables can be accommodated:

\$MC\_MM\_NUM\_R\_PARAM = \$MC\_MM\_START\_FIFO + \$MC\_NUM\_AC\_FIFO \* (\$MC\_LEN\_AC\_FIFO + 6)

The FIFO variable is an array variable.

Indices 0 - 5 have special meanings:

n = 0: When written with index 0, a new value is stored in the FIFO.

When read with index 0, the oldest element is read and removed from the FIFO.

- n=1: Access to the first element read
- n=2: Access to the second element read
- n=3: Total of all FIFO elements if Bit0 in \$MC MM MODE FIFO is set.
- n=4: Number of elements available in the FIFO
- n=5: Current write index relative to the start of the FIFO
- n=6: Oldest element
- n=7: Second oldest etc.

description of field limits:

THE UITH	1131011113	delined in	φίνιΟ_LLI	<b>_</b>						
axis identifier:					NCK ver	rsion:	13.00.0	13.00.00		
unit:	-	min.:	DBL_MII	V	•	max.:	DBL_N	DBL_MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х		Х	Х	Х	Х		
write:	Х	Х			Х	Х		Х	7	
attributes:	global	block sear	rch		link	link				
		Not class	sified		Not clas	ssified				

DOUBLE  \$AC FIFO8[n]	descrip	tio
, =	n:	

description:

Variable \$AC\_FIFO8[n] is a stack with first in first out characteristics. This stack memory can be used for cyclic measuring operations.

\$MC NUM AC FIFO is used to define the number of FIFO variables \$AC FIFO1 - \$AC FIFO10.

The elements of the stack memory are saved in R variables. The length of all FIFO variables is configured with \$MC\_LEN\_AC\_FIFO.

\$MC\_START\_AC\_FIFO is used to specify the number of the start R variable, from which the FIFO elements are stored.

R variables assigned to FIFO areas should not be written elsewhere.

The number of R variables must be set in machine data \$MC\_MM\_NUM\_R\_PARAM such that all FIFO variables can be accommodated:

\$MC\_MM\_NUM\_R\_PARAM = \$MC\_MM\_START\_FIFO + \$MC\_NUM\_AC\_FIFO \* (\$MC\_LEN\_AC\_FIFO + 6)

The FIFO variable is an array variable.

Indices 0 - 5 have special meanings:

n = 0: When written with index 0, a new value is stored in the FIFO.

When read with index 0, the oldest element is read and removed from the FIFO.

- n=1: Access to the first element read
- n=2: Access to the second element read
- n=3: Total of all FIFO elements if Bit0 in \$MC MM MODE FIFO is set.
- n=4: Number of elements available in the FIFO
- n=5: Current write index relative to the start of the FIFO
- n=6: Oldest element
- n=7: Second oldest etc.

description of field limits:

THE UITIC	113101113	acililea ili		<b>1_</b>						
axis					NCK ver	NCK version:		13.00.00		
identifier:						_				
unit:	-	min.:	DBL_MIN	٧		max.:	DBL_M	DBL_MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access	
			·	-					rights	
read:	Х	Х	Х		X	Х	Х	Х		
write:	Х	Х			Х	Х		Х	7	
attributes: gl	global	block sea	ch		link	link				
		Not class	sified		Not clas	ssified				

DOUBLE  \$AC FIFO9[n]	descriptio	
,	n:	

description:

Variable \$AC\_FIFO9[n] is a stack with first in first out characteristics. This stack memory can be used for cyclic measuring operations.

\$MC NUM AC FIFO is used to define the number of FIFO variables \$AC FIFO1 - \$AC FIFO10.

The elements of the stack memory are saved in R variables. The length of all FIFO variables is configured with \$MC\_LEN\_AC\_FIFO.

\$MC\_START\_AC\_FIFO is used to specify the number of the start R variable, from which the FIFO elements are stored.

R variables assigned to FIFO areas should not be written elsewhere.

The number of R variables must be set in machine data \$MC\_MM\_NUM\_R\_PARAM such that all FIFO variables can be accommodated:

\$MC\_MM\_NUM\_R\_PARAM = \$MC\_MM\_START\_FIFO + \$MC\_NUM\_AC\_FIFO \* (\$MC\_LEN\_AC\_FIFO + 6)

The FIFO variable is an array variable.

Indices 0 - 5 have special meanings:

n = 0: When written with index 0, a new value is stored in the FIFO.

When read with index 0, the oldest element is read and removed from the FIFO.

- n=1: Access to the first element read
- n=2: Access to the second element read
- n=3: Total of all FIFO elements if Bit0 in \$MC MM MODE FIFO is set.
- n=4: Number of elements available in the FIFO
- n=5: Current write index relative to the start of the FIFO
- n=6: Oldest element
- n=7: Second oldest etc.

description of field limits:

THE UITH	110101115	delilled ill	φινι <b>C_</b> LLι	N_AC_FIFO.						
axis identifier:		Taria			NCK ver	rsion:	13.00.00			
unit:	-	min.:	DBL_MII	V		max.:	DBL_M	DBL_MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х		Х	Х	Х	Х		
write:	Х	X			Х	Х		Х	7	
attributes:	global	block search			link	link				
		Not class	sified		Not clas	ssified				

DOUBLE  \$AC_FIFO10[n]	descriptio	
	n:	
description:		

Variable \$AC FIFO10[n] is a stack with first in first out characteristics. This stack memory can be used for cyclic measuring operations.

\$MC NUM AC FIFO is used to define the number of FIFO variables \$AC FIFO1 - \$AC FIFO10.

The elements of the stack memory are saved in R variables. The length of all FIFO variables is configured with \$MC LEN AC FIFO.

\$MC START AC FIFO is used to specify the number of the start R variable, from which the FIFO elements are stored.

R variables assigned to FIFO areas should not be written elsewhere.

The number of R variables must be set in machine data \$MC MM NUM R PARAM such that all FIFO variables can be accommodated:

\$MC\_MM\_NUM\_R\_PARAM = \$MC\_MM\_START\_FIFO + \$MC\_NUM\_AC\_FIFO \* (\$MC\_LEN\_AC\_FIFO + 6)

The FIFO variable is an array variable.

Indices 0 - 5 have special meanings:

n = 0: When written with index 0, a new value is stored in the FIFO.

When read with index 0, the oldest element is read and removed from the FIFO.

- n=1: Access to the first element read
- n=2: Access to the second element read
- n=3: Total of all FIFO elements if Bit0 in \$MC MM MODE FIFO is set.
- n=4: Number of elements available in the FIFO
- n=5: Current write index relative to the start of the FIFO
- n=6: Oldest element
- n=7: Second oldest etc.

description of field limits:

The dime	ension is o	Jenned in a	DIVIC_L⊏I\	I_AC_FIFO.						
axis					NCK ver	sion:	13.00.0	0		
identifier:								•		
unit:	-	min.:	DBL_MIN	N		max.:	DBL_M	DBL_MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access	
			-						rights	
read:	Х	Х	Х		X	Х	Х	Х		
write:	Х	Х			X	Х		Х	7	
attributes:	global	block sear	ch		link	link				
		Not class	sified		Not clas	ssified				

BOOL	\$A_IN[n	1				descriptio					
	Ψ, ιι								n:		
description	n:										
Variable:	\$A_IN[n]	is used to	interrogat	te digital in	puts.						
description	n of field lin	nits:			-						
The dime	ension is	defined in	\$MN_FAS	STIO_DIG_	NUM_IN	PUTS.					
axis						NCK version:		06.00.0	06.00.00		
identifier:											
unit:	-	min.:	FALSE				max.: TRUE				
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х			Х	Х	Х	Х		
write:											
attributes:	global	block sear	rch			link					
		Not class	sified			Not classified					

BOOL	\$A_OU	[[n]							descripti	0
	*								n:	
description	n:									
Variable	\$A OUT	[n] is used	to interro	gate digital	outputs.					
description	n of field li	mits:								
The dime	ension is	defined in	\$MN FAS	STIO DIG	NUM O	<b>JTPUTS</b>				
axis identifier:			·		<u> </u>	NCK ver		06.00.0	0	
unit:	-	min.:	n.: FALSE			1	max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:	Х	Х				Х	Х	Х	Х	7
attributes:	global	block sear	ch			link				
		Not class	ified			Not clas	ssified			

DOUBLE	\$A INA	n1							descripti	0
	,								n:	
description	n:									
Variable	\$A_INA[n	] is used t	o access	the analog	inputs.					
description	n of field lin	nits:		<u>-</u>	· · · · ·					
The dime	ension is o	defined in	\$MN FAS	STIO ANA	NUM IN	IPUTS.				
axis identifier:			_	_		NCK version: 06.00.00			0	
unit:	- min.: DBL_MIN					max.: DBL_MA			AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch			link				
	Not classified					Not classified				

DOUBLE	\$A OU	TA[n]						descripti	0	
								n:		
description	า:									
Variable:	\$A_OUT	ΓA[n] is use	d to acces	ss the analog	outputs. Whe	n written th	ne value d	oes not be	ecome	
operative	until the	e next interp	polator cyc	cle and can t	hen be read ba	ack.				
description	n of field l	limits:								
The dime	ension is	defined in	\$MN_FAS	STIO_ANA_N	IUM_OUTPUT	S.				
axis					NCK ve	ersion:	06.00.00			
identifier:										
unit:	-	min.:	DBL_MIN	٧		max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access	
									rights	
read:	Х	Х	Х		X	X	Х	X		
write:	te: X X				Х	Х	Х	Х	7	
attributes:	global	block sea	rch	1	link					
		Not class	sified		Not cla	Not classified				

BOOL	\$A_INC	CO[2]					descriptio				
	<b>*</b> '	· ~ [_]						n:			
description	n:			•					•		
Variable:	\$A INC	O[n] is used	d to acces	s the comparat	or inputs.						
description				· ·	<u> </u>						
nth comp	arator in	nput.									
axis		1			NCK vei	rsion:	06.00.0	0			
identifier:							00.00.00				
unit:	-	min.:	FALSE			max.:	TRUE				
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access		
									rights		
read:	Х	Х	Х		X	Х	Х	Х			
write:											
attributes:	global	block sear	rch		link						
		Not class	sified		Not cla	ssified					

INI descriptio \$A\_DBB[1024]

description:

Array variable \$A\_DBB[n] is used to read and write a data byte (8 bits) from PLC. The byte is unsigned and can be read in the range from 0 to 255 and written in the range from -128 to 255.

A memory area is reserved in the communications buffer of these modules (DPR) for high-speed data exchange between PLC and NC. The PLC uses function calls (FC) and the NCK uses \$ variables to access this memory.

See also \$A\_DBSB[n]. description of field limits:

n: Positio	n offset	within I/O a	ırea 0						
axis					NCK ver	sion:	13.00.0	0	
identifier:									
unit:	-	min.:	-128			max.:	255		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х	Х	
write:	Х	Х		Х	Х	Х		Х	7
attributes:	global	block sear	rch	•	link	•	•	•	
		Not class	sified		Not clas	ssified			

INT	\$A DB	W[1024]							descripti	0	
	. –								n:		
description	n:										
and can I	be read i	_DBW[n] is n the range reserved i	e from 0 to	65535 ar	nd written	in the rà	nge from	-32768 to	65535.	Ü	
exchange	e betwee	n PLC and						. ,	• .		
this mem	,										
See also											
description	n of field l	imits:									
n: Positio	n offset	within I/O a	ırea 0								
axis identifier:						NCK version: 13.0			3.00.00		
unit:	-	min.:	-32768			max.: 65			65535		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х			Х	X	Х	Х		
write:	Х	Х		Х		Х	Х		Х	7	
attributes:	global	block sear	ch	•		link	•	•	•		
		Not class	sified			Not clas	ssified				
		<u> </u>									

IIN I	\$A_DBD[1024]	descriptio	i l
		n:	ĺ
-1	! #! ·		

#### description:

Array variable \$A\_DBD[n] is used to read and write a data doubleword (32 bits) from PLC.

A memory area is reserved in the communications buffer of these modules (DPR) for high-speed data exchange between PLC and NC. The PLC uses function calls (FC) and the NCK uses \$ variables to access

this memory.
description of field limits:

n: Position offset within I/O area 0 - ...

axis identifier:					NCK vei	rsion:	13.00.0	00	
unit: _	-	min.:	INT_MIN		•	max.:	INT_M	4Χ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		X	Х	Х	Х	
write:	Х	Х		Х	X	Х		Х	7
attributes:	global	block sea	rch	l	link		I	I .	
		Not class	sified		Not cla	ssified			

DOUBLE	\$A_DB	R[1024]						descript	io	
description	J.							n:		
		DDD[-1:-			D1-1-4- (00	L:4-\ £	DI O			
					Real data (32					
					ouffer of these					
exchange	e betwee	en PLC and	NC. The	PLC uses fund	ction calls (FC)	and the N	NCK uses	\$ variable	s to access	
this mem	ory.									
description		imits:								
n: Positio	n offset	within I/O a	area 0							
axis					NCK ver	sion:	13.00.0	0		
identifier:								•		
unit:	-	min.:	DBL_MII	N		DBL_N	IAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access	
									rights	
read:	Х	Х	Х		X	Х	Х	Х		
write:	Х	Х		Х	Х	Х		X	7	
attributes:	global	block sear	rch	<u> </u>	link		<u> </u>	<u> </u>		
		Not class	sified		Not clas	Not classified				

INI	\$A DLB[n]	descriptio	
		n:	

description:

Variable \$A\_DLB[n] enables reading and writing of a data byte (8 bits) which can be transmitted to other channels or NCUs across the NCU link.

\$MC\_MM\_NUM\_LINKVAR\_ELEMENTS is used to define the number of elements available to the user for programming link variables (\$A DLx).

The negative value range of this variable applies to write operations only. The variable can thus store negative values. Only the corresponding positive value can be read back. description of field limits:

The dimension is defined in \$MC MM SIZEOF LINKVAR DATA.

axis identifier:					NCK vei	rsion:	14.00.0	0	
unit:	-	min.:	-128		<b>.</b>	max.:	255		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		X	Х	Х	Х	
write:	Х	Х		Х	X	Х	Х	Х	7
attributes:	global	block sear	rch		link		,	•	
		Not class	sified		Not cla	ssified			

INT	\$A_DL	W[n]							descripti	0
d	<u> </u>								n:	
description										
		V[n] enables	•	•	g of a data	a word (1	6 bits) wh	ich can be	e transmitt	ed to othe
channels	or NCU	s across the	e NCU lin	k.						
\$MC_MN	/_NUM_	LINKVAR_	ELEMEN	TS is used	to define	the num	nber of ele	ments av	ailable to t	he user fo
programi	ning link	variables (	\$A DLx).							
The nega	ative valu	ue range of	this varia	ble applies	s to write	operation	ns only. Th	ne variable	e can thus	store
		Only the co								
description				J 1						
The dime	ension is	defined in	SMC MM	SIZFOF	LINKVAF	R DATA				
axis	1		<del>•</del>			NCK ver		14.00.0	in.	
identifier:								11.00.00		
unit:	-	min.:	-32768			max.: 655				
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:	Х	Х		Х		Х	Х	Х	Х	7
attributes:	global	block sear	rch	1		link				
		Not class	sified			Not clas	ssified			
INT	\$A_DL	D[n]							descripti	01
	φA_DL	רויון							n:	
description	u.				1				ı	

Variable \$A\_DLD[n] enables reading and writing of a data doubleword (32 bits) which can be transmitted to other channels or NCUs across the NCU link.

\$MC\_MM\_NUM\_LINKVAR\_ELEMENTS is used to define the number of elements available to the user for programming link variables (\$A\_DLx).

description of field limits:

The dimension is defined in \$MC\_MM\_SIZEOF\_LINKVAR\_DATA.

axis					NCK ver	sion:	14.00.0	0	
identifier:									
unit:	-	min.:	INT_MIN			max.:	INT_MA	·Χ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х	Х	Х		Х	Х	Х	Х	
write:	Х	Х		Х	Х	Х	Х	Х	7
attributes:	global	block sear	ch		link				
		Not class	sified		Not clas	ssified			

DOUBLE	\$A DI	R[n]	•					•	descripti	0
	ΨΛ_ΒΕ								n:	
description	n:								· ·	
Variable	\$A DLR	[n] enables	reading a	and writing of	a Real va	lue wh	nich can b	e transmit	ted to othe	er channels
	_	he NCU lin	•	Ü						
\$MC MN	/ NUM	LINKVAR	ELEMEN	TS is used to	o define th	e num	ber of ele	ments av	ailable to t	the user for
		variables (								
description										
The dime	ension is	defined in	\$MC_MM	_SIZEOF_L	INKVAR_I	DATA.				
axis						CK ver		14.00.0	0	
identifier:										
unit:	-	min.:	DBL_MII	N			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn	P	Р	SA	OPI	OEM	access rights
read:	Х	Х	Х			Χ	Х	Х	Х	
write:	Х	Х		Х		Х	Х	Х	Х	7
attributes:	global	block sear	rch	<u> </u>	lir	nk	L			
		Not class	sified		N	lot clas	ssified			
		•								
NI	¢ΛΙΙΝ	K TRANS	DATE						descripti	0

INI	\$A LINE	(_TRANS	RATE						descripti	0
	Ψ/\_=	<u> </u>							n:	
description	า:								•	
Variable	\$A LINK	<b>TRANS</b>	RATE det	ermines th	e numbe	r of byte	s which ca	n still be t	ransferre	by NCU
		_ nterpolatio				,				•
axis			<del>-</del>			NCK ve	rsion:	15.00.0	0	
identifier:										
unit:	-	min.:	INT_MIN				max.:	INT_MA	١X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:		Х					Х	Х	Х	rigino
write:										
attributes:	global	block sear	rch	•		link	1		II	
		Not class	sified			Not cla	ssified			

INT	\$A PBE	3_IN[32]							descript	i0
	<b>*</b>								n:	
description	1:									
Array var	iable \$A	PBB IN[n	is used t	to read and	d write a	data byte	(8 bits) fr	om the Pl	_C I/O.	
description	n of field li	mits:	-							
The dime	nsion is	defined in	\$MN_PLC	CIO_NUM_	BYTES_	IN.				
axis						NCK ver	sion:	16.00.0	0	
identifier:										
unit:	-	min.:	INT_MIN				max.:	INT_MA	λX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch			link	L			
		Not class	sified			Not clas	sified			

INT	\$A PB\	W IN[32]							description	0
	-								n:	
description	า:									
		_PBW_IN[ı	n] is used	to read ar	nd write a	data wor	d (16 bits	) from the	PLC I/O.	
description	n of field li	imits:								
The dime	ension is	defined in	\$MN_PLC	CIO_NUM_	BYTES_	IN.				
axis						NCK ver	sion:	16.00.0	0	
identifier:										
unit:	-	min.:	INT_MIN				max.:	INT_MA	λX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch		l .	link	I	·		
		Not class	sified			Not clas	ssified			
	•	•				-				•

INI	\$A_PBD	_IN[32]							description:	
description	า:								1.0	
Array var	iable \$A_	PBD_IN[n	] is used	to read a c	lata doub	leword (3	32 bits) fro	m the PLC	C I/O.	
description	n of field lin	nits:								
The dime	ension is d	lefined in	\$MN_PLO	CIO_NUM_	BYTES_	IN.				
axis identifier:						NCK ver	sion:	16.00.00	)	
unit:	-	min.:	INT_MIN			•	max.:	INT_MA	X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch	1		link			_1	
		Not class	ified			Not clas	ssified			

DOUBLE	\$A_PBR	_IN[32]							descripti n:	0
description	1: 1:								1	
Array var	iable \$A	PBR IN[n	il is used t	to read Re	al data (3	2 bits) fro	om the PL	C I/O.		
	n of field lin		•			,				
The dime	ension is d	lefined in S	\$MN_PLC	CIO_NUM_	BYTES_I	N.				
axis identifier:						NCK vers	sion:	16.00.0	0	
unit:	-	min.:	DBL_MIN	V			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch	1		link	-1	1		
		Not class	sified			Not clas	sified			

INT	\$A_PBI	3_OUT[32]						descripti	io
								n:	
description	า:								
Array var	iable \$A	PBB OU	Γ[n] is use	ed to write a da	ata byte (8 bits	) to the Pl	LC I/O.		
description					, ,	,			
The dime	nsion is	defined in	\$MN_PLO	CIO_NUM_BY	TES_OUT.				
axis					NCK ver	sion:	16.00.0	00	
identifier:									
unit:	-	min.:	INT_MIN			max.:	INT_M	4X	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		X	Х	Х	Х	
write:	Х	Х		Х	Х	Х		Х	7
attributes:	global	block sear	ch		link		l.		
		Not class	sified		Not clas	ssified			

INI	\$A_PB\	W_OUT[32	]						descript n:	10
description	n:				I.					II.
Array var		_PBW_OU imits:	T[n] is use	ed to write	a data w	ord (16 b	oits) to the	PLC I/O.		
The dime	ension is	defined in	\$MN_PLC	CIO_NUM_	BYTES_	OUT.				
axis identifier:						NCK ver	sion:	16.00.0	00	
unit:	-	min.:	INT_MIN				max.:	INT_M	4Χ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:	Х	Х		Х		Х	Х		Х	7
attributes:	global	block sear	rch	1	I	link	1	1	L	
		Not class	sified			Not clas	ssified			

INT	\$A PBI	D_OUT[32]							descript	10
		•							n:	
description	n:									
Array var	riable \$A	_PBD_OU	T[n] is use	ed to write	a data do	ubleword	d (32 bits)	to the PL	C I/O.	
description	n of field li	mits:								
The dime	ension is	defined in	\$MN_PLC	CIO_NUM_	BYTES_	OUT.				
axis						NCK ver	sion:	16.00.0	0	
identifier:										
unit:	-	min.:	INT_MIN			•	max.:	INT_M	XΑ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:	Х	Х		Х		Х	Х		Х	7
attributes:	global	block sear	rch			link				
		Not class	sified			Not clas	ssified			

DOUBLE	\$A PBI	R_OUT[32]						descript	io
	-		-					n:	
descriptior	1:								
Arrav var	iable \$A	PBR OU	TIn1 is use	ed to write Re	al data (32 bits	) to the Pl	LC I/O.		
description					( )	,			
The dime	nsion is	defined in	\$MN_PLC	CIO_NUM_B	TES_OUT.				
axis					NCK vei	rsion:	16.00.0	0	
identifier:									
unit:	-	min.:	DBL_MIN	٧		max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		X	Х	Х	Х	
write:	Х	Х		Х	X	Х		Х	7
attributes:	global	block sear	rch	<u> </u>	link		L		
		Not class	sified		Not cla	ssified			

ROOF	\$C_IN[	161							descript	0
	_								n:	
descriptio	n:									
\$C_IN[n]										
Signal fro	om the P	LC to cycle	)							
Reserve	d for SIE	MENS app	lications!							
16 input	signals (	i.e. 2 bytes	) are avai	able. Data	transfer i	s cyclic.				
descriptio	n of field i	imits:	•							
n: Numb	er of inpu	ut 1								
axis						NCK vei	rsion:	41.00.0	10	
identifier:										
unit:	-	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sea	rch	L		link			L	
		Not class	sified			Not clas	ssified			

BOOL	\$C_OU	T[16]							descripti	0
									n:	
descriptio	n:									
\$C_OUT	[n]									
Signal fro	om cycle	to the PLC	;							
Reserve	d for SIE	MENS app	lications!							
16 outpu	ıt signals	(i.e. 2 byte	s) are ava	ailable. Data	a transfer	is cyclic	C.			
descriptio	n of field I	imits:	· · · · · · · · · · · · · · · · · · ·							
n: Numb	er of out	put 1								
axis						NCK ver	sion:	41.00.0	00	
identifier:									-	
unit:	-	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:	Х	Х				Х	Х	Х	Х	7
attributes	global	block sea	rch	1		link	1			
		Not class	rified			Not clas	ecified			

INT	SAC TO	C_CMDT							descripti	0
									n:	
description	n:									
SAC TC	CMDT									
Trigger v	- ariable: \$	SAC TC C	MDT (Co	MmadTrigo	ger) assui	mes the	value '1' f	or an inter	polation	
		new comn								
axis						NCK ve		44.00.0		
identifier:								1	•	
unit:	-	min.:	INT_MIN				max.:	INT_MA	١X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:		Х	Х				Х	Х	Х	
write:										
attributes:	global	block sear	rch			link				
		Not class	sified			Not cla	assified			

INI	\$AC_TC	_ACKT							descripti n:	0
description	n:				I					
\$AC TC	ACKT									
Trigger v	ariable: \$.	AC TC A	CKT (ACI	Knowledge	eTrigger) a	assumes	the value	'1' for an	interpolat	ion cycle
wheneve			•		,					•
the PLC	acknowle	dges a TM	1 comman	ıd.						
axis						NCK vers	sion:	44.00.0	0	
identifier:			_				_			
unit:	-	min.:	INT_MIN				max.:	INT_MA	١X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:		Х	Х				Х	Х	Х	
write:										
attributes:	global	block sear	rch	•		link	•	•		
		Not class	sified			Not clas	sified			

INT	\$AC T	C CMDC							descripti	0
	*****								n:	
description	า:									
\$AC_TC	_CMDC									
Counter	variable:	\$AC_TC_0	CMDC (Co	oMmandCo	ounter) is	increme	nted			
by 1 ever	y time th	ne TM send	ls a comm	nand to the	PLC.					
axis						NCK ver	sion:	44.00.0	0	
identifier:										
unit:	-	min.:	INT_MIN	l			max.:	INT_M	λX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:	Х	Х	Х	Х		Х	Х	Х	Х	7
attributes:	global	block sear	rch			link		•	•	
		Not class	sified			Not clas	ssified			

INT	\$AC TO	CACKC							descripti	0
	<b>,</b>								n:	
description	n:									
\$AC TC	ACKC									
Counter	variable:	\$AC TC (	CMDC (A	CKnowledg	geCounte	r) is incr	emented			
by 1 ever	ry time th	ie PLC ack	nowledge	s a comma	and from	the TM.				
axis						NCK ver	sion:	44.00.0	0	
identifier:										
unit:	-	min.:	INT_MIN				max.:	INT_M	ΑX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:	Х	Х	Х	Х		Х	Х	Х	Х	7
attributes:	global	block sear	rch			link		1	I.	
		Not class	sified			Not clas	ssified			

INI	\$AC_TC	FCT							descripti	0
	<b>V</b> 10_10								n:	
description	n:								•	
\$AC_TC	_FCT									
Comman	d numbe	r. This spe	cifies the	requested	operation	١.				
-1: No TI	M comma	nd is active	e at the in	stant the v	ariable is	read.				
axis						NCK ver	sion:	15.00.0	0	
identifier:										
unit:	-	min.:	INT_MIN				max.:	INT_MA	λX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch	1	I	link		L		
		Not class	sified			Not clas	ssified			

INT	\$AC TC	STATUS							description	)
	<b>,</b>								n:	
description	1:									
\$AC_TC	_STATUS									
Current s	tatus of th	ne comma	nd - to be	read via \$	SAC_TC_I	FCT.				
-1: No TN	/I commar	nd is active	e at the in	stant the v	ariable is	read.				
axis identifier:						NCK ver	sion:	15.00.0	0	
unit:	-	min.:	INT_MIN				max.:	INT_MA	λX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	_
write:										
attributes:	global	block sear	ch	1	I	link	I	I		
		Not class	ified			Not clas	ssified			

INT	\$AC TO	C_THNO							descriptio	
		_							n:	
description	า:									
\$AC_TC	THNO									
Number (	of the too	olholder (sp	ecifically	the spindle	e no.) to w	hich the	new			
tool is to	be loade	ed.								
-1: No TN	A comma	and is activ	e at the in	stant the v	/ariable is	read.				
axis						NCK ver	sion:	15.00.0	0	
identifier:										
unit:	-	min.:				•	max.:	INT_MA	ΑX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch		I	link	L			
		Not class	sified			Not clas	ssified			
INT	\$AC_T	C_TNO					·		descriptio	

INT	\$AC TC	TNO							descriptio	
	. –	_							n:	
description	1:									
\$AC_TC	TNO									
NCK inte	rnal T nur	nber of the	e new (to	be loaded	) tool.					
0: There	is no new	tool.								
-1: No TN	/I commar	nd is active	e at the in	stant the v	ariable is	read.				
axis						NCK vers	ion:	15.00.00		
identifier:										
unit:	-	min.:					max.:	INT_MAX	(	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch			link	•	•	-	
		Not class	ified			Not class	sified			

INT	\$AC_T	C_MMYN							descriptio	
		_							n:	
description	า:									
\$AC TC	MMYN									
Home ma	agazine r	number of t	he new (t	o be loade	d) tool.					
		w tool, or th				> 0) is no	t loaded (	manual to	ol).	
		and is activ		. –	_	•	,		,	
axis						NCK ver	sion:	49.00.0	0	
identifier:								10.00.0		
unit:	-	min.:				•	max.:	INT_MA	λX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch	1		link	1	<u> </u>	<u>I</u>	
		Not class	sified			Not clas	ssified			

INT	\$AC TO	LMYN							descripti	0
	-	_							n:	
description	า:									
\$AC_TC	_LMYN									
Home loc	cation nu	mber of the	e new (to l	be loaded)	tool.					
0: There	is no nev	w tool, or th	ne new too	ol (if \$AC_7	TC_TNO>	o) is no	t loaded (	manual to	ol).	
-1: No TN	/I comma	and is activ	e at the in	stant the v	ariable is	read.				
axis						NCK ver	sion:	49.00.0	0	
identifier:										
unit:	-	min.:				•	max.:	INT_M	4X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sea	rch			link			•	
		Not class	sified			Not clas	ssified			
		Not class	sified			Not clas	ssified			

INT	\$AC_TC	_MFN							description:	
description	1 n:								11.	
\$AC TC	MFN									
		number of	the new	tool.						
0: There	•									
-1: No TN	И comma	ind is activ	e at the in	stant the v	ariable is	read.				
axis						NCK ver	sion:	16.00.0	)	
identifier:										
unit:	-	min.:					max.:	INT_MA	·Χ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch	L	I	link	<u>I</u>	L	- 1	
		Not class	sified			Not clas	ssified			

INI	\$AC_TC	_LFN						n:	
description	n:								
\$AC_TC	LFN								
Source Id	cation nu	mber of th	ne new too	ol.					
0: There	is no new	tool.							
-1: No TN	/I commar	nd is active	e at the in	stant the v	 				
axis identifier:					NCK ver	sion:	16.00.0	0	
unit:	-	min.:				max.:	INT_MA	١X	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х		
write:									
attributes:	global	block sear	ch	•	link	•	•	•	
		Not class	ified		Not clas	ssified			

INT	\$AC_T	C MTN							descriptio	
	_	_							n:	
description	n:									
\$AC_TC	_MTN									
Target m	agazine	number of	the new to	ool.						
0: There	is no ne	w tool.								
-1: No TN	√ comm	and is activ	e at the in	stant the v	/ariable is	read.				
axis						NCK ver	sion:	16.00.0	0	
identifier:										
unit:	-	min.:				•	max.:	INT_M	ΑX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х		
write:										
attributes:	global	block sear	rch	1		link				
		Not class	sified			Not clas	ssified			
		L				1				.1
INT	\$AC T	CLTN							descriptio	

INT	\$AC_T	C_LTN							descripti n:	0
description	n:				<u>l</u>				l l	
\$AC TC	LTN									
Target lo	_ cation กเ	ımber of th	e new too	ol.						
0: There	is no nev	v tool.								
-1: No TN	√ comma	and is activ	e at the in	stant the v	ariable is	read.				
axis						NCK ver	sion:	16.00.0	0	
identifier:										
unit:	-	min.:					max.:	INT_MA	λX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sea	rch			link				
		Not class	sified			Not clas	ssified			

INT	\$AC_T	C_MFO							description:	)
description	n:			I						-1
\$AC TC	MFO									
Source n	- nagazine	number of	the old (t	o be replac	ed) tool.					
0: There			,	•	,					
-1: No TN	/I comma	and is activ	e at the in	stant the va	ariable is	read.				
axis						NCK ver	sion:	16.00.00	)	
identifier:										
unit:	-	min.:				•	max.:	INT_MA	X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch			link		•		
		Not class	sified			Not clas	ssified			

INT	\$AC_T	C LFO							descripti	0
		_							n:	
description	n:									
\$AC_TC	LFO									
Source lo	cation n	umber of th	ne old (to	be replace	d) tool.					
0: There	is no old	tool.	•	•	•					
-1: No TN	√ comma	and is activ	e at the in	stant the v	ariable is	read.				
axis						NCK ver	sion:	16.00.0	0	
identifier:										
unit:	-	min.:					max.:	INT_M	4X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	Ť
write:										
attributes:	global	block sear	rch	L		link	1			
		Not class	sified			Not clas	ssified			

INT	\$AC TO	MTO							descriptio	
	. –	_							n:	
description	1:									
\$AC_TC	_MTO									
Target m	agazine	number of	the old (to	be replac	ed) tool.					
0: There	is no old	tool.								
-1: No TN	/I comma	and is activ	e at the in	stant the v	ariable is	read.				
axis						NCK ver	sion:	16.00.00	)	
identifier:										
unit:	-	min.:					max.:	INT_MA	X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	Х	Х			Х	Х	X	Х	
write:										
attributes:	global	block sear	rch	1	l	link	· ·		1	
		Not class	sified			Not clas	ssified			

INT	\$AC_TC	LTO							descriptio	
		_							n:	
description	1:									
\$AC_TC	LTO									
Target lo	cation nur	mber of the	e old (to b	e replace	d) tool.					
0: There	is no old t	ool.								
-1: No TN	/I commar	nd is active	e at the in	stant the v	ariable is	read.				
axis						NCK vers	sion:	16.00.00	)	
identifier:										
unit:	-	min.:				•	max.:	INT_MA	X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch	•		link	•	•		
		Not class	ified			Not clas	sified			

IINI	\$A_YE	AR						n:	<b>'</b>	
description	l n:									
\$A_YEA										
System t		r								
axis		•			NCK ve	rsion:	00.00.0	0		
identifier:							00.00.0			
unit:	-	min.:			•	max.:	INT_MA	<del>\X</del>		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access	
									rights	
read:	Х	X	Х		X	X	Х	X		
write:										
attributes:	global	block sea	rch		link					
	-		.c			.c. 1				
		Not class	sified		Not cla	ssified				
INT	\$A_MC	NTH						description	)	
description	n·							n:		
-										
\$A_MON		-41-								
System t	ime mor	าเท			INCK ve	roion:	10000			
identifier:	er:				INCK VE	151011.	06.00.0	0		
unit:		Imin.:	1			max.:	INIT M/	\Y		
	run-in	main run	runin stp	Mrun syn	IPP	SA	OPI	INT_MAX		
	Turi-iri	Illalli Tuli	Turiir Stp	Wildir Syll		SA.	OFI	OLIVI	access rights	
read:	Х	X	Х		X	X	X	Х	- Ingrito	
write:		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \							_	
	-1-1-1				PI.					
attributes:	giobai	block sea	rcn		link					
		Not class	sified		Not cla	ssified				
					l					
INT	\$A_DA	V						description	)	
								n:		
description	n:			•						
\$A_DAY										
System t	ime day									
axis					NCK ve	rsion:	06.00.0	0		
identifier:		T!				1				
unit:	-	min.:				max.:	INT_MA			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х		Х	Х	Х	Х		
write:										
attributes:	butes: global block search				link					
		Not class	sified		Not classified					
		140t Glast	JCu		Not classified Not classified					

INT									dooorinti	
IIN I	\$A_HO	UR							descripti	٥
									n:	
description	า:									
\$A_HOU										
System t	ime hour	-								
axis						NCK ver	sion:	06.00.0	0	
identifier:								00.00.0	•	
unit:	-	min.:					max.:	INT_MA	١X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch	•	•	link		•	•	
		Not class	sified			Not clas	ssified			

INT	\$A MIN	NUTE						descript	i0
	. –	_						n:	
description	n:								
\$A MINU	JTE								
System t	ime mini	ute							
axis					NCK ver	sion:	06.00.0	0	
identifier:									
unit:	-	min.:				max.:	INT_M	λX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х	X	Х		Х	Х	Х	Х	
write:									
attributes:	global	block sear	rch	<u> </u>	link		_ I		
		Not class	sified		Not clas	ssified			

INT	\$A SE	COND						descripti	0
	-							n:	
description	า:								
\$A_SEC	OND								
System t	ime seco	ond							
axis identifier:					NCK ver	rsion:	06.00.0	0	
unit:	-	min.:			•	max.:	INT_MA	λX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х	Х	
write:									
attributes:	global	block sear	rch		link	•		•	
		Not class	sified		Not clas	ssified			

IINI	\$A_MS	ECOND							n:	
descriptio	<u> </u> n:								11.	
\$A MSE										
System t		second								
axis						NCK ver	rsion:	06.00.00	)	
identifier: unit:	_	min.:					max.:	INT MA	X	
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	TOEM	access
İ	Turi-iri	Illaili Tuli	ται ιιι στρ	Wildir Syll		' '	57		OLIVI	rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch	ı		link				
		Not class	sified			Not clas	ssified			
		•								
DOUBLE	\$AC_T	IME							descriptio	
descriptio	n:								n:	<u> </u>
Variable	\$AC TII	ME determi	nes the tir	ne from th	e block s	tart in se	conds.			
axis	_					NCK ver		06.00.00	)	
identifier: unit:		Imin.:	0				max.:	DDI M	A V	
driit.	run-in	main run	runin stp	Mrun syn		IPP	SA	DBL_M/	TOEM	access
	run-in	main run	ταιτιτ διρ	Wirum Sym			SA	OFI	OEIVI	rights
read:		Х	Х				Х	Х	Х	<u> </u>
write:										
attributes:	global	block sea	rch	I		link	I			
		Not class	sified			Not clas	ssified			
						I				
DOUBLE	\$AC_T	IMES							descriptio	
descriptio	n.								n:	
\$AC TIN										
		start (REAL	) in secon	ds (exclud	dina times	for inter	nally gene	erated inte	rmediate b	locks).
		ed block car								
		et to zero o								
		econds. The								
block sed										
		be accesse	ed only fro	m svnchro	onized act	tions.				
axis			, ,	-,		NCK ver	rsion:	54.00.00	)	
identifier:										
unit:	-	min.:	0				max.:	DBL_M		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:		Х	Х				Х	Х		1.5
write:										1
attributes:	global	block sear	rch	<u> </u>	<u> </u>	link		_1		
		Not class	sified			Not clas	ssified			
<u> </u>	<u> </u>									

DOUBLE	SAC T	IMFC						descript			
	\\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	0						n:			
description	n:			•							
Variable start.	\$AC_TII	MEC deterr	nines the	number of inter	polation cyc	cles which I	have elaps	sed since	the block		
axis identifier:					NCK v	NCK version: 06.00.00					
unit:	-	min.:	0		•	max.:	DBL_M	AX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM			
read:		Х	Х			X	Х	Х			
write:											
attributes:	es: global block search				link						
		Not class	sified		Not cla	assified	sified				

DOUBLE	\$AC_TIMESC		descriptio
			n:
description	n:		
\$AC_TIM	IESC		
Time fron	n block start (Real) in IPO cycles (exc	uding cycles for internally ger	nerated intermediate blocks).
Each pro	grammed block can be divided into a	sequence of sub-blocks for se	equential processing.
\$AC_TIM	IESC is set to zero o_n_l_y during the	1st cycle of the 1st block in the	he sequence. It is then
incremen	ted in IPO cycles. The variable therefor	ore allows time measurements	s to be taken over the whole
block seq	uence.		
The varia	ble can be accessed only from synchi	onized actions	
axis		NCK version:	54.00.00
identifier:			
unit:	_ lmin.:	max.:	DRI MAY

axis identifier:					NCK vers	sion:	54.00.0	0	
unit:	-	min.:			I	max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:		Х	Х			Х	Х		
write:									
attributes:	global	block sear	rch	1	link	•	1	•	
		Not class	sified		Not clas	sified			

DOUBLE	¢AC TIM	IEDI41							descriptio	T	
	∌AC_TIIV	IEK[I]							n:		
description	1:				I					.1	
Array var	iable \$AC	_TIMER[r	] is an ap	plication-re	elated tim	er. The tir	ne in seco	nds is cou	ınted in m	ultiples of	
an interp	olation cyc	cle.									
The time	is started	d by assigi	ning a val	ue:							
\$AC_TIM	IER[n]= <s< td=""><td>tart value</td><td>&gt;</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></s<>	tart value	>								
The time	s can be	stopped b	y assignir	ng a negat	ive value:						
\$AC_TIM	IER[n]=-1										
The curre	nt timer c	ount can b	e read wh	nile the tim	ne variable	e is runnin	g or stopp	ed. When	the time v	variable is	
stopped I	stopped by assigning -1, the last count value remains stored in the variable and can continue to be read.										
description	description of field limits:										
The dime	The dimension is defined in \$MC_MM_NUM_AC_TIMER.										
axis						NCK vers	ion:	13.00.00			
identifier:		Leader .									
unit:	-	min.:	DBL_MIN	1			max.:	DDL_IVIAX			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access	
read:										rights	
	X	Х	X			Х	Х	Х	X		
write:	X	Х	Х			Х	Х		Х	7	
attributes:	global	block sear	ch			link					
		Not class	ified			Not class	sified				
DOORLE	\$AC_PR	TIME_M							descriptio		
description	).								n:		
\$AC PR		"Progra	mRunTIM	IE-Main"							
		n) of the c			run time (ı	main time	)				
							, ed blocks i	in the part	program	can be	
calculated by the NCK and stored in OPI variable 'acPRTimeM'. This value is cleared by writing a value to the variable.											
axis						NCK vers	ion:	13.00.00			
identifier:								. 5.55.66			
unit:	-	min.:					max.:	DBL_MA	X		

SA

PP

link

Χ

Not classified

OEM

access rights

7

OPI

main run

block search

Not classified

runin stp

Mrun syn

run-in

Х

read: write:

attributes: global

DOUBLE	\$AC_PR	TIME_A							descriptio n:	
description	1 N:								111.	
\$AC PR	TIMF A	"Progra	mRunTIM	E-Auxilary	/"					
		on) of the o				auxiliarv t	ime)			
		rch, the a						skipped bl	ocks in the	e part
		lculated b								
		he variable								
axis						NCK vers	sion:	13.00.00		
identifier:								10.00.00		
unit:	-	min.:					max.:	DBL_MA	Х	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:										
write:	Х					Х				7
attributes:	global	block sear	ch			link	1			
		Not class	ified		Not classified					<del> </del>
		1.101 0.000								
DOUBLE	\$AC PR	TIME_M_	INC						descriptio	
									n: .	
description										
		INC "Pro								
		the calcula			`	,				
		irch, the ai								
		NCK and s								
	dered, the	e calculate	d progran	n runtime	can be co				e explicitly	<i>'</i> .
axis identifier:						NCK vers	sion:	13.00.00		
unit:	_	min.:					max.:	DBL MA	X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	IOEM	access
			. с оср						0	rights
read:										
write:	Х					Х				7
attributes:	global	block sear	ch			link	II.		L	
		Not class	ified			Not clas	sified			
	1									
DOUBLE	\$AC PR	TIME_A_	NC						descriptio	
									n:	
description										
		INC "Prog								
		accumulat								
		irch, the ai								
		NCK and s								
	dered, the	e calculate	d progran	n runtime	can be co			1		<i>'</i> .
axis identifier:						NCK vers	sion:	13.00.00		
unit:	-	min.:					max.:	DBL MA	Х	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
roadi										rights
read:										
write:	Х					Х				7
attributes:	global	block sear	rch			link				
		Not class	sified			Not clas	sified			

DOUBLE	\$AC_P	ATHN							descriptio	
									n:	
description	n:									
Variable	\$AC_PA	THN is a n	ormalized	path para	meter wh	ose val	ue varies b	etween 0	at the block	start and
1 at the b	olock end	d.								
axis						NCK v	ersion:	06.00.0	0	
identifier:										
unit:	-	min.:	0				max.:	1		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:		Х	Х				Х	Х	Х	
write:										
attributes:	global	block sear	rch	1		link	<u> </u>			
		Not class	sified			Not cl	assified			
		•								
DOUBLE	\$AC_D	TBW							descriptio n:	
description	n:				ı					1
Variable system.	\$AC_DT	BW detern	nines the (	geometric	distance 1	from the	e block star	t in the wo	orkpiece co	ordinate

Variable \$AC_DTBW determines the geometric distance from the block start in the workpiece coordinate
system.
The programmed position is used to calculate the distance. If the axis is a coupled axis, the position
component derived from the axis coupling is not considered.

Compone	THE GEHA	eu nom me	anis coup	Jillig is flot cons					
axis identifier:					NCK v	ersion:	06.00.0		
unit:	mm	min.:	DBL_MII	N		max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:		Х	Х			Х	Х	Х	
write:									
attributes:	utes: global block search		1	link	link				
	Not classified				Not cl	assified			

IN	T	\$AC REPOS PATH MODE	description	0
		*****	n:	

description:

\$AC\_REPOS\_PATH\_MODE

Type of Repos mode

0 not defined.

- 1 == RMB Repos approach to start of interrupted block
- 2 == RMI Repos approach to interruption point in interrupted block
- 3 == RME Repos approach to end of interrupted block
- 4 == RMN Repos approach to next geometric point in interrupted block

The variable is defined if a REPOS command is currently being executed, or if

a new REPOS mode has been specified via the VDI.

axis identifier:					NCK vers	ion:	51.00.00		
unit:	-	min.:			•	max.:	4		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:		Х	Х			Х	Х	Х	
write:									
attributes:	global	block sear	ch		link				
		Program	sensitive		Not class	sified			

DOUBLE	\$AC DT	BB			description					)		
									n:			
description	1:											
Variable :	\$AC DTE	BB determi	ines the g	eometric d	listance fr	om the b	lock start	in the bas	ic coordina	ate system.		
The prog	rammed p	position is	used to ca	alculate th	e distance	e. If the a	ixis is a co	oupled axi	s, the posi	tion		
compone	nt derive	d from the	axis coup	ling is not	considere	ed.		•	•			
axis			•			NCK vers	sion:	06.00.0	0			
identifier:												
unit:	mm	min.:	DBL_MIN	١			max.:	DBL_M	DBL_MAX			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights		
read:		Х	Х				Х	Х	Х			
write:												
attributes:	global	block sear	ch	l .	I.	link			I			
		Not class	sified			Not clas	sified					
		•										
DOUBLE	\$AC_DT	EW							description:	0		
description	)·								111.			
'		-W determ	nines the c	neometric	distance f	rom the I	nlock end	in the wo	rkniece co	ordinate		

v an abic	Ψ, ιΟ_Β .	_,,		goonnound and		0111 1110	DIOON ONG		mpioco oc	oraniato
system.										
The prog	rammed	position is	used to c	alculate the d	distance	. If the	axis is a co	oupled axi	s, the pos	ition
compone	ent derive	d from the	axis coup	ling is not co	nsidere	d.				
axis				-		NCK ve	rsion:	06.00.0	0	
identifier:										
unit:	mm	min.:	DBL_MII	BL_MIN			max.:	DBL_MAX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:		Х	Х				Х	Х	Х	
write:										
attributes:	global	block sea	rch	•		link	•	•	•	

Not classified

Not classified

DOUBLE	\$AC DT	EB							descripti	0		
	*****								n:			
description	1:											
Variable	\$AC_DTE	B determi	ines the g	eometric o	distance fr	om the b	olock end i	in the bas	ic coordin	ate system.		
The prog	rammed p	osition is	used to ca	alculate th	e distance	e. If the a	axis is a co	oupled axi	s, the pos	sition		
compone	nt derived	from the	axis coup	ling is not	considere	ed.		·	•			
axis identifier:			·			NCK ver	sion:	06.00.00				
unit:	mm	min.:	DBL_MIN	DBL_MIN			max.:	DBL_MAX				
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights		
read:		Х	Х				Х	Х	Х			
write:												
attributes:	global	lobal block search					link					
	Not classified					Not classified						

DOUBLE	\$AC P	LTBB						descript	io	
	ψ2 ( <b>U</b> _1							n:		
descriptior	ո:							•		
Variable:	\$AC_PL	TBB deterr	nines the	path from the b	lock start in	the basic of	coordinate	system.		
axis identifier:				-	NCK ve	ersion:	06.00.0	06.00.00		
unit:	mm	min.:	DBL_MIN	N	*	max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:		Х	Х			Х	Х	Х		
write:										
attributes:	global	block sear	ch		link					
		Not class	sified		Not classified					

DOUBLE	\$AC P	LTEB							descript	io	
	*****								n:		
description	n:										
Variable	\$AC_PL	TEB detern	nines the	path to the	block en	d in the	basic coo	rdinate sy	stem.		
axis identifier:						NCK ve	rsion:	06.00.0	06.00.00		
unit:	mm	min.:	DBL_MII	BL_MIN max.: DBL_N					IAX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:		Х	Х				Х	Х	Х		
write:											
attributes:	global	al block search  Not classified			link						
						Not classified					

DOUBLE	\$AC DE	LT							description	0
	\\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\ \\								n:	
description	n:			-					•	
Variable	\$AC DEI	LT is used	to read th	e stored path	distan	ce to go	o in the wor	kpiece co	ordinate s	ystem aftei
delete dis	stance to	go in moti	on-synchr	onous actions	S.	Ū		•		•
axis						NCK version: 06.00.00			0	
identifier:										
unit:	mm	min.:	DBL_MIN	DBL_MIN			max.:	DBL_MAX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:		X					X	X	X	
write:										
attributes:	global	block sear	link							
		Not class			Not classified					

BOOL	\$P_APD	V							descriptio			
description	l n:								n:			
\$P APD												
		nosition v	values wh	ich can be	read with	SP AP	RIX1 or \$F	AFP[X]				
				point in the				_, [, 1]				
	ction) are	• .		, , , , , , , , , , , , , , , , , , , ,			лрр. о ш о					
axis						NCK version: 13.0			3.00.00			
identifier:								10.00.0				
unit:	-	min.:	FALSE				max.:	TRUE				
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access		
rood										rights		
read:	Х					Х						
write:												
attributes:	global	block sear	rch		ı	link	<u> </u>		· ·			
		Not class	sified		Not classified							
DOUBLE	\$P F								descriptio			
	. –								n:			
description												
	\$P_F is u	sed to rea	d the last	programm	ned path f							
axis identifier:						NCK ver	'sion:	06.00.0	0			
unit:	mm/min	min.:	DBL MIN	N .		max.:			DBL MAX			
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	TOEM	access		
										rights		
read:	Х					Х						
write:												
attributes:	global	block sear	rch			link						
		Not class	:ti a d			Not clas	:fid					
		NOL Class	silieu			NOT CIAS	ssilled					
DOUBLE					ı				descriptio	ı		
DOUBLE	\$AC_F								n:			
description	n:								11.			
Variable	\$AC F is	used to re	ead the ac	tive progra	ammed pa	ath feed	F.					
axis	_				· ·	NCK ver		20.10.0	0			
identifier:			1									
unit:	mm/min	min.:	DBL_MIN				max.:	DBL_M				
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights		
read:		X				1	X	X	X	rigino		
write:							+					
attributes:	global	block sear	rch	<u> </u>		link						

Not classified

Not classified

DOUBLE	\$AC_F_	G0						descript	io	
								n:		
description	n:									
Variable	\$AC_F_G	0 returns	the maxin	num rapid trav	erse velocity	in the bloc	k.			
axis identifier:					NCK ve	ersion:	53.00.0			
unit:	mm/min min.: DBL_MIN					max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:		Х				Х	Х	Х		
write:										
attributes:	global block search				link					
	Not classified				Not cla	Not classified				

DOUBLE SAC OVR	d	escriptio	
	n	1:	

description:

The variable \$AC\_OVR determines the path override specifiable via synchronized action. The path override must be set by assigning a value cyclically to \$AC\_OVR in each interpolation cycle. Otherwise \$AC\_OVR is reset to 100%.

The total path override can be read via \$AC\_TOTAL\_OVR.

The total path override without the programmable override (e.g. OVR = 10) is limited to the maximum value defined by the machine data \$MN\_OVR\_FACTOR\_LIMIT\_BIN or \$MN\_OVR\_FACTOR\_FEEDRATE[31]. Values less than 0 are not allowed.

axis identifier:							ersion:	06.00.0	06.00.00		
unit:	- min.: DBL_MIN						max.:	DBL_M	AX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:		Х					X	Х	Х		
write:		Х					Х		Х	7	
attributes:	global	block sear	olock search			link					
		Not classified				Not classified					

## 1.1 List of system variables

DOUBLE	\$AC_P	LC_OVR			descriptio					
									n:	
override t The rapid traverse r	able \$AC that is se d traverse reductior	C_PLC_OVF et via the Ma e override ( n has been D_FACTOF	achine Co (settable o activated	ontrol Pane on the Mac via the op	el. chine Cont perator inte	trol Panel erface, th	l) is effectiven, with G	ve with G0		
axis identifier:						NCK vers	sion:	54.00.00	)	
unit:	-	min.:					max.:	max.: DBL_MAX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:		Х					Х	Х	Х	
write:		1		<del>                                     </del>	<u> </u>	<u> </u>	1			
attributes:	global	block sear	rch		<u> </u>	link			1	
		Not class	ified							
DOUBLE	\$AC_T	OTAL_OVE	₹						descriptio n:	
from the I	able \$AC PLC, the	c_TOTAL_C e synchroniz /R = \$AC_f	zed action	override (	(\$AC_OV	R) and th	ne program			
axis						NCK vers	sion:	54.00.00	)	

identifier: unit:

read:

write:

attributes: global

run-in

min.:

Χ

block search Not classified

main run runin stp

Mrun syn

max.:

Χ

SA

Not classified

DBL\_MAX

Χ

OEM

Χ

access rights

OPI

DOUBLE SAC\_VC | descriptio | n:

description:

\$AC VC

Additive path feed override for synchronized actions

The override value must be rewritten in every Ipo cycle or else a value of 0 is applied.

The override value is ignored with an override of 0. Otherwise, the override value is applied independent of the override.

The total feedrate cannot be made negative by an override value.

An upper limit is applied to ensure that the maximum axis velocities and acceleration rates cannot be exceeded. The maximum feedrate is limited by \$MN\_OVR\_FACTOR\_LIMIT\_BIN,

\$MN\_OVR\_FACTOR\_FEEDRATE[30] (see machine data).

The override value is not included in the calculation in the case of G0, G33, G331, G332 and G63.

The variable can be accessed only from synchronized actions.

axis identifier:			-		NCK ve	ersion:	06.00.0	06.00.00		
unit:	Linear / angular speed	min.:	DBL_MI	N	·	max.:	DBL_M	IAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:		Х				Х	Х	Х		
write:		Х				Х		Х	7	
attributes:	global	block sear	ch	1	link	l .				
	Not classified				Not cla	Not classified				

DOUBLE   \$AC_PATHACC	description	)
	n:	

description:

\$AC PATHACC

Defines an increased path acceleration for override changes and stop/start events.

\$AC PATHACC is taken into account only if the value is higher than the prepared acceleration limit.

A value of 0 deselects the function.

Values which cause machine axis acceleration rates twice the rate configured in \$MA\_MAX\_AX\_ACCEL[..] are limited internally.

axis					NCK ver	sion:	45.00.0	0	
identifier:									
unit:	m/s²	min.:	0.			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Χ	Х	Х		Х	Х	Х	Х	
write:	Х	Х	Х		Х	Х		Х	7
attributes:	global	block sear	ch		link				
		Not class	sified		Not clas	ssified			

DOUBLE	\$AC PA	ATHJERK							descripti	0
									n:	
description	1:									
\$AC_PA	THJERK									
Defines a	an increa	sed path je	erk for ove	rride chan	ges and s	top/start	events.			
\$AC_PA	THJERK	is taken in	to accoun	t only if the	e value is	higher th	nan the pr	epared je	rk limit.	
A value o	of 0 dese	lects the fu	nction.							
axis						NCK ver	sion:	45.00.0	0	
identifier:										
unit:	m/s³	min.:	0.				max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:	Х	Х	Х			Х	Х		Х	7
attributes:	global	block sear	rch		•	link		•		
		Not class	sified			Not clas	ssified			
	•	•				•				•

DOUBLE	\$AC_VA	СТВ							descripti	0
									n:	
description	n:									
\$AC_VA	СТВ									
Path velo	city in the	basic co	ordinate s	ystem.						
The velo	city is cald	culated fro	m the velo	ocities of the	ne geome	try axe	s - indepen	dent of FC	ROUP.	
				m synchro			•			
axis						NCK ve	ersion:	06.00.0	0	
identifier:									-	
unit:	Linear /	min.:	DBL_MIN	٧			max.:	DBL_M	AX	
	angular									
	speed									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:		Х	Х				Х	Х	Х	
write:										
attributes:	global	block sear	rch			link	1	L	L	
		Not class	sified			Not cla	assified			

DOUBLE	\$AC_VA	CTW							descripti	0
	<b>*</b>								n:	
description	n:									
\$AC_VA	CTW									
Path velo	ocity in the	workpied	e coordin	ate system	1					
The velo	city is cald	culated fro	m the vel	ocities of th	ne geome	try axe	s - indepen	dent of F0	GROUP.	
The varia	able can b	e accesse	ed only fro	m synchro	nized act	ions				
axis						NCK ve	ersion:	06.00.0	0	
identifier:										
unit:	Linear /	min.:	DBL_MII	V			max.:	DBL_M	AX	
	angular									
	speed									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:		Х	Х				Х	Х	Х	
write:										
attributes:	global	block sear	rch	1		link	1	1	1	
		Not class	sified			Not cla	assified			

DOUBLE	\$P_S[n]								descriptio n:	
description	n:				l .				1111	
\$P_S[n]										
n: Numbe										
Last prog	grammed	spindle sp	eed							
description										
n: Spindle						INCK ver	oion:	100.00		
identifier:	SPINDLI	E				INCK VEI	51011.	06.00.0	0	
unit:	rpm	min.:				ı	max.:	DBL M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI _	OEM	access
				-						rights
read:	Х					Х				
write:										
attributes:	global	block sear	rch		ı	link				
		Not class	sified			Not clas	ssified			
	1	1				1				
DOUBLE	\$AA S[	1]							descriptio	
		•							n:	
description										
\$AA_S[n	-	مام								
n: Numbe			an correct	oonds to th	na diractic	n of rota	ation			
description	n of field lir	nits:	gii coires <sub>i</sub>	Johas to ti	ie directio	טוו טו וטנפ	ation.			
n: Spindl										
axis						NCK ver	rsion:	06.00.0	0	
identifier:		Tuesta .					1			
unit:	rpm	min.:					max.:	DBL_M		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	X	X	Х			Х	X	X	X	rights
write:	^	^	^			_ ^		^		
	alahal	blook ooo	roh			link				
attributes:	giobai	block sear				link				
		Not class	sified			Not clas	ssified			
DOUBLE	\$P_CON	ISTCUT_S	S[n]						descriptio	
description	u. 								n:	
\$P_CON		S[n]								
n: Numbe										
		constant o	cutting rate	9						
description	n of field lir	nits:								
n: Spindle	e number	•								
axis identifier:						NCK ver	rsion:	42.00.0	0	
unit:	m/min	min.:				<u> </u>	max.:	DBL M	ΔΥ	
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	IOEM	access
1	i un-in	Thair run	l umi stp	Wildir Syll		[ '			OLIVI	rights
read:	Х	1				Х				
write:		1	<u> </u>							
attributes:	global	block sear	rch	l		link			1	+
	5						- : <b>::</b> : - :			
1	1	Not class	sitiea			Not class	ssitied			1

## 1.1 List of system variables

\$P\_SDIR[n]

SAC CO	DNSTCUT	S[n]						descripti	0
\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		_~[]						n:	
n:									
NSTCUT	S[n]								
er of spin	dle								
constant o	cutting rate	<b>)</b> .							
n of field li	mits:								
e numbe	r								
SPINDL	E				NCK ver	sion:	42.00.0	0	
m/min	min.:					max.:	DBL_M	AX	
run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
Х	Х	Х			Х	Х	X	Х	
global	block sear	rch	L	I	link	Į.			
	Not class	sified			Not clas	ssified			
	n: NSTCUT er of spin constant of field li e number SPINDL m/min run-in X	NSTCUT_S[n] er of spindle constant cutting rate n of field limits: e number SPINDLE m/min min.: run-in main run  X X global block sea	NSTCUT_S[n] er of spindle constant cutting rate. n of field limits: e number  SPINDLE  m/min   min.: run-in   main run   runin stp	NSTCUT_S[n] er of spindle constant cutting rate. n of field limits: e number  SPINDLE  m/min min.: run-in main run runin stp Mrun syn  X X X X  global block search	NSTCUT_S[n] er of spindle constant cutting rate. n of field limits: e number  SPINDLE  m/min   min.: run-in   main run   runin stp   Mrun syn    X	NSTCUT_S[n] er of spindle constant cutting rate. n of field limits: e number  SPINDLE  m/min  min.: run-in  main run  runin stp  Mrun syn  PP  X  X  X  global  block search  link	NSTCUT_S[n]	NSTCUT_S[n]	

DOUBLE	\$P_SE	ARCH_S[n	]						descript	io
									n:	
description										
\$P_SEAI	RCH_S[I	n]								
n: Numbe	er of spir	ndle								
Last prog	ramme	d spindle sp	eed colle	cted during b	lock search	1				
or cutting	rate			· ·						
description	n of field I	imits:								
n: Spindle	e numbe	er								
axis identifier:	SPINDI	_E			NCF	\(   \text{ver}   \)	sion:	20.01.0	00	
unit:	rpm	min.:			max.:			DBL_MAX		
	run-in	main run	runin stp	Mrun syn	PP		SA	OPI	OEM	access rights
read:	Х					Χ				
write:										
attributes:	global	block sear	rch		link		1	I	1	
		Not class	sified		Not	clas	ssified			

								1	
n:								•	
₹[n]									
er of spin	dle								
grammed	direction of	of spindle	rotation						
indle rota	ation, 4: CO	CW spindl	e rotation,	5: Spindle	e stop				
n of field li	mits:								
e numbe	r								
SPINDL	E				NCK ver	sion:	06.00.	00	
-	min.:	3				max.:	5		
run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
									rights
Х					Х				
global	block sear	rch			link				
	Not class	sified			Not clas	ssified			
	R[n] er of spin grammed pindle rota n of field li e numbel SPINDL - run-in X	R[n] er of spindle grammed direction of pindle rotation, 4: Connof field limits: e number SPINDLE - min.: run-in main run X global block sear	R[n] er of spindle grammed direction of spindle pindle rotation, 4: CCW spindle n of field limits: e number SPINDLE - min.: 3 run-in main run runin stp	R[n] er of spindle grammed direction of spindle rotation pindle rotation, 4: CCW spindle rotation, n of field limits: e number  SPINDLE  - min.: 3 run-in main run runin stp Mrun syn  X global block search	R[n] er of spindle grammed direction of spindle rotation pindle rotation, 4: CCW spindle rotation, 5: Spindle n of field limits: e number  SPINDLE  - min.: 3 run-in main run runin stp Mrun syn  X global block search	R[n] er of spindle grammed direction of spindle rotation pindle rotation, 4: CCW spindle rotation, 5: Spindle stop n of field limits: e number  SPINDLE  - min.: 3 run-in main run runin stp Mrun syn PP  X X X global block search link	R[n] er of spindle grammed direction of spindle rotation bindle rotation, 4: CCW spindle rotation, 5: Spindle stop n of field limits: e number  SPINDLE  NCK version:  - min.: 3 run-in main run runin stp Mrun syn PP SA  X X X  global block search	R[n] er of spindle grammed direction of spindle rotation bindle rotation, 4: CCW spindle rotation, 5: Spindle stop n of field limits: e number  SPINDLE    NCK version:   06.00.0  -   min.:   3     max.:   5     run-in   main run   runin stp   Mrun syn     PP   SA   OPI     X   X   X	R[n] er of spindle grammed direction of spindle rotation bindle rotation, 4: CCW spindle rotation, 5: Spindle stop n of field limits: e number  SPINDLE  NCK version:  O6.00.00  - min.: 3 run-in main run runin stp Mrun syn PP SA OPI OEM  X X X I IIII global block search

INT	\$AC_S	DIR[n]						descript	0
	-							n:	
descriptio	n:								
\$AC_SD	IR[n]								
n: Numb	er of spir	ndle							
Current of	direction	of spindle r	otation						
3: CW sp	oindle rot	tation, 4: Co	CW spindl	e rotation, 5:	Spindle stop				
descriptio	n of field l	imits:	•	•	•				
n: Spindl	e numbe	er							
axis	SPINDI	E			NCK vei	rsion:	06.00.00		
identifier:									
unit:	-	min.:	3			max.:	5		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		X	X	X	X	
write:									
attributes:	global	block sea	rch	<u> </u>	link	l .	ı	I	
		Not class	sified		Not cla	ssified			

IN I \$F	P_SEARCH_SDIR[n]		descriptio	
		r	n:	

description:

\$P\_SEARCH\_SDIR[n]

n: Number of spindle

Last programmed direction of spindle rotation collected during block search

- 3: M3 CW spindle rotation
- 4: M4 CCW spindle rotation
- 5: M5 Spindle stop
- -19: M19, SPOS, SPOSA spindle positioning, position and approach mode

is read from SEARCH variables

- 70: M70 Changeover to axis mode
- -5: No direction of rotation programmed, not output. description of field limits:

n: Spindle number

axis identifier:	SPINDL	Е			NCK ver	sion:	20.01.00			
unit:	-	min.:	3		•	max.:	70			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х					
write:										
attributes:	global	block sea	rch	I	link	l .				
		Not class	sified		Not clas	ssified				

INT	\$P_SM	ODE[n]							descriptio	
									n:	
description										
P_SMO										
	er of spir									
		e resulting t								
		grammed iı					er channe	el, or		
		the PLC (F	C18) or sy	nchronize/	d actions.					
1: Speed										
2: Positio										
3: Synch		node								
4: Axis m										
description										
n: Spindl	e numbe	er								
axis dentifier:	SPINDI	-E				NCK ver	sion:	06.00.	00	
unit:	-	min.:				max.:				
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:										
attributes:	global	block sea	rch			link				
		Not class	sified			Not clas	ssified			
INT	\$AC_S	MODE[n]							descriptio n:	
description	n:								L	1
AC SM	ODE[n]									

									n:	
description	า:									
\$AC_SM	ODE[n]									
n: Numbe	er of spind	dle								
Current s	pindle mo	ode:								
		rammed ir	n channel							
1: Speed										
2: Position										
3: Synch		ode								
4: Axis m										
description										
n: Spindl	e number	•								
axis identifier:	SPINDLI	E				NCK ver	sion:	13.00.0	00	
unit:	-	min.:				•	max.:	4		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch	•	•	link		•	•	
		Not class	sified			Not clas	ssified			

INT	\$P SG	EAR[n]							descripti	0
									n:	
descriptio	n:									
\$P_SGE	AR[n]									
n: Numb	er of spir	ndle								
		ge last prog	rammed o	or requeste	d by S pr	ogramm	ing in the	case of N	<b>Л4</b> 0	
' '	,	, ,		•	, ,	J	J			
1: 1. Gea	ar stage	requested								
		- 4								
5: 5. Gea	ar stage	requested								
descriptio										
n: Spindl	e numbe	er								
axis	1	-				NCK ver	sion:	41.00.	00	
identifier:								11.00.	00	
unit:	-	min.:	1			•	max.:	5		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	X					Х				
write:										
attributes:	global	block sea	rch	1		link				
		Not class	sified			Not clas	ssified			
-						ı				
INT	¢AC S	GEAP[n]		Ì					descripti	0

INT	\$AC_S	GEAR[n]						descripti n:	0
description	1:			<u> </u>				1	
\$AC_SG	EAR[n]								
n: Numbe	er of spir	ndle							
Active sp									
1: 1. Gea	r stage i	is active							
5: 5. Gea									
description	n of field l	imits:							
n: Spindl	e numbe	er							
axis					NCK ve	rsion:	41.00.0	00	
identifier:		I main							
unit:	-	min.:	1			max.:	5		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		X	Х	Х	Х	
write:									
attributes:	global	block sear	rch	1	link	I		I	
		Not class	sified		Not cla	ssified			

INI	\$P SAI	UTOGEAR	[n]						descriptio	
									n:	
description	า:									
\$P_SAU	TOGEAF	R[n]								
n: Numbe	er of spir	ndle								
Automati	c gear st	tage chang	e (M40) is	programn	ned.					
0: Gear s	tages ar	e requeste	d by M41.	.M45						
1: Gear s	tage is c	calculated a	and reques	sted accor	ding to pro	ogramm	ed speed	(S)		
		ear stage o			•	•	•	` '		
description	n of field I	imits:	<u>v</u>	· · · · · · · · · · · · · · · · · · ·						
n: Spindle	e numbe	er								
axis						NCK ver	sion:	41.00.	00	
identifier:										
unit:	-	min.:					max.:	1		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:										
attributes:	global	block sea	rch	<u> </u>		link		<u> </u>		
		Not class	sified			Not clas	ssified			
	•	•								•
INT	\$P SEA	ARCH_SG	EAR[n]						descriptio	
									n:	

	W _OLAKON_OOLAK[ii]	n:	
description	n:		
_	RCH_SGEAR[n]		

n: Number of spindle

Last programmed gear stage M function collected during block search

40: M40 automatic gear stage change

41: M41 1st gear stage requested

45: M45 5th gear stage requested description of field limits:

n: Spindle number

ii. Opiiidi	C Hullibe	ار							
axis identifier:					NCK vei	rsion:	20.01.	00	
unit:	-	min.:	1		<u>l</u>	max.:	5		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:									
attributes:	global	block sea	rch	<u> </u>	link				
		Not class	sified		Not cla	ssified			

DOUBLE	\$P_SEA	RCH_SP	OS[n]						description	
d									n:	
description										
\$P_SEAI	RCH_SP	OS[n]								
n: Numbe	er of spin	dle								
Spindle p	osition o	r traversing	g path last	programr	ned via M	19, SPO	S or SPC	SA and co	ollected du	ring block
search.										
Position:	0359,9	99 if the va	alue in MD	30330 M	ODULO I	RANGE	is 360.0 c	legrees		
		100000								
description					<u> </u>					
n: Spindle	e numbei	r								
axis						NCK ver	sion:	20.01.0	<u> </u>	
identifier:								20.01.0	,	
unit:	deg.	min.:	DBL_MIN	1			max.:	DBL_M	4Χ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•		link	•	•	•	
		Not class	sified			Not clas	sified			
	1									· ·
INT	AD 054	DOLL OD			1				Idescription	

IIN I	\$P_SEARCH_SPOSMODE[n]	descriptio	
		n:	
description	ī:	,	

# \$P\_SEARCH\_SPOSMODE[n] n: Number of spindle

Position approach mode last programmed via M19, SPOS or SPOSA and collected during block search.

- 0: DC
- 1: AC
- 2: IC
- 3: DC
- 4: ACP

5: ACN description of field limits:

## n: Spindle number

	o mannoon								
axis					NCK ver	sion:	20.01.0	00	
identifier:									
unit:	-	min.:				max.:	5		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch		link		•	•	
		Not class	sified		Not clas	ssified			

INT	\$P_NUN	/I_SPINDL	ES						description	,
									n:	
description										
\$P_NUM										
Calculate	es the ma	ximum nuı	mber of sp	oindles in t	the chann	el				
0: No spi	ndle prog	ırammed ir	n channel.							
1n: Nun	nber of sp	oindles in o	channel.							
axis						NCK vers	sion:	20.01.00	)	
identifier:										
unit:	-	min.:					max.:	INT_MA	X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				1
write:										
attributes:	global	block sear	rch	ı		link				
		Not class	sified			Not clas	sified			
	1.									,
INT	\$P_MSN	NUM							description:	)
description	n:								· ·	
\$P MSN	UM									
Returns t	the numb	er of the m	naster spir	ndle.						
		rammed ir								
		aster spin								
axis						NCK vers	sion:	06.00.00	)	
identifier:								00.00.00	•	
unit:	-	min.:	INT_MIN				max.:	INT_MA	X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights

INT	\$AC M	ISNUM						descripti	0
	ψ2 t <b>C</b>							n:	
description	ո:							•	
\$AC MS	NUM								
		ber of the c	urrent ma	ster spindle.					
0: No spi				·					
•		naster spin	dle						
axis					NCK ver	sion:	06.00.0	0	
identifier:									
unit:	-	min.:	INT_MIN	I	•	max.:	INT_MA	4X	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Χ	Х	Х		Х	Х	Х	Х	
write:									
attributes:	global	block sear	rch	1	link	1	1		
		Not class	sified		Not clas	ssified			

Χ

Not classified

read:

write:

attributes: global

block search

Not classified

INT	\$P_MT	HNUM						descriptio	
description	n.							n:	
				magazine mai	nagement is a	active			
		per of the m		lholder.					
		holder conf	•						
	nber of n	naster toolh	nolder						
axis					NCK ver	rsion:	20.00.0	0	
identifier:			,			•			
unit:	-	min.:	INT_MIN	I		max.:	INT_M	4X	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				Ť
write:									
attributes:	global	block sear	rch		link				
		Not class	sified		Not clas	ssified			
INT	\$AC M	THNUM						descriptio	
	_							n:	
description	n:								
\$AC_MT	HNUM -	meaningfu	I only whe	en magazine m	anagement is	active			
Returns t	the numb	per of the c	urrent ma	ster toolholder:					
0: No ma	aster tool	holder conf	figured						
		naster toolh							
axis					NCK ver	rsion:	20.00.0	0	
identifier:									
unit:	-	min.:	INT_MIN	I		max.:	INT_M	4X	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х	Х	Ĭ
	1	1	1	<u> </u>					
write:									

BOOL	\$P_GWF	PS[31]							descripti	0
									n:	
description	า:									
\$P_GWF	PS[n]									
Constant	grinding	wheel sur	face spee	d ON if TR	UE					
description	n of field lin	nits:								
n: Spindl	e number									
axis						NCK ver	sion:	06.00.0	00	
identifier:										
unit:	Linear /	min.:	FALSE			•	max.:	TRUE		
	angular									
	speed									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:										
attributes:	global	block sear	rch			link	I		1	
		Not class	sified			Not clas	ssified			

Not classified

Not classified

DOUBLE	\$AC F	CT1LL						descript	10
	ļ <b></b>	<del>-</del>						n:	
description	n:			•				•	
Variable	\$AC FC	T1LL is us	ed to defii	ne the lower lim	nit for the first	polvnomi	al functio	n.	
				efined by FCTI					a0. a1. a2
a3).	ioiiiai i	a	a.00 b0 a	oou by 1 0 1 2	) L. (poly.lo	iai iio., ioi	, or	аррог шт.,	ao, a i, a <u>-</u>
axis					INCK ve	rsion:	06.00.	00	
identifier:					Tront vo.	01011.	06.00.	00	
unit:	- min.: DBL MIN					max.:	DBL_N	ИАX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х		Х	<u> </u>
write:	Х	Х	Х		Х	Х		Х	7
attributes:	global	block sea	rch	1	link				
		Not class	sified		Not cla	ssified			

		Not class	sified			Not clas	ssified			
DOUBLE	\$AC_F	CT2LL							descripti n:	0
descriptio	n:			•						
Variable	\$AC_FC	T2LL is us	ed to defir	ne the lowe	r limit for	the seco	ond polyn	omial fun	ction.	
The poly	nomial fu	ınction can	also be d	efined by F	CTDEF(p	olynomi	ial no., lov	ver limit, ι	upper limit,	a0, a1, a2
a3).				-	-	-				
axis identifier:						NCK ver	sion:	06.00.0	00	
unit:	-	min.:	DBL_MII	N			max.:	DBL_N	ИАX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х		Х	
write:	Х	Х	Х			Х	Х		Х	7
	<del>                                     </del>		cob	1		link		1		
attributes:	global	block sea	CH			link				

DOUBLE	SAC FO	CT3LL							descripti	0
	φ, ι <b>σ_</b> . ι								n:	
description	n:									•
Variable	\$AC FC	T3LL is use	ed to defir	ne the lowe	er limit for	the third	polynom	ial function	on.	
	nomial fu	nction can	also be d	efined by F	CTDEF(p	olynomi	al no., low	ver limit, ı	upper limit,	a0, a1, a2,
a3). axis identifier:						NCK ver	sion:	06.00.	00	
unit:		Imin.:	DDI MI	.1			max.: DBL MAX		11 V	
Grift.	-		DBL_MI	V						
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х		Х	
write:	Х	X	Х			Х	Х		Х	7
attributes:	global	block sear	ch	•		link	*	•	•	
		Not class	sified			Not clas	ssified			

DOUBLE	\$AC F	CT1UL						descript	10
	<b>V</b> 10_1							n:	
description	n:			•					•
Variable	SAC FC	T1UL is us	ed to defi	ne the upper lir	nit for the firs	t polvnom	ial functio	n.	
	_			efined by FCTI					a0, a1, a2
a3).				,	11 3	•	, ,	,	, ,
axis					NCK ver	sion:	06.00.0	0	
identifier:								-	
unit:	-	min.:	DBL_MIN	V		max.:	DBL_M	AX	
<del></del>	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		X	Х	Х	Х	
write:	Х	Х	Х		Х	Х		Х	7
attributes:	global	block sear	rch	l l	link	-			
		Not class	sified		Not clas	ssified			

DOUBLE	\$AC_F	CT2UL							descript	10
									n:	
description	n:									
Variable	\$AC FC	T2UL is us	ed to defi	ne the upp	er limit fo	r the sec	ond polyr	nomial fun	ction.	
										a0, a1, a2,
a3).				•		,				
axis						NCK ver	sion:	06.00.0	0	
identifier:										
unit:	-	min.:	DBL_MI	V			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:	Х	Х	Х			Х	Х		Х	7
attributes:	global	block sea	rch	•		link	•	•	•	
		Not class	sified			Not clas	ssified			

DOUBLE	1				i				l d a a ani mbi	_ 1
DOUBLE	\$AC_FC	T3UL							descripti n:	0
description	1 n:								111.	
_		Γ3UL is us	ed to defi	ne the linr	er limit fo	r the thir	d nalynam	ial functio	'n	
										a0, a1, a2,
a3).	iloitilai tai	iction can	also be a	cillica by i	OIDLI (	Jorymonn	ai 110., 10w	Cr mint, up	oper mine,	ao, a 1, az,
axis						INCK ver	sion.	06.00.0	^	
identifier:						11011101	0.011.	06.00.0	U	
unit:	-	min.:	DBL_MIN	٧		!	max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	X	Х			X	X	X	Х	
write:	Х	Х	Х			Х	Х		Х	7
attributes:	global	block sear	ch		I.	link				
		Not class	sified			Not clas	ssified			

DOUBLE	\$AC F	CT1C[4]						descripti	0
								n:	
description	า:								
Array var	iable \$A	C_FCT1C[	n] is used	to program p	olynomial coef	icients a0	) - a3 for	the first po	lynomial
function.									
The poly	nomial fu	ınction can	also be d	efined by FCT	DEF(polynomi	al no., lov	ver limit, ι	upper limit,	a0, a1, a2,
a3).				•	" ,				
description	n of field I	imits:							
n: Degree	e of orde	er of coeffici	ient 0 - 3						
axis					NCK ver	sion:	06.00.	00	
identifier:									
unit:	-	min.:	DBL_MII	N		max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
read:									rights
	Х	Х	Х		X	Х		Х	
write:	Х	Х	Х		X	Х		Х	7
attributes:	global	block sear	rch	1	link	•			
		Not class	sified		Not clas	sified			

DOUBLE SAC FCT2C[4]	de	escriptio	
, <b></b>	n:	:	

description:

Array variable \$AC\_FCT2C[n] is used to program polynomial coefficients a0 - a3 for the second polynomial function.

The polynomial function can also be defined by FCTDEF(polynomial no., lower limit, upper limit, a0, a1, a2, a3).
description of field limits:

n: Degree of order of coefficient 0 - 3

axis identifier:	entifier:				NCK vei	rsion:	06.00.	06.00.00			
unit:	-	min.:	DBL_MII	V		max.:	DBL_MAX				
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights		
read:	Х	Х	Х		X	Х		X			
write:	Х	Х	Х		Х	Х		Х	7		
attributes:	global	block sea	rch		link			<b>.</b>			
		Not class	sified		Not cla	ssified					

DOUBLE	\$AC F	CT3C[4]					descript				
	*****							n:			
description	n:										
Array var	iable \$A	C_FCT3C[	n] is used	to program po	lynomial coef	ficients a0	) - a3 for	the third po	olynomial		
function.			_					-	•		
The polyi	nomial fu	ınction can	also be d	efined by FCTE	EF(polynomi	al no., lov	ver limit, ι	upper limit,	a0, a1, a2		
a3).											
description	n of field l	imits:									
n: Degree	e of orde	er of coeffic	ient 0 - 3								
axis					NCK ver	sion:	06.00.	00			
identifier:											
unit:	-	min.:	DBL_MII	V		max.:	DBL_N	ИAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access		
									rights		
read:	Х	X	X		X	Х		X			
write:	Х	Х	Х		Х	Х		Х	7		
attributes:	global	block sear	rch		link	1	T.	<u> </u>			
		Not class	sified		Not clas	ssified					

DOUBLE	\$AC_F	CTLL[n]							descripti n:	0
description	<u> </u> า:								111.	
_	nomial fu	C_FCTLL[r inction can	-					•		a0, a1, a2,
'		defined in	\$MC_MM	_NUM_FC	TDEF_E	LEMENT	S.			
axis identifier:						NCK ver	sion:	06.00.0	0	
unit:	-	min.:	DBL_MIN	V			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:	Х	Х	Х			Х	Х		Х	7
attributes:	global	block sear	ch	1		link	L	L	1	
		Not class	ified			Not clas	ssified			

DOUBLE	\$AC_F	CTUL[n]							descripti	0
									n:	
description	n:									
Array var	iable \$A	C_FCTUL[	n] is used	to define t	he upper	limit for	the nth po	lynomial f	unction.	
The poly	nomial fu	inction can	also be de	efined by F	CTDEF(g	oolynomi	al no., low	er limit, u	oper limit,	a0, a1, a2,
a3).				,	<b>V</b>	,	,	, ·	,	, , ,
description	n of field l	imits:								
The dime	ension is	defined in	\$MC_MM	_NUM_FC	TDEF_E	LEMENT	S.			
axis						NCK ver	sion:	06.00.0	0	
identifier:										
unit:	-	min.:	DBL_MII	V			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:	Х	Х	Х			Х	Х		Х	7
attributes:	global	block sear	ch			link	L			
		Not class	sified			Not clas	ssified			

DOUBLE	\$AC_F	CT0[n]							descripti	0
description	J.								n:	
Array var	iable \$A nomial fu									n. a0, a1, a2,
		defined in	\$MC_MM	_NUM_FC	TDEF_E	LEMENT	S.			
axis identifier:						NCK ver	sion:	06.00.0	0	
unit:	-	min.:	DBL_MIN	N .		•	max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:	Х	Х	Х			Х	Х		Х	7
attributes:	global	block sear	ch	<u>.                                    </u>		link		L		
		Not class	ified			Not clas	ssified			

DOUBLE					1				Idooorinti	~ 1
DOUBLE	\$AC_F	CT1[n]							description	)
-1									n:	
description	1:									
Array var	iable \$A	C_FCT1[n]	is used to	program	the a1 co	efficient	for the nth	polynomia	al function	٦.
The poly	nomial fu	nction can	also be de	efined by F	CTDEF(r	olvnomi	al no low	er limit. up	per limit.	a0. a1. a2.
a3).				<b>,</b>	- (1	,	, -	-, -, -,	1/	,- ,- ,
description	n of field li	mits:								
'			* N A C	NILINA EC	ידרר רו					
	ension is	defined in		_NUM_FC	IDEF_E					
axis						NCK ver	sion:	06.00.00	)	
identifier:							-			
unit:	-	min.:	DBL_MIN	1			max.:	DBL_MA	λX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:	Х	Х	Х			Х	Х		Х	7
attributes:	global	block sear	ch	•	•	link		•	•	
		Not class	ified			Not clas	sified			

DOUBLE	\$AC F	CT2[n]							descripti	io
	<b>*</b>	[]							n:	
description	n:									
Array var	iable \$A	C FCT2[n]	is used to	program th	ne a2 co	efficient	for the nth	n polynom	ial functio	n.
The poly	nomial fu	unction can	also be de	efined by FC	CTDEF(p	olynomi	al no., low	er limit, u	pper limit,	a0, a1, a2,
a3).				,	VI.	,	,	,	,	
description	n of field l	imits:								
The dime	ension is	defined in	\$MC MM	_NUM_FCT	DEF EL	EMENT	٦S.			
axis					_	NCK ver		06.00.0	0	
identifier:								00.00.0		
unit:	-	min.:	DBL_MII	٧			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	X	Х	
write:	Х	Х	Х			Х	Х		Х	7
attributes:	global	block sear	rch	•		link	•	•	•	
		Not class	sified			Not clas	ssified			

DOUBLE	\$AC F	CT3[n]						descript	i0
	*****							n:	
description	n:			<u> </u>					
Array var	iable \$A	C FCT3[n]	is used to	o program the a	a3 coefficient	for the nth	n polynom	nial functio	n.
The poly	nomial fu	inction can	also be d	efined by FCTE	DEF(polynomi	ial no., low	ver limit, u	pper limit,	a0, a1, a2
a3).				•	,	•	,		
description	n of field l	imits:							
The dime	ension is	defined in	\$MC MM	_NUM_FCTDE	F ELEMENT	ΓS.			
axis					NCK ver		06.00.0	00	
identifier:							00.00.0	. •	
unit:	-	min.:	DBL_MII	N		max.:	DBL_M	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		X	Х	Х	Х	
write:	Х	Х	Х		Х	Х		Х	7
attributes:	global	block sea	rch	1	link		l.	L	
		Not class	sified		Not clas	ssified			

INI	\$AC_A	LARM_ST	AT					descriptio				
description	<u>.</u>							n:				
•												
				selected alarm	responses.							
The follow	wing bits	are possib	ole:									
0x04Cha	nnel sta	tus NOREA	NDY									
0x40Stop	due to	alarm										
0x200Sic	nal to P	LC										
0x11Axe	•											
axis		•			NCK vei	rsion:	16.00.0	00				
identifier:												
unit:	-	min.:	INT_MIN			max.:	INT_M	AX				
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights			
read:	Х	Х	Х		Х	Х	Х	Х				
write:												
attributes:	global	block sea	rch		link	l .						
		Not class	sified		Not cla	ssified						

BOOL	\$AN E	SR_TRIGG	ER					descripti	0
	-	_						n:	
description	า:								
\$AN ES	R TRIG	GER = 1							
Trigger "I	Extended	d stop and	retract"						
axis					NCK ve	ersion:	16.00.0	0	
identifier:									
unit:	-	min.:	FALSE			max.:	TRUE		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:		Х				Х	Х	Х	
write:		Х				Х		Х	7
attributes:	global	block sear	rch	1	link			I	
		Not class	sified		Not cla	assified			

BOOL	\$AN B	US_FAIL_	TRIGGER					descript	io
	<b>*</b>							n:	
description	1:							•	
Reserved	for Sie	mens							
axis identifier:					NCK ve	ersion:	51.00.0	0	
unit:	-	min.:	FALSE		•	max.:	TRUE		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:		Х				Х	Х	X	
write:		Х				Х		Х	7
attributes:	global	block sear	rch		link	I .	<u> </u>	1	
		Not class	sified		Not cla	assified			

BOOL	\$AC_ES	R_TRIGG	ER					descripti	0
								n:	
description	า:								
\$AC_ES	R_TRIGG	SER = 1							
Trigger "ı	numerical	lly controlle	ed ESR"						
axis		-			NCK ve	ersion:	42.00.0	0	
identifier:									
unit:	-	min.:	FALSE			max.:	TRUE		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:		Х				Х	Х	Х	
write:		Х				Х		X	7
attributes:	global	block sear	ch		link	•	•	•	
		Not class	sified		Not cla	ssified			

DOUBLE  \$AC_OPERATING_TIME   description	
n:	

description:

\$AC\_OPERATING\_TIME measures the total operating time of all NC programs

in AUTOMATIC mode between NC Start and end of program / NC Reset (in seconds)

The timer is zeroed after each Power On.

The measurement can be activated using channel MD 27860 \$MC\_PROCESS\_TIMER:

Bit 0 = 1\$AC\_OPERATING\_TIME measurement is active.

The following selection of further measurement conditions is possible:

Bit 4 = 0No measurement when dryrun feed active

Bit 4 = 1Measurement even when dryrun feed active

Bit 5 = 0No measurement during program test

Bit 5 = 1Measurement even during program test

#### Use in NC program:

IF \$AC\_OPERATING\_TIME < 12000 GOTOB STARTMARK

axis identifier:					NCK ver	sion:	19.00.00		
unit:	S	min.:	DBL_MIN	١		max.:	DBL_MA	٩X	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х	Х	
write:	Х	Х	Х		Х	Х	Х	Х	7
attributes:	global	block sear	rch		link	•	<b>.</b>		
		Not class	sified		No restr	rictions			

DOUBLE SAC\_CYCLE\_TIME descriptio n:

description:

\$AC\_CYCLE\_TIME measures the operating time of the selected NC program between NC Start and end of program/NC Reset (in seconds).

The timer is cleared after each program start.

The measurement can be activated using channel MD 27860 \$MC PROCESS TIMER:

Bit 1 = 1\$AC CYCLE TIME measurement of current program operating time is active.

The following selection of further measurement conditions is possible:

Bit 4 = 0No measurement when dryrun feed active

Bit 4 = 1Measurement even when dryrun feed active

Bit 5 = 0No measurement during program test

Bit 5 = 1Measurement even during program test

#### Use in NC program:

IF \$AC CYCLE TIME> 2400 GOTOF ALARM01

axis identifier:					NCK ve	rsion:	19.00.0	0	
unit:	s	min.:	DBL_MII	V	•	AX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		X	X	X	Х	
write:	Х	Х	Х		Х	Х	Х	Х	7
attributes:	global	block sea	rch	<u> </u>	link	I			
		Not class	sified		No rest	rictions			

DOUBLE  \$AC_CUTTING_TIME	descriptio	
	n:	

description:

\$AC CUTTING TIME is used to measure the machining time (in seconds).

This time is defined as the operating time of the path axes (at least one is active)

excluding periods when rapid traverse is active in all NC programs between NC Start and end of program / NC Reset

optionally including/not including active tool.

The measurement is also interrupted whenever a dwell time is active.

The timer is automatically reset each time the control boots with default values.

The measurement can be activated using channel MD 27860 \$MC PROCESS TIMER:

Bit 2 = 1\$AC CUTTING TIME measurement is active.

The following selection of further measurement conditions is possible:

Bit 4 = 0No measurement when dryrun feed active

Bit 4 = 1Measurement even when dryrun feed active

Bit 5 = 0No measurement during program test

Bit 5 = 1Measurement even during program test

## Use in NC program:

#### IF \$AC CUTTING TIME> 6000 GOTOF ACT M06

axis identifier:					NCK vei	NCK version:		19.00.00		
unit:	s min.: DBL_MIN					max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х		Х	Х	Х	Х		
write:	Х	Х	Х		X	Х	Х	Х	7	
attributes:	global block search			link	link					
		Not class	sified		No rest	rictions				

DOUBLE | \$AC\_REQUIRED\_PARTS descriptio

description:

\$AC REQUIRED PARTS can be used to define the number of workpieces

which, when reached, causes the number of actual workpieces \$AC ACTUAL PARTS to be reset (workpiece target).

Channel MD 27880 \$MC PART COUNTER can be used to activate the

display alarm "workpiece target reached" and channel VDI signal "workpiece target reached":

Bit 0 = 1:\$AC\_REQUIRED\_PARTS counter is active

Further meaning of bit 1 only when bit 0 = 1:

Bit 1 = 0: Alarm/VDI output when \$AC ACTUAL PARTS matches \$AC REQUIRED PARTS

Bit 1 = 1: Alarm/VDI output when \$AC\_SPECIAL\_PARTS matches \$AC\_REQUIRED\_PARTS

Use in NC program:

\$AC REQUIRED PARTS = ACTUAL LOS

e.g. for defining a batch size, a daily production output ...

axis identifier:						NCK version:		19.00.00			
unit:	-	min.: DBL_MIN				l .	max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х			Х	Х	Х	Х		
write:	Х	Х	Х			Х	Х	Х	Х	7	
attributes:	es: global block search				link						
		Not class	sified			No rest	rictions				

DOUBLE SAC TOTAL PARTS	descriptio	
, , , , , , , , , , , , , , , , , , , ,	n:	

description:

The \$AC TOTAL PARTS counter indicates the number of all workpieces machined since the start time.

The counter is incremented by 1 when the MC command defined in channel MD

27882\$MC\_PART\_COUNTER\_MCODE[0] is output to the PLC.

The counter is automatically reset only when the control boots with default values.

Channel MD 27880 \$MC\_PART\_COUNTER can be used to activate the timer:

Bit 4 = 1: \$AC TOTAL PARTS counter is active

Further meaning of bits 5-6 only when bit 4 = 1:

The \$AC\_TOTAL\_PARTS counter is incremented by 1 on a VDI output of M02/M30 The \$AC\_TOTAL\_PARTS counter is incremented by 1 when the M command from MD Bit 5 = 0:

Bit 5 = 1: PART\_COUNTER\_MCODE[0] is output.

Bit 6 = 0:\$AC TOTAL PARTS active even during program test/block search

Bit 6 = 1:No processing of \$AC TOTAL PARTS during program test/block search

#### Use in NC program:

IF \$AC TOTAL PARTS> SERVICE COUNT GOTOF MARK END

axis					NCK vei	rsion:	19.00.0	0	
identifier:									
unit:	-	min.:	DDL_IVIIIV				DBL_MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		X	Х	Х	Х	
write:	Х	Х	Х		X	Х	Х	Х	7
attributes:	global	block search		link	link				
		Not class	sified		No rest	rictions			

DOUBLE   SAC ACTUAL PARTS	descriptio	
	n:	

#### description:

The \$AC\_ACTUAL\_PARTS counter records the number of all workpieces machined since the start time. When the workpiece target is reached (\$AC\_REQUIRED\_PARTS), the counter is automatically reset (\$AC\_REQUIRED\_PARTS not equal to 0).

The counter is incremented by 1 when the MC command defined in channel MD 27882\$MC PART COUNTER MCODE[1] is output to the PLC.

The counter is automatically reset only when the control boots with default values.

Channel MD 27880 \$MC PART COUNTER can be used to activate the timer:

Bit 4 = 1: \$AC\_TOTAL\_PARTS counter is active

Further meaning of bits 5-6 only when bit 4 = 1:

Bit 5 = 0: The \$AC\_TOTAL\_PARTS counter is incremented by 1 on a VDI output of M02/M30

Bit 5 = 1: The \$AC\_TOTAL\_PARTS counter is incremented by 1 when the M command from MD PART\_COUNTER\_MCODE[0] is output.

Bit 6 = 0:\$AC\_TOTAL\_PARTS active even during program test/block search

Bit 6 = 1:No processing of \$AC\_TOTAL\_PARTS during program test/block search

#### Use in NC program:

IF \$AC\_ACTUAL\_PARTS == 0 GOTOF NEW\_RUN

axis identifier:					NCK ve	NCK version:		19.00.00		
unit:	- min.: DBL_MIN					max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х		Х	Х	Х	Х		
write:	Х	Х	Х		Х	Х	Х	Х	7	
attributes:	global	block sear	block search			link				
		Not class	sified		No res	trictions				

DOUBLE SAC\_SPECIAL\_PARTS | descriptio | n:

description:

The \$AC\_SPECIAL\_PARTS counter allows the user to apply his own strategy for counting workpieces. Channel MD 27880 \$MC\_PART\_COUNTER can be used to activate the timer:

Bit 12 = 1: \$AC SPECIAL PARTS counter is active

Further meaning of bits 13-15 only when bit 12 = 1:

Bit 13 = 0: The \$AC SPECIAL PARTS counter is incremented by 1 on a VDI output of M02/M30

Bit 13 = 1: The \$AC\_SPECIAL\_PARTS counter is incremented by 1 when the M command from MD PART\_COUNTER\_MCODE[2] is output.

Bit 14 = 0: \$AC\_SPECIAL\_PARTS active even during program test/block search

Bit 14 = 1: No processing of \$AC SPECIAL PARTS during program test/block search

#### Use in NC program:

\$AC SPECIAL PARTS = R20

axis identifier:					NCK ve	rsion:	19.00.0	19.00.00		
unit:	-	min.:	DBL_MI	V		max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х		X	Х	Х	X		
write:	Х	Х	Х		Х	Х	Х	Х	7	
attributes:	utes: global block search				link					
	Not classified			No restrictions						

INT	\$AC_G0MODE	descriptio	
	, =====	n:	

description:

\$AC\_G0MODE

- 0: G0 not active
- 1: G0 and linear interpolation active
- 2: G0 and non-linear interpolation active.

The response of the path axes to G0 depends on machine data

\$MC\_G0\_LINEAR\_MODE (Siemens mode) or \$MC\_EXTERN\_G0\_LINEAR\_MODE (ISO mode):

With linear interpolation, the path axes traverse together,

With non-linear interpolation, the path axes are traversed

as positioning axes.

axis identifier:					NCK v	ersion:	42.00.0	0		
unit:	-	min.:			*	max.:	2			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:		Х				Х	Х	Х		
write:										
attributes:	global	block sea	block search			link				
		Not class	sified		Not cl	assified				

INT	\$AC_M	EAS_SEM	A		_			descript	io
description	J.							n:	
•									
		piece and to							
				o synchronize i					
before ea	ach assig	gnment of th	ne measu	rement interfac	ce and set to (	) when re	leasing it.	Only one	
measure	ment inte	erface is ava	ailable for	each channel	and should be	assigned	d only if the	e \$AC_ME	EAS_SEM/
contains	the valu	e 0.							
Application	on:								
if (\$AC_N	//EAS_S	EMA == 0							
\$AC_M	EAS_SE	MA = 1; A	ssign mea	asurement inter	rface				
endif _									
axis					NCK ver	sion:	43.00.0	00	
identifier:									
unit:	-	min.:				max.:	1		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X		X		
write:	Х				X		Х		7
attributes:	global	block sear	ch		link				
		Not class	sified		Not clas	ssified			

INT	\$AC_MEAS_LATCH[4]	descriptio	
	· · ·	n:	

description:

Variable for workpiece and tool measurement.

Axial variable \$AA\_MEAS\_LATCH[n] is used to unlatch all current axis positions with reference to a selected coordinate system. Variable \$AC\_MEAS\_P1\_COORD is used to select the coordinate system. \$AC\_MEAS\_P4\_COORD.

Application:

\$AA\_MEAS\_LATCH[0] = 1 ; Unlatch 1st measuring point of all axes \$AA\_MEAS\_LATCH[1] = 1 ; Unlatch 2nd measuring point of all axes \$AA\_MEAS\_LATCH[2] = 1 ; Unlatch 3rd measuring point of all axes \$AA\_MEAS\_LATCH[3] = 1 ; Unlatch 4th measuring point of all axes

The unlatched measuring point is stored in \$AA\_MEAS\_POINT1[ax].

description of field limits:

0: 1st measuring point, .. , 3: 4th measuring point

		Not class	sified		Not clas	ssified			
attributes:	global	block sea	rch		link		•	•	
write:	Х	Х	Х		Х	Х	Х	Х	7
read:	Х	Х			Х	Х	Х	Х	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
unit:	-	min.:				max.:	1		
axis identifier:					NCK ver	SIOH.	43.00.0	0	

INT	\$AC_ME	EAS_P1_C	COORD						descript n:	io
description	n:									•
Variable 1	for workp	iece and to	ool measu	ırement.						
Variable :	\$AC_ME	AS_P1_C	OORD is	used to set	t the coor	dinate sy	ystem fran	ne for the	1st meas	uring point.
Application	on:									
\$AC_ME	AS_P1_0	COORD =	0; WCS							
\$AC_ME	AS_P1_0	COORD =	1; BCS							
\$AC_ME	AS_P1_0	COORD =	2; MCS							
\$AC_ME	AS_P1_0	COORD =	3 ; SZS							
axis						NCK ver	sion:	50.00.0	0	
identifier:		Total to a					1			
unit:	-	min.:	0				max.:	3		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х		
write:	Х					Х		Х		7
attributes:	global	block sear	•	•						
		Not class	sified			Not clas	ssified			

INT	\$AC_MEAS_P2_COORD	descri	otio	
		n:		

description:

Variable for workpiece and tool measurement.

Variable \$AC\_MEAS\_P2\_COORD is used to set the coordinate system frame for the 2nd measuring point. Application:

\$AC\_MEAS\_P2\_COORD = 0; WCS \$AC\_MEAS\_P2\_COORD = 1; BCS \$AC\_MEAS\_P2\_COORD = 2; MCS \$AC\_MEAS\_P2\_COORD = 3; SZS

axis					NCK ver	sion:	50.00.0	50.00.00		
identifier:										
unit:	-	min.:	0			max.:	3			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х		Х			
write:	Х				Х		Х		7	
attributes:	global	block sear	ch	•	link	•	•	•		
		Not class	sified		Not clas	ssified				

INT	\$AC_M	EAS_P3_0	COORD					description:	
description	n:							<b>I</b>	1
Variable	for work	piece and t	ool meası	urement.					
					the coordinate sy	stem frar	ne for the	3rd measu	ring point.
Application	on:				·				•
\$AC ME	AS P3	COORD =	0; WCS						
\$AC_ME	AS_P3_	COORD =	1; BCS						
\$AC_ME	AS_P3_	COORD =	2; MCS						
\$AC_ME	AS_P3_	COORD =	3 ; SZS						
axis identifier:					NCK ver	sion:	50.00.0	00	
unit:	-	min.:	0		ļ.	max.:	3		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х		Х		
write:	Х				Х		Х		7
attributes:	global	block sea	rch	L	link	I.		L	
		Not class	sified		Not clas	sified			

INT	\$AC_MEAS_P4_COORD	description	)
		n:	

description:

Variable for workpiece and tool measurement.

Variable \$AC\_MEAS\_P4\_COORD is used to set the coordinate system frame for the 4th measuring point. Application:

\$AC\_MEAS\_P4\_COORD = 0; WCS \$AC\_MEAS\_P4\_COORD = 1; BCS \$AC\_MEAS\_P4\_COORD = 2; MCS \$AC\_MEAS\_P4\_COORD = 3; SZS

axis					NCK ver	sion:	50.00.0	0	
identifier:									
unit:	-	min.:	0			max.:	3		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	X				Х		Х		
write:	Х				Х		Х		7
attributes:	global	block sear	ch		link				
		Not class	sified		Not clas	ssified			

INT	\$AC_M	EAS_SET_	COORD					descript n:	io
description	n:			<u> </u>				<b>I</b>	ı
Variable	for work	piece and to	ool meası	urement.					
Variable	\$AC ME	AS SET	COORD is	s used to set th	e coordinate	system fo	r the posit	tion setpo	int.
Application	on:					•	•	•	
\$AC ME	AS SET	COORD	= 0 ; WCS	8					
\$AC_ME	AS_SET	_COORD	= 1 ; BCS						
\$AC_ME	AS_SET	_COORD	= 2 ; MCS	}					
\$AC_ME	AS_SET	COORD	= 3 ; SZS						
axis					NCK vei	rsion:	50.00.0	0	
identifier:									
unit:	-	min.:	0			max.:	3		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х		X		
write:	Х				Х		Х		7
attributes:	global	block sear	rch		link	•	•	•	
		Not class	sified		Not cla	ssified			

DOUBLE	\$AC N	IEAS_WP_	SETANG	LE		·		descript	io	
	<b>V</b>							n:		
description	n:									
Variable	for work	piece and to	ool meası	ırement.						
Axial vari	iable \$A	A_MEAS_V	VP_SETA	NGLE is used	to define an a	angle setp	oint for th	e workpie	ce positior	
axis			<del></del>		NCK ver	sion:	43.00.0	00		
identifier:								-		
unit:	deg.	min.:	DBL_MII	٧		max.:	DBL_N	1AX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access	
									rights	
read:	Х				Х		Х			
write:	Х				Х		Х		7	
attributes:	global	block sear	rch		link					
		Not class	sified		Not clas	ssified				

DOUBLE	\$AC_ME	AS_COR	NER_SE	<b>TANGLE</b>					descript n:	io	
description	า:								1		
	\$AA_MĖ	ece and to AS_CORN		irement. ANGLE is	used to d	efine an	angle set	point for t	he corner	of a	
axis identifier:						NCK ver	sion:	43.00.0	0		
unit:	deg.	min.:	DBL_MIN	٧			max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х					Х		Х			
write:	Х					Х		Х		7	
attributes:	global	block sear	ch	1		link	L		1		
		Not class	ified			Not clas	ssified				

INT	\$AC_M	EAS_DIR_	APPROA	CH					descript	io
description	<u> </u> า:								n:	
Variable	\$AA_ME	piece and to EAS_DIR_A ues are pos	PPROAC		to define	the direc	ction of ap	proach to	the workp	piece.
axis identifier:						NCK ver	rsion:	43.00.0	00	
unit:	-	min.:	0				max.:	5		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х		
write:	Х					Х		Х		7
attributes:	global	block sear	rch	П		link	Г	I	ı	
		Not class	sified			Not classified				

INT	\$AC_MEAS_ACT_PLANE	descriptio	
		n:	

description:

Variable for workpiece and tool measurement.

Variable \$AC\_MEAS\_ACT\_PLANE is used to define the working plane. The working plane is needed in order to define the tool orientation.

The following values are possible:

- 0: G17 working plane x/y infeed direction z
- 1: G18 working plane z/x infeed direction y
- 2: G19 working plane y/z infeed direction x

axis identifier:						NCK vers	sion:	43.00.0	0	
unit:	-	min.:	0				max.:	2		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х		
write:	Х					Х		Х		7
attributes:	global	block sear	ch			link	•	•	•	
		Not class	ot classified			Not classified				

Not classified

TK17										- 1
INT	\$AC_ME	AS_FINE	_TRANS						descripti	0
description	). 								n:	
		ece and to								
When me	easuring w	vorkpieces	s, translati	on offsets	can be er	itered in	the fine of	fset comp	onent of the	ne selected
frame. Va	ariable \$A	C_MEAS	_FINE_TF	RANS is us	sed for thi	s purpos	e.			
The follow	wing value	es are pos	sible:							
	•	et is entere		se offset						
1: Transl	ation offse	et is entere	ed in fine	offset						
axis						INCK ver	sion:	45.00.0	in.	
identifier:								45.00.0	10	
unit:	-	min.:	0			u .	max.:	1		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
			-							rights
read:	Х					Х		Х		
write:	Х					Х		Х		7
attributes:	global	block sear	ch	•		link	•	•	•	

Not classified

INT	\$AC_ME	EAS_FRAI	ME_SELE	СТ					descriptio n:	
descriptio	n:								ļ11.	1
Variable	for workp	iece and to	ool measu	rement.						
					to select	the frame	e in which	the calcula	ated frame	e is
entered.	· –	_	_							
The follo	wing valu	es are pos	sible:							
0:\$P_SE	TFRAME									
1:\$P_PA	RTFRAM	E								
2:\$P_EX	TFRAME									
1025:\$1	P_CHBFF	RAME[018	5]							
5065:\$1	P_NCBFF	RAME[018	5]							
100199	:\$P_IFRA	ME								
500:\$P_	TOOLFRA	AME								
501:\$P_	WPFRAM	ΙE								
	TRAFRAN	ΛE								
	PFRAME									
504:\$P_	CYCFRAI	ME								
		HBFRAME								
	_	CBFRAME	E[015], w	hen G500	) is active					
2000:	\$P_SET									
	_PARTFF	₹								
2002:\$P										
		HBFR[01								
		CBFR[01	5]							
		IFR[099]								
	_TOOLFF	₹								
2501:\$P										
2502:\$P										
	_CYCFR			0=00:						
		HBFR[01								
305030 axis	05: \$P_N	CBFR[01	oj, wnen	GOUU IS a	cuve	INCK vers	eion:	140.00.00		
identifier:						NOIL VEIS	oioii.	43.00.00		
unit:	-	min.:	0			I	max.:	3065		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	IOEM	access
			- 4							rights
read:	Х					Х		Х		
write:	Х					Х		Х		7
attributes	global	block sear	ch	ı	1	link	1	1	ı	
		Not class	ified			Not classified				
	1	1								1

INT	\$AC MEAS CHSFR	de	escriptio				
	,	n:	:				
description							

description:

Variable for workpiece and tool measurement.

In order to convert a position from one coordinate system to another, \$AC\_MEAS\_CHSFR can be used to define the composition of the desired frame chain. The value of the variable should be selected according to the system frame bitmask \$MC\_MM\_SYSTEM\_FRAME\_MASK.

Application:

\$AC MEAS CHSFR = 'B1001'

Only the system frames for preset actual value and TOROT are included in the calculation of the new overall frame.

loveran m	arrio.								
axis					NCK ver	sion:	50.00.0	50.00.00	
identifier:									
unit:	-			max.:		INT_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				Х		Х		
write:	Х				Х		Х		7
attributes:	global	block sear	rch		link	•	•	•	
		Not class	sified		Not classified				

INT	\$AC MEAS NCBFR	description	)
	, -=	n:	

description:

Variable for workpiece and tool measurement.

In order to convert a position from one coordinate system to another, \$AC\_MEAS\_NCBFR can be used to define the composition of the desired frame chain. The value of the variable should be interpreted as a bitmask from 0x0 to 0xFFFF for the global basic frames (up to 16 frames in total).

Application:

\$AC\_MEAS\_NCBFR = 'B11'

Only the first two global basic frames are included in the calculation of the new overall frame.

axis identifier:		•			NCK ver	sion:	50.00.0	50.00.00			
unit:	-	min.:	0			max.:	0xFFFF	0xFFFF			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights		
read:	Х				Х		Х				
write:	Х				Х		Х		7		
attributes:	global	block sea	rch	'	link	•	•	•			
		Not class	sified		Not clas	ssified					

INT \$AC\_MEAS\_CHBFR | descriptio | n:

description:

Variable for workpiece and tool measurement.

In order to convert a position from one coordinate system to another, \$AC\_MEAS\_CHBFR can be used to define the composition of the desired frame chain. The value of the variable should be interpreted as a bitmask from 0x0 to 0xFFFF for the channel basic frames (up to 16 frames in total).

Application:

\$AC MEAS CHBFR = 'B11'

Only the first two channel basic frames are included in the calculation of the new overall frame.

axis					NCK ver	cion:	=0.00.0	^		
					NCK VEI	51011.	50.00.0	50.00.00		
identifier:										
unit:	-	min.:	0		•	max.:	0xFFFF			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access	
									rights	
read:	Х				X		Х			
write:	Х				Х		Х		7	
attributes:	global	block sea	rch		link			•		
	Not classified				Not clas	Not classified				

INT	\$AC_MEAS_UIFR	de	escriptio	
		n:	:	

description:

Variable for workpiece and tool measurement.

In order to convert a position from one coordinate system to another, \$AC\_MEAS\_UIFR can be used to define the composition of the desired frame chain. The variable range for the settable frames is from 0 to 99 (up to 100 in total).

Application:

\$AC\_MEAS\_UIFR = 1

The G54 frame is included in the calculation of the new overall frame.

axis identifier:					NCK version:		50.00.0	50.00.00		
unit:	-	min.:	0		•	max.:	99			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х		Х			
write:	Х				Х		Х		7	
attributes:	global	block sear	rch	•	link	•	,	•		
	Not classified			Not clas						

INT	\$AC M	EAS PFR	AME						descripti	0	
	<b>V</b>								n:		
description	n:										
Variable	for work	piece and to	ool meası	urement.							
In order t	o conver	t a position	from one	coordinate	system to	o anothe	r, \$AC M	IEAS PFF	RAME can	be used to	
		•		frame chair	•		_	_			
The follow	wing valu	ues are allo	wed:								
	_			nable frame	e is not in	cluded i	n calculat	ion			
				nable frame							
axis		,				NCK ver		50.00.0	00		
identifier:								00.00.0			
unit:	-	min.:	0				max.:	1			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access	
										rights	
read:	X					Х		X			
write:	Х					Х		Х		7	
attributes:	s: global block search					link					
		Not class	sified			Not classified					

INI	\$AC_MEAS_T_NUMBER	descriptio	
		n:	

description:

Variable for workpiece and tool measurement.

Variable \$AC\_MEAS\_T\_NUMBER is used to select the tool for workpiece and tool measurement. The tool number of the active tool must match the selected tool. The active tool is included in the calculation when T0 is selected. If no tool is selected, the tool selected by \$AC\_MEAS\_T\_NUMBER is used in the calculation.

oaloalatic	<i>,</i> ,,,									
axis					NCK ver	sion:	43.00.0	0		
identifier:										
unit:	-	min.:	0			max.:	INT_MA	λX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access	
									rights	
read:	Х				X		Х			
write:	Х				Х		Х		7	
attributes:	global	block sea	rch		link	•	•	•		
		Not class	sified		Not clas	Not classified				

INT	\$AC MEAS TOOL MASK	d	escriptio					
	* -=	n	1:					
descriptions								

description:

Variable for workpiece and tool measurement.

Variable \$AC\_MEAS\_TOOL\_MASK specifies the tool position and considers the tool lengths for workpiece and tool measurement.

The following values are possible:

0x0:Default setting; all tool lengths are included

0x1:The radius of the tool is not included in the calculation

0x2:The tool position is in the x direction (G19)

0x4:The tool position is in the y direction (G18)

0x8:The tool position is in the z direction (G17)

0x10:The length of the tool is not included in the calculation.

Whether or not the radius of a milling tool is included in the calculation is determined from the tool position and direction of approach. If the direction of approach is not specified explicitly, it is derived from the selected plane. The direction of approach is in -z for G17, -y for G18 and -x for G19.

axis identifier:	lmin :				NCK ver	rsion:	50.00.00			
unit:	-	min.:	0			max.:	0x10			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х		X			
write:	Х				Х		Х		7	
attributes:	global	block sea	rch	1	link	-	ı.	I.		
		Not class	sified		Not clas					

INT	\$AC MEAS D NUMBER	d	lescriptio	
	, -=	n	1:	

description:

Variable for workpiece and tool measurement.

Variable \$AC\_MEAS\_D\_NUMBER is used to select the tool cutting edge for workpiece and tool measurement. The tool cutting edge number of the active tool must match the selected cutting edge. The active cutting edge is included in the calculation when D0 is selected. If no tool is selected, the cutting edge selected by \$AC\_MEAS\_D\_NUMBER is used in the calculation.

SCICCICA	υ φι ιΟ_ι	VIL/ (O_D_	INCINIDEIN	is asca iii	tile calcu	iation.					
axis						NCK version:		43.00.0	43.00.00		
identifier:											
unit:	-	min.:	0				max.:	INT_MA	λX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access	
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read:	Х					Х		Х			
write:	Х					Х		Х		7	
attributes:	global	block sear	ch			link	-				
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TK17										
INT	\$AC_ME	AS_TYPE	Ē						descriptio	
description	J.								n:	
		ece and to	ool maasi	ıramant						
				select the	a type of r	maaciiran	nent			
		es are pos		Select till	e type or i	ileasuleii	iciii.			
0: Defau	•	os arc pos	SIDIC.							
1: x edge	_									
2: y edge										
3: z edge										
4: Corne										
5: Corne										
6: Corne										
7: Corne	-									
8: Hole	•									
9: Shaft										
10: Tool	enath									
11: Tool	•									
12: Groo	ve									
13: Web										
14: Prese	et actual v	alue mem	ory for ge	o and spe	cial axes					
				ecial axes						
16: Inclin	ed edge									
17: Plane	_Angles	(2 solid an	igles in or	ne plane)						
18: Plane	_Normal	(3 solid ar	ngles in o	ne plane w	vith specif	ied setpo	int)			
				oint specifi						
				oint specifi						
				oint specifi						
				ement of to						
				urement o	f a tool ler	ngth with	marked p	osition)		
		nsformatio	n of a pos	sition						
25: Recta	angle							1		
axis						NCK vers	sion:	43.00.00		
identifier: unit:		Imin.:	١٥				max.:	25		
uiii.	-		0	IM	1	IDD		25	IOEM	T
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	Х					Х		X		rights
write:					1				1	
wille.	Х		İ	1		X	1	X		7

Not classified

attributes: global

block search

Not classified

INT	\$AC_ME	EAS_VALI	D						descriptio	
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lescription			1							
		iece and to			مادناها مادناها			alial fam tha a		
		AS_VALID						alid for the	current	
		e value sh								
		s are set in		nen the co	orrespond	ing varia	bies are w	ritten.		
		_POINT1[a								
		_POINT2[a								
		POINT3[a POINT4[a								
		_POINT4[8 _SETPOIN								
		WP SET								
		_WP_SET		21 E						
	_	T NUMB		JLE						
		_1_NOMB								
		_D_NOMB _DIR_APF								
		_DIIX_ALT S_ACT_PL								
		FRAME								
	C MEAS		_00							
		S FINE T	RANS							
		S SETANO								
	_	S SCALE								
		S TOOL N								
		S P1 CO								
Bit 18: \$A	C_MEAS	S_P2_CO0	ORD							
	_	S_P3_CO0								
Bit 20: \$A	C_MEAS	S_P4_CO0	ORD							
3it 21: \$ <i>A</i>	C_MEAS	S_SET_CO	OORD							
Bit 22: \$A	AC_MEAS	S_CHSFR								
		S_NCBFR								
		S_CHBFR								
	AC_MEAS									
	C_MEAS	S_PFRAM	<u>E</u>							
axis						NCK ver	sion:	43.00.00	)	
dentifier: unit:		min.:	INIT MAINI				max.:	INIT NAA	V	
	-		INT_MIN			IDD		INT_MA		T
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
ead:	Х					Х		Х		rigitio
write:	Х	<u> </u>				Х		Х		7
attributes:	global	block sear	ch		<u> </u>	link				
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		1								1

FRAME	\$AC M	EAS_FRAI	ME						descript	io
al a a a wi w &i a									n:	
descriptio		.:								
		piece and to			- <b>f</b>			nt Thin for	:	برط لمحلما امر
		AS_FRAM function or								
		copied int								
further P		•	o li le sele	cieu iraine	· (ΦΑΟ_IVII	_A3_FR	AIVIE_SEI	LECT) by	ille part p	iografii or a
axis	I SCI VICE.	•				NCK ver	sion:	43.00.0	Λ	
identifier:								45.00.0	O	
unit:	-	min.:	DBL_MII	٧			max.:	DBL_M	AX	
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write:	Х					Х				7
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DOUBLE	\$AC_M	EAS_WP_	ANGLE						n:	10
descriptio	n:								1	
Variable	for work	oiece and to	ool meası	ırement.						
		AS_WP_A			ated work	oiece pos	sition angl	e for work	piece me	asurement
		es the relat								
axis						NCK ver		43.00.0	•	,
identifier:		Imin :	I==				Imav			
unit:	deg.	min.:	DBL_MII				max.:	DBL_MAX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	X					Х		X		
write:										
attributes:	global	block sear	rch	1	1	link				
		Not class	sified			Not clas	eeified			
		TVOL CIASS	Silicu			TVOL CIAS	Silicu			
DOUBLE	CAC M	EAS_COR	NED AN	CLE					descript	io I
200222	ΦAC_IVI	EAS_COR	NEK_AIN	GLE					n:	
descriptio	n:				•					
Variable	for work	piece and to	ool meası	ırement.						
Variable	\$AC_ME	AS_CORN	IER_ANG	LE is the	calculated	cutting a	angle of th	ne corner i	for workp	iece
measure	ment.									
axis						NCK ver	sion:	43.00.0	0	
identifier: unit:	doa	min.:	DBL MII	NI.			max.:	DBL M	۸٧	
	deg. run-in	main run	runin stp	Mrun syn	1	IPP	SA	OPI	IOEM	access
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read:	Х					Х		Х		J
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attributes:	alobal	block sear	rch		<u> </u>	link				
atti ibutes.	giobai									
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description Variable f Variable s axis identifier:	n: for work	piece and to	ool measu					descriptio n:	
Variable f Variable s axis identifier: unit:	for work \$AC_ME						_		
Variable s axis identifier: unit:	\$AC_ME								
axis identifier: unit:	_	EAS_DIAMI	ETER is th						
identifier: unit:	mm			ne calculated	diameter for to INCK ve				
unit:	mm				NCK VE	rsion.	43.00.0	0	
		min.:	DBL MIN	N		max.:	DBL M	AX	
read:	run-in	main run	runin stp	Mrun syn	IPP	SA	OPI	IOEM	access
read:									rights
	Х				X		Х		
write:									
attributes:	global	block sear	ch	<u> </u>	link				1
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description	1:			•					. 1
		piece and to							
	\$AC_ME	EAS_TOOL	_LENGTH	is the calculate	ated tool lengt		neasurem	ient.	
axis identifier:					NCK ve	rsion:	43.00.0	0	
· · mit·	mm	lmin.:	DBL MIN	J		max.:	DBL M	IAV	
	run-in	main run	runin stp		IPP	SA	OPI	IOEM	access
	Tull-III	main run	ruilli stp	Wildir Syll	' '	57	011	OLIVI	rights
read:	Х				Х		Х	1	1.3
write:									1
attributes:	global	block sear	rch Tch		link				+
u	9.000.								
		Not class	sified		Not cla	ssified			
DOORLE	\$AC_M	EAS_RES	ULTS[10]					description:	,
description	1:							111.	
Variable f	for work	piece and to	ool measu	ırement.					
		•			ne calculation	results. Ti	ne measur	rement type	Э
(\$AC_ME	AS_TY	PE) determ	ines whicl	n elements of	the array are	written.			
description									
Measurer	ment res	sults			INOK				
axis identifier:					NCK ve	rsion:	45.00.0	0	
unit:	_	min.:	DBL MIN			max.:	DBL M	ΔΥ	
	run-in	main run	_	Mrun syn	IPP	SA	OPI	IOEM	access
	. air iii	Thair run	- unini sip	Islandin Synt	[' '	J., (		O LIVI	rights
read:	Х				X		Х		<b>T</b>
								+	+
write:	1	1	1	1 1	1	1	1	1	1

Not classified

Not classified

INT	\$AC_ME	AS_SCA	LEUNIT						description	)
description	u.								n:	
		iece and to	ool measi	ırement						
					nit of mea	suremer	nt accordir	na to the c	configuration	n for input
	ut values							.9 10 11.0 1	,gaa	
		es are pos	sible:							
				(default se	etting)					
	measure	ment with	reference	to active	G code is			METRIC:	G71/G710	)
axis						NCK ver	sion:	48.00.0	0	
identifier: unit:		Imin.:	0				max.:	4		
unit.	-		_	184	ı	IDD		1	IOEM	T
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	X					Х		X		
write:	Х					Х		Х		7
attributes:	global	block sear	rch		l	link	ı	1		
		Not class	sified			Not clas	ssified			
		l				I				
INI	\$P_CHA	NNO							description	)
description	l n:								n:	
		t channel i	number							
axis		· onamon	101112011			NCK ver	sion:	48.00.0	10	
identifier:								10.00.0		
unit:	-	min.:	1				max.:	10		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:										
attributes:	global	block sear	ch			link	ļ.			
		Not class	sified			Not clas	ssified			
INT	<b>***</b>	DUDDO			I				description	NT.
1111	\$AC_SE	RUPRO							n:	
description	n:				I					ı
\$AC_SE	RUPRO									
			_		e (Serun	ro: "Bloc	k search v	ia progra	m test")	
	ite whethe				c. (Ccrup			u p.og.u	iii tost j	
Can be u	ised in Sy	nacts and	the part p	orogram			it oodi oii t	na progra	iii test j	
Can be u \$AC_SE	ised in Sy RUPRO	nacts and	the part parch type	orogram Serupro is	not activ		it oodi oir t	na progra	iii test j	
Can be u \$AC_SE \$AC_SE	ised in Sy RUPRO	nacts and	the part parch type	orogram	not activ	e				
Can be u \$AC_SE	ised in Sy RUPRO	nacts and	the part parch type	orogram Serupro is	not activ			48.00.0		

read:

write:

attributes: global

Χ

block search

Not classified

run-in

Χ

main run runin stp

Mrun syn

Χ

SA

Χ

No restrictions

link

OPI

Χ

OEM

Χ

access rights

DOUBLE	\$AC_VA	CTBF							descript n:	io
descriptio	n:								111.	
_	CTBF sup	oplies the p	oath veloc	ity in the ba	asic coord	dinate sy	stem. FG	oup and F	FGREF ar	e taken into
account.	1					INICIZ	!	1		
axis identifier:						NCK vei	rsion:	55.00.0	00	
unit:	Linear /	min.:	DBL_MII	V		1	max.:	DBL_N	1AX	
	angular		_					_		
	speed									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:		X	X				X	X		rights
write:										
attributes:	global	block sea	rch			link				
	9.020.						:fid			
		Not class	siileu			Not cla	SSIIIEU			
DOUBLE	\$AC_VA	CTWF							descript	io
									n:	
descriptio			t	F1						
Path velo	ocity in wo	orkpiece co	ordinate	system. FO	3ROUP a	INCK ve				
identifier:						TOR VO	0.011.	55.00.0	)()	
unit:	Linear /	min.:	DBL_MII	V			max.:	DBL_N	1AX	
	angular									
	speed									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:		X	Х				X			rigitis
write:										
attributes:	global	block sea	rch			link				
		Not class	sified			Not cla	ssified			
	<u> </u>	Trot oldot	J			1101 010				
FRAME	\$P_CHE	BFR0							descript	io
al a a a si sa 4i a	-								n:	
descriptio		anal basis	frama Ca	orresponds	+0 CD C	HDEDIO.	ı			
Access	O ISLUIIAI	iriei basic	iiaiiie. Co	nesponas	10 \$F_C	пьгкіо	-			
axis	GEOAX					NCK vei	rsion:	56.00.0	00	
identifier:	CHANA	X								
	MACHA	X								
unit:	-	min.:	DBL_MII	V		I	max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	Х	1				X				rights
write:		1								7
attributes:	X	block sea	reh			X				7
สแบบแยร.	global									
		Not class	sified			No rest	rictions			

FRAME	\$P_CH	BFR1						descript n:	io	
description	n:							111.		
Access to	o 2nd ch	annel basio	frame. C	orresponds to	\$P_CHBFR[1	].				
axis identifier:	GEOAX CHANA				NCK ver	rsion:	56.00.	00		
	MACHA	·Χ								
unit:	-	min.:	DBL_MII	V		max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х				Ĭ	
write:	Х				Х				7	
attributes:	global	block sear	rch	1	link		I			
		Not class	sified		No rest	rictions				

FRAME	\$P_CH	BFR2						descript n:	10	
descriptio	n:									
Access to	o 3rd cha	annel basic	frame. Co	orresponds to	\$P_CHBFR[2]	].				
axis identifier:	GEOAX CHANA MACHA	Х			NCK ver	rsion:	56.00.	00		
unit:						max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				X					
write:	Х				X				7	
attributes:	global	block sear	rch	1	link		<u> </u>	<u> </u>		
		Not class	sified		No rest	rictions				

FRAME	\$P_CHE	BFR3							descript n:	io
description										II.
Access to	o 4th chai	nnel basic	frame. Co	orresponds	s to \$P_C	HBFR[3]	•			
axis identifier:	GEOAX CHANAX MACHA	X				NCK ver	sion:	56.00.	00	
unit:	-	min.:	DBL_MII	N			max.:	DBL_N	ИАX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				_
write:	Х					Х				7
attributes:	global	block sear	rch			link	•	•	•	
		Not class	sified			No rest	rictions			

FRAME	\$P_CHI	BFR4						descript	io	
	<b>*</b>							n:		
descriptior	ո:			•					•	
Access to	5th cha	nnel basic	frame. Co	orresponds to \$	P_CHBFR[4]	].				
					INOK		1			
axis	GEOAX				NCK ver	sion:	56.00.	00		
identifier:	CHANA	X								
	MACHA	١X								
unit:	-	min.:	DBL_MIN	V	'	max.:	ЛАХ	AX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access	
									rights	
read:	Х				X					
write:	Х				Х				7	
attributes:	global	block sear	ch	•	link			<u> </u>		
		Not class	sified		No rest	rictions				

FRAME	\$P_CHI	BFR5							descript n:	Ю
descriptio	n:			•						
Access to	o 6th cha	nnel basic	frame. Co	orresponds t	o \$P_C	HBFR[5]				
axis identifier:	GEOAX CHANA MACHA	Х				NCK ver	sion:	56.00.	00	
unit:	-	MIN: DBL MIN MAX: DBL MAX								
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	<u> </u>		link	L		I	
		Not class	sified			No resti	rictions			

FRAME	\$P_CHE	BFR6							descript n:	io
description										
Access to	o 7th cha	nnel basic	frame. Co	orresponds	s to \$P_C	HBFR[6]	•			
axis identifier:	GEOAX CHANA MACHA	X				NCK ver	sion:	56.00.0	00	
unit:	-	min.:	DBL_MII	N			max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	1		link			T.	
		Not class	sified			No rest	rictions			

FRAME	\$P_CHE	BFR7						descript n:	io
description	n:							111.	
Access to	8th cha	nnel basic	frame. Co	orresponds to \$	P_CHBFR[7]				
axis identifier:	GEOAX CHANA MACHA	X			NCK ver	sion:	56.00.	00	
unit:	-	min.:	DBL_MII	V	1	max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				J
write:	Х				Х				7
attributes:	global	block sear	rch		link			L	
		Not class	sified		No rest	rictions			

FRAME	\$P_CH	BFR8						descript n:	10	
descriptio	n:			l l						
Access to	o 9th cha	nnel basic	frame. Co	orresponds to	\$P_CHBFR[8]	<b> .</b>				
axis identifier:	GEOAX CHANA MACHA	X			NCK ver	rsion:	56.00.	00		
unit:					L	max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х					
write:	Х				X				7	
attributes:	global	block sear	rch	1	link	1	1			
		Not class	sified		No rest	rictions				

FRAME	\$P_CHB	FR9							descript n:	io
description		annal hasi	c frame (	Correspond	te to \$D (	^HBEDI(	מו		•	
	) TOUT ON	armer basi	c iraine. C	zonespone	13 tO ψ1 _\	_	-			
axis identifier:	GEOAX CHANAX MACHAX					NCK ver	sion:	56.00.0	00	
unit:	-	min.:	DBL_MII	N			max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•		link	•	•	•	
		Not class	sified			No rest	rictions			

FRAME	\$P_CH	BFR10						descript	io
	-							n:	
description	n:								
Access to	11th ch	nannel basi	c frame. C	Corresponds to	\$P_CHBFR[	10].			
axis					NCK ver	oion:	1		
axis identifier:	GEOAX				INCK VEI	SIOII.	56.00.	00	
identinei.	CHANA								
	MACHA	λX							
unit:	-   min.:   DBL_MIN   max.:   DBL_M.		AX						
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	ch		link	1			
		Not class	sified		No rest	rictions			

FRAME	\$P_CHI	BFR11						descript n:	10
descriptio	n:								
Access to	o 12th ch	annel basi	c frame. C	Corresponds t	o \$P_CHBFR[	11].			
axis identifier:	GEOAX CHANA MACHA	Х			NCK ver	sion:	56.00.	00	
unit:	-	min.:	in.:   DBL MIN   max.:   DBL MAX						
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch	1	link		l	L	
		Not class	sified		No rest	rictions			

FRAME	\$P_CH	BFR12						descript	io		
	. –							n:			
description	n:										
Access to	o 13th ch	nannel basi	c frame. C	Corresponds to	o \$P_CHBFR[	12].					
axis	GEOAX	(			NCK ver	sion:	56.00.0	0			
identifier:	CHANA	·Χ									
	MACHA	λX									
unit:	-	min.:	DBL_MII	٧		max.:	DBL_M	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights		
read:	Х				X						
write:	Х				X				7		
attributes:	global	block sear	rch		link			•			
		Not class	sified		No rest	rictions					

FRAME	\$P_CHE	BFR13						descript n:	io
description	ո:			I				1	
Access to	o 14th ch	annel basi	c frame. C	Corresponds to	\$P_CHBFR[	13].			
axis identifier:	GEOAX CHANA MACHA	X			NCK ver	sion:	56.00.	00	
unit:	-	min.:	DBL_MII	V	U.	max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				Ĭ
write:	Х				Х				7
attributes:	global	block sear	ch		link			<u> </u>	
		Not class	sified		No rest	rictions			

FRAME	\$P_CH	BFR14						descript n:	10
descriptio	n:			I I					
Access to	o 15th ch	nannel basi	c frame. C	Corresponds to	\$P_CHBFR[	14].			
axis identifier:	GEOAX CHANA MACHA	X			NCK ver	rsion:	56.00.	00	
unit:	-	min.:	DBL_MII	N		max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch	1	link		<u> </u>	1	
		Not class	sified		No rest	rictions			

FRAME	\$P_CHE	BFR15							descript	io
									n:	
description	า:									
Access to	o 16th ch	annel basi	c frame. C	Correspond	ls to \$P_0	CHBFR[	15].			
axis	GEOAX					NCK ver	sion:	56.00.0	00	
identifier:	CHANA	Χ								
	MACHA	X								
unit:	-	min.:	DBL_MII	V			max.:	DBL_N	ИАX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link	•	•	•	
		Not class	sified			No rest	rictions			

FRAME	\$P_NC	BFR0						descript	io	
	<b>*</b>							n:		
descriptior	n:									
Access to	1st NC	U-global ba	sic frame	. Corresponds	to \$P_NCBF	R[0].				
axis	0504	,			INCK ver	eion:	50.00	00		
identifier:	GEOAX				NOIX VEI	31011.	56.00.	00		
identiner.	CHANAX MACHAX									
	MACHA	λX								
unit: _	-	min.:	DBL_MII	V	•	max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access	
									rights	
read:	Х				X					
write:	Х				Х				7	
attributes:	global	block sear	ch		link			<u> </u>		
		Not class	sified		No rest	rictions				

FRAME	\$P_NC	BFR1						descript n:	10		
descriptio	n:			•							
Access to	o 2nd NO	CU-global b	asic fram	e. Corresponds	to \$P_NCBF	R[1].					
axis identifier:	GEOAX CHANA MACHA	X			NCK ver	sion:	56.00.	00			
unit:	-	min.:	DBL_MII	V	'	max.:	DBL_N	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights		
read:	Х				Х						
write:	Х				Х				7		
attributes:	global	block sear	rch		link		1	L			
		Not class	sified		No rest	rictions					

FRAME	\$P_NCE	BFR2							descript n:	io		
description Access to		U-global ba	asic frame	e. Correspor	nds to \$F	P_NCBF	R[2].		<b>'</b>			
axis identifier:	GEOAX CHANA MACHA	X				NCK ver	sion:	56.00.	00			
unit:	-	min.:	DBL_MII	N		1	max.:	DBL_I	DBL_MAX			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights		
read:	Х					Х						
write:	Х					Х				7		
attributes:	global	block sear	ch	1		link			1			
		Not class	sified			No rest	rictions					

FRAME	\$P_NCE	BFR3						descript n:	io	
description	<u> </u> า:							111.		
		U-global ba	asic frame	e. Corresponds	to \$P_NCBF	R[3].				
axis identifier:	GEOAX CHANA MACHA	X			NCK ver	rsion:	56.00.	00		
unit: _	-	min.:	DBL_MII	V	'	max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х					
write:	Х				Х				7	
attributes:	global	block sear	rch		link	1		L		
		Not class	sified		No rest	rictions				

FRAME	\$P_NC	BFR4						descript n:	10	
descriptio	n:			I						
Access to	o 5th NC	U-global ba	asic frame	e. Corresponds	to \$P_NCBF	R[4].				
axis identifier:	GEOAX CHANA MACHA	×Χ			NCK ver	rsion:	56.00.	00		
unit:	-	min.:	DBL_MII	V		max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				X					
write:	Х				X				7	
attributes:	global	block sear	rch	1	link		1	1		
		Not class	sified		No rest	rictions				

FRAME	\$P_NC	BFR5							descript	io
		-							n:	
description	n:									
Access to	o 6th NC	U-global ba	asic frame	. Correspon	nds to \$P	_NCBF	R[5].			
axis	GEOAX	(				NCK ver	sion:	56.00.	00	
identifier:	CHANA	·Χ								
	MACHA	٨X								
unit:	-	min.:	DBL_MI	٧			max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Χ				
write:	Х					Χ				7
attributes:	global	block sear	rch	•		link	•		•	
1		Not class	sified			No rest	rictions			

FRAME	\$P_NC	BFR6						descript	io	
	<b>*</b>							n:		
descriptior	1:									
Access to	7th NC	U-global ba	asic frame	. Corresponds	to \$P_NCBF	R[6].				
axis	<b>GEOAX</b>	(			NCK ver	sion:	56.00.	00		
identifier:	CHANAX									
	MACHAX									
unit: _	-	min.:	DBL_MII	V	•	max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access	
									rights	
read:	Х				X					
write:	Х				Х				7	
attributes:	global	block sear	ch		link	1	1	<u> </u>		
		Not class	sified		No rest	rictions				

FRAME	\$P_NC	BFR7						descript n:	10			
descriptio	n:			•								
Access to	o 8th NC	:U-global ba	asic frame	e. Corresponds	to \$P_NCBF	R[7].						
axis identifier:	GEOAX CHANA	=			NCK ver	sion:	56.00.	00				
	MACHA	λX										
unit:	-	min.:	DBL_MI	V		max.:	DBL_MAX					
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights			
read:	Х				Х							
write:	Х				Х				7			
attributes:	global	block sear	rch		link	•	•					
		Not class	sified		No rest	rictions						

FRAME	\$P_NC	BFR8							descript	io
									n:	
description	า:									
Access to	o 9th NC	U-global ba	asic frame	e. Correspo	nds to \$F	_NCBF	R[8].			
axis	GEOAX	(				NCK ver	sion:	56.00.	00	
identifier:	CHANA	X								
	MACHA	λX								
unit:	-	min.:	DBL_MII	N			max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link	•			
		Not class	sified			No rest	rictions			

FRAME	\$P_NC	BFR9						descript n:	io
description	n:							110	
Access to	o 10th N	CU-global b	oasic fram	e. Correspond	s to \$P_NCB	FR[9].			
axis identifier:	GEOAX CHANA MACHA	X			NCK ver	rsion:	56.00.	00	
unit:	-	min.:	DBL_MI	N		max.:	DBL_N	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				Ĭ
write:	Х				Х				7
attributes:	global	block sear	rch		link	1	1		
		Not class	sified		No rest	rictions			

FRAME	\$P_NC	BFR10							descript	10
									n:	
descriptio	n:									
Access to	o 11th N	CU-global b	oasic fram	ie. Corresp	onds to \$	SP_NCBI	FR[10].			
axis	GEOAX	(				NCK ver	sion:	56.00.	00	
identifier:	CHANA	X								
	MACHA	·Χ								
unit:	-	min.:	DBL_MII	V			max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch			link		•	•	
		Not class	sified			No rest	rictions			

FRAME	\$P_NCB	FR11							descript n:	io
description	1:				I				l .	L
Access to	12th NC	U-global b	oasic fram	ie. Corresp	onds to \$	SP_NCBI	FR[11].			
axis identifier:	GEOAX CHANAX MACHAX	=				NCK ver	sion:	56.00.0	00	
unit:	-	min.:	DBL_MII	V			max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	•		link	•		•	
		Not class	ified			No resti	rictions			

FRAME	\$P_NCI	BFR12						descript n:	io
description	l 1:			<b>_</b>				111.	
Access to	13th N	CU-global b	oasic fram	e. Correspond	s to \$P_NCB	FR[12].			
axis identifier:	GEOAX CHANA MACHA	X			NCK ver	rsion:	56.00.	00	
unit:	-	min.:	DBL_MIN	V		max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				Ť
write:	Х				Х				7
attributes:	global	block sear	rch		link	1	1	I.	
		Not class	sified		No rest	rictions			

FRAME	\$P_NC	BFR13						descript n:	Ю
descriptio	n:			•				•	•
Access to	o 14th N	CU-global b	oasic fram	e. Correspond	ds to \$P_NCBI	FR[13].			
axis identifier:	GEOAX CHANA MACHA	X			NCK ver	sion:	56.00.	00	
unit:	-	min.:	DBL_MII	V	1	max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				X				7
attributes:	global	block sear	ch	l l	link			L	
		Not class	sified		No resti	rictions			

FRAME	\$P_NCE	BFR14							descriptio	
									n:	
description	า:									
Access to	o 15th N0	CU-global b	oasic fram	ne. Corresp	onds to \$	P_NCBI	FR[14].			
axis	GEOAX					NCK ver	sion:	56.00.0	10	
identifier:	CHANA	Χ								
	МАСНА	X								
unit:	-	min.:	DBL_MII	N			max.:	DBL_N	IAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	•		link	•	•	•	
		Not class	sified			No rest	rictions			

FRAME	\$P_NC	BFR15						descript	iio
	. –							n:	
descriptior	1:								
Access to	16th N	CU-global l	basic fram	e. Correspond	s to \$P_NCB	FR[15].			
axis	OFOAN	/			INCK ver	eion.	150.00	20	
identifier:	GEOAX				NOIX VCI	31011.	56.00.	JU	
identifici.	CHANA								
	MACHA	λX							
unit:	-	min.:	DBL_MIN	V	•	max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X				
write:	Х				X				7
attributes:	global	block sear	rch		link			· ·	
		Not class	sified		No rest	rictions			

FRAME	\$P_CHB	FRAME0							descript	10
description	<u> </u> า:								n:	
Access to	1st curre	ent channe	el basic fra	ame. Corre	esponds to	o \$P_CH	BFRAME	[0].		
axis identifier:	GEOAX CHANAX MACHAX	<				NCK vers	sion:	56.00.0	00	
unit:	-	min.:	DBL_MIN	N .			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link	- I			
		Not class	sified			No restr	ictions			

FRAME	\$P_CH	BFRAME1							descript	io
de e e election									n:	
description	1:									
Access to	o 2nd cu	rrent chanr	nel basic f	rame. Corre	esponds	to \$P_C	HBFRAM	E[1].		
axis	GEOAX	(				NCK ver	sion:	56.00.	00	
identifier:	CHANA	X								
	MACHA	λX								
unit:	-	min.:	DBL_MII	V			max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch			link	1			
		Not class	sified			No rest	rictions			

FRAME	\$P_CHB	FRAME2							description	
									n:	
description	1:									
Access to	3rd curr	ent channe	el basic fr	ame. Corre	esponds t	o \$P CH	<b>IBFRAME</b>	[2].		
					•	· <del>-</del>				
axis	<b>GEOAX</b>					NCK ver	sion:	56.00.0	00	
identifier:	CHANA	<								
	MACHA	X								
unit:	-	min.:	DBL_MIN	٧			max.:	DBL_N	IAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	•		link		'	•	
		Not class	sified			No resti	rictions			
•		•				•				•

FRAME	\$P_CH	BFRAME3						descript n:	10
description	n:			I				I	
Access to	o 4th cur	rent chann	el basic fr	ame. Corresp	onds to \$P_CH	HBFRAMI	E[3].		
axis identifier:	GEOAX CHANA MACHA	X			NCK ver	sion:	56.00.	00	
unit:	-	min.:	DBL_MII	٧		max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				X				7
attributes:	global	block sear	rch	1	link	1			
		Not class	sified		No rest	rictions			

FRAME	\$P_CHE	BFRAME4							descript n:	io
description	n:			•					•	
Access to	5th cur	ent channe	el basic fr	ame. Corre	sponds t	o \$P_CH	HBFRAME	<u>[</u> 4].		
axis	GEOAX					NCK ver	sion:	56.00.	.00	
identifier:	CHANA									
	MACHA	X								
unit:	-	min.:	DBL_MII	N			max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link	•		•	
		Not class	sified			No rest	rictions			

FRAME	\$P_CH	BFRAME5						descript n:	io	
description	n:								I	
Access to	o 6th cur	rent chann	el basic fr	ame. Correspo	nds to \$P_C	HBFRAME	Ξ[5].			
axis identifier:	GEOAX CHANA				NCK ver	rsion:	56.00.	00		
	MACHA	·Χ								
unit:	MACHAX - min.: DBL_MIN				•	max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х				Ĭ	
write:	Х				Х				7	
attributes:	global	block sear	rch		link		I	L		
		Not class	sified		No rest	rictions				

FRAME	\$P_CH	BFRAME6						descript n:	10
description	n:			·				I	
Access to	o 7th cur	rent channe	el basic fr	ame. Correspo	onds to \$P_Cl	HBFRAMI	E[6].		
axis identifier:	GEOAX CHANA MACHA	×Χ			NCK ver	rsion:	56.00.	00	
unit:	-	min.:	DBL_MII	٧	<u>'</u>	max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch	1	link				
		Not class	sified		No rest	rictions			

FRAME	\$P CHB	FRAME7							descripti	0
	_								n:	
description	า:									
Access to	o 8th curr	ent chann	el basic fr	ame. Corre	esponds t	o \$P_CH	HBFRAME	E[7].		
axis	GEOAX					NCK ver	sion:	56.00.0	00	
identifier:	CHANA	Χ								
	MACHA	X								
unit:	-	min.:	DBL_MI	N			max.:	DBL_N	ИАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	'		link	•	•		
		Not class	sified			No rest	rictions			

FRAME	\$P_CHE	BFRAME8							descript	io
									n:	
description	า:									
Access to	o 9th curi	rent chann	el basic fr	ame. Corre	esponds t	o \$P_CH	HBFRAME	[8].		
axis	<b>GEOAX</b>					NCK ver	sion:	56.00.0	00	
identifier:	CHANA	X								
	MACHA	X								
unit:	-	min.:	DBL_MIN	V			max.:	DBL_N	ИАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch			link	•	•	•	
		Not class	sified			No rest	rictions			
	•	•				•				•

FRAME	\$P_CH	BFRAME9						descript n:	10
descriptio	n:			ı					I
Access to	o 10th cu	ırrent chan	nel basic	frame. Corresp	onds to \$P_0	CHBFRAN	ИЕ[9].		
axis identifier:	GEOAX CHANA MACHA	X			NCK vei	rsion:	56.00	00	
unit:	-	min.:	DBL_MII	V	I	max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sea	rch	l l	link		1	L	
		Not class	sified		No rest	rictions			

FRAME	\$P_CH	BFRAME1	0						descript n:	io
description	<b>ո</b> ։			l					I.	
Access to	o 11th cu	ırrent chanı	nel basic	frame. Cor	responds	to \$P_C	HBFRAM	1E[10].		
axis identifier:	GEOAX CHANA					NCK ver	sion:	56.00.	.00	
	MACHA	٨X								
unit:	-	min.:	DBL_MII	N			max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link	1		l.	
		Not class	sified			No rest	rictions			

FRAME	\$P CHI	BFRAME1	1					descript	io
	_							n:	
description	1:								
Access to	12th cu	ırrent chanı	nel basic t	frame. Corresp	onds to \$P_C	HBFRAM	1E[11].		
	T = = = = =				INCK	-1			
axis	GEOAX				NCK ver	Sion:	56.00.	00	
identifier:	CHANA	X							
	MACHA	·Χ							
unit:	-	min.:	DBL_MII	V	•	max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch		link	•	,	•	
		Not class	sified		No rest	rictions			

FRAME	\$P_CH	BFRAME1	2					descript n:	10
descriptio	n:			•				I.	
Access to	o 13th cu	ırrent chanı	nel basic	frame. Corresp	onds to \$P_C	HBFRAN	/IE[12].		
axis identifier:	GEOAX CHANA MACHA	×Χ			NCK ver	rsion:	56.00.	.00	
unit:	-	min.:	DBL_MII	٧		max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch	1	link		<u> </u>		
		Not class	sified		No rest	rictions			

FRAME	\$P_CHE	FRAME1	3				descrip n:					
description	n:			•								
Access to	14th cui	rrent chan	nel basic t	frame. Corre	esponds	to \$P_C	HBFRAM	IE[13].				
axis	GEOAX					NCK ver	sion:	56.00.	00			
identifier:	CHANA	X										
	MACHA	X										
unit:	-	min.:	DBL_MIN	V			max.:	DBL_N	ЛАХ			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights		
read:	Х					Х						
write:	Х					Х				7		
attributes:	global	block sear	rch	,		link	•	•				
		Not class	sified			No rest	rictions					

FRAME	\$P CH	BFRAME1	4						description	0
	-		•						n:	
description	า:									
Access to	o 15th cu	irrent chan	nel basic t	frame. Corı	responds	to \$P_C	HBFRAM	1E[14].		
axis	GEOAX					NCK ver	sion:	56.00.0	00	
identifier:	CHANA	Х								
	MACHA	·Χ								
unit:		min.:	DBL_MIN	V			max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:										rights
	Х					Х				
write:	Х					X				7
attributes:	global	block sear	rch			link				
		Not class	sified			No resti	rictions			

FRAME	-	BFRAME1	5						descript n:	10
description	n:									•
Access to	o 16th cu	urrent chan	nel basic	frame. Corr	esponds	to \$P_C	HBFRAN	1E[15].		
axis identifier:	GEOAX CHANA MACHA	λX				NCK ver	sion:	56.00.0	00	
unit:	-	min.:	DBL_MII	N		•	max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				_
write:	Х					Х				7
attributes:	global	block sear	rch	•		link	•	•		
		Not class	sified			No restr	rictions			

FRAME	\$P NC	BFRAME0						descript	io
								n:	
description	n:								
Access to	o 1st cur	rent NCU-g	lobal bas	ic frame. Co	responds to \$P	_NCBFR	AME[0].		
axis	GEOAX	(			NCK ver	sion:	56.00.0	00	
identifier:	CHANA	·Χ							
	MACHA	λX							
unit:	-	min.:	DBL_MII	V	<u>.</u>	max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				X				7
attributes:	global	block sear	ch		link	•	•	•	
		Not class	sified		No resti	rictions			

FRAME	\$P_NCE	BFRAME1						descript n:	io	
description	1:			I				1		
Access to	2nd cur	rent NCU-	global bas	sic frame. Corre	esponds to \$F	_NCBFR	RAME[1].			
axis identifier:	GEOAX CHANA MACHA	X			NCK ver	sion:	56.00.	00		
unit:	-	min.:	DBL_MII	V	max.: DBI			_MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х				Ť	
write:	Х				Х				7	
attributes:	global	block sear	ch		link			L		
		Not class	sified		No rest	rictions				

FRAME	\$P_NC	BFRAME2						descript n:	Ю
descriptio	n:			1					
Access to	o 3rd cur	rent NCU-ç	global bas	ic frame. Corre	esponds to \$P	_NCBFR	AME[2].		
axis identifier:	GEOAX CHANA MACHA	×Χ			NCK ver	rsion:	56.00	00	
unit:	-	min.:	DBL_MII	٧		max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI OEM		access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch	1	link			l	
		Not class	sified		No rest	rictions			

FRAME	\$P_NC	BFRAME3			descript   n:						
description	n:								l .		
Access to	o 4th cur	rent NCU-g	lobal bas	ic frame. C	orrespon	ds to \$P	_NCBFR/	RAME[3].			
axis	GEOAX	(				NCK ver	sion:	56.00.	00		
identifier:	CHANA	Х									
	MACHA	·Χ									
unit: _	-	min.:	DBL_MII	V			max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х					Х					
write:	Х					Х				7	
attributes:	global	block sear	ch			link	•	•	•		
		Not class	sified			No rest	rictions				

FRAME	\$P_NCE	BFRAME4							descripti	0		
									n:			
description	า:											
Access to	5th curr	ent NCU-g	global basi	ic frame. C	Correspon	ds to \$P	_NCBFR/	AME[4].				
axis	GEOAX					NCK ver	sion:	56.00.0	00			
identifier:	CHANA	Χ							DBL_MAX OPI OEM			
	MACHA	X										
unit:	-	min.:	DBL_MIN	٧			max.:	DBL_M	1AX			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights		
read:	Х					Х						
write:	Х					Х				7		
attributes:	global	block sear	rch	•		link	•	•	•			
		Not class	sified			No resti	rictions					

FRAME	\$P_NCI	BFRAME5						descript n:	Ю	
descriptio	n:			•					•	
Access to	o 6th cur	rent NCU-g	global bas	ic frame. Cori	esponds to \$P	_NCBFR	AME[5].			
axis identifier:	GEOAX CHANA MACHA	X			NCK ver	sion:	56.00.	00		
unit:	-	min.:	DBL_MII	١		max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				X					
write:	Х				X				7	
attributes:	global	block sear	rch	1	link					
		Not class	sified		No restr	rictions				

FRAME	\$P NC	BFRAME6							descript	io
									n:	
description	า:									
Access to	7th cur	rent NCU-g	lobal bas	ic frame. C	orrespon	ds to \$P	_NCBFR/	AME[6].		
axis	GEOAX	(				NCK ver	sion:	56.00.0	00	
identifier:	CHANA	·X								
	MACHA	λX								
unit:	-	min.:	DBL_MII	N			max.:	DBL_N	ИАX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				J
write:	Х					Х				7
attributes:	global	block sear	ch			link	•	•		
		Not class	sified			No rest	rictions			

FRAME	\$P NCI	BFRAME7						descript	io	
	_							n:		
description	1:									
Access to	8th cur	rent NCU-g	lobal bas	ic frame. Corre	sponds to \$P	_NCBFR	AME[7].			
axis	GEOAX				NCK ver	sion:	56.00.	00		
identifier:	CHANA	X								
	MACHA	·Χ						DDL MAY		
unit: _	-	min.:	DBL_MII	V	•	max.:	DBL_N	ЛАХ		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х				Ĭ	
write:	Х				Х				7	
attributes:	global	block sear	ch		link					
		Not class	sified		No rest	rictions				

FRAME	\$P_NC	BFRAME8							descript	10
docorintio	<u>.</u>								n:	
descriptio										
Access to	o 9th cur	rent NCU-g	lobal bas	ic frame. C	Correspon	ds to \$P	_NCBFR	AME[8].		
axis	GEOAX					NCK ver	sion:	56.00	00	
identifier:	CHANA	X								
	MACHA	١X								
unit:	-					max.: DBL_MAX				
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link	•	•	<b>,</b>	
		Not class	sified			No rest	rictions			

FRAME	\$P_NC	BFRAME9			descripti  n:					
description	n:								<u> </u>	
Access to	o 10th cu	ırrent NCU-	-global ba	sic frame.	Correspo	nds to \$	P_NCBFF	RAME[9].		
axis	GEOAX	(				NCK ver	sion:	56.00.	00	
identifier:	CHANA	·Χ								
	MACHA	λX								
unit:	-	min.:	DBL_MIN	V			max.:	DDL_IVIAX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•		link	•	•	•	
		Not class	sified			No rest	rictions			

FRAME	\$P_NCB	FRAME1	0						descriptio n:	
description	J.								111.	
'		rent NCU	-global ba	sic frame.	Correspo	nds to \$I	P_NCBFF	RAME[10].		
axis	GEOAX					NCK ver	sion:	56.00.00		
identifier:	CHANA	<								
	MACHA:	X								
unit:	-	min.:	DBL_MIN	١			max.:	DBL_MA	λX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•	•	link	•	•	•	
		Not class	sified			No resti	rictions			

FRAME	\$P_NC	BFRAME1	1					descript n:	10
descriptio	n:			ı					
Access to	o 12th cu	urrent NCU	-global ba	sic frame. Cor	responds to \$	P_NCBFI	RAME[11	].	
axis identifier:	GEOAX CHANA MACHA	·Χ			NCK ver	rsion:	56.00	.00	
unit:	-	min.:	DBL_MII	N		max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				X				7
attributes:	global	block sea	rch		link	I	1		
		Not class	sified		No rest	rictions			

FRAME	\$P_NCI	BFRAME1	2						descript n:	io
description Access to		rrent NCU	-global ba	sic frame. C	Correspo	nds to \$	P_NCBFF	RAME[12	<u>'</u> ].	
axis identifier:	GEOAX CHANA MACHA	X				NCK ver	sion:	56.00.	00	
unit:	-	min.:	DBL_MII	N			max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch		link					
		Not class	sified	fied			No restrictions			

FRAME	\$P_NCE	BFRAME1	3			io				
description	n:			I				n:	l e	
Access to	o 14th cu	rrent NCU-	-global ba	sic frame. Cori	responds to \$	P_NCBFF	RAME[13	].		
axis identifier:	GEOAX CHANAX MACHAX				NCK version: 56.00.00					
unit:	-	min.:	DBL_MII	V	•	max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				X					
write:	Х				Х				7	
attributes:	global	block sear	rch	•	link			<u> </u>		
		Not class	sified		No rest	rictions				

FRAME	\$P_NC	BFRAME1	4					descript n:	10		
descriptio	n:			1				l.	· ·		
Access to	o 15th cu	ırrent NCU-	-global ba	sic frame. Co	orresponds to \$	P_NCBFI	RAME[14	<b>!</b> ].			
axis identifier:	GEOAX CHANA MACHA	×Χ			NCK ver	rsion:	56.00.00				
unit:	-	min.:	DBL_MII	٧	1	max.:		DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights		
read:	Х				X						
write:	Х				Х				7		
attributes:	global	block sear	rch	1	link						
		Not class	sified		No restrictions						

FRAME	\$P_NCE	BFRAME1	5				description:				
description	n:				I						
16. 16th	current N	ICU-global	basic fran	ne Corres	ponds to S	\$P_NCB	FRAME[1	5].			
axis identifier:	GEOAX CHANA MACHA		NCK version:			56.00.00					
unit:	-	min.:	DBL_MII	V			max.:		DBL_MAX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х					Х					
write:	Х					Х				7	
attributes:	global	block sear	ch		I	link	1	ı			
		Not class	sified			No restrictions					

unit:

read:

write: attributes: 1.1 List of system variables

INT	\$P TRA	FO_CHAI	N[MAX C	ONCAT					descriptio	
		 D_TRAFO							n:	
description	n:				1				1	
\$P_TRAI	FO_CHAI	N[n]								
Code nui	mbers of	chained tra	ansformat	ions of pro	ogrammed	TRACO	N accordir	ng to mach	nine data	
\$MC_TR	AFO_TYI	PE_m.								
Supplies	the code	number o	f the nth c	hained tra	nsformati	on of the	programm	ed TRAC	ON, startir	ng with
n=0.										
							ON is prog			
							l transform		turned (e.	g. 257 for
							)' is returne			
\$P_TRAI returned.	_	N[1] is the	2nd chai	ned transf	ormation i	f a TRAC	ON is prog	grammed.	Otherwise	e a '0' is
The sam	e applies	according	ly for \$P_	TRAFO_C	CHAIN[2] a	and \$P_T	RAFO_CH	HAIN[3].		
description	n of field lir	nits:								
	of the cha	ined trans	formation	•						
axis						NCK vers	sion:	51.06.00		
identifier: unit:	  -	min.:	0				max.:	INT MAX		
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	IOEM	access
			. с о ср				0, 1		02	rights
read:	Х					Х				
write:										
attributes:	global	block sear	rch			link	•		•	
		Not class	sified			Not clas	sified			
INT	\$AC_TR	AFO_CH	AIN[MAX_	CONCA					descriptio	
	TENATE	D_TRAF	os]						n:	
description	n:				•					•
	AFO_CH									
			ansformat	ions of ac	tive TRAC	ON acco	rding to m	achine dat	ta	
\$MC_TR	AFO_TYI	PE_m.								
Cumpling	460000		f the eath o	اممانهما		a.a. a.f 4la.a.	antiva TD	A C C A L - 4-	ملائدي بمسائس	0
							active TRA			
							ormation is			
		transform						s returned	(e.g. 257	101
	,			•			CON is ac	tive Othe	nvise a 'N'	' ie
returned.		~!! <b>!</b> [!]!3 !!	ic zna cna	anica trans	Sioimatioi	ilia ilv	OON 13 ac	ouve. Ouic	i wisc a o	10
		according	ly for \$AC	TRAFO	CHAIN[2	l and \$AC	_TRAFO_	CHAIN[3]		
	n of field lir		ι, ιοι φείο		_0 \[_	aria yric		_0: // ([0]		
		ained trans	formation							
axis	1					NCK vers	sion:	51.06.00		
identifier:	1									

max.:

Χ

SA

PP

Х

Not classified

INT MAX

Х

OEM

Χ

access

rights

OPI

1-179

min.:

main run

Χ

block search

Not classified

run-in

global

Χ

0

Χ

runin stp | Mrun syn

DOORLE	\$AC_M	IEAS_INPU	JT[10]		descriptio						
description	n:								1		
Variable	for work	piece and to	ool measu	ırement.							
		C_MEAS_I								and tool	
measure	ment. Th	ne control e	ffect of the	e paramete	ers is doc	umented	I in the me	easureme	nt variants.		
description	n of field l	limits:									
		g input para	meter								
axis		g input part	arrictor			NCK ver	sion:	51.08.0	0		
identifier:								01.00.0			
unit:	-	min.:	DBL_MIN	1			max.:	DBL_M	AX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х					Х		Х			
write:	Х					Х		Х		7	
attributes:	global	block sea	rch			link	-	I.			
		Not class	sified			Not clas	ssified				
- INIT					•				l d a a a si mbi a	,	
INT		SB[1024]							description:		
description	n:										
_		_DBSB[n] i				ita byte (	8 bits) fro	m PLC. Th	ne byte is si	gned and	
		written in th				. 6 (1)		(DDD) (	1.2.1		
		s reserved i									
exchange	e petwee	en PLC and	NC. The	PLC uses 1	runction c	alis (FC)	and the N	NCK uses	variables	to access	

this memory.
See also \$A\_DBB[n].
description of field limits:

n: Position offset within I/O area 0 - ...

axis identifier:					NCK ver	sion:	58.00.0	0	
unit:	-	min.:	-128			max.:	127		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х	Х	
write:	Х	X		Х	Х	Х		Х	7
attributes:	global	block sea	rch		link			*	
		Not class	sified		Not clas	sified			

INT	\$A_DB	SW[1024]						descripti	0	
								n:		
description	1:									
and can I	oe read y area is e betwee ory. \$A_DB\	and written is reserved in PLC and	in the ran	ge from -3276 imunications b	te a data word 68 to 32767. ouffer of these ction calls (FC)	modules	(DPR) for	high-spee	d data	
		within I/O a	roo O							
	II Oliset	WILLIIII I/O a	ii ea 0		INCK	oion:	1			
axis identifier:					NCK ver	SIOH.	58.00.0	0		
unit:	-	min.:	-32768			max.:	32767	32767		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х		X	Х	Х	Х		
write:	Х	Х		Х	Х	Х		Х	7	
attributes:	global	block sear	rch		link	1	1	1		
		Not class	sified		Not clas					

INI	\$P_SUB_AXFCT	descriptio	
		n:	
dooor	intion:		

description:

Returns a bitmask according to machine data \$MA\_AXIS\_LANG\_SUB\_MASK. An enabled bit means that the substitution of the corresponding function is active:

Bit 0 = 1:Automatic gear stage change (M40) and direct gear stage change (M41-M45)

Bit 1 = 1:Spindle positioning with SPOS/SPOSA/M19

axis identifier:						NCK ver	sion:	58.00.00			
unit:	- min.: 0						max.:	3			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х					Х				_	
write:											
attributes:	global	block sear	ch	l l		link	L	L	l .		
		Program	gram sensitive				No restrictions				

NT	\$P_SUE	GEAR							descriptio			
description	l n:								n:			
substituti	on config		\$MA_AXI	S_LANG_	SUB_MA				an NC langu subprograi			
axis	1					NCK ver	sion:	58.00.0	58.00.00			
dentifier:			1									
unit:	-	min.:	41				max.:	45	10511	_		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights		
read:	Х					Х						
write:												
attributes:	global	block sea	rch			link						
		Program	sensitive			No resti	rictions					
BOOL	\$P_SUE	_AUTOG	EAR						descriptio	1		
description	J								n:			
was activ	re in the p	part progra	ım line wh	ich initiate	d the sub	stitution <sub>l</sub>	process.	_	age change	()		
axis dentifier:						NCK version:			58.00.00			
unit:	-	min.:	FALSE				max.:	TRUE				
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access		
ead:	X					Х				rights		
write:												
attributes:	global	block sea	rch			link						
	3	Program	sensitive			No resti	rictions					
		i rogia				110 1000	10000110					
AXIS	\$P_SUE	B_LA							description:			
\$MA_AX coupling Outside t	bstitution IS_LANG which ini	subprogra 6_SUB_M/ tiated the s tution prod	ASK, this v substitutio	/ariable su n process	ipplies the	axis ide ram exec	ntifier of th	he leading	g spindle of	the active		
axis dentifier:						NCK ver	sion:	58.00.0	00			
unit:	-	min.:					max.:					
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights		
ead:	Х					Х						
write:												
attributes:	global	block sea	rch	1	1	link	ı	1	1			
	<u> </u>	Program	sensitive			No resti						

AXIS	\$P_SUB	CA							descriptio	
	*								n:	
description	า:									
In the sul	ostitution	subprogra	m of an N	IC languad	ae substitu	ution con	figured wi	ith		
								he followin	a spindle o	of the
_		ich initiate							3 -	
						ram avar	ution and	triggers ar	alarm	
axis	inc Substi	tation proc	ocoo, tric v	anabic ab	orto progr	NCK ver		58.00.00		
identifier:						110111011	51011.	56.00.00	1	
unit:	_	min.:				l	max.:			
						I D D	-	OBI	TOEM.	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:										
attributes:	global	block sear	rch			link				
		Program	sensitive			No restr	rictions			
		1 3.5				1				
CTDIMO					1				Ideogriptio	1
STRING	\$P_BLC	CKNO[IN	MAXFILE	STACK]			descriptio n:			
description	J.								J11.	

Example:

\$P BLOCKNO[0]

\$P\_BLOCKNO[n]

Supplies the modal block number of the program on program level 0 = main program name.

MD 10284 \$MN\_DISPLAY\_FUNCTION\_MASK Bit0 must be = 1.

Supplies the last programmed block number of program level n.

Block numbers programmed during DISPLOF cannot be read with \$P\_BLOCKNO. description of field limits:

n: Defines the program level from which the block number is to be read.

axis identifier:						NCK vers	sion:	58.00.00			
unit:	_ min.:						max.:				
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х					Х		Х			
write:											
attributes:	global	block sear	rch			link	1		<u> </u>		
		Not class	sified			Not clas	sified				

INT	\$P LIN	ENO[INMA	XFILEST	ACK1					description	
	_	•		•					n:	
description	n:									
\$P_LINE	NO[n]									
Supplies	the last	programme	ed line nur	nber of pro	gram level	n.				
Example	:									
\$P_LINE	NO[0]									
Supplies	the line	number of	the progra	ım on prog	ram level 0	= mai	n program	level.		
description	n of field l	imits:								
n: Define	s the pro	gram level	from whice	ch the line	number is to	o be re	ead.			
axis					N	CK ver	sion:	58.00.0	0	
identifier:										
unit:	-	min.:	INT_MIN				max.:	INT_MA	XΑ	
	run-in	main run	runin stp	Mrun syn	P	Р	SA	OPI	OEM	access rights
read:	Х					Х		Х		
write:										
attributes:	global	block sea	rch	J	lir	nk		II.		
		Not class	sified		N	lot clas	ssified			

INT	\$AC_AUTO_JOG_STATE	description	)
		n:	

#### description:

- 1: Automatic is selected, \$MN\_JOG\_MODE\_MASK is set and the mode group is "BAG-Reseted". By actuating the +/- buttons or the handwheel, you can jog in Auto mode.
- 2: After a JOG movement has been performed, this mode group was switched by the system to JOG. The VDI and OPI still display Automatic mode.
- 0: Other

Remark: This information covers the whole mode group and is available to each mode group channel via \$AC AUTO JOG STATE.

axis identifier:	_						ersion:	59.00.00			
unit:	-	min.: 0					max.:	2			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:		Х					Х	Х	Х		
write:											
attributes:	global	block sear	ch	· · · · · · · · · · · · · · · · · · ·		link	1	<b>'</b>	1		
		Not class	t classified				Not classified				

DOUBLE  \$AC FIFO[n,m]	desc	riptio	
	n:		

description:

Variable \$AC\_FIFO[n,m] access the n-th. first in first out stack. See also \$AC\_FIFO1 .. \$AC\_FIFO10. \$MC\_NUM\_AC\_FIFO is used to define the range of n values and thus the number of FIFO Stacks \$AC\_FIFO1 - \$AC\_FIFO10.

The elements of the stack memory are saved in R variables. The length of all FIFO stacks is configured with \$MC\_LEN\_AC\_FIFO.

\$MC\_START\_AC\_FIFO is used to specify the number of the start R variable, from which the FIFO elements are stored.

R variables assigned to FIFO areas should not be written elsewhere.

The number of R variables must be set in machine data \$MC\_MM\_NUM\_R\_PARAM such that all FIFO variables can be stored:

\$MC\_MM\_NUM\_R\_PARAM = \$MC\_MM\_START\_FIFO + \$MC\_NUM\_AC\_FIFO \* (\$MC\_LEN\_AC\_FIFO + 6)

The FIFO variable is an array variable.

Indices 0 - 5 have special meanings:

m = 0: When written with index 0, a new value is stored in the FIFO.

When read with index 0, the oldest element is read and removed from the FIFO.

- m=1: Access to the first element read
- m=2: Access to the last element read
- m=3: Total of all FIFO elements if Bit0 in \$MC MM MODE FIFO is set.
- m=4: Number of elements available in the FIFO
- m=5: Current write index relative to the start of the FIFO
- m=6: Oldest element
- m=7: Second oldest etc.

description of field limits:

The dimension is defined in \$MC\_NUM\_AC\_FIFO.

The dimension is defined in \$MC LEN AC FIFO.

axis identifier:					NCK vei	rsion:	60.00.0	60.00.00		
unit: .	-	min.:	DBL_MII	V	•	max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х		X	X	X	Х		
write:	Х	Х			X	X		Х	7	
attributes:	global	block sea	rch		link	1	1	1		
		Not class	sified		Not cla	ssified				

access rights

### 1.1 List of system variables

INT	\$AC_AU	IXFU_M_\	/ALUE[64	1]					descriptio n:	
descriptio	n:								11.	
•		SAC ALIX	(FII M V	Al UF[n] is	s used to i	ead the v	alue of the	M auxili	ary function	n that has
									ions are as	
									determine	
									not yet be	
									determine	
									s the curre	
status.	*		[].				[] +			
	n of field lir	nits:								
The inde	x corresp	onds to the	e auxiliarv	function of	aroup nun	nber decre	emented b	v one.		
axis			,		,	NCK vers		59.00.00	)	
identifier:								00.00.0	-	
unit:	-	min.:	INT_MIN				max.:	INT_MA	·Χ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	Х	Х			Х	Х	Х	X	
write:										
attributes:	global	block sear	ch			link				
		Not class	sified			Not class	sified			
		1				l				
INT	\$AC_AU	IXFU_M_E	EXT[64]						descriptio	
docorintio	n·								n:	
descriptio		<b>640 411</b>	/ELL NA E	VT-1-1-						
									iliary functi	
									functions a	
									. The index	
									auxiliary fur	
							M VALL		ant value o	)i tile
							_IVI_VALU	ı⊑[n]. The	e variable	
	n of field lin	STATE[n]	uetermine	s the cum	eni output	Status.				
•			a auvilian	function	מיום חווים	her door	emented b	v ono		
axis	T correspo	uius lu liil	auxilial y	iui ictioi (	Jioup Hull	INCK vers		ř –	<u> </u>	
identifier:						NCK version: 59.00.00			J	
unit:	_	min.:	INT MIN			!	max.:	INT MA	X	

main run runin stp Mrun syn

Χ

Χ

block search

Not classified

run-in

Χ

read:

write:

attributes: global

SA

Χ

Χ

Not classified

OPI

Χ

OEM

Χ

INT	\$AC_AUXFU_M_STATE[64]		descriptio	
	· -= <b>.</b>		n:	
description	1:			
The array	(variable \$AC ALIVELL M STATEInLie	s used to road the output status of the N	/ auvilian	function

The array variable \$AC\_AUXFU\_M\_STATE[n] is used to read the output status of the M auxiliary function that has been collected last for an auxiliary function group (search run) or output. Auxiliary functions are assigned to groups. The index corresponds to the group number decremented by one. The index 0 determines the status of the M auxiliary function output last for the 1st group. If an auxiliary function has not yet been output for the group specified, the variable returns the value 0. If the value is greater than 0, the relevant auxiliary function value can be determined with the variable \$AC AUXFU M VALUE[n]. The variable \$AC\_AUXFU\_M\_EXT[n] determines the current extension of the auxiliary function.

The variable returns the following values:

- 0: Auxiliary function not available
- 1: M-auxiliary function collected via search run
- 2: M-auxiliary function output to the PLC
- 3: M-auxiliary function output to the PLC, transfer has been acknowledged.
- 4: M-auxiliary function managed by the PLC and integrated into the PLC.
- 5: M-auxiliary function managed by the PLC, function has been acknowledged.

description of field limits:

The index corresponds to the auxiliary function group number decremented by one. NCK version: 59.00.00 identifier: unit: min.: max.: main run OPI run-in runin stp Mrun syr SA OFM access rights read:

							1	 	
write:									
attributes:	global	block sear	ch		1	link	•		
		Not class	ified			Not class	sified		
DOUBLE	\$P THR	EAD PIT	CH					descriptio	
	description:							n:	

\$P THREAD PITCH provides the lead with G33, G34, G35, G331 and G332 programmed under the address I. J or K. Value 0 is supplied in the RESET state or if no lead has been programmed. With G33. G34 and G35 a positive value is always returned. With G331 and G332, the sign results from the spindle rotation direction; positive in clockwise direction (as with M3) or negative in counterclokekwise direction (as with M4).

In the following example, \$P THREAD PITCH provides the value "1.5".

N11 M4 S500

N12 G33 Z10 K1.4

N13 G33 Z12 K1.5

N14 R1=\$P THREAD PITCH ;R1=1.5

axis identifier:					NCK ver	sion:	60.00.00		
unit:	THREA D_PITC H	min.:	DBL_MIN	N		max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:									
attributes:	global	block sear	ch	<u> </u>	link	II.			
		Not class	sified		Not clas	ssified			

DOUBLE	\$P_THR	EAD_PIT	CH_INC						descriptio	
description	l n:								n:	
(G34/G3	5). Value	0 is suppli	ed in the I	RESET sta	ate or if no	lead ch		been prog	e lead char grammed.	ige
Example M3 S400 G35 F2 Z R1=\$P_1	1	PITCH_IN	NC ;R1= -	2						
axis						NCK ver	rsion:	60.00.0	0	
identifier: unit:	THREA D_PITC H_INCR EMENT	min.:	DBL_MIN				max.:	DBL_M		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х			1	riginto
write:										
attributes:	global	block sear	rch	l .		link	l .	I		
		Not class	sified			Not clas	ssified			
DOUBLE					•				descriptio	_
DOUBLE	\$AC_TH	READ_PI	ТСН						descriptio n:	
I, J or K. G35, a pris as follo M4). In the foll  N11 M4 3 N12 G33 N13 G33	READ_PI In the RE ositive val ows: positi Iowing exa	SET state ue is alwa ve for cloo ample, \$A	or if no le lys returne ckwise rot C_THREA	ad has beed. With G ation (as v	een progra 331 and 0	mmed, to 3332, the r negative	the value ( e sign fror /e for cour	) is given. n the spin	mmed unde With G33, dle rotating vise rotation	G34 and direction
axis identifier:						NCK ver	sion:	60.00.0	0	
unit:	THREA   min.:   DBL_MIN   D_PITC   H						max.:	DBL_M		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear				link				
		Not class	sified			Not classified				

DOUBLE  \$AC_THREAD_PITCH_INC										
DOUBLE	\$AC_TH	READ_PI	TCH_INC						descriptio n:	
description	1 n:								111.	
\$AC THI	READ PI	TCH INC	provides	the value	programm	ned unde	er the addre	ess F for l	ead chang	е
(G34/G3	5). In the I	RESET st	ate or if a	change in	lead has	not bee	n programr	ned, the v	alue 0 is s	upplied.
				and negat						
Example										
M3 S400										
G34 F4 Z				_						
R1=\$P_I	HREAD_	PITCH_IN	NC ;R1= 4	1						
axis						NCK vei	rsion:	60.00.00	)	
identifier:								00.00.00	,	
unit:	THREA	min.:	DBL_MIN	1			max.:	DBL_MA	λX	
	D_PITC									
	H_INCR									
	EMENT									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch			link				
		Not class	sified			Not cla	ssified			
DOUBLE	SAC TH	READ DI	TCH_AC	7					descriptio	
	ΨΑΟ_111	INEAD_I I	TOTI_ACT						n:	
description					•				•	•
							ad. This val	ue is cont	inuously u	pdated in
				ne value p						
	thread bl	ocks (G33	3, G34, G3	35, G331 a	and G332		unequal z	ero is sup	plied.	
axis						NCK vei	rsion:	60.00.00	)	
identifier: unit:	TUDEA	min.:	DDI MIN	1			max.:	DDI M	\ \ \	
ariic.	THREA		DBL_MIN	N			max	DBL_MA	<del>1</del> X	
	D_PITC H									
				I Marrian arrian	1	IDD	CA	ODI	IOEM	T
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	X	rigino
write:										
	alabel	blook as -				link				
attributes:	global	block sear	CIT		link					
		Not class	sified	· · · · · · · · · · · · · · · · · · ·	Not classified					

descriptio

### 1.1 List of system variables

DOUBLE | \$P\_TOOLROT[3]

									11.				
description													
\$P_TOOLROTn]													
	Programmed tool rotation vector  Normalized vector with length 1 and the components												
				e compon	ents								
		range - 1,	, 1.										
1: x-comp													
2: y-comp													
3: z-comp													
		the follow	ing unit ve	ctor is ret	urned, de	pending	on the act	ive plane:					
G17: (0, 1, 0)													
G18: (1, 0, 0)													
G19: (0, 0, 1)													
description of field limits:													
n: Components 1 - 3													
axis NCK version: 60.00.00													
identifier:													
-    -1.0													
	run-in main run runin stp   Mrun syn   PP   SA   OPI   OEM   access rights												
read:	X					Х							
write:													
attributes:	global	block sear	rch		<u> </u>	link		Į.	<u> </u>				
		Not class	rified			No resti	rictions						
		TVOL CIASS	micu			140 1030	ictions						
DOLIBLE	*** ==	010 10			1				descriptio	1			
DOOBLE	\$AC_TC	OLR_AC	Γ[3]						n:				
description	า:								1111.				
\$AC TO		T[n]											
_	_	otation vec	ctor										
		with lengt		e compon	ents								
		range - 1,		o compon									
1: x-com		rango i,	,										
2: y-comp													
3: z-com													
If no tool is active, the following unit vector is returned, depending on the active plane:													
G17: (0, 1, 0)													
G18: (1, (													
G19: (0, 0													
description	of field lin	nits:											
	n: Components 1 - 3												

NCK version:

Χ

No restrictions

link

max.:

Χ

SA

axis

read:

write:

attributes: global

identifier: unit:

run-in

Χ

-1.0

Χ

runin stp Mrun syn

main run

Χ

block search

Not classified

60.00.00

Χ

OEM

Χ

access rights

1.0

OPI

DOUBLE	\$AC_TC	OOLR_ENI	D[3]						n:	
description	h:				ı					1
\$AC_TO	OLR EN	D[n]								
		or of active	block							
Normaliz	ed vector	with lengt	h 1 and th	ne compor	ents					
		range - 1,								
1: x-com	•	,	,							
2: y-com										
3: z-com										
		the follow	ing unit ve	ector is ret	urned, de	pending	on the act	ive plane:		
G17: (0,			Ū					•		
G18: (1,	0, 0)									
G19: (0,										
description		mits:								
n: Compo	onents 1	- 3								
axis						NCK ver	sion:	60.00.0	0	
identifier:										
unit:	-	min.:	-1.0				max.:	1.0		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	X	X			Х	X	X	X	
write:										
attributes:	global	block sear	rch		L	link		L	_ L	
		Not class	sified			No resti	rictions			
	1	· ·				·				1

DOUBLE	\$AC T	OOLR_DIF	F					descript	io	
	<b>V</b>		•					n:		
description	n:			<u>.</u>				•		
\$AC_TO	OLR_DI	FF								
Remainir	ng angle	of tool rota	tion in act	ive block in de	egree in the ra	nge 0 1	80 degree	e.		
axis identifier:					NCK ver	rsion:	60.00.0	0		
unit:	deg.	min.:	0.0		•	max.: 180.0				
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х		Х	Х	Х	Х		
write:										
attributes:	global	block sear	rch	1	link		<u> </u>	I		
		Not class	sified		No rest	No restrictions				

DOORLE	\$VC_TC	OLR[3]							descriptio	
description	J.								n:	
•										
\$VC_TO		_								
Actual to										
		with lengt		ie compon	ents					
	•	range - 1,	, 1.							
1: x-com										
2: y-com										
3: z-com	oonent									
If no tool	is active,	the follow	ing unit ve	ector is ret	urned, de	pending	on the act	tive plane		
G17: (0,	1, 0)									
G18: (1,	0, 0)									
G19: (0,										
description	n of field lii	mits:								
n: Compo	onents 1	- 3								
axis						NCK ver	sion:	60.00.0	0	
identifier:										
unit:	-	min.:	-1.0				max.:	1.0		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	X	Х			X	X	X	X	
write:										
attributes:	global	block sear	rch			link		· ·		
		Not class	sified			No rest	rictions			

DOUBLE	\$VC T	OOLR_DIF	F					descript	io	
								n:		
description	n:			-				•		
\$VC_TO	OLR_DI	FF								
Angle be	tween co	ommand ar	nd actual t	ool rotation in	degree in the	range 0	. 180 degi	ree.		
axis					NCK ver	sion:	60.00.0	0		
identifier:										
unit:	deg.	min.:	0.0			max.: 180.0				
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х		Х	Х	Х	Х		
write:										
attributes:	global	block sear	rch		link					
		Not class	sified		No rest	rictions				

INT   \$VC_TOOLR_STAT									descripti	0
									n:	
description	n:									
\$VC_TO	OLR_ST	AT								
Status of	calculati	on of actua	al tool rota	ition:						
0: MCS -	> BCS Tr	ansformat	ion in one	ipo cycle						
-1: MCS	-> BCS tr	ansformat	ion not in	one ipo cy	cle possib	ole				
axis						NCK ver	sion:	60.00.0	0	
identifier:										
unit:	-	min.: -1				max.: 0				
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch	•		link	•	•	•	
		Not class	sified			No rest	rictions			

BOOL	\$P SIMUL	descriptio	
	*· ==·····	n:	ĺ

description:

Value==TRUE

The part program is executed in the control under the Simulation search run mode.

The simulation search run is a search run (with calculation) which is aborted with an

internal M30 once the end of the program has been reached.

The control is internally in search run mode, the variables \$P\_SEARCH, \$P\_SEARCH1, \$P\_SEARCH2 and \$P\_SEARCHL are also correctly supplied.

Parts program adjustments can be made through variables \$P\_SEARCH\* or \$P\_SIMUL. \$P\_SIMUL is designed only for adjustments restricted to the simulation search run.

Value==FALSE No simulation search run is active.

axis					NCK vei	rsion:	61.00.0	00	
identifier:								-	
unit:	-	min.:	FALSE			max.:	TRUE		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:									
attributes:	global	block sear	ch	I	link	!	- I	l .	
		Current v	/alue		Not cla	ssified			

INT	\$P SUB STAT	descriptio							
	, =====================================	n:							
descriptions									

description:

A replacement of the tool programming has been configured (address D, DL, T or M function through which the tool change cycle is called up). \$P\_SUB\_STAT now permits polling to see if the substitution process is active and if the process is executed at the start or the end of the block:

Value 0:Substitution subprogram not active

Value 1:Substitution subprogram active,

call-up at start of block

Value 2:Substitution subprogram active,

call-up at end of block

The system variable is influenced by machine data \$MN\_T\_NO\_FCT\_CYCLE\_MODE bit1 and 2.

axis identifier:					NCK ve	rsion:	61.00.00		
unit:	-	min.:	0		•	max.:	2		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:									
attributes:	global	block sea	rch		link	I	<b>I</b>	I	
		Program	sensitive		No res	No restrictions			

INT	\$A_USEDND[SLMDMAXMAGLOCA	descriptio	
	TIONSWITHDISTANCE]	n:	

#### description:

\$A\_USEDND[ toolHolder ]

The number of cutting edges used in tool holder s, counted since the last setpiece command, including the currently active cutting edge.

toolHolder=1,...,maximum tool holder number

toolHolder=0 = The master tool holder is selected

Result = >0 = Number of cutting edges that have been used.

Result = 0 = There have been no cuts since the last setpiece command.

Result = -1 = Tool Management Tool Monitoring is not active.

Result = -2 = toolHolder is not the value of a defined tool holder.

description of field limits:

toolHolder: Spindle number / Tool holder number

axis identifier:					NCK version:		62.00.00		
unit:	-	min.:	0		•	max.:	INT_MA	١X	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х	Х	
write:									
attributes:	global	block sear	ch	•	link	•	•	•	
		Not class	sified		Not clas	ssified			

INT \$A_USEDT[SLMDMAXMAC	LOCATI	descriptio
ONSWITHDISTANCE,1500]		n:

description:

\$A USEDT[ toolHolder, usedCuttingEdgeIndex ]

T-Number for the i-th cutting edge used with tool holder s since the last setpiece command, including the currently active cutting edge.

toolHolder=1,...,maximum tool holder number

toolHolder=0 = The master tool holder is selected

Result = >0 = T-Number (can occur several times) (if different D-corrections of the tool were used).

Result = 0 = There have been no cuts since the last setpiece command.

Result = -1 = Tool Management Tool Monitoring is not active.

Result = -2 = toolHolder is not the value of a defined tool holder.

description of field limits:

toolHolder: Spindle number / Tool holder number

usedCuttingEdgeIndex: index

axis identifier:	lmin :				NCK ve	rsion:	62.00.0	62.00.00		
unit:	-	min.:	0		•	max.:	INT_M	ΑX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х		Х	Х	Х	Х		
write:										
attributes:	global	block sea	rch	1	link	L	L	L		
		Not class	sified		Not cla	ssified				

INT	\$A_USEDD[SLMDMAXMAGLOCATI	descriptio	
	ONSWITHDISTANCE,1500]	n:	

description:

\$A\_USEDD[ toolHolder, usedCuttingEdgeIndex ]

D-Number for the i-th cutting edge used with tool holder s since the last setpiece command, including the currently active cutting edge.

toolHolder=1,...,maximum tool holder number

toolHolder=0 = The master tool holder is selected

Result = >0 = D-Number (can occur several times) (if different D-corrections of the tool were used).

Result = 0 = There have been no cuts since the last setpiece command.

Result = -1 = Tool Management Tool Monitoring is not active.

Result = -2 = toolHolder is not the value of a defined tool holder.

description of field limits:

toolHolder: Spindle number / Tool holder number

usedCuttingEdgeIndex: index

axis identifier:					NCK version:		62.00.00		
unit:	-	min.:	0			max.:	INT_MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х	Х	
write:									
attributes:	global	block sear	ch	•	link	•	•	•	
		Not class	ified		Not classified				

INT	\$AC AL	JXFU M 1	TICK[64]						description		
	. –								n:		
description	า:										
Field vari	able \$AC	_AUXFU_	M_TICK[r	n] is used i	to read the	e time sta	amp of the	e M auxili	ary function	collected	
(search r	un) or ou	tput last fo	r an auxili	ary function	n group.	Auxiliary	functions	are assid	gned to gro	ups. The	
									nes the valu		
	•	• .			•				peen output		
,		_	• •		•		•		ed using va		
									J M EXT[n		
							iable JAC		_INI_⊏	j. variable	
		STATE[n]	aetermine	s the curr	ent output	state.					
description											
	x corresp	onds to the	e auxiliary	function of	group nun			by one.			
axis						NCK ver	sion:	63.00.0	00		
identifier:		Tour tour	T				1				
unit:	-	min.:	INT_MIN				max.:	INT_M	AX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access	
										rights	
read:	Х	X	Х			Х	Х		X		
write:											
attributes:	global	block sear	ch	1	<u> </u>	link					
		Not classified Not classified									

DOUBLE	\$AC_C	ONE_ANG	LE						descripti	0
									n:	
description	1:									
\$AC_CO	NE_ANG	GLE								
Currently	active c	one angle	for cone to	urning. The	e cone an	ale is se	t by defau	It via the	setting dat	ta
-		GLE and is		-			,		J	
axis						NCK ver	sion:	62.03.0	0	
identifier:										
unit:	deg.	min.:	-90				max.:	90		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х		
write:										
attributes:	ites: global block search					link				
		Not class	sified			Not classified				

BOOL	\$P_TEC	CYCLE							descriptio n:	
description	<u> </u> 1:								1	
\$P_TEC	CYCLE is		Using this	s variable,	programs			cycles, preped into sync		
; Progran else	CCYCLE n sequen	E == TRUE ce for a ted ce for parts	chnology		nchronize	d action				
axis identifier:						NCK vers	sion:	64.00.00		
unit:	-	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:										
attributes:	global	block sear	ch			link	•	•		
		Not class	ified			Not clas	sified			
BOOL					1				Idoscriptio	

BOOL	\$AC_W BLE[n]	ORKAREA	A_CS_PL	US_ENA				n:	0
description	n:			J				<u> </u>	L
	area limit	ation is val		rection for to AC_WORK				te system-	-specific
to be def		iiiilo.							
axis identifier:	GEOAX CHANA MACHA	X			NCK ver	rsion:	65.00.0	0	
unit:	-	min.:	FALSE		max.:				
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	X	Х	
write:									
attributes:	global	block sear	rch	1	link		I		
		Not class	sified		No rest	rictions			

BOOL	\$AC_W BLE[n]	ORKAREA	A_CS_MII	NUS_ENA				descriptio n:	
description	n:							•	•
	rea limi	tation is val		irection for the AC_WORKAR				ate system-	specific
to be defi									
axis identifier:	GEOAX CHANA MACHA	λX			NCK ver	sion:	65.00.0	0	
unit:	-	min.:	FALSE		I.	max.:	TRUE		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х	Х	Ĭ
write:									
attributes:	global	block sear	rch		link				
		Not class	sified		No rest	rictions			
DOUBLE					•			Idenovintia	
DOUBLE	\$AC_W	ORKARE	A_CS_LIN	IIT_PLUS				descriptio n:	

DOUBLE	\$AC_WC	RKAREA	CS_LIN	IIT_PLUS					description	)
	[n]								n:	
description	n:								· ·	· I
The limita	ation in the	e positive	direction f	or the stat	ed axis of	f the stat	ed group	of the coo	rdinate sy	stem-
specific v	vorking ar	ea limitatio	on. This v	alue is onl	y evaluate	ed if \$AC	_WORKA	REA_CS	_PLUS_EI	NABLE =
description	n of field lim	nits:								
to be def	ined									
axis identifier:	GEOAX CHANAX MACHAX	-				NCK ver	sion:	65.00.0	0	
unit:	Linear / angular position	min.:	DBL_MIN	N			max.:	DBL_M	ΑX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch			link		1	1	
		Not class	sified			No restr	rictions			

DOUBLE	\$AC_WO	ORKAREA	A_CS_LIN	IIT_MINU					descripti n:	0
description	n:									
specific v TRUE.	vorking ar	ea limitati		for the state alue is only						
description	n of field lin	nits:								
to be def	ined									
axis identifier:	GEOAX CHANAX MACHAX	-				NCK ver	sion:	65.00.0	0	
unit:	Linear / angular position	min.:	DBL_MIN   max.: DBL_MA						AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch			link				
		Not class	sified			No resti	rictions			
INT	\$AC_WO	ORKAREA	A_CS_CO	ORD_SY					descripti n:	0
doccrintion	ų.									_

INT	\$AC_WO	ORKARE#	\_CS_CO	ORD_SY					description:	
description	n:			· ·						
The follow	ving valu	es apply:		, coordinate	e-specific	working	g area limi	tation app	lies.	
		nitation app								
Workin	g area lin	nitation app	olies in the	e SZS						
axis identifier:	GEOAX					NCK ver	ersion: 65.00.00			
unit:	-	min.:	0			•	max.:	INT_MA	١X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										7
attributes:	global	block sear	ch	L L		link			I.	
		Not class	ified			No rest	rictions			

INT	\$AC_W	ORKARE	A_CS_GR	OUP				0	
description	ո:			I				n:	
					n-specific work S0-WALCS10		imitation.	The value	is
axis identifier:	GEOAX CHANA MACHA	X			NCK ver	sion:	65.00.0	00	
unit: _	-	min.:	0		'	max.:	INT_M	٩X	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х	Х	_
write:				Х			Х		7
attributes:	global	block sear	rch		link	I			
		Not class	sified		No rest	rictions			

FRAME	\$P_ISO	1FRAME							descript	10
description	l n:								n:	
				rogram the a						
Bit0 in \$N	MC_RES	ET_MODE FRAME R	_MASK	·	penas o	n the loi	lowing ma	ichine dat	а.	
axis identifier:	GEOAX	X X X	<u></u>			NCK ver	sion:	66.00.0	00	
unit:	-	min.:	DBL_MIN	١			max.:	DBL_N	IAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х		
write:	Х					Х				7
attributes:	global	block sear	rch	L		link		1		
		Not class	sified			No rest	rictions			

FRAME	\$P_ISC	2FRAME						descript n:	io
description	<u> </u> า:							111.	
The varia	ible \$P_ set, the a		f the syste	. •	he active systemends on the follong				· ·
Bit8 in \$N	AC_CHS	FRAME_R	ESET_M	ASK					
axis identifier:	GEOAX CHANA MACHA SPINDI	X AX			NCK ver	sion: 66.00.00			
unit:	-	min.:	DBL_MIN	٧		max.:	DBL_N	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х		Х		
write:	Х				Х				7
attributes:	global	block sear	rch	1	link	1	I	ı	
		Not class	sified		No rest	rictions			

FRAME	\$P_ISO3FRAME								descripti	0
description	n·								n:	
•		SO3FRAM	IE is usad	to program	n the activ	va evetar	n frame fo	vr ISO G6:	S 3DDOT	
		ctivation of								•
		ET MODE		iii iiaiiic c	ісреназ о	ii tiic ioii	owing ma	orniro date		
		RAME_R		ASK						
axis	GEOAX		<u></u>			NCK vers	sion:	66.00.00	)	
identifier:	CHANA	<						00.00.0	•	
	MACHA	=								
	SPINDLE	Ξ								
unit:	_	min.:	DBL MIN	J			max.:	DBL MAX		
	run-in	main run	_	Mrun syn		PP	SA	OPI	IOEM	access
			· ·							rights
read:	Х					Х		Х		
write:	Х					Х				7
attributes:	global	block sear	rch		l	link				
	Not classified					No restr	ictions			
FRAME	\$P_ISO4	FRAME							description	0
									n:	
description										
		SO4FRAM								
		tivation of		m trame o	iepenas o	n the follo	owing ma	cnine data	1:	
		ET_MODE		1ACK						
axis		SFRAME_I	KESEI_IV	IASK		INCK vers	sion.	66.00.00	`	
identifier:	GEOAX CHANA	,				NOIX VOIX	)ioii.	66.00.00	J	
	MACHA	=								
	SPINDLE									
unit:	OI IINDLI	- Imin.:	DBL MIN	J			lmax.:	DBL M	۸ <b>۷</b>	
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	TOEM	access
	Turi-iii	mainruin	ται ιιι σιρ	Wildir Syll		'	57	011	OLIVI	rights
read:	Х					Х		Х		J
write:	Х					Х		1	1	+
										7
attributes:		block sear	ch			link				/
attributes:		block sear					ictions			/

FRAME	\$P_ACS	FRAME							descriptio	
									n:	
description										
The varia	ible \$P_A	CSFRAMI	E determir	nes the ac	tive chain	ed total f	rame betv	veen BCS	and SZS.	
\$P_ACSI	FRAME = FRAME :	\$P_PAR1	FRAME :	· —	RAME:	_		SP_ISO1FI TOOLFRA		
\$P_ACSI \$P_ISO2 \$P_WPF	FRAME = FRAME :	\$P_PAR1 \$P_ISO3I	FRAME :		FRAME : S FRAME :	\$P_IFRA O4FRAM	ME : \$P_ E	SP_ISO1FI TOOLFRA		
axis	GEOAX					NCK vers	sion:	66.00.00		
identifier:	CHANAX	, <u>.</u>								
	MACHAX	(								
	SPINDLE									
unit:	-	min.:	DBL_MIN	ı		I.	max.:	DBL_MA	·Χ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х		
write:										
attributes:	global	block sear	ch			link				
		Not class	ified			No restr	ictions			

BOOL	\$P_CUT_INV	description	0
		n:	

description:

\$P\_CUT\_INV

This system variable is used to indicate whether or not the direction of spindle rotation has to be inverted for machining with the currently active tool.

The variable has the value TRUE if the four following conditions are fulfilled:

- 1. A turning tool is active (tool types 500 to 599).
- 2. The cutting edge influencing has been activated with the language command CUTMOD = 1 or CUTMOD =2.
- 3. A tool carrier with orientation capability is active.
- 4. The tool carrier with orientation capability rotates the tool so that the resulting normal of the tool cutting edge to the initial position is rotated more than 90 degrees (typically 180 degrees).

The content of the variable is FALSE if at least one of the four conditions has not been fulfilled.

axis identifier:					NCK ve	rsion:	66.00.0	00	
unit:	-	min.:	FALSE			max.:	TRUE		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х		Х		
write:									
attributes:	global	block sea	rch	1	link				
		Not class	sified		No rest	trictions			

BOOL	\$AC_CUT_INV	des	scriptio						
	,	n:							
docarintian									

description:

#### \$AC CUT INV

This system variable is used to indicate whether or not the direction of spindle rotation has to be inverted for machining with the currently active tool.

The variable has the value TRUE if the four following conditions are fulfilled:

- 1. A turning tool is active (tool types 500 to 599).
- 2. The cutting edge influencing has been activated with the language command CUTMOD = 1 or CUTMOD =2.
- 3. A tool carrier with orientation capability is active.
- 4. The tool carrier with orientation capability rotates the tool so that the resulting normal of the tool cutting edge to the initial position is rotated more than 90 degrees (typically 180 degrees).

The content of the variable is FALSE if at least one of the four conditions has not been fulfilled.

axis identifier:					NCK ve	rsion:	66.00.00			
unit:	-	min.:	FALSE		•	max.:	TRUE			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х		X	Х	X	Х		
write:										
attributes:	global	block sea	rch	1	link					
	Not classified			No restrictions						

BOOL	\$P_CUTMOD	descripti	0
	. =	n:	

description:

### \$P CUTMOD

Reads the current valid value that was last programmed with the language command CUTMOD (number of the tool carrier for which the cutting edge data modification is to be activated).

If the last programmed value was CUTMOD = -2 (activation with the currently active tool carrier with orientation capability), \$P\_CUTMOD does not return the value -2 but the number of the active tool carrier with orientation capability at the time of programming.

axis identifier:						NCK vers	sion:	66.00.00		
unit:	- min.: -2						max.:	INT_MAX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х		
write:										
attributes:	global	block sear	rch	<b>,</b>		link		1	•	
		Not class	ot classified			No restrictions				

BOOL	\$AC_C	UTMOD							n:	2	
descriptio	n:								111.		
\$AC_CU	ITMOD										
		tly valid val	ue of the l	anguage c	command	CUTMO	D in the c	urrent bloc	k (numbe	r of the tool	
carrier fo	r which t	the cutting of	edge data	modificati	ion is to b	e activat	ed).				
axis						NCK ver	sion:	66.00.0	0		
identifier: unit:		min.:	-2				max.:	INIT NA	\ <b>V</b>		
urne.	run-in	main run	runin stp	Mrun syn		IPP	SA	INT_MA	TOEM	access	
	Turi-iri	Illalli Tuli	ται ιιι διρ	Ivii ui i Syii			SA	OFI	OLIVI	rights	
read:	Х	Х	Х			Х	Х	Х	Х	J	
write:											
attributes:	global	block sea	rch	1		link					
		Not class	sified			No rest	rictions				
		1101 0100	Jillou			110 1000	110110110				
DOUBLE	\$P CU	TMOD_AN	G						description	0	
	l -	11110D_7111							n:		
descriptio											
\$P_CUT			:-  4		4-4 :	4141:				la: ala 4la a	
		through wh modified cu									
based.	iation or i	mounieu cu	ittirig euge	dala Willi	i iiie iuiici	ions co	I WOD all	u/0i	COIDINI	IOD IS	
bascu.											
axis	1					NCK ver	oion:	1	_		
identifier:						INCK VEI	SIOI1.	66.00.0	0		
unit:	deg.	min.:	-360				max.:	360			
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	OEM	access	
										rights	
read:	Х					Х		Х			
write:											
attributes:	global	block sea	rch			link					
		Not class	sified			No restrictions					

DOUBLE	DOUBLE  \$AC_CUTMOD_ANG				descriptio					)
description									n:	
		NG								
Reads th		NG nrough wh nodified cu								
axis identifier:						NCK vers		66.00.00	)	
unit:	deg.	min.:	-360				max.:	360		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	J
write:										
attributes:	global	block sear	rch			link		. N		
		Not class	sified			No restr	rictions			
	ı	ı				I				1
BOOL	\$P_SUB	SPOS							description	)
description	<u> </u> n:								n:	
		iguage sub bprogram							B_MASK	bit1 = 1 in
axis identifier:						NCK vers	sion:	66.00.00	)	
unit:	-	min.:	FALSE			I	max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				Ť
write:										
attributes:	global	block search		l	link				1	
		Program	sensitive		No restrictions				1	
	<u>i</u>					L				

BOOL	\$P_SU	P_SUB_SPOSA							descriptio n:	
descriptio	n:				l				1	I
Returns	an NC la	nguage sul	ostitution <sup>-</sup>	ΓRUE (1) (	configured	d with \$N	//A AXIS	LANG SI	JB_MASK	bit1 = 1 in
the subs	titution sı	ubprogram	if the sub	stitution wa	as activat	ed by the	e SPOSA	command	<b>I</b> .	
	1									
axis						NCK ver	sion:	66.00.0	0	
identifier: unit:	L	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn	1	IPP	SA	OPI	IOEM	access
	Turi-iii	Illalii Tuli	Turiir stp	Wirdin Syn		' '	57		OLIVI	rights
read:	Х					Х				
write:										
attributes:	global	block sear	rch	1	I	link		I		
	Program sensitive					No rest	rictions			
	1	<u> </u>				ı				l
BOOL	\$P_SU	3_M19							descriptio	
descriptio	n:								n:	
Returns at the subst	an NC la	nguage sul ubprogram				ed by M	19.		JB_MASK	bit1 = 1 in
axis identifier:						NCK ver		66.00.0	0	
unit:	-						max.:	TRUE		
		min.:	FALSE				-	11100		
	run-in	min.:	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	run-in X			Mrun syn		PP X			OEM	
read: write:				Mrun syn					ОЕМ	
	X		runin stp	Mrun syn					OEM	

DOUBLE  \$P_SUB_SPOSIT									descriptio	
		_3_0311							n:	
description										
		ammed po								6.24. 0.2.
		ss, the pro						e variable	e is called o	utside this
อนมอแเนแ	on proces	ss, the pro	gram exe	cution is c	anceieu w	nui aiaiii	1 14000.			
axis	ı					INCK ver	oion:	100.00		
identifier:						NCK VEI	51011.	66.00.0	00	
unit:	_	min.:	DBL MI	V			max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:										
attributes:	global	block sear	rch	•	•	link				
		Program	sensitive			No resti	rictions			
		1 -								
INT	\$P SUB	SPOSM	ODE						descriptio	
description									n:	
•		an annraa	h mada f	or the enin	adla naaiti	on roturn	ad by ¢D	CLID CI	OCIT of a l	00011000
enhetituti	ne positio	on approac	MA AXIS	OF THE SPIN	iale position	on return Chit1 = 1	ea by \$P.	_SUB_SF hetitution	POSIT of a l subprograr	anguage
0: DC	on comig	uicu by wi	VIA_AXIO_	_LANO_0	OD_IVIAOI	CDILI — I	iii tiic su	Dollation	Subprograi	11.
1: AC										
2: IC										
3: DC										
4: ACP										
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If the yer	iabla ia ar	allad autoid	to thin out	actitution r	arooona th	o progra	m ovoqui	ion io oor	nceled with	olorm
14055.	iable is ca	alleu outsit	ie iiis sui	շեււսւյցը բ	JIOCESS, II	ie progra	ani execui	ion is car	icelea with	alallli
14000.										
						T. I.O.I.				
axis identifier:						NCK ver	sion:	66.00.0	00	
unit:	_	min.:	0				max.:	5		
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	IOEM	access
										rights
read:	Х					Х				
write:										
attributes:	global	block sear	ch	I	I	link				†
		Program	sensitive			No restrictions				
i		I rogram	SCHOILIVE			1.40 1031	10110113			1

INT	\$AC_SA	FE_SYNA						descriptio n:		
description	n:				I					
The varia Safety In \$MC_MM	ible \$AC_ tegrated. <sup>·</sup> //_NUM_S	The maxir AFE_SYN	NA_MEM num numb NC_ELEM art prograi	per of elen ENTS.	nents is c	onfigured	by	onized act	ion eleme	nts for
axis						NCK vers	ion:	67.00.00		
identifier:										
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	Х	Х	Х			Х	Х	Х	Х	<u> </u>
write:										
attributes:	global	block sear	ch	L	I.	link	1	•	L	
		Not class	ified			Not class	sified			
	I	I				l				
DOUBLE	. –	T_PROG	NET_TIM	ΙE					descriptio n:	
stopped, mode, ch	ent net rur is deducte annel stat	ed. actPro tus RESE	gNetTime T.	is automa	atically res	set to zero		ne in which		
axis identifier:		arr bo rara	ioi iiiaiiipe	alatou Witi	. φ, ιο_ι ι	NCK vers		67.00.00		
unit:	S	min.:	0			l	max.:	DBL_MA	X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights

Χ

block search

Current value

read:

write:

attributes: global

Χ

link

No restrictions

Χ

DOUBLE	\$AC O	LD_PROG	NET TIN	ME					description	0
		_							n:	
description	n:									
not cance remains The impli	eled with unaffecto icit proce	is the net ru RESET, b ed until M30 edure of cop ger is not w	ut termina 0 is reache pying actP	ated norma ed again.	ally with M	130. If a r	new progra	am is star	ted, oldPro	
axis identifier:						NCK ver	rsion:	67.00.0	0	
unit:	s	min.:	0			1	max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х				Х	Х	Х	Х	
write:										
attributes:	global	block sea	rch		ı	link			1	
		Current v	/alue			No rest	rictions			

INT	\$AC_PROG_NET_TIME_TRIGGER	desc	riptio
		n:	

#### description:

Serves for the selective measurement of program sections, that is the time measurement can be switched on and off again by the program by writing progNetTimeTrigger.

1Starts the measurement and sets actProgNetTime to zero

2Terminates the measurement and copies actProgNetTime -> oldProgNetTime

Certain values of ProgNetTimeTrigger are given a special function in order to fully exploit all trigger options:

Neutral status.

#### 1Terminate

Terminates the measurement and copies actProgNetTime -> oldProgNetTime. actProgNetTime is set to zero and then runs on again.

#### 2Start

Starts the measurement and sets actProgNetTime to zero. oldProgNetTime remains unchanged.

#### 3Stop

Stops the measurement. Does not change oldProgNetTime and holds actProgNetTime constant until resume.

#### 4Resume

Resumption of the measurement, that is a previously stopped measurement is resumed. actProgNetTime runs on. oldProgNetTime remains unchanged.

axis identifier:							NCK version:		67.00.00		
unit:	s	min.:	0				max.:	INT_MA	λX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х			Х	Х	Х	Х		
write:	Х	Х	Х	Х		Х	Х			7	
attributes:	global	block sear	rch			link		•	•		
		Program	sensitive			No restr	rictions				

Ī	INT	\$AC_OLD_PROG_NET_TIME_COU	descriptio	
		NT	n:	
-	description	1:	<u> </u>	

Is zero in the power ON status. oldProgNetTimeCount is always increased when the NCK has newly written oldProgNetTime. This enables the user to ensure that oldProgNetTime has been written, that is, if the user cancels the current program with reset, oldProgNetTime and oldProgNetTimeCount remain unchanged. Note: Two programs running consecutively can have identical runtimes and be correctly terminated. The user can then only detect this by the changed oldProgNetTimeCount.

axis identifier:					NCK ve	rsion:	67.00.0	67.00.00		
unit:	s	min.:	0			max.:	INT_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х	Х			Х	X	Х	Х		
write:										
attributes:	global	block sea	rch		link	I	L	L		
		Current v	/alue		No res	trictions				

### 1.1.5 Tool carrier data

DOUBLE	\$TC_CA	RR1[n]							descripti	0
description	<u> </u>								n:	
\$TC_CA			. 14							
		fset vector		,,	10TO 1					
									the TOA ar	
	cial charac	cteristic of	this area	is that mad	chine data	a 28085 :	= MM_LIN	IK_TOA_	UNIT can	be set to
allow										
				se parame						
	•	meter setti	ing has be	en selecte	ed by the	NCK, yo	u must be	aware th	nat changir	ig these
data can										
_	e impact	on other cl	hannels. E	Before you	change a	iny data :	settings, n	nake sure	that the c	hanges will
have										
			nnel in wl	nich they a	are made.					
description										
	imum nun	nber of too	olholders	can be set	in					
axis						NCK ver	sion:	13.00.0	00	
identifier: unit:		Imin :	· · · · · · · · · · · · · · · · · ·				Imav :			
unit:	mm	min.:	DBL_MI	N			max.:	DBL_N	ЛAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					X				
write:	Х					Х				7
attributes:	global	block sear	rch			link			1	

No restrictions

Not classified

DOUBLE	\$TC CA	ARR2[n]						descript	io	
								n:		
descriptior	1:									
\$TC CAI	RR2[n]									
y compor	nent of o	ffset vector	· I1							
description	n of field li	mits:								
The maxi	mum nu	mber of too	olholders	can be set in						
axis identifier:					NCK ver	sion:	13.00.	00		
unit:	mm	min.:	DBL_MII	V	*	max.:	DBL_N	ЛАХ		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				X					
write:	Х				Х				7	
attributes:	global	block sear	rch		link	L	1	<u> </u>		
		Not class	sified		No restrictions					

DOUBLE	\$TC CA	ARR3[n]						descript	io
	*							n:	
description	1:			•					•
\$TC CA	RR3[n]								
z compoi	nent of o	ffset vector	11						
description									
The max	mum nu	mber of too	lholders of	can be set in					
axis identifier:					NCK ver	sion:	13.00.	00	
unit:	mm	min.:	DBL_MII	V	•	max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch	1	link	1		<u> </u>	
		Not class	sified		No rest	rictions			

DOUBLE	\$TC_CA	RR4[n]							description:	
description	1:									1
\$TC CA	RR4[n]									
x compor	nent of off	set vector	12							
description	n of field lin	nits:								
The max	mum nun	nber of too	lholders of	can be set	in					
axis identifier:						NCK ver	sion:	13.00.0	00	
unit:	mm	min.:	DBL_MIN	V			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	•		link	•	•	•	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC CA	RR5[n]							descriptio	
									n:	
description	1:									
\$TC_CAI	RR5[n]									
		set vector	12							
description	n of field lin	nits:								
The maxi	imum nun	nber of too	olholders o	can be set	in					
axis						NCK ver	sion:	13.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	٧		•	max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch			link				
		Not class	sified			No rest	rictions			
	•	•								•

DOUBLE	\$TC_CA	.RR6[n]							descripti	0
									n:	
description	1:									
\$TC_CA	RR6[n]									
z compoi	nent of of	fset vector	12							
description	n of field lir	nits:								
The max	imum nur	nber of too	olholders	can be set in	1					
axis						NCK ver	sion:	13.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MI	7			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Χ				
write:	Х					Х				7
attributes:	global	block sear	ch	I		link		L		
		Not class	sified			No resti	rictions			

DOUBLE	\$TC_CA	RR7[n]							descript	io
									n:	
description	า:									
\$TC_CA	RR7[n]									
x compor	nent of ro	tary axis v	1							
description	n of field li	mits:								
The max	imum nur	mber of too	olholders	can be set in						
axis						NCK ver	sion:	13.00.0	00	
identifier:										
unit:	-	min.:	DBL_MII	V	•		max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Χ				7
attributes:	global	block sear	ch	I		link			1	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC C	ARR8[n]						descript	io
	,							n:	
description	า:			•					
\$TC CAI	RR8[n]								
y compor	nent of re	otary axis v	1						
description									
The maxi	imum nu	mber of too	olholders	can be set in					
axis					NCK ver	rsion:	13.00.	00	
identifier:						13.33.33			
unit:	-	min.:	DBL_MI	N	•	max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sea	rch	1	link				
		Not class	sified		No rest	rictions			

DOUBLE	\$TC CA	ARR9[n]						descript	io
	• • • • • •							n:	
description	n:			•					
\$TC_CA	RR9[n]								
z compoi	nent of ro	otary axis v	1						
description									
The max	imum nu	mber of too	olholders	can be set in					
axis identifier:					NCK ver	rsion:	13.00.	00	
unit:	-	min.:	DBL_MII	V	<u>"</u>	max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch		link		1	<u> </u>	
		Not class	sified		No rest	rictions			

DOUBLE	\$TC CA	RR10[n]							descript	io
									n:	
description	1:									
\$TC_CAI	RR10[n]									
x compor	nent of ro	tary axis v	2							
description	n of field lir	nits:								
The maxi	imum nun	nber of too	olholders of	can be set ir	n					
axis						NCK ver	sion:	13.00.0	00	
identifier:										
unit:	-	min.:	DBL_MI	V			max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				_
write:	Х					Х				7
attributes:	global	block sear	ch			link				
		Not class	sified			No rest	rictions			

DOUBLE	\$TC C	ARR11[n]						descriptio		
	<b> </b> • • • • •							n:		
descriptio	n:			•						
\$TC CA	.RR11[n]									
		otary axis v	2							
descriptio	n of field	limits:								
The max	imum nu	umber of too	olholders	can be set in						
axis					NCK ver	sion:	13.00.00			
identifier:										
unit:	-	min.:	DBL_MI	٧	<del>.</del>	max.:	DBL_MAX			
<del></del>	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х					
write:	Х				Х				7	
attributes	global	block sea	rch		link					
		Not class	sified		No restrictions					
attributes	, ,				link	rictions				

DOUBLE	1							descript	i_ 1			
DOOBLE	\$TC_C	Ψ10_0A(((12[11]										
								n:				
description	n:											
\$TC_CA	RR12[n]											
z compoi	nent of ro	otary axis v	2									
description	n of field li	mits:										
The max	imum nu	mber of too	olholders	can be set in								
axis					NCK ve	NCK version:		13.00.00				
identifier:												
unit:	-	min.:	DBL_MI	V		max.:	DBL_MAX					
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access			
									rights			
read:	Х				X							
write:	Х				X				7			
attributes:	global	block sear	rch	1	link	link						
		Not class	sified		No res	No restrictions						

DOUBLE	\$TC_CA	.RR13[n]							descript n:	io	
description	<u> </u> า:								111.		
\$TC CA	RR13[n]										
		lpha1 (in c	legrees)								
description	n of field lir	nits:									
The max	imum nun	nber of too	olholders	can be set ir	n						
axis identifier:						NCK ver	sion:	13.00.00			
unit:	-	min.:	DBL_MIN	٧		•	max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х					Х					
write:	Х					Х				7	
attributes:	global	bal block search				link					
		Not class	ified			No restrictions					

DOUBLE	\$TC C	ARR14[n]				descriptio					
								n:			
descriptior	<b>า</b> :										
\$TC CAI	RR14[n]										
Angle of	rotation	alpha2 (in d	degrees)								
description											
The maxi	imum nu	mber of too	olholders	can be set in							
axis identifier:					NCK version:		13.00.00				
unit:	-	min.:	DBL_MII	V		max.: DBL_MAX					
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights		
read:	Х				Х						
write:	Х				Х				7		
attributes:	global	block sear	rch	1	link						
		Not class	sified		No rest						

DOUBLE	\$TC_C/	ARR15[n]					descriptio				
									n:		
description	า:										
\$TC_CA	RR15[n]										
x compoi	nent of o	ffset vector	· 13								
description	n of field li	imits:									
The max	imum nu	mber of too	olholders	can be set	in						
axis						NCK version:		13.00.00			
identifier:											
unit:	mm	min.:	DBL_MIN	1		max.:		DBL_MAX			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access	
										rights	
read:	Х					X					
write:	Х					Х				7	
attributes:	global	block sear	rch			link					
		Not class	sified			No restr					

DOUBLE	\$TC_CA	RR16[n]							descripti n:	0	
description	1:			·					I		
\$TC CAI	RR16[n]										
y compor	nent of off	set vector	13								
description	n of field lin	nits:									
The maxi	mum nun	nber of too	lholders of	can be set	in						
axis identifier:						NCK ver	rsion:	14.00.00			
unit:	mm	min.:	DBL_MIN	V		max.: DBL_MAX			ИАХ		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х					Х					
write:	Х					Х				7	
attributes:	global	block sear	ch			link					
		Not class	ified			No restrictions					

DOUBLE	\$TC_CA	RR17[n]							descripti	0
									n:	
description	1:									
\$TC_CAI	RR17[n]									
z compor	nent of off	set vector	13							
description	n of field lin	nits:								
The maxi	imum nun	nber of too	lholders o	can be set	in					
axis						NCK ver	sion:	14.00.0	10	
identifier:										
unit:	mm	n min.: DBL_MIN				max.: DBL_MA			IAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link				
		Not class	sified			No restr	rictions			
	•	•								

DOUBLE	\$TC_CA	.RR18[n]							descripti	0
									n:	
description	า:									
\$TC_CA	RR18[n]									
x compoi	nent of of	fset vector	· 14							
description	า of field lir	nits:								
The max	imum nur	nber of too	olholders	can be set in	1					
axis						NCK ver	sion:	14.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MI	V			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	1		link		I	I	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC_CA	RR19[n]						descript	io
								n:	
description	1:								
\$TC CAI	RR19[n]								
v compor	nent of of	fset vector	· 14						
description									
The maxi	imum nur	mber of too	olholders	can be set in					
axis					NCK ver	sion:	20.00.	00	
identifier:									
unit:	mm	min.:	DBL_MII	V	•	max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	ch	<u> </u>	link		1	I.	
		Not class	sified		No rest	rictions			

DOUBLE	<b>6TO OA</b>	DD00[1			l				description	
DOUBLE	\$IC_CA	KK2U[n]								<b>'</b>
									n:	
description	1:									
\$TC_CAI	RR20[n]									
z compor	nent of of	fset vector	· 14							
description										
The maxi	imum nur	nber of too	olholders o	can be set	in					
axis						NCK ver	sion:	20.00.0	0	
identifier:										
unit:	mm	min.:	DBL_MIN	٧			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•		link	•	•		
		Not class	sified			No rest	rictions			
		T.								

AXIS	\$TC CA	ARR21[n]							descript	io
									n:	
description	n:								•	•
\$TC CA	RR21[n]									
Axis iden	tifier of 1	st rotary ax	kis							
description	n of field li	mits:								
The max	imum nu	mber of too	olholders	can be set ir	า					
axis						NCK ver	sion:	20.00.	00	
identifier:										
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				3
write:	Х					Х				7
attributes:	global	block sear	ch			link	•	,	•	
		Not class	sified			No rest	rictions			

AXIS	\$TC_CA	RR22[n]							descripti n:	0
description	n:				ı				ı	
\$TC CA	RR22[n]									
Axis iden	tifier of 2r	nd rotary a	xis							
description	n of field lir	nits:								
The max	imum nun	nber of too	lholders of	can be set	in					
axis identifier:						NCK ver	rsion:	20.00.	00	
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	•		link	•		•	
		Not class	ified			No rest	rictions			

CHAR	STC C	ARR23[n]							descript	io
	<b>V</b>								n:	
description	n:									
\$TC_CA	RR23[n]									
Type of k	kinematio	s: P: Rotat	able work	piece (Part)						
M: Rotata	able tool	and rotatal	ble workpi	ece (Mixed)						
T or any	other ch	aracter apa	rt from P	and M: Rota	table too	I				
description	n of field l	imits:								
The max	imum nu	mber of too	olholders o	can be set in	1					
axis						NCK ver	sion:	20.00.	00	
identifier:										
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				J
write:	Х					Χ				7
attributes:	global	block sea	rch	•		ink		•	•	
		Not class	sified			No resti	rictions			

DOUBLE	\$TC C	ARR24[n]							descript	10
									n:	
description	า:									
\$TC_CA	RR24[n]									
Offset of	1st rotar	y axis in de	egrees							
Specifies	the ang	le in degree	es of the 1	st rotary a	xis at					
which the	axis as	sumes its ir	nitial posit	ion.						
description	n of field l	imits:	•							
The max	imum nu	mber of too	olholders	can be set	in					
axis						NCK ver	sion:	43.00.0	00	
identifier:										
unit:	-	min.:	DBL_MIN	٧			max.:	DBL_N	ЛAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch			link				
		Not class	sified			No rest	rictions			

DOUBLE	STC C	ARR25[n]							descript	io	
									n:		
description	n:										
\$TC_CA	RR25[n]										
Offset of	2nd rota	ry axis in d	egrees								
				nd rotary ax	xis at						
which the	e axis as	sumes its i	nitial posit	ion.							
description	n of field l	imits:	· ·								
The max	imum nu	mber of too	olholders	can be set in	ı						
axis						NCK ver	sion:	43.00.	00		
identifier:											
unit:	-	min.:	DBL_MIN	1			max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х					Χ					
write:	Х					Χ				7	
attributes:	global	block sear	ch	· · · · · · · · · · · · · · · · · · ·		link		ı			
1		Not class	sified			No rest	rictions				

DOUBLE	\$TC_C	ARR26[n]						descriptio			
description	J.								11.		
•											
\$TC_CAI											
		et of the 1s									
		y variable (									
It is evalu	ıated onl	y if \$TC_C	ARR28 is	set to a va	alue other	than ze	ro.				
		gs, please	refer to th	e descript	ion of \$TC	CARR	28				
description	n of field li	mits:									
The maxi	imum nu	mber of too	olholders of	can be set	in						
axis						NCK ver	sion:	43.00.	00		
identifier:											
unit:	-	min.:	DBL_MIN	N			max.:	DBL_N	ИAX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access	
										rights	
read:	Х					Х					
write:	Х					Х				7	
attributes:	global	block sear	rch	···		link					
		Not class	sified			No rest	rictions				

DOUBLE	\$TC_C	ARR27[n]						descript n:	io
descriptio	n:			•					
\$TC_CA	RR27[n]								
Specifies	the offs	et of the 1s	t rotary ax	kis if its position	1				
is not con	ntinuous	ly variable (	(Hirth toot	h system).					
				set to a value					
			refer to th	e description o	f \$TC_CARR	29			
descriptio	n of field l	imits:							
	imum nu	mber of too	olholders	can be set in					
axis identifier:					NCK ver	rsion:	43.00.	00	
unit:	-	min.:	DBL_MII	V	•	max.:	DBL_I		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sea	rch	1	link	I			
		Not class	sified		No rest	rictions			

DOUBLE   \$TC_CARR28[n]	description	
	n:	

description:

\$TC CARR28[n]

Specifies the size of the minimum increment (in degrees)

by which the rotary axis can change position (e.g.

for Hirth tooth systems).

A programmed or calculated angle is rounded to the nearest

value calculated from phi = s + n \* d when n

is an integer.

In this equation

s = \$TC\_CARR28

d = \$TC\_CARR26

If \$TC\_CARR28 equals zero, \$TC\_CARR26 and \$TC\_CARR28

are not used.

The settings in machine data

\$MC\_TOCARR\_ROT\_ANGLE\_INCR[i] and \$MC\_TOCARR\_ROT\_ANGLE\_OFFSET[i]

are applied instead.

description of field limits:

The maximum number of toolholders can be set in

axis					NCK version:			43.00.00		
identifier:										
unit:	-	min.:	DBL_MIN	١		max.:	DBL_N	1AX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х					
write:	Х				Х				7	
attributes:	global	block sear	ch	<u> </u>	link		•	•		
		Not class	ified		No rest	rictions				

The maximum number of toolholders can be set in

DBL MIN

runin stp Mrun syn

min.:

main run

block search
Not classified

DOUBLE	STC C	ARR29[n]							descriptio	
									n:	
description										
TC_CA		of the mains		anaant (in	d = === = = \					
		of the min								
for Hirth t		ond rotary a	ixis can c	nange pos	illori (e.g.					
		calculated	analo is i	rounded to	the near	oct				
		rom phi = s			lile ileai	ESI				
is an inte		Tom pm – c	, . II	WIICH II						
o an into	901.									
In this eq	uation									
s = \$TC_										
$d = TC_$	_									
_		equals zero	, \$TC_CA	ARR28 and	STC_CA	ARR29				
are not u										
		achine data								
		ROT_ANGI	_E_INCR[	i] and \$Mo	C_TOCA	RR_ROT	_ANGLE	_OFFSE	T[i]	
are applion description										
axis	imum nu T	mber of too	inolders	can be set	In	NCK ver	sion.	140.00	00	
identifier:						IVOIC VCI	31011.	43.00.	00	
unit:	-	min.:	DBL MII	N		· ·	max.:	DBL MAX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link				
		Not class	sified			No rest	rictions			
										ı
DOUBLE	\$TC_C	ARR30[n]							descriptio	
description									n:	
a <del>c</del> oci iptioi										
TC CA	บบวกเ∽า									
\$TC_CA		imum nocit	ion of the	1et rotany	avie 7	olletaen	digen			
Specifies	the min	imum posit ee \$TC CA		1st rotary	axis. Zu v	/ollstaen	digen			

NCK version:

PP

Χ

Χ

No restrictions

max.:

SA

axis

read:

write:

attributes:

identifier: unit:

run-in

Χ

Χ

global

43.00.00

DBL MAX

OEM

access

7

rights

OPI

DOUBLE	\$TC C	ARR31[n]						descript	io
								n:	
description	n:								
\$TC_CA	RR31[n]								
Specifies	the min	imum posit	ion of the	2nd rotary a	xis. Zu vollstae	ndigen			
For desc	ription, s	ee \$TC_CA	ARR33						
description	n of field I	imits:							
The max	imum nu	mber of too	olholders	can be set in					
axis					NCK ve	rsion:	43.00.	00	
identifier:									
unit:	-	min.:	DBL_MI	٧		max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				X				7
attributes:	global	block sear	ch	,	link			· ·	
		Not class	sified		No res	trictions			

DOUBLE	\$TC_CA	RR32[n]							descriptio	
		• •							n:	
description										
\$TC_CAI										
		•		1st rotary						
	•		•	of an orien						
				e (TCOFR						
_	•			e which lie	within the	Э				
_		TC_CARF	•							
		when the i	otary ang	le is progr	ammed a	bsolutely				
(TCOABS	,									
			C_CARR	32 equal z	zero, the					
	not evalu									
'	of field lin									
	mum num	ber of too	lholders c	an be set	in					
axis						NCK vers	ion:	43.00.0	0	
identifier: unit:		min.:	DDI MIN	1			Imax.:	DDI M	^ V	
uriic.			DBL_MIN			l D D		DBL_M		1
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	X					X	+	-	+	rights
	, ,									
write:	Х					Х				7
attributes:	global	block sear	ch			link				

No restrictions

	descriptio	ı	
DOUBLE  \$TC_CARR33[n]	n:		
description:	11.		
\$TC CARR33[n]			
Specifies the maximum position of the 2nd rotary axis.			
When the angle of the 2nd rotary axis of an orientatable			
toolholder aligned according to a frame (TCOFR) is calculated,			
the only acceptable solutions are those which lie within the			
\$TC_CARR31 to \$TC_CARR33 range.			
The same applies when the rotary angle is programmed absolutely			
(TCOABS).			
If both \$TC_CARR31 and \$TC_CARR33 equal zero, the			
limits are not evaluated.			
description of field limits:			
The maximum number of toolholders can be set in			
axis identifier: NCK version: 43.00.00			
unit: - min.: DBL MIN max.: DBL MA	Y		
	OPI IOEM Iacce		
Turi-iri Iriairi turi Turiiri stp Iviituri syri	OLIVI	rights	
read: X X		3 11	
write: X X		7	
attributes: global block search link	I		
Not classified No restrictions			
STRING  \$TC_CARR34[n]	descriptio n:		
description:	III.		
ISTC CARR34IN			
\$TC_CARR34[n] Contains a freely definable string. This is provided as a			
Contains a freely definable string. This is provided as a free identifier for the orientatable toolholder.			
Contains a freely definable string. This is provided as a			

toolholder via a name rather than a number. description of field limits:

The maximum number of toolholders can be set in

This identifier should not be used for other purposes as it may be used in a future upgrade to allow the activation of an orientatable

ovio					NCK version:		10.00		
axis					INCK Vei	SIOH.	48.00.	00	
identifier:									
unit:	-	min.:				max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch		link	*			
		Not class	sified		No rest	rictions			

STRING	\$TC C	ARR35[n]						descript	io
	*							n:	
descriptio	n:								
\$TC_CA	RR35[n]								
Contains	a freely	definable s	tring. This	s is provided	as a				
	-	the first rota	-	·					
			•	nificance at	all and is there	fore			
not evalu		,	`	•					
It can als	o be use	ed for any o	ther purpo	ose.					
descriptio									
The max	imum nu	mber of too	olholders	can be set in					
axis					NCK ve	rsion:	48.00.	00	
identifier:									
unit:	-	min.:				max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	X				X				
write:	Х				Х				7
attributes:	global	block sear	rch	1	link	I	1	1	
		Not class	sified		No res	trictions			

STRING	\$TC C	ARR36[n]							descript	io
									n:	
descriptio	n:									
\$TC_CA	RR36[n]									
Contains	a freely	definable s	tring. This	s is provide	d as a					
free iden	tifier for	the second	rotary axi	S.						
Within th	e NCK, ł	nowever, it	has no sig	gnificance a	at all and	is theref	fore			
not evalu	ated.		•	-						
It can als	o be use	ed for any o	ther purp	ose.						
descriptio	n of field l	imits:								
The max	imum nu	mber of too	olholders	can be set	in					
axis						NCK ver	sion:	48.00.	00	
identifier:										
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sea	rch	1		link				

No restrictions

INT	\$TC_C	ARR37[n]							descript	io
									n:	
description	n:									
\$TC_CA	RR37[n]									
Contains	an integ	ger number	for identif	ying the to	olholder.					
Within th	e NCK, İ	nowever, it	has no sig	gnificance	at all and	is theref	ore			
not evalu	ated.									
description	n of field l	imits:								
The max	imum nu	imber of too	olholders	can be set	in					
axis						NCK ver	sion:	48.00.	00	
identifier:										
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sea	rch	I	I	link	1		I	
		Not class	sified			No rest	rictions			

DOUBLE	STC C	ARR38[n]							descript	10
									n:	
description	<b>า</b> :									
\$TC CA	RR38[n]									
Contains	a position	on (X comp	onent of r	etraction po	osition)					
Within the	e NCK, ł	nowever, it	has no sig	nificance a	at all and	is theref	ore			
not evalu	ated.		`	•						
description	n of field I	imits:								
The max	imum nu	ımber of too	olholders	can be set	in					
axis						NCK ver	sion:	48.00.	00	
identifier:										
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sea	rch	1		link				
		Not class	sified			No rest	rictions			

DOUBLE	\$TC CA	ARR39[n]							description	)
									n:	
description	1:									
\$TC_CAI	RR39[n]									
Contains	a positio	n (Y comp	onent of re	etraction p	osition)					
Within the	e NCK, h	nowever, it	has no sig	gnificance	at all and	is theref	ore			
not evalu	ated.									
description	n of field li	mits:								
The maxi	imum nu	mber of too	olholders o	can be set	in					
axis						NCK ver	sion:	48.00.0	00	
identifier:										
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sea	rch		I.	link	I.	l .	l .	
		Not class	sified			No resti	rictions			
	l									

DOORFE	\$TC_C	ARR40[n]							descript	Ю
									n:	
description	า:									
\$TC_CA	RR40[n]									
Contains	a position	on (X comp	onent of r	etraction p	osition)					
Within the	e NCK, ł	nowever, it	has no sig	gnificance	at all and	is theref	ore			
not evalu	ated.									
description	n of field l	imits:								
The max	imum nu	mber of too	olholders	can be set	in					
axis identifier:						NCK ver	sion:	48.00.	00	
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sea	rch	11		link				
		Not class	sified			No rest	rictions			

DOUBLE	\$TC_CA	RR41[n]						descript	io
								n:	
description	n:								
\$TC_CA	RR41[n]								
x compoi	nent of fin	e offset of	offset ve	ctor I1					
description	n of field lir	nits:							
The max	imum nur	nber of too	olholders	can be set in					
axis					NCK ver	sion:	52.00.0	00	
identifier:									
unit:						max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch	1	link	1	I	1	
		Not class	sified		No rest	rictions			

DOUBLE	STC CA	RR42[n]						descript	io
								n:	
descriptior	า:								
\$TC_CAI	RR42[n]								
y compor	nent of fir	ne offset of	offset ve	ctor I1					
description	n of field li	nits:							
The maxi	imum nur	mber of too	olholders	can be set in					
axis identifier:					NCK ver	rsion:	52.00.	00	
unit:	mm	min.:	DBL_MIN	V	•	max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	ch		link				
		Not class	sified		No rest	rictions			

DOUBLE	\$TC_C	ARR43[n]						descript n:	io
description	n:								
\$TC CA	RR43[n]								
z compoi	nent of fi	ne offset of	offset ve	ctor I1					
description	n of field l	imits:							
The max	imum nu	mber of too	olholders	can be set in					
axis identifier:					NCK ver	rsion:	52.00.	00	
unit:	mm	min.:	DBL_MII	٧	•	max.:	DBL_N	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sea	rch	1	link	L	1		
		Not class	sified		No rest	rictions			

DOUBLE	\$TC CA	ARR44[n]						descript	io
	<b>*</b> • • = • •							n:	
description	า:								
\$TC CA	RR44[n]								
_		ne offset of	offset ve	ctor I2					
description	n of field li	mits:							
The max	imum nui	mber of too	olholders	can be set in					
axis identifier:					NCK ver	sion:	52.00.	00	
unit:	mm	min.:	DBL_MII	١	ļ	max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				J
write:	Х				X				7
attributes:	global	block sear	rch		link	•	,	<b>,</b>	
		Not class	sified		No rest	rictions			

DOUBLE	STC C	ARR45[n]						descript	io
								n:	
description	n:								
\$TC CAI	RR45[n]								
		ne offset of	offset ve	ctor I2					
description									
The maxi	imum nu	mber of too	olholders	can be set in					
axis dentifier:					NCK ver	rsion:	52.00.	00	
unit:	mm	min.:	DBL_MII	V	*	max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
ead:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	rch		link		I		
		Not class	sified		No rest	rictions			

DOUBLE	\$TC C	ARR46[n]							descript	io
	*								n:	
description	n:			-						
\$TC_CA	RR46[n]									
x compoi	nent of fi	ne offset of	offset ve	ctor I2						
description										
The max	imum nu	mber of too	olholders	can be set in						
axis identifier:						NCK ver	sion:	52.00.0	00	
unit:	mm	min.:	DBL_MII	V	<u>'</u>		max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn		PP PP	SA	OPI	OEM	access rights
read:	Х					Χ				
write:	Х					Χ				7
attributes:	global	block sear	rch		1	ink				
		Not class	sified		I	No resti	rictions			

DOUBLE	\$TC_CA	RR55[n]							descript	io
description	). 								n:	
'										
\$TC_CA										
		ne offset of	offset ve	ctor I3						
description	n of field lir	mits:								
The max	imum nur	nber of too	lholders of	can be set in	า					
axis						NCK ver	sion:	52.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MI	٧			max.:	DBL_N	ИΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link	•	•	•	
		Not class	sified			No resti	rictions			

DOUBLE	\$TC_C	ARR56[n]						descript	io
description	u. 							n:	
\$TC CA									
_		ne offset of	offset ve	ctor I3					
description			***************************************						
The max	imum nu	mber of too	olholders	can be set in					
axis identifier:					NCK ver	rsion:	52.00.	00	
unit:	mm	min.:	DBL_MII	N	•	max.:	DBL_N	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	rch		link			1	
		Not class	sified		No rest	rictions			

DOUBLE	\$TC C	ARR57[n]						descript	io
								n:	
description	n:								
\$TC_CA	RR57[n]								
z compoi	nent of fi	ne offset of	offset ve	ctor I3					
description	n of field l	imits:							
The max	imum nu	mber of too	olholders	can be set in					
axis identifier:					NCK ver	rsion:	52.00.	00	
unit:						max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				X				7
attributes:	global	block sea	rch		link	1	1		
		Not class	sified		No rest	rictions			

DOUBLE	\$TC_CA	RR58[n]							description:	0
description	1:								l .	1
\$TC CAI	RF58[n]									
x compor	nent of fin	e offset of	offset ve	ctor I4						
description	n of field lin	nits:								
The maxi	mum nun	nber of too	lholders of	can be set	in					
axis identifier:						NCK ver	rsion:	52.00.0	00	
unit:	mm	min.:	DBL_MIN	V			max.:	DBL_N	ИАX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	•		link	•	•	•	
		Not class	sified			No rest	rictions			

DOUBLE	STC CA	\RR59[n]						descript	io
	*							n:	
descriptior	n:			-					
\$TC CAI	RR59[n]								
		ne offset of	offset ve	ctor I4					
description									
The maxi	imum nui	mber of too	olholders	can be set in					
axis identifier:					NCK ver	rsion:	52.00.	00	
unit:	mm	min.:	DBL_MII	V	!	max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
ead:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	rch	<u> </u>	link	1	1	1	
		Not class	sified		No rest	rictions			

DOUBLE	STC CA	ARR60[n]						descript	io
								n:	
description	า:			<u> </u>					
\$TC_CA	RR60[n]								
z compoi	nent of fi	ne offset of	offset ve	ctor I4					
description	n of field li	mits:							
The max	imum nu	mber of too	olholders	can be set in					
axis identifier:					NCK ver	rsion:	52.00.	00	
unit:	mm	min.:	DBL_MII	V		max.:	DBL_N	ИАX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch		link	<u> </u>	1		
		Not class	sified		No rest	rictions			

DOUBLE	\$TC_CA	ARR64[n]							descript	io
									n:	
description	1:									
\$TC CAI	RR64[n]									
		et (\$TC_CA	ARR24) o	f 1st rotary a	axis in de	egrees				
description			,							
The maxi	imum nur	mber of too	olholders	can be set in	1					
axis						NCK ver	sion:	52.00.	00	
identifier:								02.00.		
unit:	-	min.:	DBL_MII	٧			max.:	DBL_N	MAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	1 1		link		L	L	
		Not class	sified			No rest	rictions			

DOUBLE	STC CA	RR65[n]							descript	io
									n:	
description	n:									
\$TC CA	RR65[n]									
Fine offse	et of offse	et (\$TC CA	ARR25) of	f 2nd rotar	y axis in c	degrees				
description					•					
The max	imum nur	nber of too	olholders of	can be set	in					
axis identifier:						NCK ver	sion:	52.00.	00	
unit:	-	min.:	DBL_MIN	N			max.:	DBL_N	ИАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	1		link				
		Not class	sified			No rest	rictions			

# 1.1.6 Channel-specific protect

BOOL	\$SC_PA	_ACTIV_I	MMED[n]						n:	9
descriptio	n:								ļ	1
\$SC_PA Protectio TRUE: T the contr FALSE: Th	_ACTIV_ n zone in he protec ol has bo The prote is variable	IMMED[n] nmediately tion zone i oted and tl ction zone e can only s between	is activate he axes h is not im be writter	d immedia ave been i mediately a	reference active em variab	le and is	not affec	ted by		
Note: Th Blocks: _	is variable	e is not reset is saved PRO, _N_ mits:	during da	ta backup.		NITIAL_I	NI			
n: Numb	er of prote	ection zone	Э							
axis identifier:						NCK ver	sion:	06.00.0	00	
unit:	-	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х		
write:	Х					Х		Х		7
attributes:	tributes: global block search				link					
		Not class	sified			No rest	rictions			

CHAR	\$SC P	A_T_W[n]						descript	io	
								n:		
descriptio	n:									
\$SC_PA	_T_W[n]									
Protectic	n zone s	specific to w	/orkpiece/	tool						
): Workp	oiece-spe	ecific protec	tion zone							
3: Tool-s	specific p	rotection zo	one							
Note: Th	is variab	le is not res	stored dur	ing REORG.						
Note: Th	is variab	le is saved	during da	ta backup.						
Blocks: _	N_CHA	x_PRO, _N	_COMPL	ETE_PRO and	I_N_INITIAL_	INI				
C	CHAx: x=	channel no								
descriptio	n of field l	imits:								
n: Numb	er of pro	tection zone	е							
axis					NCK ver	sion:	06.00.0	0		
identifier:										
unit:	-	min.:	0			max.:	3			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access	
									rights	
read:	X				X		X			
write:	Х				Х		Х		7	
attributes	global	block sear	rch		link	l		1		
Not classified						No restrictions				
		NIAL ALAA								

INI	\$SC_PA_ORI[n]	n:	criptio	

description:

\$SC PA ORI[n]

Orientation of protection zone

- 0: Polygon definition in the plane from the 1st and 2nd geo axes (G17)
- 1: Polygon definition in the plane from the 3rd and 1st geo axes (G18)
- 2: Polygon definition in the plane from the 2nd and 3rd geo axes (G19)

Note: This variable is not restored during REORG.

Note: This variable is saved during data backup.

Blocks: \_N\_CHAx\_PRO, \_N\_COMPLETE\_PRO and \_N\_INITIAL\_INI CHAx: x=channel no.

description of field limits:

### n: Number of protection zone

axis					NCK ver	sion:	06.00.0	0	
identifier:									
unit:	-	min.:	0			max.:	2		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х		Х		
write:	Х				Х		Х		7
attributes:	global	block sear	ch	<u>'</u>	link		•	•	
		Not class	ified		No rest	rictions			

INT	SSC PA	LIM_3DI	M[n]						descriptio	
			[]						n:	
description	1:									
	_LIM_3DII									
	for limitati				xis					
perpendi	cular to the	e polygon	definition							
0: No lim	itation									
1: Limitat	ion in the	positive d	irection							
2: Limitat	ion in the	negative (	direction							
3: Limitat	ion in both	n direction	ıs							
Note: Thi	s variable	is not res	tored duri	ng REOR	G.					
Note: Thi	s variable	is saved	during dat	ta backup.						
	N_CHAx_			ETE_PRO	and _N_	INITIAL_	INI			
С	HAx: x=ch	nannel no	_							
description	n of field lim	nits:								
n: Numbe	er of prote	ction zone	9							
axis						NCK vers	sion:	06.00.0	00	
identifier:										
unit:	-	min.:	0				max.:	3		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Χ					Х		Х		
write:	Х					Х		Х		7
attributes:	global	block sear	ch	I	I	link				
		Not class	sified			No restr	ictions			
DOUBLE	200 5:				i				descriptio	
DOOBLL	\$SC_PA	_PLUS_L	IM[n]						n:	
description	<u>ا</u> :								1111	1
\$SC PA	PLUS LI	M[n]								
	imitation c		on zones i	n the axis						
	cular to the									
	only if \$S									
	•			-						
Note: Thi	s variable	is not res	tored duri	ng REOR	G.					
Note: Thi	s variable	is saved	durina dat	ta backup.						
	N_CHAx_					INITIAI	INI			
	HAx: x=cl									
	of field lim		-							

NCK version:

Χ

Χ

No restrictions

link

max.:

SA

axis

read:

write:

attributes: global

identifier: unit:

n: Number of protection zone

Χ

Х

mm run-in min.:

main run

block search

Not classified

DBL\_MIN

runin stp Mrun syn

06.00.00

Χ

Χ

OPI

DBL\_MAX

OEM

access rights

7

DOUBLE | \$SC\_PA\_MINUS\_LIM[n] descriptio n: description: \$SC PA MINUS LIM[n] Negative limitation of protection zone in minus direction in the axis perpendicular to the polygon definition Effective only if SC PA LIM 3DIM[n]=2 or = 3. Note: This variable is not restored during REORG. Note: This variable is saved during data backup. Blocks: \_N\_CHAx\_PRO, \_N\_COMPLETE\_PRO and \_N\_INITIAL\_INI CHAx: x=channel no. description of field limits: n: Number of protection zone NCK version: 06.00.00 identifier: unit: mm min.: DBL MIN max.: DBL\_MAX main run OPI OEM access run-in runin stp | Mrun syn SΑ rights read: X X X write: Х Χ Χ 7 attributes: global block search link Not classified No restrictions

INT	\$SC PA CONT NUM[n]	descriptio	
		n:	

description:

\$SC\_PA\_CONT\_NUM[n]

Number of valid contour elements

Protection zones need at least 2 contour elements for a complete description.

Note: This variable is not restored during REORG.

Note: This variable is saved during data backup.

Blocks: \_N\_CHAx\_PRO, \_N\_COMPLETE\_PRO and \_N\_INITIAL\_INI

CHAx: x=channel no.

description of field limits:

n: Number of protection zone

axis identifier:					NCK vers	ion:	06.00.00	)	
unit:	-	min.:	0			max.:	10		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х		Х		
write:	Х				Х		Х		7
attributes:	global	block sear	ch		link				
		Not class	ified		No restri	ctions			

INT	\$SC_PA_CONT_TYP[n,m]	descriptio	
	· = = = <b>.</b> / <b>.</b>	n:	
descriptio	n:		
\$SC_PA	_CONT_TYP"[n,m]		
Type (G	I, G2, G3) of contour element		
=0: Cont	our not defined		
=1: Strai	ght		
-2: Circle	o clament (clackwice)		

=2: Circle element (clockwise)

=3: Circle element (counterclockwise)

The end point is determined by \$SC\_PA\_CONT\_ORD or \$SC\_PA\_CONT\_ABS. With contour types G2 and G3, \$SC\_PA\_CENT\_ORD or \$SC\_PA\_CENT\_ABS determines the center point of the circle element.

Note: This variable is not restored during REORG.

Note: This variable is saved during data backup.

Blocks: \_N\_CHAx\_PRO, \_N\_COMPLETE\_PRO and \_N\_INITIAL\_INI

CHAx: x=channel no.

description of field limits:

n: Number of protection zone

m: Number of the contour element

axis identifier:					NCK vei	rsion:	06.00.0	00	
unit:	-	min.:	0		•	max.:	3		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X		X		
write:	Х				X		Х		7
attributes:	global	block sea	rch	1	link				
		Not class	sified		No rest	rictions			

DOUBLE   SSC PA CONT ORDIN.ml	descriptio	
, and the second	n:	

description:

\$SC\_PA\_CONT\_ORD[n,m]

End point of contour element (ordinate)

See also description of \$SC\_PA\_CONT\_TYP

Note: This variable is not restored during REORG.

Note: This variable is saved during data backup.

Blocks: N CHAx PRO, N COMPLETE PRO and N INITIAL INI

CHAx: x=channel no.

description of field limits:

n: Number of protection zone

m: Number of the contour element

axis identifier:					NCK ver	sion:	06.00.0				
unit:	mm	min.:	DBL_MIN	١		max.:	DBL_M	AX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights		
read:	Х				Х		Х				
write:	Х				Х		Х		7		
attributes:	global	block sear	ch	•	link	•	•	•			
		Not class	sified		No resti	rictions					

DOUBLE	\$SC_P	A_CONT_A	ABS[n,m]						description	)
									n:	
description										
\$SC_PA	_CONT_	ABS[n,m]								
End poin	t of conto	our elemen	t (absciss	a)						
See also	descript	ion of \$SC	_PA_CON	IT_TYP						
Note: Thi	is variabl	le is not res	tored duri	ing REOR	G.					
L										
		e is saved	•							
		<_PRO, _N		ETE_PRO	and _N_	INITIAL_	INI			
_		channel no								
description	n of field l	imits:								
n: Numbe	er of prot	ection zone	Э							
m: Numb	er of the	contour ele	ement							
axis						NCK ver	sion:	06.00.0	0	
identifier:										
unit:	mm	min.:	DBL_MIN	1			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					X		X		
write:	Х					Х		Х		7
attributes:	global	block sear	rch			link				
		Not class	sified			No resti	rictions			
		TVOL CIASS	Silicu			140 1630	ICHOITS			

DOUBLE   \$SC PA CENT_ORD[n,m]	description	)
	n:	

description:

\$SC\_PA\_CENT\_ORD[n,m]

Center point of contour element (ordinate)

Relevant only if \$SC\_PA\_CONT\_TYP[n,m] = 2 or = 3.

Note: This variable is not restored during REORG.

Note: This variable is saved during data backup.

Blocks: \_N\_CHAx\_PRO, \_N\_COMPLETE\_PRO and \_N\_INITIAL\_INI

CHAx: x=channel no.

description of field limits:

n: Number of protection zone

m: Number of the contour element

axis identifier:					NCK vei	rsion:	06.00.00			
unit:	mm	min.:	DBL_MIN	N	*	max.:	DBL_M	1AX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х		Х			
write:	Х				Х		Х		7	
attributes:	global	block sear	rch		link		I	l .		
		Not class	sified		No rest	rictions				

DOUBLE	\$SC PA	_CENT_A	BS[n.m]						descriptio	
			, .						n:	
description	า:									
\$SC_PA	_CENT_A	BS[n,m]								
Center po	oint of cor	ntour elem	ent (absci	issa)						
				[n,m] = 2c	or = 3.					
	•		_	. , .						
Note: Thi	s variable	is not res	tored duri	ng REOR	G.					
					•.					
Note: Thi	s variable	is saved	during dat	ta backup.						
			_	ETE PRO		ΙΝΙΤΙΔΙ	INI			
		hannel no			unu _n_					
	of field lin		•							
		ction zone	2							
	•	contour ele								
axis		Jointour Cit	JIIICIIL			INCK ver	sion:	06.00.0	0	
identifier:						Troit voi	01011.	06.00.0	U	
unit:	mm	min.:	DBL_MIN	٧		1	max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х		Х		
write:	Х					Х		Х		7
attributes:	global	block sear	ch	•		link	•	•	•	
		Not class	ified			No rest	rictions			

# 1.1.7 Tool parameters

INT	\$TC_D	P1[32000,3	2000]					descript	io
								n:	
description	n:								
\$TC_DP	1[t,d]								
Tool type	;								
When the	e 'flat D r	number ma	nagement	' function is a	active, the synta	x is as fo	llows:		
\$TC_DP	1[d]								
description	n of field I	imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D i	number 1	- 32000					
axis					NCK ver	sion:	06.00.	00	
identifier:									
unit:	-	min.:	INT_MIN			max.:	INT_M	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sea	link	<u> </u>					
		Not class	sified		No restr	rictions			

DOUBLE	\$TC DF	2[32000,3	20001						descripti	0
		, .							n:	
description	1:									
\$TC_DP2	2[t,d]									
Tool poin	t directio	n								
When the	flat D n	umber mai	nagement	t' function i	s active, t	he synta	x is as fo	llows:		
\$TC_DP2	2[d]									
description	of field li	mits:								
t: T numb	er 1 - 32	000								
d: Cutting	g edge ni	ımber / D r	number 1	- 32000						
axis						NCK ver	sion:	06.00.0	00	
identifier:										
unit:	-	min.:	DBL_MIN	N			max.:	DBL_N	ИAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link	•	•	•	
		Not class	ified			No rest	rictions			

	l									I
DOUBLE	\$TC DE	3[32000,3	20001						descript	io
			•						n:	
description	า:									
\$TC_DP	3[t,d]									
Geometr	y - length	າ 1								
When the	e 'flat D n	umber ma	nagement	' function is	active, t	he synta	ax is as fo	llows:		
\$TC DP	3[d]		•			•				
description	n of field li	mits:								
t: T numb	er 1 - 32	2000								
d: Cutting	g edge ni	umber / D r	number 1	- 32000						
axis	ĺ					NCK ver	sion:	06.00.0	00	
identifier:								00.00.0		
unit:	mm	min.:	DBL_MI	V			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	X					X				rights
write:	Х					Х				7
attributes:	global	block sear	rch			link				

No restrictions

DOUBLE	\$TC DP	4[32000,3	20001					descript	io
		, .						n:	
description	1:								
\$TC_DP4	4[t,d]								
Geometr	y - length	2							
When the	flat D n	umber ma	nagement	' function is a	active, the synt	ax is as fo	llows:		
\$TC DP4	4[d]				•				
description		mits:							
t: T numb	er 1 - 32	000							
d: Cutting	g edge nu	ımber / D r	number 1	- 32000					
axis					NCK ve	ersion:	06.00.	00	
identifier:									
unit:	mm	min.:	DBL_MIN	٧		max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch		link	•	•	•	
		Not class	sified		No res	trictions			

DOUBLE	¢TC D	P5[32000,3	20001					descript	io I	
	φ1 <b>C</b> _D	r 5[52000,5	2000]					n:		
descriptior	1:							•	•	
\$TC_DP	5[t,d]									
Geometr	/ - lengtl	h 3								
When the	flat D	number ma	nagement	' function is act	tive, the synta	ax is as fo	llows:			
\$TC_DP										
description										
t: T numb	-									
	edge n	umber / D r	number 1	- 32000	111017					
axis identifier:					NCK ver	sion:	06.00.	00		
unit:	mm	min.:	DBL_MIN	N	•	max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х					
write:	Χ				Х				7	
attributes:	global	block sear	ch		link					
		Not class	sified		No rest	rictions				

DOUBLE	\$TC DP	6[32000,3	20001						descripti	0
			•						n:	
description	1:									
\$TC_DP	6[t,d]									
Geometry	y - radius									
When the	flat D n	umber mai	nagement	t' function i	s active, t	the synta	ax is as fo	llows:		
\$TC DP	3[d]									
description	of field lir	mits:								
t: T numb	er 1 - 32	000								
d: Cutting	g edge nu	ımber / D r	number 1	- 32000						
axis						NCK ver	sion:	06.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MI	N			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	•		link	•	•		
		Not class	ified			No rest	rictions			

DOUBLE	\$TC D	P7[32000,3	20001					descripti	0
	<b> </b> • • • • • • • • • • • • • • • • • • •	[0=000,0						n:	
description	n:							•	
\$TC DF	7[t,d]								
_		ner radius							
_			nagement	' function is	active, the synt	ax is as fo	llows:		
\$TC DF			3		, <b>,</b> -				
	n of field I	imits:							
t: T num	ber 1 - 3	2000							
d: Cuttin	g edge n	umber / D r	number 1	- 32000					
axis	1				NCK ve	rsion:	06.00.	00	
identifier:							00.00.	00	
unit:	mm	min.:	DBL_MIN	١		max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X				
write:	Х				X				7
attributes	: global	block sear	rch	1	link	1		1	1

No restrictions

DOUBLE	\$TC_D	P8[32000,3	2000]					descript	io
description	l n:							n:	
\$TC DP	8ſt.d1								
Slotting s		qth							
When the	e 'flat D r	•	nagement	' function is ac	tive, the synta	ax is as fo	llows:		
\$TC_DP									
description	n of field l	imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D i	number 1	- 32000					
axis identifier:					NCK ver	rsion:	06.00.	00	
unit:	mm	min.:	DBL_MI	٧	ļ.	max.:	max.: DBL_MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	rch	<u> </u>	link			Į.	
		Not class	sified		No rest	rictions			

DOUBLE	\$TC DP	9[32000,3	20001						descript	io
	escription: TC_DP9[t,d]									
description	า:									
\$TC_DP	9[t,d]									
Reserved	t									
		umber mai	nagement	t' function i	s active, t	the synta	x is as fo	llows:		
· —		14								
t: T numb	er 1 - 32	000								
d: Cutting	g edge nu	ımber / D r	number 1	- 32000						
axis						NCK vers	sion:	06.00.	00	
identifier:										
unit:	mm	min.:	DBL_MIN	N			max.:	DBL_N	ИΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
						Х				7
write:	Х									,

No restrictions

DOUBLE	\$TC D	P10[32000,	.320001					descript	io
			,					n:	
descriptio	n:								
\$TC_DP	10[t,d]								
Angle be	tween to	ol face and	l toroidal s	surface					
When the	e 'flat D i	number ma	nagement	t' function is ac	ctive, the synta	ax is as fo	llows:		
\$TC DP	10[d]		•		•				
descriptio		imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D r	number 1	- 32000					
axis	Ĭ				NCK ver	sion:	06.00.	00	
identifier:									
unit:	-	min.:	DBL_MI	V		max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	rch		link	•	•	•	
		Not class	sified		No rest	rictions			

DOORFE	\$TC_DP11[32000,32000]		descriptio	
	. = [: :: ]		n:	
description	1:			
\$TC_DP	11[t,d]			
Angle be	tween tool longitudinal axis and upper	end of toroidal surface		

When the 'flat D number management' function is active, the syntax is as follows:

\$TC\_DP11[d]
description of field limits:

t: T number 1 - 32000

d: Cutting edge number / D number 1 - 32000

axis identifier:					NCK ver	rsion:	06.00.00			
unit:	-	min.:	DBL_MIN	N	I	max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х					
write:	Х				X				7	
attributes:	global	block sear	rch	1	link	1				
		Not class	sified		No rest	rictions				

DOUBLE	OUBLE   <b>\$TC_DP12[32000,32000]</b>							descript	iio
		-	•					n:	
description	n:								
\$TC_DP	12[t,d]								
Wear - le	ength 1 -	\$TC_DP3							
When the	e 'flat D r	number ma	nagement	t' function is ac	tive, the synta	ax is as fo	llows:		
\$TC DP	12[d]		-		-				
description	n of field I	imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D ı	number 1	- 32000					
axis					NCK vei	rsion:	06.00.	00	
identifier:									
unit:	mm	min.:	DBL_MI	N		max.:	DBL_N		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch	•	link	•	•		
		Not class	sified		No rest	rictions			

		•							
DOUBLE	\$TC_D	P13[32000,	32000]					descript n:	io
description	n:			l.				ı	ı
\$TC_DP	13[t,d]								
Wear - le	ngth 2 -	\$TC_DP4							
When the	e 'flat D r	number ma	nagement	' function is ac	tive, the synta	ax is as fo	llows:		
\$TC_DP									
description	n of field l	imits:							
t: T numb	oer 1 - 32	2000							
,	g edge n	umber / D r	number 1	- 32000					
axis identifier:					NCK vei	rsion:	06.00.	00	
unit:	mm	min.:	DBL_MIN	N	•	max.:	DBL_MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch	l L	link	<u> </u>		1	
		Not class	sified		No rest	rictions			

DOUBLE	\$TC D	P14[32000	.320001					descript	0
		•	,					n:	
descriptio	n:								
\$TC_DP	14[t,d]								
Wear - le	ength 3 -	\$TC_DP5							
When the	e 'flat D r	number ma	nagement	t' function is ac	tive, the synta	ax is as fo	llows:		
\$TC_DP	14[d]								
descriptio	n of field I	imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D i	number 1	- 32000					
axis					NCK ver	rsion:	06.00.	00	
identifier:									
unit:	mm	min.:	DBL_MII	N		max.:	DBL_N	ИAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch		link	•		•	
		Not class	sified		No rest	rictions			

DOUBLE	ATO DD	4.5500000	200001						descript	in I
DOODLL	\$IC_DP	15[32000,	32000]						n:	
description	າ:									I .
\$TC DP	15[t,d]									
Wear - ra	dius - \$T0	C_DP6								
When the	e 'flat D nu	ımber maı	nagement	' function i	s active, t	he synta	x is as fol	llows:		
\$TC_DP										
description	of field lim	nits:								
t: T numb	er 1 - 320	000								
	g edge nu	mber / D r	number 1	- 32000						
axis						NCK ver	sion:	06.00.0	00	
identifier:		lmin :	l				mov:			
unit:	mm	min.:	DBL_MIN	٧			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					X				
write:	Х					Х				7
attributes:	global	block sear	ch	•		link	•	•	•	

No restrictions

DOUBLE	OUBLE <b>\$TC_DP16[32000,32000]</b>								descript	io
									n:	
description	n:									
\$TC_DP	16[t,d]									
Slotting s	saw: Wea	ar - corner i	radius - \$7	ΓC_DP7						
When the	e 'flat D r	number ma	nagement	' function is	active, the	e synta	x is as fo	llows:		
\$TC DP	16[d]									
description	n of field I	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D r	number 1	- 32000						
axis					N	ICK ver	sion:	06.00.	00	
identifier:										
unit:	mm	min.:	DBL_MIN	٧			max.:	max.: DBL_MAX		
	run-in	main run	runin stp	Mrun syn	F	P	SA	OPI	OEM	access rights
read:	Х					Χ				_
write:	Х					Χ				7
attributes:	global	block sear	rch	1	li	nk	•	•	•	
		Not class	sified		١	lo resti	rictions			

									•		
DOUBLE	\$TC_DI	P17[32000,	32000]					descript n:	tio		
description	1: 1:			I				1			
\$TC DP	17[t,d]										
Slotting s	aw: Wea	ar length - \$	STC DP8								
				' function is ac	tive, the synta	ax is as fo	llows:				
\$TC_DP			-		-						
description	n of field l	imits:									
t: T numb	er 1 - 32	2000									
d: Cutting	g edge n	umber / D r	number 1	- 32000							
axis identifier:					NCK vei	rsion:	06.00.	00			
unit:	mm	min.:	DBL_MI	N	I	max.: DB			BL_MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights		
read:	Х				Х						
write:	Х				Х				7		
attributes:	attributes: global block search				link						
		Not class	sified		No rest	rictions					

DOUBLE	\$TC D	P18[32000,	320001					descript	io
								n:	
description	n:								
\$TC_DP	18[t,d]								
Wear - re	eserved -	STC_DP9							
When the	e 'flat D r	number ma	nagement	t' function is a	ctive, the synta	x is as fo	llows:		
\$TC DP	18[d]		-		•				
description		imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D r	number 1	- 32000					
axis					NCK ver	sion:	06.00.	00	
identifier:									
unit:	mm	min.:	DBL_MI	N		max.:	DBL_N	ЛAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				X				7
attributes:	global	block sear	ch		link	•	•	•	
		Not class	sified		No rest	rictions			

DOUBLE	\$TC_DP19[32000,32000]		descriptio	
	, =		n:	
description	:		,	
\$TC_DP	9[t,d]			
14/	المراجع المراجع والمراجع والمراجع والمراجع والمراجع والمراجع	PD40		

Wear - angle between tool face and toroidal surface - \$TC\_DP10

When the 'flat D number management' function is active, the syntax is as follows:

\$TC\_DP19[d]
description of field limits:

t: T number 1 - 32000

d: Cutting edge number / D number 1 - 32000

a: Cutting	j eage nu	mber / D r	iumber i	- 32000					
axis					NCK ve	rsion:	06.00.0	00	
identifier:									
unit:	-	min.:	DBL_MIN	١		max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X				
write:	Х				X				7
attributes:	global	block sear	ch	•	link	,	•	•	
		Not class	ified		No res	trictions			

DOORLE	STC_D	P20[32000.	,32000]					aescript	Ю
			_					n:	
escriptior	า:								
TC_DP2	20[t,d]								
Vear - ar	ription: _DP20[t,d] ur - angle between tool longitudinal axis and upper end of toroidal surface - \$TC_DP11 en the 'flat D number management' function is active, the syntax is as follows: _DP20[d] ription of field limits: number 1 - 32000 utting edge number / D number 1 - 32000  iffer:    NCK version:   06.00.00    -   min.:   DBL_MIN   max.:   DBL_MAX    -   run-in   main run   runin stp   Mrun syn   PP   SA   OPI   OEM   access rights    -   X   X   X   X   X   X   X   X   X								
Vhen the	e 'flat D r	number ma	nagement	t' function is a	ctive, the synta	ax is as fo	llows:		
TC DP2	20[d]		-		•				
escription	n of field I	limits:							
: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D r	number 1	- 32000					
axis	Ì				NCK ver	sion:	06.00.	00	
dentifier:									
ınit:	-	min.:	DBL_MII	N		max.:	DBL_N	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
ead:	Х				X				
vrite:	Х				X				7
ttributes:	global	block sear	rch	I I	link				
		Not class	sified		No rest	rictions			
	·				· · · · · · · · · · · · · · · · · · ·				
OUBLE	\$TC_D	P21[32000	,32000]					descript	io
lescription		<u> </u>						n:	

DOUBLE	\$TC_DF	21[32000,	32000]					descript	io
description	J.							n:	
\$TC_DP:	21[t,d]								
	e 'flat D n	umber ma	nagement	' function is ac	tive, the synta	ax is as fo	llows:		
description	n of field li	mits:							
t: T numb	er 1 - 32	000							
d: Cutting	g edge nu	ımber / D r	number 1	- 32000					
axis identifier:					NCK ver	sion:	06.00.0	00	
unit:	mm	min.:	DBL_MIN	١	•	max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				_
write:	Х				Х				7
attributes:	global	block sear	ch		link				

No restrictions

DOUBLE	\$TC_D	P22[32000	,32000]					descript n:	io
descriptio	n:							•	•
\$TC_DP	22[t,d]								
Basis - le	ength 2								
When the	e 'flat D i	number ma	nagement	t' function is ac	tive, the synta	ax is as fo	llows:		
\$TC_DP	22[d]								
descriptio	n of field l	imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D ı	number 1	- 32000					
axis identifier:					NCK vei	rsion:	06.00.	00	
unit:	mm	min.:	DBL_MII	V	•	max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sea	rch	1	link		I	<u> </u>	
		Not class	sified		No rest	rictions			

DOUBLE	\$TC_DP	23[32000,	32000]						descript	io
									n:	
description	1:									
\$TC_DP2	23[t,d]									
Basis - le	ngth 3									
When the	e 'flat D nu	umber mai	nagement	t' function i	s active.	the synta	x is as fol	lows:		
\$TC DP2	23[d]		J		•	,				
description		nits:								
t: T numb	er 1 - 320	000								
d: Cutting	edge nu	mber / D r	number 1	- 32000						
axis						NCK ver	sion:	06.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	V			max.:	DBL_N	ИАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch		I	link			I	

No restrictions

DOUBLE	\$TC DF	24[32000,	320001						descripti	0
									n:	
description	1:									
\$TC_DP	24[t,d]									
Clearanc	e angle									
When the	e 'flat D n	umber ma	nagement	' function i	s active, t	he synta	ax is as fo	llows:		
\$TC_DP										
description	n of field li	mits:								
t: T numb	oer 1 - 32	000								
d: Cutting	g edge ni	ımber / D r	number 1	- 32000						
axis identifier:						NCK ver	rsion:	06.00.0	00	
unit:	-	min.:	DBL_MI	V			max.:	DBL_N	ИАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link	1	T.	I.	
		Not class	ified			No rest	rictions			

DOUBLE	¢TC D	P25[32000,	220001					descript	io I
DOOBLE	\$1C_D	P25[32000,	32000]					n:	
description	1:								<b>I</b>
\$TC_DP2	25[t,d]								
Reserved	l								
When the	flat D r	number ma	nagement	' function is act	tive, the synta	ax is as fo	llows:		
\$TC_DP2									
descriptior	of field I	limits:							
t: T numb	er 1 - 32	2000							
	j edge n	umber / D r	number 1	- 32000					
axis identifier:					NCK ver	rsion:	06.00.	00	
unit:	-	min.:	DBL_MIN	N	•	max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch		link				
		Not class	sified		No rest	rictions			

description:  \$TC_DPCE[t,d] = 'cutting edge number' of compensation data block t,d When the 'flat D number management' function is active, the syntax is as follows:  \$TC_DPCE[d] CE stands for <c>utting<e>dge Value range of legal 'cutting edge numbers': 1 up to value of machine data \$MN_MM_MAX_CUTTING_EDGE_PERTOOL.  description of field limits: t: T number 1 - 32000 d: Cutting edge number / D number 1 - 32000 axis identifier: unit:</e></c>	INT	\$TC_DF	PCE[32000	,32000]						descriptio	
\$TC_DPCE[t,d] = 'cutting edge number' of compensation data block t,d When the 'flat D number management' function is active, the syntax is as follows: \$TC_DPCE[d] CE stands for <c>utting<e>dge Value range of legal 'cutting edge numbers': 1 up to value of machine data \$MN_MM_MAX_CUTTING_EDGE_PERTOOL. description of field limits: t: T number 1 - 32000 d: Cutting edge number / D number 1 - 32000 axis identifier: unit:</e></c>			-							n:	
When the 'flat D number management' function is active, the syntax is as follows: \$TC_DPCE[d] CE stands for <c>utting<e>dge Value range of legal 'cutting edge numbers': 1 up to value of machine data \$MN_MM_MAX_CUTTING_EDGE_PERTOOL. description of field limits: t: T number 1 - 32000 d: Cutting edge number / D number 1 - 32000 axis identifier: unit:</e></c>											
\$TC_DPCE[d] CE stands for <c>utting<e>dge Value range of legal 'cutting edge numbers': 1 up to value of machine data \$MN_MM_MAX_CUTTING_EDGE_PERTOOL.  description of field limits: t: T number 1 - 32000 d: Cutting edge number / D number 1 - 32000  axis identifier: unit:</e></c>											
CE stands for <c>utting<e>dge Value range of legal 'cutting edge numbers': 1 up to value of machine data \$MN_MM_MAX_CUTTING_EDGE_PERTOOL.  description of field limits: t: T number 1 - 32000 d: Cutting edge number / D number 1 - 32000  axis identifier: unit:</e></c>			umber ma	nagement	' function i	is active, t	he synta	x is as fo	llows:		
Value range of legal 'cutting edge numbers': 1 up to value of machine data \$MN_MM_MAX_CUTTING_EDGE_PERTOOL.  description of field limits: t: T number 1 - 32000 d: Cutting edge number / D number 1 - 32000  axis identifier:  unit:  - min.: INT_MIN  run-in main run runin stp Mrun syn PP SA OPI OEM access rights  read: X  write: X  attributes: global block search link  Not classified  No restrictions    No restrictions	_										
1 up to value of machine data \$MN_MM_MAX_CUTTING_EDGE_PERTOOL.  description of field limits:  t: T number 1 - 32000  d: Cutting edge number / D number 1 - 32000  axis identifier:  unit: - min.: INT_MIN											
Cutting edge number / D number 1 - 32000											
t: T number 1 - 32000 d: Cutting edge number / D number 1 - 32000 axis identifier:  unit:  -   min.:   INT_MIN   max.:   INT_MAX    run-in   main run   runin stp   Mrun syn   PP   SA   OPI   OEM   access rights  read:   X           X         7  attributes:   global   block search   link      Not classified   No restrictions      Not classified				a \$MN_M	M_MAX_	CUTTING	_EDGE_	PERTOC	)L.		
d: Cutting edge number / D number 1 - 32000  axis identifier:  unit:  - min.: INT_MIN  run-in main run runin stp Mrun syn PP SA OPI OEM access rights  read:  x x x x x x x x x x x x x x x x x x x	'										
NCK version:   16.00.00											
Interest		g edge nu	ımber / D r	number 1	- 32000		LLIOIZ		1		
INT_MIN							NCK ver	sion:	16.00.0	00	
Tun-in	unit:	_	min.:	INT MIN	<u> </u>			max.:	INT M	ΔX	
		run_in	main run	_		ı	IDD	SΛ			200000
Tead:   X		Tull-III	Illalii Iuli	Turiir Stp	Ivii aii 3yii		l' '	JOA.	011	OLIVI	
attributes: global block search link  Not classified No restrictions  INT \$TC_DPH[32000,32000]	read:	Х					Х				
attributes: global block search link  Not classified No restrictions  INT \$TC_DPH[32000,32000] descriptio	write:	X					X				7
Not classified No restrictions    Not classified   No restrictions	attributes:	, · ·	block sear	rch							<u>'</u>
INT \$TC_DPH[32000,32000] descriptio	attributes.	giobai									
\$1C_DFH[32000,32000]			Not class	sified			No resti	rictions			
\$1C_DFH[32000,32000]											
ln· l	INT	\$TC_DF	PH[32000,3	32000]							
	doporintia	<u>.</u>								n:	
description:			11 - 44	da							
\$TC_DPH[t,d] = 'H cutting edge number' of compensation data block t,d for Fanuc0 M When the 'flat D number management' function is active, the syntax is as follows:	_		•	•		•				VI	

\$TC\_DPH[d]

description	n or riela i	imits:							
t: T numb	oer 1 - 3	2000							
d: Cutting	g edge n	umber / D i	number 1	- 32000					
axis identifier:					NCK ver	sion:	17.00.	00	
unit:	-	min.:	INT_MIN	I		max.:	INT_M	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch		link		•	,	
		Not class	sified		No rest	rictions			

INT	\$TC_DI	PV[32000,3	32000]					descript	io
description	J.							n:	
•		ool outting	odao orio	atation					
_		ool cutting	•		ativa tha avesta	ia aa fa	llavvav		
		iumber ma	nagemeni	i function is a	ctive, the synta	ix is as io	llows:		
\$TC_DP		,							
description									
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D i	number 1	- 32000					
axis					NCK ver	sion:	43.00.	00	
identifier:									
unit:	-	min.:	INT_MIN			max.:	INT_M		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	rch	1	link	I		<u> </u>	
		Not class	sified		No resti	rictions			

DOUBLE	\$TC D	PV3[32000	.320001						descript	0
	<b>*</b>		,,						n:	
description	1:									
\$TC DP	$\sqrt{3[t,d]} =$	L1 compor	nent of too	ol cutting edge	ge orientation	on				
When the	'flat D r	number ma	nagement	t' function is	active, the	synta	x is as fo	lows:		
\$TC DP	/3[d]		•			•				
description	of field I	mits:								
t: T numb	er 1 - 32	2000								
d: Cutting	edge n	umber / D r	number 1	- 32000						
axis					NC	K ver	sion:	43.00.0	00	
identifier:										
unit:	-	min.:	DBL_MIN	N			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn	PP		SA	OPI	OEM	access rights
read:	Х					Χ				
write:	Х					Х				7
attributes:	global	block sear	rch	I	link	(	I.		ı	
		Not class	sified		No	resti	rictions			

DOUBLE	\$TC_D	PV4[32000	,32000]					descript n:	io			
description	n:							•				
\$TC_DP	V4[t,d] =	L2 compor	nent of too	ol cutting e	dge orientation							
When the	e 'flat D r	number ma	nagement	' function i	s active, the sy	ntax is as fo	ollows:					
\$TC_DP												
description	n of field l	imits:										
t: T numb	oer 1 - 32	2000										
d: Cutting	g edge n	umber / D ı	number 1	- 32000								
axis					NCK v	ersion:	43.00.	00				
identifier:												
unit:	-	min.:	DBL_MIN	٧		max.:	DBL_I	MAX				
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights			
read:	Х				X							
write:	Х				X				7			
attributes:	global	block sear	rch		link	- I						
		Not class	sified		No re	strictions						

DOORLE	\$TC_DP	V5[32000	,32000]						n:	0
description	1:			J					1	
\$TC DP	/5[t,d] = L	_3 compor	nent of too	ol cutting ed	dge orien	tation				
When the	flat D n	umber ma	nagement	t' function is	s active, t	he synta	x is as fo	lows:		
\$TC_DP	/5[d]					-				
description	of field lir	nits:								
t: T numb	er 1 - 320	000								
d: Cutting	edge nu	mber / D r	number 1	- 32000						
axis identifier:						NCK ver	sion:	43.00.0	00	
unit:	-	min.:	DBL_MIN	V			max.:	DBL_N	ИАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	•		link	•	•	•	
		Not class	sified			No restr	rictions			

DOUBLE	\$TC D	PVN3[3200	0.320001					descript	io
			.,.					n:	
description	n:								
\$TC_DP	VN3[t,d]	= L1 comp	onent of tl	he orientation i	normal of the	tool cuttin	g edge.		
If the fun	ction 'fla	t D-number	manager	nent' is active,	the syntax is	as follows	s:		
\$TC_DP	VN3[d]		_		-				
description	n of field l	imits:							
t: T numb	oer 1 - 32	2000							
d: tool cu	itting edg	ge number	D numbe	er 1 - 32000					
axis					NCK vei	rsion:	58.00.	00	
identifier:									
unit:	-	min.:	DBL_MII	٧		max.:	DBL_N	ИAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				X				7
attributes:	global	block sea	rch		link		1		
		Not class	sified		No rest	rictions			

DOUBLE	\$TC_DP	VN4[3200	0,32000]					descript	10
								n:	
description	1:								
\$TC DP	VN4[t,d] =	L2 compo	onent of the	ne orientation	normal of the	tool cuttin	g edge.		
If the fund	ction 'flat	D-number	manager	nent' is active,	the syntax is	as follows	3:		
\$TC DP			Ū	·	•				
description		nits:							
t: T numb	er 1 - 32	000							
d: tool cu	ttina eda	e number /	D numbe	er 1 - 32000					
axis	9 9				NCK ver	sion:	58.00.0	00	
identifier:						00			
unit:	-	min.:	DBL_MIN	V	•	max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				J
write:	Х				Х				7
attributes:	global	block sear	ch	!	link	1		<u> </u>	

No restrictions

DOUBLE	\$TC_DF	PVN5[3200	0,32000]						descript n:	io
description	n:									•
\$TC_DP	VN5[t,d] :	= L3 comp	onent of tl	he orientati	on norma	al of the t	ool cutting	g edge.		
If the fund	ction 'flat	D-number	manager	nent' is act	ive, the s	yntax is a	as follows	:		
\$TC_DP	√N5[d]									
description	n of field li	mits:								
t: T numb	er 1 - 32	.000								
d: tool cu	tting edg	e number i	D numbe	er 1 - 32000	0					
axis						NCK ver	sion:	58.00.0	00	
identifier:										
unit:	-	min.:	DBL_MII	N			max.:	DBL_N	ИAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				- Tigrito
write:	Х					Х				7
attributes:	global	block sear	rch			link	•	•	•	
		Not class	sified			No restr	rictions			

# 1.1.8 Cutting edge data for OEM users

DOOBLL	\$IC_DP	C1[32000	,32000]						n:	١
description	n:								1	
The type	can be s	pecified by	machine	data. DOI	JBLE is th	ne defau	It setting			
\$TC_DP	C1[t,d]									
When the	e 'flat D ni	umber mai	nagement	' function i	s active, t	he synta	x is as fo	llows:		
\$TC_DP										
description	n of field lir	nits:								
t: T numb	oer 1 - 320	000								
	g edge nu	mber / D r	number 1	- 32000						
axis						NCK ver	sion:	06.00.0	00	
identifier:		Imin :	I==:				Imav :	<del></del>		
unit:	-	min.:	DBL_MIN	٧			max.:	DBL_M	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:						V		+		rights
	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link	•			
		Not class	sified			No rest	rictions			

DOUBLE	\$TC DI	PC2[32000	.320001					descript	io
		<u>-</u>	,					n:	
descriptio	n:								
The type	can be s	specified by	/ machine	data. DOU	JBLE is the default	setting			
\$TC_DP	C2[t,d]								
When the	e 'flat D r	number ma	nagement	t' function is	s active, the syntax	x is as fo	llows:		
\$TC_DP	C2[d]								
descriptio	n of field I	imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D ı	number 1	- 32000					
axis					NCK vers	ion:	06.00.	00	
identifier:									
unit:	-	min.:	DBL_MII	N		max.:	DBL_MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	rch		link	1			
		Not class	sified		No restri	ictions			

DOUBLE	\$TC_DP	C3[32000	,32000]						descript n:	О
description	າ:				l .					
\$TC_DP	C3[t,d] e 'flat D nu	,		data. DOl			J	llows:		
	of field lin	nits:								
t: T numb	er 1 - 320	000								
d: Cutting	edge nu	mber / D r	number 1	- 32000						
axis identifier:						NCK ver	sion:	06.00.	00	
unit:	-	min.:	DBL_MIN	١			max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	ı		link				

No restrictions

DOUBLE	\$TC D	PC4[32000	.320001					descript	0
			,					n:	
description	n:								
The type	can be	specified by	/ machine	data. DOU	BLE is the defaul	t setting			
\$TC DP	C4[t,d]					•			
When the	e 'flat D r	number ma	nagement	t' function is	active, the synta	x is as fo	llows:		
\$TC DP									
description		imits:							
t: T numb	ner 1 - 32	2000							
•• • • • • • • • • • • • • • • • • • • •		umber / D ı	number 1	- 32000					
axis	j cage n	ullibel / D i	iuiiibci i	- 32000	INCK vers	sion.	06.00.	00	
identifier:					TOTA VOIC	5.011.	06.00.	00	
unit:	-	min.:	DBL_MII	V	ļ.	max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				X				7
attributes:	global	block sear	rch	1 L	link	1		1	
		Not class	sified		No restr	ictions			

DOUBLE	\$TC D	PC5[32000	.320001						descript	io
	<b>V</b>		,,						n:	
description	n:									
The type	can be	specified by	/ machine	data. DOL	JBLE is th	ne defau	It setting			
\$TC DF	C5[t.d]						•			
. –		number ma	nagement	' function is	s active. t	the synta	x is as fo	llows:		
\$TC DF										
	on of field I	imits:								
t: T num	ber 1 - 3	2000								
		umber / D ı	number 1	- 32000						
axis	1					NCK ver	sion:	06.00.	าก	
identifier								00.00.	30	
unit:	-	min.:	DBL_MII	V			max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:						V				7

No restrictions

block search

Not classified

attributes: global

DOUBLE	\$TC_DF	PC6[32000	,32000]					descript n:	iio
description	า:								
The type	can be s	pecified by	/ machine	data. DOUI	BLE is the defau	ılt setting			
\$TC_DP	C6[t,d]								
When the	e 'flat D n	umber ma	nagement	' function is	active, the synta	ax is as fo	llows:		
\$TC_DP									
description	n of field li	mits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge ni	umber / D i	number 1	- 32000					
axis identifier:					NCK ve	rsion:	06.00.	00	
unit:	-	min.:	DBL_MIN	V	•	max.:		DBL_MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				X				7
attributes:	global	block sear	rch	1	link			1	
		Not class	sified		No rest	rictions			

DOUBLE	\$TC_DI	PC7[32000	,32000]						descript	io
description	u. 								n:	
		nonified by	, machina	data DO	IIDI E io th	o dofou	lt cotting			
٠.		specified by	machine	data. DO	ODLE IS II	ie delau	it setting			
\$TC_DP										
		number ma	nagement	' function	is active, t	ne synta	ix is as to	llows:		
\$TC_DP										
description	n of field li	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge ni	umber / D r	number 1	- 32000						
axis						NCK ver	sion:	06.00.0	00	
identifier:										
unit:	-	min.:	DBL_MIN	1			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	X					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link	ı	1	ı	
		Not class	sified			No resti	rictions			

DOUBLE	\$TC_D	PC8[32000	,32000]					descript n:	io
description	n:							ı.	
, ,		specified by	/ machine	data. DOUBL	E is the defau	It setting			
\$TC_DP		numher ma	nanement	' function is ac	tive the synts	av ie ae fo	llowe.		
\$TC_DP	C8[d]		nagemen	. Turicuon is ac	uve, the synte	17 13 43 10	iiows.		
description									
t: T numb				22000					
a: Cutting	g eage n	umber / D ı	number 1	- 32000	INCK ver	eion.	00.00	00	
identifier:					NOR Vei	51011.	06.00.	00	
unit:	-	min.:	DBL_MII	V	· ·	max.:	DBL_N	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sea	rch	l l	link		I	<u> </u>	
		Not class	sified		No rest	rictions			

DOORFE	\$TC DPC9[32000,32000]		aesc	riptio	,
	. = 1 , 1		n:		
description	n:			-	
The type	can be specified by machine data. DO	UBLE is the default setting			
\$TC_DP	C9[t,d]				
When the	e 'flat D number management' function	is active, the syntax is as foll	lows:		
\$TC_DP	C9[d]				
description	n of field limits:				
t: T numb	per 1 - 32000				
d: Cutting	g edge number / D number 1 - 32000				
axis		NCK version:	06 00 00		

axis identifier:					NCK ver	sion:	06.00.00		
unit:	-	min.:	DBL_MIN	1		max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch		link	•			
		Not class	ified		No restr	ictions			

DOUBLE	\$TC DI	PC10[3200	0.320001					descript	io
			-, <b>,</b>					n:	
descriptio	n:								
The type	can be s	specified by	/ machine	data. DOU	JBLE is the default	setting			
\$TC_DP	C10[t,d]								
When the	e 'flat D r	number ma	nagement	' function is	s active, the syntax	x is as fo	llows:		
\$TC_DP	C10[d]								
descriptio	n of field I	imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D ı	number 1	- 32000					
axis					NCK vers	ion:	06.00.	00	
identifier:									
unit:	-	min.:	DBL_MIN	N		max.:	DBL_N	ИΑХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch		link	•		•	
		Not class	sified		No restri	ictions			

DOUBLE	\$TC_DP	CS1[3200	0,32000]						descript	0
description	<u> </u> n:								n:	
The type	can be sp	pecified by	machine	data. DO	JBLE is th	ne defaul	It setting			
\$TC_DP										
When the	e 'flat D nu	ımber maı	nagement	' function i	is active, t	the synta	x is as fo	llows:		
\$TC_DP										
description	n of field lir	nits:								
t: T numb	per 1 - 320	000								
d: Cutting	g edge nu	mber / D r	number 1	- 32000						
axis						NCK ver	sion:	18.00.0	00	
identifier:			ı							
unit:	-	min.:	DBL_MI	1			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					X				
write:	Х					Х				7
attributes:	global	block sear	ch		ı	link				

No restrictions

read:

write:

attributes: global

Χ

Χ

block search

Not classified

DOUBLE	\$TC D	PCS2[3200	0.320001					descript	io
			.,.					n:	
description	n:								
The type	can be	specified by	/ machine	data. DOU	BLE is the def	ault setting			
\$TC DP						J			
. –		number ma	nagement	' function is	active, the sy	ntax is as fo	llows:		
\$TC DP									
description		imits:							
t: T numb									
•• • • • • • • • • • • • • • • • • • • •		umber / D i	numbor 1	32000					
axis	g euge II	ullibel / D i	iuiiibei i	- 32000	INCK	version:	40.00		
identifier:					NOR '	CISIOII.	18.00.	00	
unit:	_	min.:	DBL MII	V	<u> </u>	max.:	DBL I	ЛΑХ	
			_		IDD		_		1
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
read:	· · ·	_							rights
	Х				X				
write:	Х				X				7
attributes:	global	block sear	rch		link		l .	I	
		Not class	sified		No re	strictions			

DOUBLE	\$TC DP	CS3[3200	0.320001						descriptio	
			-,1						n:	
description	1:									
The type	can be sp	ecified by	machine	data. DOI	UBLE is th	ne default	setting			
\$TC DP	CS3[t,d]	-					_			
_		ımber mar	nagement	' function i	is active, t	he syntax	is as foll	ows:		
\$TC DP	CS3[d]		J		,	,				
	of field lim	nits:								
t: T numb	er 1 - 320	000								
d: Cutting	edge nu	mber / D r	number 1 -	- 32000						
axis	, ,					NCK vers	ion:	18.00.00		
identifier:								10.00.00		
unit:	-	min.:	DBL_MIN	1			max.:	DBL_MA	Х	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										riahts

Χ

Χ

No restrictions

link

7

DOUBLE	\$TC_D	PCS4[3200	0,32000]					descript n:	io
description	า:			ı					
The type	can be	specified by	/ machine	data. DOUE	BLE is the defau	It setting			
\$TC_DP	CS4[t,d]					•			
When the	e 'flat D r	number ma	nagement	' function is	active, the synta	ax is as fo	llows:		
\$TC_DP									
description	n of field l	imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D ı	number 1	- 32000					
axis dentifier:					NCK ver	sion:	18.00.	00	
unit:	-	min.:	DBL_MII	V	•	max.: DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				X				7
attributes:	global	block sea	ch	I	link	l .	l .		
		Not class	sified		No rest	rictions			
	•	•			•				•
DOUBLE	\$TC_D	PCS5[3200	0,32000]					descript	io

			, <b>.</b>							
DOUBLE	\$TC_D	PCS5[3200	0,32000]						descript	io
description	n·								n:	
		.6								
		specified by	/ macnine	data. DOI	JBLE IS T	ne detau	it setting			
\$TC_DP										
		number ma	nagement	t' function i	s active, t	the synta	x is as fo	llows:		
\$TC_DP										
description										
t: T numb	oer 1 - 32	2000								
	g edge n	umber / D r	number 1	- 32000						
axis						NCK ver	sion:	18.00.0	00	
identifier:		I main .								
unit:	-	min.:	DBL_MI	N			max.:	DBL_N	ЛAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					X				
write:	Х					Х				7
attributes:	global	block sear	rch			link		•	•	
		Not class	sified			No resti	rictions			

DOUBLE	\$TC_D	PCS6[3200	0,32000]					descript n:	io
description	n:			<u> </u>					
The type \$TC_DP	can be s CS6[t,d] e 'flat D r CS6[d]	number ma		data. DOUBLI		J	llows:		
t: T numb	oer 1 - 32		number 1	- 32000					
axis identifier:					NCK ver	sion:	18.00.	00	
unit:	-	min.:	DBL_MII	٧		max.:	DBL_N	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sea	rch	1	link	1		1	
		Not class	sified		No rest	rictions			

DOUBLE				<u></u>					Ideacrint	io l
DOUBLE	\$TC_DP	CS7[3200	0,32000]						descript	١٥
description									n:	
'										
71		pecified by	/ machine	data. DOL	JBLE is th	ne detau	It setting			
\$TC_DP	CS7[t,d]									
When the	e 'flat D ni	umber ma	nagement	' function is	s active, t	the synta	ax is as fol	lows:		
\$TC_DP	CS7[d]									
description	n of field lir	nits:								
t: T numb	oer 1 - 320	000								
d: Cutting	g edge nu	mber / D r	number 1	- 32000						
axis	ĺ					NCK ver	sion:	18.00.0	00	
identifier:								10.00.0	, ,	
unit:	-	min.:	DBL_MIN	٧			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link	•	•	•	

No restrictions

DOUBLE	\$TC DF	PCS8[3200	0,320001						descript	io
			.,.						n:	
description	n:									
The type	can be s	pecified by	machine	data. DOI	JBLE is th	ne defau	It setting			
\$TC_DP	CS8[t,d]									
When the	e 'flat D n	umber ma	nagement	' function i	s active, t	he synta	ax is as fo	llows:		
\$TC DP	CS8[d]		_			-				
description		mits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge ni	umber / D r	number 1	- 32000						
axis	Ĭ					NCK ver	sion:	18.00.0	00	
identifier:										
unit:	-	min.:	DBL_MIN	1			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link				
		Not class	sified			No rest	rictions			

DOUBLE	\$TC_DP	CS9[3200	0,32000]						descript	io
description	j.								n:	
•		:¢: l		-l-t- DOI	IDI E :- 4	<b></b>	14 44!			
71		pecified by	/ macnine	data. DOL	JBLE IS T	ne detau	it setting			
\$TC_DP										
		umber ma	nagement	' function is	s active, t	the synta	ix is as to	llows:		
\$TC_DP										
description	n of field lir	nits:								
t: T numb										
d: Cutting	g edge nu	ımber / D r	number 1	- 32000						
axis						NCK ver	sion:	18.00.0	00	
identifier:			1							
unit:	-	min.:	DBL_MI	N			max.:	DBL_N	ЛAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch			link				

No restrictions

DOUBLE	\$TC D	PCS10[320	00.32000	)]				descript	io
	• · · -		,	.				n:	
descriptio	n:								•
The type	can be	specified by	/ machine	data. DOUBLI	E is the defau	It setting			
\$TC DP	CS10[t.c	וֹ				Ū			
_		-	nagemen	t' function is ac	tive, the synta	ax is as fo	llows:		
\$TC DP			3 -		, <b>,</b>				
descriptio		imits:							
t: T numl	ber 1 - 3	2000							
-		umber / D ı	number 1	- 32000					
axis	j cage n	arriber / B i	idilibei i	02000	INCK vei	rsion:	18.00.	00	
identifier:							10.00.	00	
unit:	-	min.:	DBL_MII	N		max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes	global	block sea	rch	1	link			<u> </u>	
	1	Not class	sified		No rest	rictions			

DOUBLE	STC_S	CP13[3200	0,32000]						descript	10
		<u>-</u>							n:	
description	า:									
Offset for	* \$TC_D	P3: \$TC_S	CP13[t,d]	comparabl	e to \$TC	_DP12[t	,d]			
When the	e 'flat D r	number ma	nagement	t' function is	s active, t	he synta	ax is as fo	llows:		
\$TC SC	P13[d]		•			•				
description	n of field I	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D ı	number 1	- 32000						
axis	Ì					NCK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MI	V			max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch			link		I .	1	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC_SC	CP14[3200	0,32000]						descript	io
									n:	
description	n:									
Offset for	r \$TC_DI	P4: \$TC_S	CP14[t,d]	comparable	to \$TC_[	DP13[t,	d]			
When the	e 'flat D r	number ma	nagement	' function is	active, the	e synta	x is as fo	lows:		
\$TC SC	P14[d]									
description	n of field li	mits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D r	number 1	- 32000						
axis					N	ICK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	٧			max.:	DBL_N	ЛAX	
	run-in	main run	runin stp	Mrun syn	F	PP	SA	OPI	OEM	access rights
read:	Х					Χ				
write:	Х					Χ				7
attributes:	global	block sear	rch	,	li	nk	•	•	•	
		Not class	sified		١	lo restr	rictions			

DOUBLE	\$TC_SC	CP15[3200	0,32000]						descript n:	10
description	l 1:								111.	
	e 'flat D n	_		comparable d' function is		-	-	llows:		
description	of field li	mits:								
t: T numb										
d: Cutting	g edge ni	umber / D r	number 1	- 32000						
axis identifier:						NCK ver	sion:	15.00.0	00	
unit:	mm	min.:	DBL_MIN	V	•		max.:	DBL_N	ИАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Χ				
write:	Х					Χ				7
attributes:	global	block sear	ch	1 1		ink			l .	
		Not class	sified		1	No rest	rictions			

DOUBLE	\$TC_SC	CP16[3200	0,32000]						descript	io
									n:	
description	n:									
Offset for	r \$TC_DF	P6: \$TC_S	CP16[t,d]	comparab	le to \$TC	_DP15[t,	,d]			
When the	e 'flat D n	umber ma	nagement	t' function i	s active, t	he synta	ax is as fo	llows:		
\$TC_SC	P16[d]									
description	n of field li	mits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge ni	umber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	N			max.:	DBL_N	ЛAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	X					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link		L		
		Not class	sified			No rest	rictions			

DOUBLE	\$TC_SC	P17[3200	0,32000]						descript	10
		•							n:	
description	1:									
Offset for	\$TC_DF	7: \$TC_S	CP17[t,d]	comparab	le to \$TC	_DP16[t	,d]			
When the	flat D n	umber ma	nagement	' function i	s active, t	he synta	ax is as fo	llows:		
\$TC SCI	P17[d]		•			-				
description	of field lin	mits:								
t: T numb	er 1 - 32	000								
d: Cutting	edge nu	ımber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MI	V			max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link			I	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC S	CP18[3200	0.320001					descript	io
			.,.					n:	
description	n:								
Offset for	r \$TC_D	P8: \$TC_S	CP18[t,d]	comparab	e to \$TC_DP17[t	,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, the synta	ax is as fo	llows:		
\$TC SC	P18[d]		•		•				
description	n of field I	imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D i	number 1	- 32000					
axis	Ĭ				NCK vei	rsion:	15.00.	00	
identifier:									
unit:	mm	min.:	DBL_MII	N		max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sea	rch	L	link			L	
		Not class	sified		No rest	rictions			

DOUBLE	\$TC_S	CP19[3200	0,32000]					descript	10
description	<u>า</u> :							n:	
	e 'flat D r	_		•	to \$TC_DP18  active, the synt	-	llows:		
description	of field li	mits:							
t: T numb	er 1 - 32	2000							
d: Cutting	g edge ni	umber / D r	number 1	- 32000	_				
axis identifier:					NCK ve	ersion:	15.00.	00	
unit:	mm	min.:	DBL_MIN	V		max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				X				7
attributes:	global	block sear	ch	1	link	L	l .		
		Not class	sified		No res	trictions			

DOUBLE	\$TC S	CP20[3200	0,320001						descript	io
			.,.						n:	
description	n:									
Offset for	r \$TC_D	P10: \$TC_	SCP20[t,c	l] compara	ble to \$TC	_DP19	[t,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, t	he synta	ax is as fo	llows:		
\$TC_SC										
description	n of field I	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D i	number 1	- 32000						
axis						NCK vei	rsion:	15.00.	00	
identifier:										
unit:	-	min.:	DBL_MI	N			max.:	DBL_N	ИAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sea	rch	II.		link				
		Not class	sified			No rest	rictions			

DOUBLE	\$TC SO	CP21[3200	0.320001					descript	10
			-,,					n:	
description	1:								
Offset for	STC_DI	P11: \$TC_	SCP21[t,c	l] comparable	to \$TC_DP20	[t,d]			
When the	e 'flat D r	number ma	nagement	t' function is a	ctive, the synta	ax is as fo	llows:		
\$TC SCI	⊃21[d]		-		-				
description	of field I	imits:							
t: T numb	er 1 - 32	2000							
d: Cutting	edge n	umber / D ı	number 1	- 32000					
axis					NCK ver	sion:	15.00.	00	
identifier:			•						
unit:	-	min.:	DBL_MI	N		max.:	DBL_N	ИΑХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	ch	1	link		1		
		Not class	sified		No rest	rictions			

DOUBLE	\$TC_SC	P23[3200	0,32000]						descript	io
									n:	
description	า:									
Offset for	* \$TC_DF	P3: \$TC_S	CP23[t,d]	comparable	e to \$TC_	DP12[t,	,d]			
When the	e 'flat D n	umber ma	nagement	' function is	active, tl	he synta	ax is as fo	llows:		
\$TC_SC	P23[d]									
description	n of field li	mits:								
t: T numb	oer 1 - 32	000								
d: Cutting	g edge ni	umber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.	00	
identifier:										
unit:	mm	min.:	DBL_MIN	1			max.:	DBL_N	ЛAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Χ				
write:	Х					Х				7
attributes:	global	block sear	ch	I		link	1		I	
		Not class	sified			No rest	rictions			

DOORFE	\$TC_S	CP24[3200	0,32000]					descript	:10
		-						n:	
description	n:								
Offset for	r\$TC D	P4: \$TC S	CP24[t,d]	comparable to	\$TC DP13[t	,d]			
When the	e 'flat D r	number ma	nagement	' function is ac	ctive, the synta	ax is as fo	llows:		
\$TC SC	P24[d]		•		•				
description		limits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D i	number 1	- 32000					
axis					NCK ver	sion:	15.00.	00	
identifier:									
unit:	mm	min.:	DBL_MII	N		max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sea	rch	1	link		1		
		Not class	sified		No rest	rictions			

DOUBLE	\$TC_S	CP25[3200	0,32000]						descript n:	io
description	n:									
Offset for	r \$TC_D	P5: \$TC_S	CP25[t,d]	comparab	le to \$TC_DP	14[t,	d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, the sy	ynta	x is as fo	llows:		
\$TC_SC										
description	n of field l	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D r	number 1	- 32000						
axis					NCK	ver	sion:	15.00.	00	
identifier:										
unit:	mm	min.:	DBL_MIN	N			max.:	DBL_N	ИAX	
	run-in	main run	runin stp	Mrun syn	PP		SA	OPI	OEM	access rights
read:	Х					X				
write:	Х					X				7
attributes:	global	block sear	rch	1	link		1	1		
		Not class	sified		n oN	estr	rictions			

DOUBLE	\$TC_SC	P26[3200	0,32000]						n:	0
description	1:								I	
Offset for	\$TC DP	6: \$TC S	CP26[t,d]	comparable	e to \$TC	DP15[t,	d]			
When the	: 'flat D nu	umber ma	nagement	' function is	active, t	he synta	x is as fo	lows:		
\$TC_SCI	P26[d]									
description	of field lin	nits:								
t: T numb	er 1 - 320	000								
d: Cutting	edge nu	mber / D r	number 1	- 32000						
axis identifier:						NCK ver	sion:	15.00.0	00	
unit:	mm	min.:	DBL_MIN	V			max.:	DBL_N	ИАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•		link	•	•	•	
		Not class	sified			No resti	rictions			

DOUBLE	\$TC S	CP27[3200	0.320001					descript	io
			.,.					n:	
description	n:								
Offset for	r \$TC_D	P7: \$TC_S	CP27[t,d]	comparabl	e to \$TC_DP16	[t,d]			
When the	e 'flat D r	number ma	nagement	t' function is	s active, the syn	ax is as fo	llows:		
\$TC SC	P27[d]		•		•				
description	n of field I	imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D i	number 1	- 32000					
axis					NCK ve	ersion:	15.00.	00	
identifier:									
unit:	mm	min.:	DBL_MII	V		max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				X				7
attributes:	global	block sea	rch	1	link			L	
		Not class	sified		No res	trictions			

DOORFF	\$TC SC	P28[3200	0.320001						descript	10
			-,						n:	
description	1:									
\$TC_SCI	P28[t,d] c	omparable	to \$TC_I	DP17[t,d]						
When the	e 'flat D ni	umber mai	nagement	' function i	s active, t	he synta	x is as fo	llows:		
\$TC SCI	P28[d]		•			•				
description	of field lin	mits:								
t: T numb	er 1 - 32	000								
d: Cutting	a edae nu	ımber / D r	number 1	- 32000						
axis	ĺ					NCK vers	sion:	15.00.	00	
identifier:								10.00.	00	
unit:	mm	min.:	DBL_MIN	V			max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•		link	•	•	•	

No restrictions

DOUBLE	\$TC S	CP29[3200	0.320001					descript	io
			.,.					n:	
description	n:								
Offset for	r \$TC_D	P9: \$TC_S	CP29[t,d]	comparab	e to \$TC_DP18[t	,,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, the synta	ax is as fo	llows:		
\$TC SC	P29[d]		•						
description	n of field I	imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D i	number 1	- 32000					
axis					NCK ve	rsion:	15.00.	00	
identifier:									
unit:	mm	min.:	DBL_MII	N		max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				X				7
attributes:	global	block sea	rch		link		l	L	
		Not class	sified		No rest	rictions			

DOUBLE	\$TC SC	P30[3200	0.320001						descript	10
			-,						n:	
description	1:									
Offset for	\$TC_DF	P10: \$TC_\$	SCP30[t,d	l] comparal	ble to \$T0	_DP19	[t,d]			
When the	e 'flat D n	umber ma	nagement	function is	s active, t	he synta	ax is as fo	llows:		
\$TC SC	⊃30[d]					-				
description	n of field li	mits:								
t: T numb	er 1 - 32	000								
d: Cutting	g edge nu	ımber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	-	min.:	DBL_MIN	٧			max.:	DBL_N	ЛAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	<u>.                                    </u>		link			I	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC_SC	CP31[3200	0,32000]						descript	io
			-						n:	
description	n:									
Offset for	r \$TC_DI	P11: \$TC_\$	SCP31[t,d	l] compara	ble to \$T0	C_DP20	[t,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, t	he synta	ax is as fo	llows:		
\$TC_SC	P31[d]					-				
description		mits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.	00	
identifier:										
unit:	-	min.:	DBL_MIN	N			max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	X					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	I		link				
		Not class	sified			No rest	rictions			

DOUBLE	\$TC S	CP33[3200	0.320001						descript	10
			-,						n:	
description	n:									
Offset for	r \$TC_D	P3: \$TC_S	CP33[t,d]	comparab	le to \$TC	_DP12[t	,d]			
When the	e 'flat D r	number ma	nagement	t' function i	is active,	the synta	ax is as fo	llows:		
\$TC_SC										
description	n of field I	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D ı	number 1	- 32000						
axis						NCK vei	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MI	N			max.:	DBL_N	ЛAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sea	rch	···		link	•	•		
		Not class	sified			No rest	rictions			

DOUBLE	\$TC S	CP34[3200	0.320001						descript	io
			.,.						n:	
description	n:									
Offset for	r \$TC_D	P4: \$TC_S	CP34[t,d]	comparab	le to \$TC_I	DP13[t	,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, th	e synta	ax is as fo	llows:		
\$TC_SC			-			-				
description	n of field I	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D ı	number 1	- 32000						
axis					N	ICK ver	sion:	15.00.	00	
identifier:										
unit:	mm	min.:	DBL_MI	V			max.:	DBL_N	ИΑХ	
	run-in	main run	runin stp	Mrun syn	F	PP	SA	OPI	OEM	access rights
read:	Х					Χ				
write:	Х					Χ				7
attributes:	global	block sear	rch		li	nk		I	<u> </u>	
		Not class	sified		١	lo rest	rictions			

DOUBLE	\$TC SC	P35[3200	0,32000]						descript	0
		•							n:	
description	1:									
Offset for	\$TC_DP	5: \$TC_S	CP35[t,d]	comparab	le to \$TC	_DP14[t	,d]			
When the	flat D nu	ımber maı	nagement	' function i	s active, t	he synta	x is as fo	llows:		
\$TC_SCI	P35[d]		_			-				
description	of field lim	nits:								
t: T numb	er 1 - 320	000								
d: Cutting	edge nu	mber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	١			max.:	DBL_N	ЛAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	1		link		1		

No restrictions

DOUBLE	\$TC_S	CP36[3200	0,32000]						descript n:	io
description	1 n:								111.	
		P6: \$TC S	CP36It.d1	comparab	le to \$TC	DP15ft	dl			
		number ma						llows:		
\$TC SC			3			,				
description	n of field li	mits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.	00	
identifier: unit:		Imin.:		VI.			max.:	DDI A	44.7/	
unit.	mm		DBL_MII				_	DBL_N		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link		I		
		Not class	sified			No rest	rictions			

DOUBLE	\$TC S	CP37[3200	0.320001						descript	IO
	*		-,						n:	
description	n:									
Offset for	r\$TC D	P7: \$TC S	CP37[t,d]	comparab	le to \$TC	DP16[t	,d]			
		number ma						llows:		
\$TC SC			J		,	,				
description		limits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D i	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MII	٧			max.:	DBL_N	ИΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch			link		<u> </u>	L	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC_S	CP38[3200	0,32000]						descript	io
		-							n:	
description	n:									
Offset for	r \$TC_D	P8: \$TC_S	CP38[t,d]	comparab	e to \$TC_	DP17[t	,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, th	e synta	ax is as fo	llows:		
\$TC SC	P38[d]		•			-				
description	n of field I	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D i	number 1	- 32000						
axis	Ĭ				1	NCK ver	sion:	15.00.	00	
identifier:										
unit:	mm	min.:	DBL_MII	V			max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn	F	PΡ	SA	OPI	OEM	access rights
read:	Х					Χ				
write:	Х					Χ				7
attributes:	global	block sea	rch		I	ink		L		
		Not class	sified		ı	No rest	rictions			

DOUBLE	\$TC_SC	P39[3200	0,32000]						descripti	0
		•							n:	
description	າ:									
Offset for	\$TC_DP	9: \$TC_S	CP39[t,d]	comparab	le to \$TC	_DP18[t,d	d]			
When the	e 'flat D nu	ımber maı	nagement	' function i	s active, t	he synta	x is as fol	lows:		
\$TC SCI	⊃39[d]					•				
description	of field lim	nits:								
t: T numb	er 1 - 320	000								
d: Cutting	g edge nui	mber / D r	number 1	- 32000						
axis						NCK vers	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	١			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link	•	•	•	

No restrictions

DOUBLE	\$TC_S	CP40[3200	0,32000]						descript n:	io
description	n:								111.	
Offset for	sTC DI	P10: \$TC :	SCP40[t.d	II compara	ble to \$T0	DP19I	ſt.dl			
		number ma						llows:		
\$TC SC			J		,	,				
description	n of field li	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.	00	
identifier:			•							
unit:	-	min.:	DBL_MI	V			max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link		ı		
		Not class	sified			No rest	rictions			

DOUBLE	\$TC_S	CP41[3200	0,32000]						descript n:	Ю
description	n:									•
Offset for	r \$TC_D	P11: \$TC_	SCP41[t,c	l] compara	ble to \$To	C_DP20	[t,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active,	the synta	ax is as fo	llows:		
\$TC_SC	P41[d]									
description	n of field I	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D ı	number 1	- 32000						
axis						NCK vei	sion:	15.00.0	00	
identifier:										
unit:	-	min.:	DBL_MI	N			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sea	rch	···		link	•		•	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC S	CP43[3200	0.320001						descript	io
			.,.						n:	
description	n:									
Offset for	r \$TC_D	P3: \$TC_S	CP43[t,d]	comparab	le to \$TC_I	DP12[t	,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, th	e synta	ax is as fo	llows:		
\$TC SC	P43[d]		•			•				
description	n of field l	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D ı	number 1	- 32000						
axis	Ĭ				١	ICK ver	sion:	15.00.	00	
identifier:										
unit:	mm	min.:	DBL_MIN	V			max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn	F	PP	SA	OPI	OEM	access rights
read:	Х					Χ				
write:	Х					Χ				7
attributes:	global	block sea	rch	1	li	nk	1	1	<u> </u>	
		Not class	sified		1	lo rest	rictions			

DOUBLE	\$TC_SC	P44[3200	0,32000]					descript	10
								n:	
descriptior	า:								
Offset for	STC DF	P4: \$TC S	CP44[t,d]	comparable to	\$TC DP13[t	,d]			
When the	e 'flat D n	umber mai	nagement	t' function is ac	tive, the synta	ax is as fo	llows:		
\$TC SCI			Ü		,				
description		mits:							
t: T numb	er 1 - 32	000							
d. Cutting	r edae ni	ımber / D r	number 1	- 32000					
axis	l		101111001 1	02000	NCK ver	sion:	15.00.	00	
identifier:							13.00.	00	
unit:	mm	min.:	DBL_MI	V		max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch		link	1	1	Г	

No restrictions

DOUBLE	\$TC_SC	CP45[3200	0,32000]						descript	io
			-						n:	
description	n:									
Offset for	r \$TC_DI	P5: \$TC_S	CP45[t,d]	comparab	le to \$TC	_DP14[t,	,d]			
When the	e 'flat D n	umber ma	nagement	' function i	s active, t	he synta	ax is as fo	llows:		
\$TC_SC	P45[d]									
description	n of field li	mits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge ni	umber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.	00	
identifier:										
unit:	mm	min.:	DBL_MIN	٧			max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	X					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	1		link		L		
		Not class	sified			No rest	rictions			

DOUBLE	\$TC SC	CP46[3200	0,320001						descript	10
		-	<u> </u>						n:	
description	1:									
Offset for	\$TC_DI	P6: \$TC_S	CP46[t,d]	comparable	to \$TC_	DP15[t	,d]			
When the	e 'flat D r	number ma	nagement	' function is	active, t	he synta	x is as fo	llows:		
\$TC SC	P46[d]		•			•				
description	of field li	mits:								
t: T numb	er 1 - 32	2000								
d: Cutting	edge n	umber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	٧			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Χ				
write:	Х					Х				7
attributes:	global	block sear	ch	I		link		ı		
		Not class	sified			No rest	rictions			

DOUBLE	\$TC_SC	CP47[3200	0,32000]					descript	io
								n:	
description	n:								
Offset for	r \$TC_DI	P7: \$TC_S	CP47[t,d]	comparable	to \$TC_DP16	[t,d]			
When the	e 'flat D r	number ma	nagement	' function is	active, the syn	tax is as fo	llows:		
\$TC SC	P47[d]								
description	n of field li	imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D ı	number 1	- 32000					
axis					NCK v	ersion:	15.00.	00	
identifier:									
unit:	mm	min.:	DBL_MIN	٧		max.:	DBL_N	ИAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				X				7
attributes:	global	block sear	rch	•	link		•	•	
		Not class	sified		No res	strictions			

DOUBLE	\$TC SC	P48[3200	0.320001						descripti	0
			.,						n:	
description	1:									
Offset for	*\$TC_DP	8: \$TC_S	CP48[t,d]	comparable	to \$TC_	DP17[t,	d]			
When the	e 'flat D nu	ımber maı	nagement	' function is	active, t	he synta	x is as fol	lows:		
\$TC SC	P48[d]		•			•				
description	n of field lin	nits:								
t: T numb	er 1 - 320	000								
d: Cutting	g edge nu	mber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	1			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	<u>l</u>		link		L		

No restrictions

DOUBLE	\$TC S	CP49[3200	0.320001					descript	io
			.,.					n:	
description	n:								
Offset for	r \$TC_D	P9: \$TC_S	CP49[t,d]	comparab	e to \$TC_DP18[	t,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, the synt	ax is as fo	llows:		
\$TC SC	P49[d]		Ū		•				
description	n of field I	imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D i	number 1	- 32000					
axis					NCK ve	ersion:	15.00.	00	
identifier:									
unit:	mm	min.:	DBL_MII	N		max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sea	rch		link	I		I	
		Not class	sified		No res	trictions			

DOUBLE	\$TC_SC	P50[3200	0,32000]						descript	10
description	· ·								n:	
	_	_	-	l] compara						
		umber mai	nagement	t' function i	s active, t	he synta	ix is as fo	llows:		
\$TC_SCI										
description	n of field lii	mits:								
t: T numb	er 1 - 32	000								
d: Cutting	gedge nu	ımber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	-	min.:	DBL_MIN	N			max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link		•	•	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC S	CP51[3200	0,320001						descript	io
			.,.						n:	
description	n:									
Offset for	r \$TC_D	P11: \$TC_	SCP51[t,c	l] compara	ble to \$TC_E	P20	[t,d]			
When the	e 'flat D r	number ma	nagement	function i	s active, the	synta	ax is as fo	llows:		
\$TC SC	P51[d]		•			•				
description	n of field I	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	a edge n	umber / D i	number 1	- 32000						
axis	1				NC	K ver	sion:	15.00.	00	
identifier:								10.00.		
unit:	-	min.:	DBL_MII	V			max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn	PP		SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Χ				7
attributes:	global	block sear	rch		link	(				
		Not class	sified		No	rest	rictions			

DOORFE	\$TC SC	P53[3200	0.320001						descripti	0
	*		-, <b>_</b>						n:	
description	1:									
Offset for	\$TC_DP	3: \$TC_S	CP53[t,d]	comparabl	le to \$TC	_DP12[t,	d]			
When the	e 'flat D nu	ımber maı	nagement	' function is	s active, t	he synta	x is as fol	lows:		
\$TC SCI	P53[d]									
description	of field lin	nits:								
t: T numb	er 1 - 320	000								
d: Cutting	g edge nu	mber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	١			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	1		link			l.	

No restrictions

DOUBLE	\$TC_SC	CP54[3200	0,32000]						descript	io
description	l n:								n:	
		P4: \$TC S	CP54[t d]	comparab	le to \$TC	DP13It	d]			
		number ma						llows:		
\$TC SC		iainiboi ina	nagomom	. Tarrodorr	o aouvo, t	iio oyiito	.x 10 do 10			
description		mits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge ni	umber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.	00	
identifier:										
unit:	mm	min.:	DBL_MI	N			max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	1		link	1	I.		
		Not class	sified			No rest	rictions			

DOUBLE	\$TC_S	CP55[3200	0,32000]						descript	10
description	า:								n:	
	e 'flat D r	_		comparable 'function is	_	-	-	llows:		
description		mits:								
t: T numb	er 1 - 32	2000								
d: Cutting	g edge ni	umber / D r	number 1	- 32000	-					
axis identifier:						NCK ver	sion:	15.00.0	00	
unit:	mm	min.:	DBL_MIN	V			max.:	DBL_N	ИАХ	
	run-in	main run	runin stp	Mrun syn		⊃P	SA	OPI	OEM	access rights
read:	Х					Χ				
write:	Х					Χ				7
attributes:	global	block sear	ch	1	I	ink		L	L	
		Not class	sified		ı	No rest	rictions			

DOUBLE	\$TC S	CP56[3200	0.320001						descript	io
			.,.						n:	
description	n:									
Offset for	r \$TC_D	P6: \$TC_S	CP56[t,d]	comparab	le to \$TC_DF	P15[t	,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, the	synta	x is as fo	llows:		
\$TC SC	P56[d]		Ū			•				
description	n of field I	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D i	number 1	- 32000						
axis	Ĭ				NC	K ver	sion:	15.00.	00	
identifier:										
unit:	mm	min.:	DBL_MII	V			max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn	PP		SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Χ				7
attributes:	global	block sea	rch		link	(			<u> </u>	
		Not class	sified		No	rest	rictions			

DOUBLE	\$TC SC	P57[3200	0,320001						descript	0
		•							n:	
description	1:									
Offset for	STC DP	7: \$TC S	CP57[t,d]	comparab	le to \$TC	DP16[t,	d]			
When the	e 'flat D nu	ımber maı	nagement	' function i	s active, t	he synta	x is as fol	lows:		
\$TC SCI	P57[d]		Ū		·	•				
description	n of field lin	nits:								
t: T numb	er 1 - 320	000								
d: Cutting	g edge nu	mber / D r	number 1	- 32000						
axis						NCK vers	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	١			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	1		link	· ·	1		

No restrictions

DOUBLE	\$TC S	CP58[3200	0.320001						descript	io
			.,.						n:	
description	n:									
Offset for	r \$TC_D	P8: \$TC_S	CP58[t,d]	comparab	le to \$TC_I	DP17[t	,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, th	e synta	ax is as fo	llows:		
\$TC SC	P58[d]		•			-				
description	n of field l	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D ı	number 1	- 32000						
axis	Ĭ				1	NCK ver	sion:	15.00.	00	
identifier:										
unit:	mm	min.:	DBL_MII	V			max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn	F	PΡ	SA	OPI	OEM	access rights
read:	Х					Χ				
write:	Х					Χ				7
attributes:	global	block sea	rch	1	I	ink	1		<u> </u>	
		Not class	sified		1	No rest	rictions			

DOUBLE	\$TC_SC	P59[3200	0,32000]						descript n:	10
description	1:									
Offset for	\$TC DF	9: \$TC S	CP59[t,d]	comparable	to \$TC	DP18[t.	d]			
	_	_		' function is	_		-	llows:		
\$TC SCI	P59[d]		•			•				
description	of field lin	mits:								
t: T numb	er 1 - 32	000								
d: Cutting	gedge nu	ımber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	N			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Χ				
write:	Х					Х				7
attributes:	global	block sear	ch	, <u>, , , , , , , , , , , , , , , , , , </u>		link	•		•	
		Not class	ified			No rest	rictions			

DOUBLE	\$TC_S	CP60[3200	0,32000]						descript n:	io
description	n:									
Offset for	r \$TC_D	P10: \$TC_	SCP60[t,d	l] compara	ble to \$TC_D	P19[	[t,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, the s	synta	x is as fo	llows:		
\$TC_SC										
description	n of field l	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D ı	number 1	- 32000						
axis					NC	K ver	sion:	15.00.	00	
identifier:										
unit:	-	min.:	DBL_MIN	N			max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn	PP		SA	OPI	OEM	access rights
read:	Х					Χ				
write:	Х					Χ				7
attributes:	global	block sear	rch	1	link		I.		<u> </u>	
		Not class	sified		No	resti	rictions			

DOUBLE	\$TC_SC	P61[3200	0,32000]						descript	0
									n:	
description	1:									
Offset for	\$TC_DP	11: \$TC_9	SCP61[t,d	] compara	ble to \$T0	C_DP20	[t,d]			
When the	: 'flat D nu	ımber mai	nagement	' function i	s active, t	he synta	x is as fo	llows:		
\$TC SCI	P61[d]									
description	of field lin	nits:								
t: T numb	er 1 - 320	000								
d: Cutting	edge nu	mber / D r	number 1	- 32000						
axis identifier:						NCK ver	sion:	15.00.0	00	
unit:	-	min.:	DBL_MIN	N			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Χ					Х				7
attributes:	global	block sear	ch	1		link		I.	1	
		Not class	ified			No rest	rictions			

DOUBLE	\$TC_SC	CP63[3200	0,32000]						descript	io
description	u.								n:	
		P3: \$TC S	CB63[t d]	comparab	le to \$TC	DP12It	d]			
		number ma						llows.		
\$TC SC		idilibei ilia	nagemen	. Turicuoiri	5 dollvo, t	iic Syiic	ix 15 d5 10	iiows.		
description		mits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge ni	umber / D r	number 1	- 32000						
axis	Ì					NCK ver	sion:	15.00.	00	
identifier:										
unit:	mm	min.:	DBL_MIN	N			max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				J
write:	Х					Х				7
attributes:	global	block sear	rch	1		link	1	I.		
		Not class	sified			No rest	rictions			

DOUBLE	OUBLE   <b>\$TC_SCP64[32000,32000]</b>								descript	10	
		•	<u> </u>						n:		
description	า:										
Offset for	*\$TC_D	P4: \$TC_S	CP64[t,d]	comparab	le to \$TC	_DP13[t	,d]				
When the	e 'flat D r	number ma	nagement	t' function i	s active, t	he synta	ax is as fo	llows:			
\$TC SC	P64[d]		•			-					
description	n of field I	imits:									
t: T numb	oer 1 - 32	2000									
d: Cutting	g edge n	umber / D i	number 1	- 32000							
axis						NCK version:		15.00.00			
identifier:											
unit:	mm	min.: DBL_MIN				max.:		DBL_MAX			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х					Х					
write:	Х					Х				7	
attributes:	global	block sear	block search			link					
		Not class	Not classified			No restrictions					

DOUBLE	\$TC S	CP65[3200	0.320001						descript	io
			.,.						n:	
description	n:									
Offset for	r\$TC D	P5: \$TC S	CP65[t,d]	comparab	le to \$TC_D	)P14[t,	,d]			
					s active, the			llows:		
\$TC SC	P65[d]		•			•				
description	n of field l	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D ı	number 1	- 32000						
axis	Ĭ				N	CK ver	sion:	15.00.	00	
identifier:										
unit:	mm	min.:	DBL_MII	V			max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn	P	Р	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch		lir	nk		I	<u> </u>	
		Not class	sified		N	lo rest	rictions			

DOORLE	STC S	CP66[3200	0.320001						descript	10
	*		-,						n:	
descriptior	1:									
Offset for	\$TC D	P6: \$TC S	CP66[t,d]	comparable	to \$TC DP1	5[t,d]				
				t' function is a			as follo	ows:		
\$TC SCI	P66[d]		Ū							
description	of field I	imits:								
t: T numb	er 1 - 32	2000								
d: Cutting	edge n	umber / D r	number 1	- 32000						
axis					NCK	version	:	15.00.0	00	
identifier:									, ,	
unit:	mm	min.:	DBL_MI	7		m	ax.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn	PP	S	Ą	OPI	OEM	access rights
read:	Х				)	(				
write:	Х				)	(				7
attributes:	global	block sear	ch	· · · · · · · · · · · · · · · · · · ·	link				1	
		Not class	sified		No r	estriction	ons			

DOUBLE	\$TC_S	CP67[3200	0,32000]						descript	io
description	u.								n:	
		P7: \$TC S	CP67[t d]	comparab	le to \$TC	DP16[t	d]			
		number ma						llows.		
\$TC SC		idilibei ilia	nagemen	. Turicuoiri	o activo, t	iic Syiic	ix 15 d5 10	iiows.		
description		mits:								
t: T numb	per 1 - 32	2000								
d: Cutting	a edge n	umber / D r	number 1	- 32000						
axis	ĺ					NCK ver	sion:	15.00.	00	
identifier:										
unit:	mm	min.:	DBL_MII	N			max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	1		link	1	I.		
		Not class	sified			No rest	rictions			

DOUBLE	\$TC S	CP68[3200	0.320001						descript	IO
	*		-,						n:	
description	n:									
Offset for	r\$TC D	P8: \$TC S	CP68[t,d]	comparab	le to \$TC	DP17[t	,d]			
		number ma						llows:		
\$TC SC			J		,	,				
description		limits:								
t: T numb	oer 1 - 3	2000								
d: Cutting	g edge n	umber / D i	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:									-	
unit:	mm	min.:	DBL_MII	٧			max.:	DBL_N	ИΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	11		link		<u> </u>	L	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC S	CP69[3200	0.320001					descript	io
			.,.					n:	
description	n:								
Offset for	r \$TC_D	P9: \$TC_S	CP69[t,d]	comparabl	e to \$TC_DP18[	:,d]			
When the	e 'flat D r	number ma	nagement	t' function is	s active, the synt	ax is as fo	llows:		
\$TC SC	P69[d]		•		•				
description	n of field I	imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D i	number 1	- 32000					
axis					NCK ve	rsion:	15.00.	00	
identifier:									
unit:	mm	min.:	DBL_MII	N		max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				X				7
attributes:	global	block sea	rch	<u>l</u>	link		l	L	
		Not class	sified		No res	trictions			

DOUBLE	\$TC SC	P70[3200	0.320001						descripti	0
	*		-, <b>,</b>						n:	
description	1:									
Offset for	\$TC DP	10: \$TC 5	SCP70[t,d	] comparal	ole to \$T0	DP19	t,d]			
When the	e 'flat D nu	ımber mai	nagement	' function is	s active, t	he synta	x is as fol	lows:		
\$TC SCI	⊃70[d]		_			-				
description	of field lin	nits:								
t: T numb	er 1 - 320	000								
d: Cutting	g edge nu	mber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	-	min.:	DBL_MIN	١			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	X					X				
write:	Х					Х				7
attributes:	global	block sear	ch	1		link		ı	ı	

No restrictions

DOUBLE	\$TC_S	CP71[3200	0,32000]						descript n:	io
description	n:				<u> </u>					
Offset for	r\$TC DI	P11: \$TC :	SCP71[t,c	l] compara	ble to \$T0	DP20	[t,d]			
		number ma						llows:		
\$TC_SC	P71[d]		-			-				
description	n of field li	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D ı	number 1	- 32000						
axis identifier:						NCK ver	sion:	15.00.	00	
unit:	-	min.:	DBL_MII	V			max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch		ı	link		ı		
		Not class	sified			No rest	rictions			

DOUBLE	\$TC_EC	P13[3200	0,32000]						descript n:	10
description	1:			<b>.</b>					l .	
Offset for	\$TC DF	3: \$TC E	CP13[t,d]	comparable	to \$TC	DP12[t,	d]			
When the	flat D n	umber mai	nagement	' function is	active, the	ne synta	x is as fo	llows:		
\$TC ECI	P13[d]		•			•				
description	of field lin	mits:								
t: T numb	er 1 - 32	000								
d: Cutting	gedge nu	ımber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	N			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Χ				
write:	Х					Χ				7
attributes:	global	block sear	ch	. "		link	W.	•	•	
		Not class	ified			No rest	rictions			

DOUBLE	\$TC E	CP14[3200	0,320001						descript	io
		•							n:	
description	า:									
Offset for	*\$TC_D	P4: \$TC_E	CP14[t,d]	comparabl	e to \$TC_E	DP13[t	,d]			
When the	e 'flat D r	number ma	nagement	' function is	s active, the	e synta	ax is as fo	llows:		
\$TC EC	P14[d]		•			•				
description	n of field I	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D ı	number 1	- 32000						
axis	Ì				N	ICK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	٧			max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn	P	P	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Χ				7
attributes:	global	block sea	ch	1	lii	nk	1	1		
		Not class	sified		N	lo rest	rictions			

DOUBLE	\$TC EC	P15[3200	0.320001						descripti	0
	<b>*</b> · · · · ·		-, <b>,</b>						n:	
description	1:									
Offset for	\$TC_DP	5: \$TC_E	CP15[t,d]	comparabl	le to \$TC	_DP14[t,	d]			
When the	e 'flat D nu	ımber maı	nagement	' function is	s active, t	he synta	x is as fol	lows:		
\$TC_ECI	⊃15[d]									
description	of field lin	nits:								
t: T numb	er 1 - 320	000								
d: Cutting	g edge nu	mber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	1			max.:	DBL_M	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	X					Х				
write:	Χ					Х				7
attributes:	global	block sear	ch	1		link	· L	1	I.	
		1								

No restrictions

DOUBLE	\$TC_E	CP16[3200	0,32000]						descript	io
description	n:								n:	
		P6: \$TC E	CP16[t d]	comparab	le to \$TC	DP15[t	dl			
		umber ma						llows:		
\$TC EC										
description		mits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge ni	umber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.	00	
identifier:			1				1			
unit:	mm	min.:	DBL_MIN	V			max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link			<u> </u>	
		Not class	sified			No rest	rictions			

DOUBLE	STC E	CP17[3200	0.320001						descript	IO
		•	-,-						n:	
description	n:									
Offset for	r\$TC D	P7: \$TC E	CP17[t,d]	comparab	le to \$TC	DP16[t	,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active. t	he synta	ax is as fo	llows:		
\$TC EC			J		,	,				
description	n of field I	limits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D i	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:									-	
unit:	mm	min.:	DBL_MII	٧			max.:	DBL_N	ИΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	11		link		<u> </u>	L	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC EC	P18[3200	0,32000]						descript	io
		<u>-</u>							n:	
description	n:									
Offset for	r \$TC_DF	P8: \$TC_E	CP18[t,d]	comparable	to \$TC_D	)P17[t,	d]			
When the	e 'flat D n	umber ma	nagement	' function is	active, the	synta	x is as fol	lows:		
\$TC_EC	P18[d]									
description	n of field li	mits:								
t: T numb	oer 1 - 32	.000								
d: Cutting	g edge ni	umber / D r	number 1	- 32000						
axis					N	CK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	N			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn	P	Р	SA	OPI	OEM	access
										rights
read:	X					Χ				
write:	Х					Χ				7
attributes:	global	block sear	ch	1 1	lir	nk			l .	
		Not class	sified		N	o restr	rictions			

DOUBLE	\$TC_EC	P19[3200	0,32000]					descript	Ю
description	J.							n:	
Offset for	STC_DP Iflat D nu P19[d]	umber mai		comparable to t' function is ac			llows:		
t: T numb	er 1 - 320		number 1	- 32000					
axis identifier:	,				NCK ver	rsion:	15.00.	00	
unit:	mm	min.:	DBL_MIN	V	•	max.:	DBL_N	ИАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	ch	1	link	1	I		

No restrictions

DOUBLE	\$TC_E	CP20[3200	0,32000]						descript n:	io
description	n:				<u> </u>					
Offset for	r\$TC DI	P10: \$TC I	ECP20[t,d	l] compara	ble to \$T0	DP19	[t,d]			
		number ma						llows:		
\$TC_EC	P20[d]					-				
description	n of field li	mits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge ni	umber / D r	number 1	- 32000						
axis identifier:						NCK ver	sion:	15.00.	00	
unit:	-	min.:	DBL_MI	V			max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	1	ı	link		L		
		Not class	sified			No rest	rictions			

DOUBLE	\$TC_E	P21[3200	0,32000]						descript n:	10
description	n:			•						
Offset for	*\$TC_DI	P11: \$TC_I	ECP21[t,c	l] comparab	le to \$TC	_DP20	[t,d]			
When the	e 'flat D n	umber ma	nagement	t' function is	active, t	he synta	ax is as fo	llows:		
\$TC_EC	P21[d]									
description	n of field li	mits:								
t: T numb	er 1 - 32	2000								
d: Cutting	g edge ni	umber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	-	min.:	DBL_MI	N			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	1		link	•	•	•	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC_E	CP23[3200	0,32000]					descript n:	io
description	n:							•	•
Offset for	r \$TC_D	P3: \$TC_E	CP23[t,d]	comparab	le to \$TC_DP12	2[t,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, the sy	ntax is as fo	ollows:		
\$TC_EC									
description	n of field l	imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D ı	number 1	- 32000					
axis					NCK ·	version:	15.00.	00	
identifier:									
unit:	mm	min.:	DBL_MIN	N		max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				X				7
attributes:	global	block sea	rch	1	link	ı	1		
		Not class	sified		No re	strictions			

DOUBLE	\$TC_EC	P24[3200	0,32000]						descript	10
		-							n:	
description	1:									
Offset for	\$TC_DP	4: \$TC_E	CP24[t,d]	comparabl	le to \$TC	_DP13[t	,d]			
When the	e 'flat D ni	umber mai	nagement	' function is	s active, t	he synta	x is as fo	llows:		
\$TC ECI	P24[d]									
description	of field lir	nits:								
t: T numb	er 1 - 320	000								
d: Cutting	g edge nu	mber / D r	number 1	- 32000						
axis identifier:						NCK ver	sion:	15.00.0	00	
unit:	mm	min.:	DBL_MIN	V			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	<u> </u>		link		I.	1	
		Not class	ified			No rest	rictions			

DOUBLE	\$TC_EC	P25[3200	0,32000]						descript	io
description	l n:								n:	
		P5: \$TC E	CP25[t d]	comparab	le to \$TC	DP14It	d]			
		umber ma						llows:		
\$TC EC			nagomom	. Tarrodorr	0 401170, 1	aro cyrric	D. 10 40 10			
description		mits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge ni	umber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.	00	
identifier:			•							
unit:	mm	min.:	DBL_MI	V			max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				J
write:	Х					Х				7
attributes:	global	block sear	rch	1		link		I.		
		Not class	sified			No rest	rictions			

DOUBLE	\$TC_E	CP26[3200	0,32000]						descript	10
		•	<u> </u>						n:	
description	n:									
Offset for	r \$TC_D	P6: \$TC_E	CP26[t,d]	comparab	le to \$TC	_DP15[t	,d]			
When the	e 'flat D r	number ma	nagement	' function i	s active, t	he synta	ax is as fo	llows:		
\$TC EC	P26[d]		•			•				
description	n of field I	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	٧			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•		link	•	•	•	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC E	CP27[3200	0,320001						descript	io
			.,.						n:	
description	n:									
Offset for	r \$TC_D	P7: \$TC_E	CP27[t,d]	comparab	le to \$TC	_DP16[t	,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, t	he synta	ax is as fo	llows:		
\$TC EC	P27[d]		-			-				
description	n of field l	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D ı	number 1	- 32000						
axis						NCK vei	rsion:	15.00.	00	
identifier:										
unit:	mm	min.:	DBL_MI	V			max.:	DBL_N	MAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch			link			L	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC_EC	P28[3200	0,32000]						descript	10
description									n:	
_		omparable	_							
When the	e 'flat D ni	umber mai	nagement	t' function i	is active, t	he synta	ıx is as fol	llows:		
\$TC_EC	P28[d]									
description	n of field lir	nits:								
t: T numb	er 1 - 32	000								
d: Cutting	g edge nu	ımber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	N			max.:	DBL_N	ЛAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch			link				

No restrictions

DOUBLE	\$TC_E	CP29[3200	0,32000]						descript	io
									n:	
description	n:									
Offset for	r \$TC_DI	P9: \$TC_E	CP29[t,d]	comparable	e to \$TC_	_DP18[t,	,d]			
When the	e 'flat D r	number ma	nagement	t' function is	active, tl	he synta	x is as fo	llows:		
\$TC EC	P29[d]									
description	n of field li	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D ı	number 1	- 32000						
axis						NCK ver	sion:	15.00.	00	
identifier:										
unit:	mm	min.:	DBL_MI	V			max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Χ				
write:	Х					Х				7
attributes:	global	block sear	rch	•		link	•	•	•	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC_E	CP30[3200	0,32000]						descript n:	Ю
description	n:									· ·
Offset for	r\$TC D	P10: \$TC	ECP30[t,d	l] comparab	le to \$TC	DP19	[t,d]			
When the	e 'flat D r	number ma	nagement	function is	active, th	e synta	x is as fo	llows:		
\$TC_EC	P30[d]									
description	n of field l	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D ı	number 1	- 32000						
axis					١	NCK ver	sion:	15.00.0	00	
identifier:		Tanaka .	1				1			
unit:	-	min.:	DBL_MI	N			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn	F	PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Χ				7
attributes:	global	block sear	ch		li	nk	•	•	•	
		Not class	sified		١	No rest	rictions			

DOUBLE	STC E	CP31[3200	0.320001					descript	io
			-,					n:	
description	<b>า</b> :								
Offset for	\$TC_D	P11: \$TC_I	ECP31[t,d	] comparab	le to \$TC_DP20[	[t,d]			
When the	e 'flat D r	number ma	nagement	function is	active, the synta	x is as fo	llows:		
\$TC_EC					-				
description	n of field I	imits:							
t: T numb	er 1 - 32	2000							
d: Cutting	g edge n	umber / D ı	number 1	- 32000					
axis					NCK ver	sion:	15.00.	00	
identifier:									
unit:	-	min.:	DBL_MIN	٧		max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	ch	1	link	L		<u> </u>	
		Not class	sified		No resti	rictions			

DOUBLE	\$TC_E	CP33[3200	0,32000]					n:	10
description	n:			l l				I	
Offset for	STC D	P3: \$TC E	CP33[t,d]	comparable to	\$TC DP12[t,	d]			
	_	_		t' function is ac		-	llows:		
\$TC_ECI	P33[d]		Ū		•				
description	n of field I	imits:							
t: T numb	er 1 - 32	2000							
d: Cutting	g edge n	umber / D r	number 1	- 32000					
axis identifier:					NCK ver	sion:	15.00.	00	
unit:	mm	min.:	DBL_MII	V		max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch	<u> </u>	link	L	L .		
		Not class	sified		No rest	rictions			

DOUBLE	\$TC_E	CP34[3200	0,32000]						descript	io
									n:	
description	n:									
Offset for	r \$TC_DI	P4: \$TC_E	CP34[t,d]	comparable	to \$TC_E	)P13[t,	d]			
When the	e 'flat D r	number ma	nagement	' function is	active, the	e synta	x is as fo	llows:		
\$TC_EC	P34[d]									
description	n of field li	mits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D r	number 1	- 32000						
axis					N	CK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	٧			max.:	DBL_N	ЛAX	
	run-in	main run	runin stp	Mrun syn	P	Р	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•	lir	nk	•	•	•	
		Not class	sified		N	lo restr	rictions			

DOUBLE	\$TC_EC	CP35[3200	0,32000]					descript	10
description	<u> </u> า:							n:	
	e 'flat D n	_		•	to \$TC_DP14 active, the syr		llows:		
description	of field li	mits:							
t: T numb d: Cutting		:000 umber / D r	number 1	- 32000					
axis identifier:					NCK v	ersion:	15.00.	00	
unit:	mm	min.:	DBL_MIN	V		max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	ch	1	link	l.	I.	<u> </u>	
		Not class	ified		No re	strictions			

DOUBLE	\$TC E	CP36[3200	0.320001					descript	io
			.,.					n:	
description	n:								
Offset for	r \$TC_D	P6: \$TC_E	CP36[t,d]	comparab	le to \$TC_DP15[	t,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, the synt	ax is as fo	llows:		
\$TC_EC			-		-				
description	n of field l	imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D i	number 1	- 32000					
axis					NCK ve	rsion:	15.00.	00	
identifier:									
unit:	mm	min.:	DBL_MII	V		max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sea	rch		link	l .		Į.	
		Not class	sified		No res	trictions			

DOUBLE	\$TC E	CP37[3200	0.320001					descript	10
			-,					n:	
description	1:								
Offset for	\$TC_D	P7: \$TC_E	CP37[t,d]	comparable to	\$TC_DP16[t	,d]			
When the	e 'flat D r	number ma	nagement	' function is ac	ctive, the synta	ax is as fo	llows:		
\$TC ECI	⊃37[d]				-				
description	of field I	imits:							
t: T numb	er 1 - 32	2000							
d: Cutting	edge n	umber / D r	number 1	- 32000					
axis identifier:	, ,				NCK ver	rsion:	15.00.	00	
unit:	mm	min.:	DBL_MI	١	•	max.:	DBL_N	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch	1	link	L			
		Not class	sified		No rest	rictions			

DOUBLE	\$TC_E	CP38[3200	0,32000]						descript	io
									n:	
description	n:									
Offset for	r \$TC_DI	P8: \$TC_E	CP38[t,d]	comparable	to \$TC_E	DP17[t,	d]			
When the	e 'flat D r	number ma	nagement	' function is	active, the	e synta	x is as fo	lows:		
\$TC EC	P38[d]									
description	n of field li	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D r	number 1	- 32000						
axis					N	ICK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	٧			max.:	DBL_N	ЛAX	
	run-in	main run	runin stp	Mrun syn	Р	P	SA	OPI	OEM	access rights
read:	Х					Χ				
write:	Х					Χ				7
attributes:	global	block sear	rch	•	liı	nk	•	•	•	
		Not class	sified		N	lo restr	rictions			

DOUBLE	<b>\$TC EC</b>	P39[3200	0.320001						descripti	0
			.,						n:	
description	1:									
Offset for	\$TC_DP	9: \$TC_E	CP39[t,d]	comparab	le to \$TC	_DP18[t	,d]			
When the	e 'flat D nu	ımber maı	nagement	' function i	s active, t	he synta	ax is as fo	llows:		
\$TC ECI	⊃39[d]		•			•				
description	of field lin	nits:								
t: T numb	er 1 - 320	000								
d: Cutting	edge nu	mber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	1			max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	X					Х				
write:	Х					Х				7
attributes:	global	block sear	rch			link	1	1		
		Not class	sified			No rest	rictions			

DOUBLE	\$TC E	CP40[3200	0,320001						descript	io
			.,.						n:	
description	n:									
Offset for	r \$TC_D	P10: \$TC_I	ECP40[t,d	l] compara	ble to \$TC	DP19	[t,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, th	e synta	ax is as fo	llows:		
\$TC_EC										
description	n of field I	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D r	number 1	- 32000						
axis					١	ICK ver	sion:	15.00.	00	
identifier:										
unit:	-	min.:	DBL_MI	N		max.			ЛΑХ	
	run-in	main run	runin stp	Mrun syn	F	PP	SA	OPI	OEM	access rights
read:	Х					Χ				
write:	Х					Χ				7
attributes:	global	block sea	rch	II.	li	nk	1		<u> </u>	
		Not class	sified		1	lo rest	rictions			

DOUBLE	\$TC_EC	P41[3200	0,32000]						descript	10
		•							n:	
description	າ:									
Offset for	\$TC DP	11: \$TC E	ECP41[t,d	] compara	ble to \$T0	C DP20	[t,d]			
				function i				llows:		
\$TC ECI	P41[d]		J		·	·				
	of field lin	nits:								
t: T numb	er 1 - 320	000								
d: Cutting	edae nu	mber / D r	number 1	- 32000						
axis	,					NCK ver	sion:	15.00.0	າດ	
identifier:								10.00.	,	
unit:	-	min.:	DBL_MIN	V			max.:	DBL_N	ИАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	X					Х				
write:	Χ					Х				7
attributes:	global	block sear	ch	<u>.                                      </u>		link			L	

No restrictions

DOUBLE	\$TC_E	P43[3200	0,32000]						descript n:	io
description	n:								II.	
		P3: \$TC E	CP43[t.d]	comparab	le to \$TC	DP12ft	dl			
		umber ma						llows:		
\$TC EC			3		, .					
description		mits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge ni	umber / D r	number 1	- 32000						
axis identifier:						NCK ver	sion:	15.00.	00	
unit:	mm	min.:	DBL_MIN	N			max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	L		link				
		Not class	sified			No rest	rictions			

DOUBLE	\$TC E	CP44[3200	0.320001						descript	IO
	*		-,						n:	
description	n:									
Offset for	r\$TC D	P4: \$TC E	CP44[t,d]	comparabl	le to \$TC	DP13[t	,d]			
		number ma						llows:		
\$TC EC			J		,	,				
description		limits:								
t: T numb	oer 1 - 3	2000								
d: Cutting	g edge n	umber / D i	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MII	N			max.:	DBL_N	ИΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	<u> </u>		link		<u> </u>	L	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC E	CP45[3200	0,320001						descript	io
			.,.						n:	
description	n:									
Offset for	r \$TC_D	P5: \$TC_E	CP45[t,d]	comparab	le to \$TC	_DP14[t	,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, t	he synta	ax is as fo	llows:		
\$TC EC	P45[d]		-			-				
description	n of field l	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D i	number 1	- 32000						
axis						NCK vei	rsion:	15.00.	00	
identifier:										
unit:	mm	min.:	DBL_MI	V			max.:	DBL_N	ИAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sea	rch			link				
		Not class	sified			No rest	rictions			

DOORFF	\$TC_EC	P46[3200	0,32000]						descript	0
									n:	
description	1:									
Offset for	\$TC DP	6: \$TC E	CP46[t,d]	comparabl	e to \$TC	DP15[t,	,d]			
When the	e 'flat D nu	ımber maı	nagement	' function is	s active.	he synta	x is as fo	llows:		
\$TC ECI			J		,	,				
description		nits:								
t: T numb	er 1 - 320	000								
		mber / D r	number 1	- 32000						
axis	cage na	IIIDCI / D I	idilibei i	- 32000		NCK ver	eion.	45.00.0	NO.	
identifier:						TOIL VOI	01011.	15.00.0	)()	
unit:	mm	min.:	DBL MIN	V		l.	max.:	DBL N	1AX	
			_			IDD	C A	_		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
rood										rights
read:	Х					X				
write:	X					Х				7
attributes:	global	block sear	ch	1 L		link		1	I	

No restrictions

DOUBLE	\$TC E	CP47[3200	0,320001						descript	io
			.,.						n:	
description	n:									
Offset for	r \$TC_D	P7: \$TC_E	CP47[t,d]	comparab	le to \$TC	_DP16[t	,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, t	he synta	ax is as fo	llows:		
\$TC EC	P47[d]		-			-				
description	n of field l	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D ı	number 1	- 32000						
axis						NCK vei	rsion:	15.00.	00	
identifier:										
unit:	mm	min.:	DBL_MIN	V			max.:	DBL_N	MAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sea	rch	1		link			I.	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC_EC	P48[3200	0,32000]						descript n:	Ю
description	1:			•						
Offset for	\$TC DF	28: \$TC E	CP48[t,d]	comparable	to \$TC	DP17[t,	d]			
When the	flat D n	umber mai	nagement	' function is	active, tl	he synta	x is as fo	llows:		
\$TC_ECI	P48[d]		·			•				
description	of field lin	mits:								
t: T numb	er 1 - 32	000								
d: Cutting	gedge nu	ımber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	N			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link	W.	•	•	
		Not class	ified			No resti	rictions			

DOUBLE	\$TC E	CP49[3200	0.320001					descript	io
			.,.					n:	
description	n:								
Offset for	r \$TC_D	P9: \$TC_E	CP49[t,d]	comparab	e to \$TC_DP18[t	,,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, the synt	ax is as fo	llows:		
\$TC EC	P49[d]		•						
description	n of field I	imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	a edge n	umber / D i	number 1	- 32000					
axis	Ĭ				NCK ve	rsion:	15.00.	00	
identifier:									
unit:	mm	min.:	DBL_MII	V		max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				X				7
attributes:	global	block sea	rch		link		l	L	
		Not class	sified		No res	rictions			

DOUBLE	\$TC EC	P50[3200	0.320001						descript	10
			-,						n:	
description	1:									
Offset for	\$TC_DF	P10: \$TC_I	ECP50[t,d	] compara	ble to \$T0	_DP19	[t,d]			
When the	e 'flat D n	umber ma	nagement	function i	s active, t	he synta	ax is as fo	llows:		
\$TC ECI	⊃50[d]					-				
description	n of field li	mits:								
t: T numb	er 1 - 32	000								
d: Cutting	g edge ni	ımber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	-	min.:	DBL_MIN	٧			max.:	DBL_N	ЛAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link			I	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC_EC	CP51[3200	0,32000]						descript	io
									n:	
description	n:									
Offset for	r \$TC_DI	P11: \$TC_I	ECP51[t,d	l] compara	ble to \$T0	C_DP20	[t,d]			
When the	e 'flat D n	umber ma	nagement	' function i	s active, t	he synta	x is as fo	llows:		
\$TC_EC	P51[d]									
description	n of field li	mits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge ni	umber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	-	min.:	DBL_MIN	٧			max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	X					X				
write:	Х					Х				7
attributes:	global	block sear	ch	1		link				
		Not class	sified			No rest	rictions			

DOUBLE	\$TC_E	CP53[3200	0,32000]						descript n:	Ю
description	n:				•					
Offset for	r \$TC_D	P3: \$TC_E	CP53[t,d]	comparab	le to \$TC	_DP12[t	,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active,	the synta	ax is as fo	llows:		
\$TC_EC	P53[d]									
description	n of field I	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D ı	number 1	- 32000						
axis						NCK vei	rsion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MII	N			max.:	DBL_N	ИAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sea	rch			link	•	•		
		Not class	sified			No rest	rictions			

DOUBLE	\$TC E	CP54[3200	0,320001						descript	io
			.,.						n:	
description	n:									
Offset for	r \$TC_D	P4: \$TC_E	CP54[t,d]	comparab	le to \$TC	_DP13[t	,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, t	he synta	ax is as fo	llows:		
\$TC EC	P54[d]		-			-				
description	n of field l	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D ı	number 1	- 32000						
axis						NCK vei	rsion:	15.00.	00	
identifier:										
unit:	mm	min.:	DBL_MIN	V			max.:	DBL_N	MAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sea	rch	1		link	1		I.	
		Not class	sified			No rest	rictions			

DOUBLE	<b>\$TC EC</b>	P55[3200	0,320001						descript	10
			.,						n:	
description	າ:									
Offset for	\$TC_DP	5: \$TC_E	CP55[t,d]	comparabl	le to \$TC	_DP14[t,	d]			
When the	e 'flat D nu	ımber maı	nagement	' function is	s active, t	he synta	x is as fo	llows:		
\$TC ECI	P55[d]					·				
description	of field lin	nits:								
t: T numb	er 1 - 320	000								
d: Cutting	g edge nu	mber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	1			max.:	DBL_N	ИΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Χ					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link	· ·			

No restrictions

DOUBLE	\$TC_EC	CP56[3200	0,32000]						descript	io
description	l n:								n:	
		P6: \$TC E	CP56[t d]	comparab	le to \$TC	DP15It	d]			
		number ma						llows.		
\$TC EC		idilibei ilia	nagemen	. Tarrottorr	5 dolivo, t	ine Synte	ix 15 d5 10	110W3.		
description		mits:								
t: T numb	per 1 - 32	2000								
d: Cutting	g edge ni	umber / D r	number 1	- 32000						
axis	1					NCK ver	sion:	15.00.	00	
identifier:										
unit:	mm	min.:	DBL_MIN	1			max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				<u> </u>
write:	Х					Х				7
attributes:	global	block sear	rch	1		link	1			
		Not class	sified			No rest	rictions			

DOUBLE	\$TC_EC	CP57[3200	0,32000]						descript	10
		-							n:	
description	1:									
Offset for	\$TC_DI	P7: \$TC_E	CP57[t,d]	comparable	e to \$TC	DP16[t	,d]			
When the	e 'flat D r	umber ma	nagement	' function is	active, t	he synta	ax is as fo	llows:		
\$TC EC	P57[d]		•			•				
description	of field li	mits:								
t: T numb	er 1 - 32	2000								
d: Cutting	edge n	umber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	٧			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	1		link	1	ı		
		Not class	sified			No rest	rictions			

DOUBLE	\$TC E	CP58[3200	0,320001						descript	io
			.,.						n:	
description	n:									
Offset for	r \$TC_D	P8: \$TC_E	CP58[t,d]	comparab	le to \$TC	_DP17[t	,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, t	he synta	ax is as fo	llows:		
\$TC_EC			-			-				
description	n of field I	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D ı	number 1	- 32000						
axis						NCK vei	rsion:	15.00.	00	
identifier:										
unit:	mm	min.:	DBL_MIN	N			max.:	DBL_N	ИAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sea	rch	1		link	1		1	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC E	CP59[3200	0.320001					descript	10
			-,					n:	
description	1:								
Offset for	\$TC_D	P9: \$TC_E	CP59[t,d]	comparable to	\$TC_DP18[t	,d]			
When the	e 'flat D r	number ma	nagement	t' function is ac	tive, the synta	ax is as fo	llows:		
\$TC ECI	⊃59[d]				-				
description	of field I	imits:							
t: T numb	er 1 - 32	2000							
d: Cutting	g edge n	umber / D ı	number 1	- 32000					
axis identifier:					NCK vei	rsion:	15.00.	00	
unit:	mm	min.:	DBL_MIN	V	•	max.:	DBL_N	ИАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	ch	<u>l</u>	link				
		Not class	sified		No rest	rictions			

DOUBLE	\$TC_E	CP60[3200	0,32000]						descript	io
									n:	
description	n:									
Offset for	r \$TC_DI	P10: \$TC_I	ECP60[t,c	l] comparab	le to \$TC	C_DP19	[t,d]			
When the	e 'flat D r	number ma	nagement	t' function is	active, tl	he synta	x is as fo	llows:		
\$TC_EC	P60[d]									
description	n of field li	imits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge n	umber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.	00	
identifier:										
unit:	-	min.:	DBL_MI	٧			max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•		link	•	•	•	
		Not class	sified			No rest	rictions			

DOUBLE	STC E	CP61[3200	0.320001						descript	10
			.,.						n:	
description	1:									
Offset for	*\$TC_DI	P11: \$TC_I	ECP61[t,d	l] compara	ble to \$T0	C_DP20	[t,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, t	he synta	ax is as fo	llows:		
\$TC ECI	P61[d]					-				
description		mits:								
t: T numb	er 1 - 32	2000								
d: Cutting	g edge n	umber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	-	min.:	DBL_MIN	N			max.:	DBL_N	ЛAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	1		link				
		Not class	sified			No rest	rictions			

DOUBLE	\$TC E	CP63[3200	0.320001					descript	io
	<b>*</b>		-,,					n:	
description	n:								
Offset for	r \$TC_D	P3: \$TC_E	CP63[t,d]	comparable t	:o \$TC_DP12[t	,d]			
When the	e 'flat D r	number ma	nagement	' function is a	ctive, the synta	ax is as fo	llows:		
\$TC EC			•		•				
description	n of field l	imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D i	number 1	- 32000					
axis					NCK ver	rsion:	15.00.	00	
identifier:									
unit:	mm	min.:	DBL_MII	٧		max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sea	rch	1	link			<u> </u>	
		Not class	sified		No rest	rictions			

DOUBLE	\$TC EC	P64[3200	0.320001						descripti	0
	<b>*</b> · · · · ·		-, <b>,</b>						n:	
description	1:									
Offset for	\$TC_DP	4: \$TC_E	CP64[t,d]	comparabl	le to \$TC	_DP13[t,	d]			
When the	e 'flat D nu	ımber maı	nagement	' function is	s active, t	he synta	x is as fol	lows:		
\$TC_ECI	P64[d]									
description	of field lin	nits:								
t: T numb	er 1 - 320	000								
d: Cutting	g edge nu	mber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	1			max.:	DBL_M	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	X					Х				
write:	Χ					Х				7
attributes:	global	block sear	ch			link	· L	1	I.	
		1								

No restrictions

DOUBLE	\$TC_E	CP65[3200	0,32000]						descript	io
description	l n:								n:	
		P5: \$TC E	CP65[t d]	comparab	le to \$TC	DP14It	d]			
		number ma						llows.		
\$TC EC		idilibei ilidi	nagemen	. Turicuoiri	o dolive, t	iic Syiic	IX 13 43 10	iiows.		
description		mits:								
t: T numb	per 1 - 32	2000								
d: Cutting	a edge ni	umber / D r	number 1	- 32000						
axis	ĺ					NCK ver	sion:	15.00.	00	
identifier:										
unit:	mm	min.:	DBL_MIN	N			max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				J
write:	Х					Х				7
attributes:	global	block sear	rch	1		link		I.	<u> </u>	
		Not class	sified			No rest	rictions			

DOORLE	\$TC_E	CP66[3200	0,32000]					descript	10
		-						n:	
description	n:								
Offset for	r \$TC_D	P6: \$TC_E	CP66[t,d]	comparable t	o \$TC_DP15[t,	d]			
When the	e 'flat D ı	number ma	nagement	t' function is a	ctive, the synta	x is as fo	llows:		
\$TC EC	P66[d]		-		-				
description	n of field	limits:							
t: T numb	oer 1 - 3	2000							
d: Cutting	g edge n	umber / D i	number 1	- 32000					
axis identifier:					NCK ver	sion:	15.00.	00	
unit:	mm	min.:	DBL_MII	V		max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sea	rch		link	· ·		1	
		Not class	sified		No rest	rictions			

DOUBLE	\$TC E	CP67[3200	0.320001					descript	io
			.,.					n:	
description	n:								
Offset for	r \$TC_D	P7: \$TC_E	CP67[t,d]	comparab	le to \$TC_DP16[t	,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, the synta	ax is as fo	llows:		
\$TC EC	P67[d]		•		•				
description	n of field I	imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D i	number 1	- 32000					
axis	Ĭ				NCK ve	rsion:	15.00.	00	
identifier:								••	
unit:	mm	min.:	DBL_MII	V		max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sea	rch		link			I	
		Not class	sified		No rest	rictions			

DOUBLE	<b>\$TC EC</b>	P68[3200	0.320001						descripti	0
			.,						n:	
description	1:									
Offset for	*\$TC_DP	8: \$TC_E	CP68[t,d]	comparable	e to \$TC	_DP17[t,	d]			
When the	e 'flat D nu	ımber maı	nagement	' function is	active, t	he synta	x is as fol	lows:		
\$TC EC	P68[d]		•			•				
description	n of field lin	nits:								
t: T numb	er 1 - 320	000								
d: Cutting	g edge nu	mber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	mm	min.:	DBL_MIN	٧			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	1		link	I.			
		1								

No restrictions

DOUBLE	\$TC_E	CP69[3200	0,32000]						descript	io
description	u.								n:	
		P9: \$TC E	CP69[t d]	comparab	le to \$TC	DP18It	d]			
		number ma						llows.		
\$TC EC		idilibei ilidi	nagemen	. Turicuoiri	o dolive, t	iic Syiic	17 13 43 10	iiows.		
description		mits:								
t: T numb	per 1 - 32	2000								
d: Cutting	a edge ni	umber / D r	number 1	- 32000						
axis	ĺ					NCK ver	sion:	15.00.	00	
identifier:										
unit:	mm	min.:	DBL_MI	N			max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				J
write:	Х					Х				7
attributes:	global	block sear	ch	1		link	1	I.		
		Not class	sified			No rest	rictions			

DOUBLE	\$TC EC	CP70[3200	0.320001						descript	10
			.,.						n:	
description	1:									
Offset for	*\$TC_DI	P10: \$TC_I	ECP70[t,d	l] compara	ble to \$T0	C_DP19	[t,d]			
When the	e 'flat D r	number ma	nagement	t' function i	s active, t	he synta	ax is as fo	llows:		
\$TC EC	P70[d]					-				
description	n of field li	mits:								
t: T numb	er 1 - 32	2000								
d: Cutting	g edge ni	umber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier:										
unit:	-	min.:	DBL_MIN	N			max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch			link	•		•	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC_E	CP71[3200	0,32000]					descript	io
		-						n:	
description	า:								
Offset for	*\$TC_DI	P11: \$TC_I	ECP71[t,c	l] comparable	to \$TC_DP20	[t,d]			
When the	e 'flat D r	number ma	nagement	function is a	ctive, the synta	ax is as fo	llows:		
\$TC EC	P71[d]		•		•				
description	n of field li	mits:							
t: T numb	er 1 - 32	2000							
d: Cutting	g edge ni	umber / D r	number 1	- 32000					
axis					NCK ver	sion:	15.00.	00	
identifier:									
unit:	-	min.:	DBL_MI	٧		max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X				
write:	Х				X				7
attributes:	global	block sear	ch	<u> </u>	link	1		I .	
		Not class	sified		No rest	rictions			

# 1.1.9 Tool management monitoring data

DOUBLE	\$TC_M	OP1[32000	,32000]					descript	io
								n:	
description	า:								
\$TC_MO	P1[t,d]								
Prewarni	ng limit f	or downtim	е						
description	n of field li	mits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D r	number 1	- 32000					
axis					NCK ver	sion:	06.00.	00	
identifier:									
unit:	-	min.:				max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch	•	link	•	•	•	
		Not class	sified		No rest	rictions			

DOUBLE					1				Idooorintio	
DOUBLE	\$TC_M	OP2[32000	),32000]						descriptio n:	
descriptio	n:								ļ11.	1
STC MC	P2[t.d]									
Residual										
descriptio	n of field l	imits:								
t: T numb										
	g edge n	umber / D ı	number 1	- 32000						
axis						NCK ver	sion:	06.00.0	00	
identifier: unit:		lmin.:					max.:	DBL N	11	
	run-in	main run	runin stp	I Mrup ovn	1	IPP	SA	OPI	TOEM	access
	Turi-iri	Illalli Tuli	ταιτιίτ διρ	Mrun syn		FF	SA	OFI	OEIVI	rights
read:	Х					Х				rigitio
write:	Х					Х				7
attributes:	global	block sear	rch	1		link		I		
		Not class	sified			No rest	rictions			
	1					I				1
INT	\$TC M	OP3[32000	,320001						descriptio	
al a a a al a di a									n:	
descriptio										
\$TC_MC		or workpied	oo oount							
descriptio	n of field l	imits:	Se Courit							
t: T numb										
		umber / D ı	number 1	- 32000						
axis	1					NCK ver	sion:	06.00.0	00	
identifier:										
unit:	-	min.:	INT_MIN				max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				rigitto
write:	Х					Х				7
attributes:	global	block sear	rch	ı		link		II.		
		Not class	sified			No rest	rictions			
	1					1				1
INT	\$TC_M	OP4[32000	,32000]						descriptio n:	
descriptio	l n:								111.	
\$TC MC										
Residual	workpie	ces								
descriptio	n of field l	imits:								
t: T numb	oer 1 - 32	2000								
1.1 0 11:				00000						

\$TC_MO	P4[t,d]								
Residual	workpied	ces							
description	n of field li	mits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge ni	umber / D r	number 1	- 32000					
axis					NCK ver	sion:	06.00.	00	
identifier:									
unit:	-	min.:	INT_MIN	I	·	max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch		link				
		Not class	sified		No rest	rictions			

DOUBLE	\$TC_M	OP5[32000	),32000]						description:	
description	<u> </u> า:								111.	
\$TC MO	P5[t,d]									
Prewarni	ng limit f	or wear								
description	n of field li	mits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge ni	umber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier: unit:		min.:	1				max.:			
unit.	mm							DBL_M		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				1.3
write:	Х					Х				7
attributes:	global	block sear	rch	•	•	link		•	•	
		Not class	sified			No rest	rictions			
DALIBLE	la=a				T.				Idooorintio	<u> </u>
DOUBLE	\$TC_M	OP6[32000	),32000]						description:	,
description	า:				l				11.	
\$TC MO	P6[t.d]									
Residual										
description	n of field li	mits:								
t: T numb	oer 1 - 32	2000								
	g edge n	umber / D r	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier: unit:	mm	Imin.:					max.:	DBL M	11	
	mm run-in	main run	runin stp	Mrun syn		PP	SA	OPI	IOEM	access
	Turi-iri	IIIaiii Tuii	ται ιιι διρ	Wildir Syll			SA.	OFI	OLIVI	rights
read:	Х					Х				ngnto
write:	Х					Х				7
attributes:	global	block sear	rch		I	link			I	
		Not class	sified			No rest	rictions			
DOUBLE	\$TC_M	OP11[3200	00,32000]						description	)
description	ր. 								n:	
\$TC_MO										
Specified										
description	n of field li	mits:								
t: T numb										
		umber / D ı	number 1	- 32000						
axis						NCK ver	sion:	15.00.0	00	
identifier: unit:		min.:					lmay :		4.4.\/	
uiiit.	-						max.:	DBL_M		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х				1	Х				

Χ

No restrictions

7

block search
Not classified

write:

attributes: global

Χ

INT	\$TC_M	OP13[3200	0,32000]					descripti	0
	. –	-	<u> </u>					n:	
descriptio	n:								
\$TC_MC	P13[t,d]								
Specified	d workpie	ce count							
descriptio	n of field li	mits:							
t: T numb	oer 1 - 32	.000							
d: Cutting	g edge ni	umber / D r	number 1	- 32000					
axis					NCK ver	sion:	15.00.0	00	
identifier:									
unit:	-	min.:	INT_MIN			max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch		link	<del>- 1</del>		•	
		Not class	sified		No resti	rictions			

DOUBLE	*TC_MOP15[32000,32000]							descripti	0
		-	, -					n:	
description	1:								
\$TC_MO	P15[t,d]								
Specified	wear								
description	n of field li	mits:							
t: T numb	er 1 - 32	000							
d: Cutting	g edge ni	ımber / D r	number 1	- 32000					
axis					NCK ver	sion:	15.00.0	00	
identifier:									
unit:	mm	min.:				max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch	1	link	L	L		
		Not class	sified		No rest	rictions			

## 1.1.10 OEM user monitoring data

INT	\$TC_M	OPC1[3200	00,32000]						descript	io
		-	<u> </u>						n:	
description	n:									
The type	can be s	specified by	/ machine	data. INT	is the def	ault setti	ng			
\$TC_MO	PC1[t,d]									
description	n of field li	mits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge ni	umber / D r	number 1	- 32000						
axis						NCK ver	sion:	06.00.	00	
identifier:										
unit:	-	min.:	INT_MIN				max.:	INT_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:				1						rights
	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•		link	•	•	•	
		Not class	sified			No rest	rictions			

INT	\$TC_M	OPC2[320	00,32000]					descripti n:	0
description	n:			·				ı	
The type	can be	specified by	/ machine	data. INT is the	ne default setti	ng			
\$TC_MO	PC2[t,d]								
description	n of field l	imits:							
t: T numb	er 1 - 32	2000							
d: Cutting	g edge n	umber / D ı	number 1	- 32000					
axis					NCK ver	sion:	06.00.	00	
identifier:									
unit:	-	min.:	INT_MIN	I		max.:	INT_M	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	rch	1	link			1	
		Not class	sified		No restr	rictions			

descriptio

descriptio

### 1.1 List of system variables

\$TC\_MOPC4[32000,32000]

\$TC\_MOPC5[32000,32000]

INT	\$TC_M	OPC3[320	00,32000					descript	io
		•						n:	
description	n:								
The type	can be	specified by	/ machine	data. INT is	the default sett	ing			
\$TC_MO	PC3[t,d]								
description	n of field I	imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D r	number 1	- 32000					
axis					NCK ve	rsion:	06.00.	00	
identifier:									
unit:	-	min.:	INT_MIN	I		max.:	INT_N	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				<u> </u>
write:	Х				X				7
attributes:	global	block sear	rch	•	link	•		•	
		Not class	sified		No rest	rictions			

		_	_						n:	
description	1:									
The type	can be sp	ecified by	machine	data. INT	is the def	ault setti	ng			
\$TC MO	PC4[t,d]	•					•			
description	of field lin	nits:								
t: T numb	er 1 - 320	000								
d: Cutting	g edge nu	mber / D r	number 1	- 32000						
axis						NCK ver	sion:	06.00.0	00	
identifier:										
unit:	-	min.:	INT_MIN				max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				_
write:	Х					Х				7
attributes:	global	block sear	ch	•		link	•	•	•	
		Not class	ified			No restr	rictions			

description	n:								
The type	can be sp	ecified by	machine	data. INT is th	e default setti	ng			
\$TC_MO	PC5[t,d]	-				-			
description	n of field lin	nits:							
t: T numb	er 1 - 320	000							
d: Cutting	g edge nu	mber / D r	number 1	- 32000					
axis identifier:					NCK ver	sion:	06.00.0	00	
unit:	-	min.:	INT_MIN		•	max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch		link				
		Not class	ified		No restr	rictions			

INT	\$TC_M	OPC6[3200	00,32000]						descript n:	io
description	า:								11.	
\$TC_MO	PC6[t,d]		/ machine	data. INT	is the def	fault setti	ing			
description	n of field li	mits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge ni	umber / D r	number 1	- 32000						
axis identifier:						NCK ver	sion:	06.00.0	00	
unit:	-	min.:	INT_MIN				max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch		<u> </u>	link		L	I	
		Not class	sified			No rest	rictions			
			•		•			•		•
INT	\$TC_M	OPC7[3200	00,32000]						descript	io
d		-	•						n:	

description	n:									
		pecified by	/ machine	data. INT i	s the def	ault setti	ng			
\$TC_MO										
description	n of field lir	nits:								
t: T numb	oer 1 - 320	000								
d: Cutting	g edge nu	mber / D r	number 1	- 32000						
axis						NCK ver	sion:	06.00.	00	
identifier:										
unit:	-	min.:	INT_MIN				max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	X					Х				
write:	Х					Х				7
attributes:	global	block sear	rch			link	•	•	•	
		Not class	sified			No restr	rictions			

INT	\$TC M	OPC8[320	00,32000					description	1
		•	<i>'</i>					n:	
description	า:								
The type	can be s	specified by	/ machine	data. INT is th	e default sett	ing			
\$TC_MO						J			
description									
t: T numb	oer 1 - 32	2000							
	-	umber / D ı	number 1	- 32000					
axis	l cage ii	arriber / D i	idilibei i	02000	INCK ver	sion.	06.00.0	<u> </u>	
identifier:					1.1011.10	0.0	00.00.0	U	
unit:	-	min.:	INT_MIN	I	!	max.:	INT_MA	·Χ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				j
write:	Х				Х				7
attributes:	global	block sear	ch	•	link			1	
		Not class	sified		No rest	rictions			1

descriptio

#### 1.1 List of system variables

\$TC\_MOPC10[32000,32000]

INT	\$1C_MOF C3[32000,32000]								io
dooorintio								n:	
description									
The type	can be	specified by	/ machine	data. INT is th	e default setti	ing			
\$TC_MO									
description	n of field l	imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D ı	number 1	- 32000					
axis					NCK ver	sion:	06.00.	00	
identifier:									
unit:	-	min.:	INT_MIN	I		max.:	INT_N	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				rigitis
write:	Х				Х				7
attributes:	global	block sear	rch	•	link		•		
		Not class	sified		No rest	rictions			

		_		_					n:	
description	า:									
The type	can be s	pecified by	/ machine	data. INT	is the def	ault setti	ng			
\$TC_MO	PC10[t,d	]					_			
description	n of field li	mits:								
t: T numb	oer 1 - 32	000								
d: Cutting	g edge nu	ımber / D r	number 1	- 32000						
axis						NCK ver	sion:	06.00.0	00	
identifier:										
unit:	-	min.:	INT_MIN				max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch			link	•	•	•	
		Not class	sified			No restr	rictions			

INT	STC M	OPCS1[32	000.3200	01				descript	io
	*		,	•				n:	
description	n:			•					
The type	can be	specified by	/ machine	data. INT is t	he default setti	ing			
\$TC MO	PCS1[t,	d]				•			
description									
t: T numb	er 1 - 32	2000							
d: Cutting	g edge n	umber / D ı	number 1	- 32000					
axis					NCK ver	sion:	18.00.	00	
identifier:									
unit:	-	min.:	INT_MIN		•	max.:	INT_M	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				J
write:	Х				X				7
attributes:	global	block sear	rch		link	•	•		
		Not class	sified		No rest	rictions			

INT	\$TC MO	OPCS2[32	000,3200	01					descriptio	
	. –		,	•					n:	
description	n:									
The type	can be s	pecified by	/ machine	data. INT	is the def	ault setti	ing			
\$TC_MO	PCS2[t,c	d]								
description	n of field li	mits:								
t: T numb	oer 1 - 32	2000								
d: Cutting	g edge ni	umber / D i	number 1	- 32000						
axis						NCK ver	sion:	18.00.0	0	
identifier:										
unit:	-	min.:	INT_MIN				max.:	INT_MA	λХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					X				
write:	Х					Х				7
attributes:	global	block sear	rch	•	•	link		•		
		Not class	sified			No rest	rictions			
						•				
INT	\$TC MO	OPCS3[32	000,3200	01					descriptio	
	· –	•	•	-					n:	İ

									[1].	
description	า:									
The type	can be sp	pecified by	/ machine	data. INT is	s the def	ault setti	ng			
\$TC MO	PCS3[t,d	ا آ								
description	n of field lin	nits:								
t: T numb	oer 1 - 320	000								
d: Cutting	edge nu	mber / D r	number 1	- 32000						
axis	ĺ					NCK ver	sion:	18.00.0	00	
identifier:										
unit:	-	min.:	INT_MIN				max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Χ				
write:	Х					Х				7
attributes:	global	block sear	rch	1 L		link	1	1		
		Not class	sified			No restr	rictions			

INI	\$TC_M	OPCS4[32	000,3200	0]				n:	
description	1:			"					
The type	can be s	specified by	/ machine	data. INT is t	the default setti	ng			
\$TC_MO	PCS4[t,	[b				-			
description	of field I	mits:							
t: T numb	er 1 - 32	2000							
d: Cutting	g edge n	umber / D r	number 1	- 32000					
axis					NCK vers	sion:	18.00.0	00	
identifier:									
unit:	-	min.:	INT_MIN			max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				X				7
attributes:	global	block sear	ch		link	•	•	•	
		Not class	sified		No restr	rictions			

#### 1.1 List of system variables

INT	\$TC M	OPCS5[32	000,3200	0]				descript	io
	. –	-	<u> </u>	-				n:	
descriptio	n:								
The type	can be	specified by	/ machine	data. INT	is the default se	tting			
\$TC_MC	PCS5[t,	d]							
descriptio	n of field l	imits:							
t: T numb	oer 1 - 32	2000							
d: Cutting	g edge n	umber / D i	number 1	- 32000					
axis					NCK v	ersion:	18.00.	00	
identifier:									
unit:	-	min.:	INT_MIN			max.:	INT_N	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				Ĭ
write:	Х				X				7
attributes:	global	block sear	rch		link	*	•	•	
		Not class	sified		No res	strictions			

INT	\$TC_MC	PCS6[32	000,32000	0]					description:	
description	1:								-1	-1
The type \$TC_MO description	PCS6[t,d	]	machine	data. INT	is the def	ault setti	ng			
t: T numb	-	000 mber / D r	number 1	- 32000						
axis identifier:						NCK ver	sion:	18.00.00	)	
unit:	-	min.:	INT_MIN				max.:	INT_MA	X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	•		link	•	•		
		Not class	sified			No rest	rictions			

INT	\$TC_M	OPCS7[32	000,3200	0]				descript n:	io
description	n:			I				I	
\$TC_MO	PCS7[t,	d]	/ machine	data. INT is th	e default setti	ing			
description									
t: T numb	er 1 - 32	2000							
d: Cutting	g edge n	umber / D i	number 1	- 32000					
axis identifier:					NCK ver	sion:	18.00.	00	
unit:	-	min.:	INT_MIN		•	max.:	INT_M	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch		link	1	1		
		Not class	sified		No rest	rictions			

INT	\$TC_M	OPCS8[32	000,3200	0]				descript	iio
description	J.							n:	
•	can be s PCS8[t,	d]	/ machine	data. INT is th	e default sett	ing			
t: T numb d: Cutting		2000 umber / D i	number 1	- 32000					
axis dentifier:					NCK vei	rsion:	18.00.	00	
unit:	-	min.:	INT_MIN	I	•	max.:	INT_N	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				T T
write:	Х				Х				7
attributes:	global	block sea	rch	I I	link				
		Not class	sified		No rest	rictions			
	ı	,			,				
INT	\$TC_M	<b>OPCS9[32</b>	000,3200	0]				descript	tio

	ψ I O_IVI	01 000[02	000,0200	<b>0</b> ]					n:	
description	n:									
The type \$TC_MO description	PCS9[t,d	j]	/ machine	data. INT	is the def	ault setti	ng			
t: T numb d: Cutting		2000 umber / D i	number 1	- 32000						
axis identifier:						NCK ver	sion:	18.00.0	00	
unit:	-	min.:	INT_MIN				max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sea	ch			link	•	•	-	
		Not class	sified			No resti	rictions			

INT	\$TC_MC	PCS10[3:	2000,3200	[00					descriptio	1
		-		-					n:	
description	1:									
The type	can be sp	pecified by	machine	data. INT	is the def	ault setti	ng			
\$TC MO	PCS10[t,	d]								
description	of field lin	nits:								
t: T numb	er 1 - 320	000								
d: Cutting	g edge nu	mber / D r	number 1	- 32000						
axis						NCK vers	sion:	18.00.0	00	
identifier:										
unit:	-	min.:	INT_MIN			•	max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	•		link	•	•	<b>,</b>	
		Not class	sified			No restr	ictions			

#### 1.1.11 Tool-related data

СТВІКІС	A=c -			1				Idocorintic				
STRING	STC_TF	P2[32000]						-				
description	n:							1111	1			
\$TC_TP2	2[t]											
Tool ider												
description	n of field li	imits:										
t: T numb	oer 1 - 32	2000										
axis					NCK vei	rsion:	06.00.0	00				
identifier: unit:		Imin :				Imov :						
uriit.	-	min.:				max.:						
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights			
read:	X				Х							
write:												
attributes:	global	block sear	rch	1	link							
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	\$IC_IF	P1[32000]						descriptio n:    descriptio   n:   descriptio   n:   descriptio   n:   descriptio   n:   descriptio   n:   descriptio   n:				
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	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights			
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INT	¢TC TE	3[32000]		Ī				Idescriptio	1			
	φ1 <b>C</b> _11	3[32000]						-				
description	n:								•			
\$TC_TP3	3[t]											
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axis					NCK vei	sion:	06.00.0	00				
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block sea	rch	I I	link	l .		I		
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	main run	1141_101114	main run runin stp Mrun syn  block search	main run runin stp Mrun syn PP  X  block search link	main run runin stp Mrun syn PP SA  X  block search link	main run runin stp Mrun syn PP SA OPI  X X block search link	main run runin stp Mrun syn PP SA OPI OEM  X  block search link	

INT	\$TC TP	5[32000]							descripti	0
	Ψ.Ο	J[J2000]							n:	
description	n:			•						
\$TC TPS	5[t]									
Size at to	p									
description		mits:								
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	run-in	main run	runin stp	Mrun syn	PF	)	SA	OPI	OEM	access rights
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write:	Х					Χ				7
attributes:	global	block sear	rch	· ·	linl	(	•	•	•	
		Not class	sified		No	restr	rictions			

INT	\$TC T	P6[32000]						descript	io
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descriptio	n:							•	
\$TC_TP	6[t]								
Size at b	ottom								
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t: T num	ber 1 - 32	2000							
axis					NCK ver	rsion:	06.00.	00	
identifier:									
unit:	-	min.:	INT_MIN	I	<del>.</del>	max.:	INT_N	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
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write:	Х				Х				7
attributes	: global	block sea	rch		link	1		Į.	
		Not class	sified		No rest	rictions			

INT	\$TC TE	P7[32000]						descript	io
								n:	
description	n:			-					
\$TC_TP7	7[t]								
Magazine		n type							
description	n of field l	imits:							
t: T numb	oer 1 - 32	2000							
axis identifier:					NCK ver	sion:	06.00.	00	
unit:	-	min.:	INT_MIN	1		max.:	INT_N	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				Ĭ
write:	Х				Х				7
attributes:	global	block sear	rch		link			L	
		Not class	sified		No rest	rictions			

INT	STC TE	P8[32000]						descript	io
	ψ. O	0[02000]						n:	
description	n:			•					•
\$TC TP8	3[t]								
Status									
description	n of field li	mits:							
t: T numb	er 1 - 32	2000							
axis identifier:					NCK ver	sion:	06.00.	00	
unit:	-	min.:	INT_MIN		L	max.:	INT_M	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				J
write:	Х				Х				7
attributes:	global	block sear	ch	, ,	link	•	,	•	
		Not class	sified		No rest	rictions			

INT	\$TC_TP	9[32000]						descriptio	
								n:	
description	1:								
\$TC_TP9	9[t]								
Type of t	ool monite	oring							
description									
t: T numb	er 1 - 320	000							
axis					NCK ver	sion:	06.00.0	00	
identifier:									
unit:	-	min.:	INT_MIN		•	max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch	•	link	•	•	•	
		Not class	sified		No rest	rictions			

INT	\$TC_TF	P11[32000]						description	0
								n:	
description	n:								
\$TC_TP	11[t]								
Replacer	ment-cha	inge strate	ЗУ						
description	n of field l	imits:							
t: T numb	oer 1 - 32	2000							
axis					NCK v	ersion:	06.00.	00	
identifier:									
unit:	-	min.:	INT_MIN		·	max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X				
write:	Х				X				7
attributes:	global	block sea	rch	I	link			·	
		Not class	sified		No res	strictions			
INIT								Idogorintia	-

INT	STC TF	10[32000]						descriptio	
								n:	
description	1:								
\$TC_TP	10[t]								
Tool info									
description	n of field li	mits:							
t: T numb	er 1 - 32	2000							
axis					NCK ver	sion:	06.00.	00	
identifier:									
unit:	-	min.:	INT_MIN	l		max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch	1	link		I		
		Not class	sified		No resti	rictions			

DOUBLE	STC TP	C1[32000]	1						descript	io
			•						n:	
description	n:									
The type	can be s	pecified by	/ machine	data. INT	is the def	ault setti	ng			
\$TC_TPO	C1[t]									
description	n of field li	mits:								
t: T numb	oer 1 - 32	.000								
axis						NCK ver	sion:	06.00.	00	
identifier:										
unit:	-	min.:	DBL_MI	V		•	max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch			link	•	•	•	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC_TP	C2[32000]							descriptio	
			-						n:	
description	1:									
		ecified by	machine	data. INT	is the def	ault setti	ng			
\$TC_TPC										
description	n of field lin	nits:								
t: T numb	er 1 - 320	000								
axis						NCK vers	sion:	06.00.0	10	
identifier:										
unit:	-	min.:	DBL_MIN	1		-	max.:	DBL_N	IAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link				
		Not class	sified			No restr	rictions		•	

DOUBLE	\$TC TI	PC3[32000]	1					descript	io
	<b>V</b> · · · _ · ·		•					n:	
description	n:							•	•
The type	can be	specified by	/ machine	data. INT is th	e default setti	ing			
\$TC TPO						J			
description		imits:							
t: T numb									
axis identifier:					NCK ver	rsion:	06.00.	00	
unit:	-	min.:	DBL_MII	٧	•	max.:	DBL_N	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sea	rch	1	link		1	Į.	
		Not class	sified		No rest	rictions			

DOUBLE	\$TC TPO	C4[32000]							descriptio	
	<b>*</b> - • <u>_</u> - · ·	- 1.0							n:	
description	1:								•	
The type	can be sp	ecified by	machine	data. INT	is the def	ault settir	ng			
STC TPC		•					J			
description	of field lin	nits:								
t: T numb	er 1 - 320	000								
axis						NCK vers	sion:	06.00.00	)	
identifier:										
unit:	-	min.:	DBL_MIN	٧		•	max.:	DBL_MA	λX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	•		link	•	•	•	
		Not class	sified			No restr	ictions			

DOUBLE	\$TC_TF	PC5[32000	1						descriptio	'
		-	-						n:	
description	า:									
The type	can be s	specified by	/ machine	data, INT	is the def	ault sett	ina			
\$TC_TP		.,	,				9			
description	າ of field li	imits:								
•										
t: T numb	er 1 - 32	2000								
axis						NCK ver	sion:	06.00.0	00	
identifier:										
unit:	-	min.:	DBL_MIN	V		•	max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
				•						rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sea	rch			link	I .	l .		
		Not class	sified			No rest	rictions			
1	I .	1				1				.

DOUBLE	\$TC TE	PC6[32000]	1					descript	io
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description	1:								
The type	can be s	specified by	/ machine	data. INT is t	he default setti	ing			
STC TPO						Ü			
description	of field I	imits:							
t: T numb	er 1 - 32	2000							
axis					NCK ver	sion:	06.00.	00	
identifier:							00.00.		
unit:	-	min.:	DBL_MII	V		max.:	DBL_N	ИАX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	rch	1	link	1	I.		
		Not class	sified		No rest	rictions			

DOUBLE	\$TC TP	C7[32000]	1						descript	0
									n:	
description	1:									
The type	can be s	pecified by	/ machine	data. INT	is the def	ault setti	ng			
\$TC TPC	C7[t]	•					_			
description	of field lir	nits:								
t: T numb	er 1 - 320	000								
axis						NCK ver	sion:	06.00.0	00	
identifier:										
unit:	-	min.:	DBL_MIN	٧		•	max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•		link	•	•	•	
		Not class	sified			No restr	rictions			

DOUBLE	\$TC TI	PC8[32000]	1					descript	io
			•					n:	
descriptio	n:								
\$TC_TP	C8[t]		/ machine	data. INT is th	e default sett	ing			
descriptio									
t: T numb	per 1 - 32	2000							
axis identifier:					NCK ver	rsion:	06.00.	00	
unit:	-	min.:	DBL_MII	V	*	max.:	DBL_N	ИАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sea	rch		link	1		1	
		Not class	sified		No rest	rictions			

DOUBLE	\$TC_TI	PC9[32000	]					descript n:	io
description	n:								
\$TC_TP	C9[t]		/ machine	data. INT is th	e default sett	ing			
description	n of field l	imits:							
t: T numb	oer 1 - 32	2000							
axis identifier:					NCK vei	rsion:	06.00.	00	
unit:	-	min.:	DBL_MII	٧		max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sea	rch		link			L	
		Not class	sified		No rest	rictions			

DOUBLE	\$TC TPO	C10[3200	01						descriptio	
			•						n:	
description	1:									
The type	can be sp	ecified by	machine	data. INT	is the def	ault setti	ng			
\$TC_TPO										
description	of field lin	nits:								
t: T numb	er 1 - 320	000								
axis						NCK ver	sion:	06.00.00		
identifier:										
unit:	-	min.:	DBL_MIN	٧		•	max.:	DBL_MA	·Χ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Χ					Х				
write:	X					Х				7
attributes:	global	block sear	ch	1	I .	link	I.	1	1	
		Not class	sified			No restr	rictions			

DOUBLE	\$TC TP	CS1[3200	01						description	0
			•						n:	
description	1:									
		pecified by	/ machine	data. INT	is the def	ault setti	ng			
\$TC_TPO		:4								
description	i or riela iir	nits:								
t: T numb	er 1 - 320	000								
axis						NCK ver	sion:	18.00.0	00	
identifier:										
unit:	-	min.:	DBL_MI	٧		•	max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sea	rch			link				
		Not class	sified			No rest	rictions			
		•								•

DALIBLE									Idooorint	io I
DOOBLL	SIC_IP	CS2[3200	0]						descript n:	
description	  :								11.	
	can be s CS2[t]		/ machine	data. INT	is the def	ault setti	ng			
t: T numb										
axis identifier:						NCK ver	sion:	18.00.0	00	
unit:	-	min.:	DBL_MII	V			max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				Ĭ
write:	Х					Х				7
attributes:	global	block sear	ch			link	I.		1	
		Not class	sified			No resti	rictions			

DOUBLE	\$TC TP	CS3[3200	01						descript	0
	<b>V</b> · <b>U</b> _ · ·		~]						n:	
description	า:			•					•	
\$TC_TPO	CS3[t]		machine	data. INT is	s the def	ault setti	ng			
description t: T numb										
axis identifier:						NCK ver	sion:	18.00.	00	
unit:	-	min.:	DBL_MII	V			max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	•		link	•	•	•	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC TE	PCS4[3200	01					descript	iio
			-,					n:	
description	n:			-					
The type \$TC_TPO description	CS4[t]		/ machine	data. INT is th	e default sett	ing			
t: T numb	er 1 - 32	2000							
axis identifier:					NCK ver	rsion:	18.00.	00	
unit:	-	min.:	DBL_MII	V	*	max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	rch		link	•	•	•	
		Not class	sified		No rest	rictions			

DOUBLE	\$TC_TI	PCS5[3200	0]					descript n:	io
description	n:			•				<u>'</u>	
The type \$TC_TP0 description	CS5[t]		/ machine	data. INT is th	e default sett	ing			
t: T numb									
axis identifier:					NCK ver	rsion:	18.00.	00	
unit:	-	min.:	DBL_MII	١		max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				Ĭ
write:	Х				X				7
attributes:	global	block sear	rch	1	link	1	L	1	
		Not class	sified		No rest	rictions			

DOUBLE	\$TC TP	CS6[3200	01						descripti	0
									n:	
description	1:									
The type	can be s	pecified by	machine	data. INT	is the def	ault setti	ng			
\$TC TPC	CS6[t]									
description	of field lir	nits:								
t: T numb	er 1 - 320	000								
axis						NCK ver	sion:	18.00.0	00	
identifier:									•	
unit:	-	min.:	DBL_MIN	٧		•	max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	•		link	•	•	•	
		Not class	ified			No restr	rictions			

DOUBLE	\$TC_TP	CS7[3200	0]						description:	
description	n:								l .	1
\$TC TPO	CS7[t]		/ machine	data. INT	is the def	ault setti	ng			
description	n of field lii	mits:								
t: T numb	er 1 - 32	000								
axis identifier:						NCK ver	sion:	18.00.0	00	
unit:	-	min.:	DBL_MIN	٧		•	max.:	DBL_N	ИАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	'		link	•		•	
		Not class	sified			No rest	rictions			

DOLIBLE	A=0 ==								descript	io I
DOOBLL	\$IC_IF	PCS8[3200	0]						n:	
description	1 n:								111.	
	can be s CS8[t]		/ machine	data. INT	is the def	ault setti	ng			
t: T numb										
axis identifier:						NCK ver	sion:	18.00.0	00	
unit:	-	min.:	DBL_MII	V			max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				J
write:	Х					Х				7
attributes:	global	block sear	rch			link	•		•	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC TP	CS9[3200	01						descripti	0
	<b>V</b> · <b>U</b> _ · ·		~]						n:	
description	า:			•						
\$TC_TPO	CS9[t]		machine	data. INT is	s the def	ault setti	ng			
description										
t: T numb	er 1 - 32	2000								
axis identifier:						NCK ver	sion:	18.00.	00	
unit:	-	min.:	DBL_MII	V		!	max.:	DBL_N	ИАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				_
write:	Х					Х				7
attributes:	global	block sear	ch	<u> </u>		link	•	•	•	
		Not class	sified			No rest	rictions			

DOUBLE	\$TC TP	CS10[320	001					descript	io
			,					n:	
descriptior	<b>1</b> :			-					
The type	can be s	pecified by	/ machine	data. INT is th	e default sett	ing			
STC TPO						Ū			
description		mits:							
t: T numb	er 1 - 32	2000							
axis					NCK ver	rsion:	18.00.	00	
identifier:							10.001		
unit:	-	min.:	DBL_MI	V	•	max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch		link	•	•	•	
		Not class	sified		No rest	rictions			

# 1.1.12 Tool-related grinding data

INT	\$TC_TF	PG1[32000	1					descript	io
		-	•					n:	
description	n:								
\$TC TP	G1[t]								
Spindle r									
description		mits:							
t: T numb	oer 1 - 32	2000							
axis					NCK ver	sion:	06.00.0	0	
identifier:								•	
unit:	-	min.:	INT_MIN	I		max.:	INT_M	ΑX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х		X		
write:	Х				Х		Х		7
attributes:	global	block sear	ch		link	•	,	•	
		Not class	sified		No rest	rictions			

INT	\$TC_TI	PG2[32000	]					descript n:	io
descriptio	n:								
\$TC_TP	G2[t]								
Chaining									
descriptio	n of field l	imits:							
t: T numl	oer 1 - 32	2000							
axis identifier:					NCK ver	rsion:	06.00.0	0	
unit:	-	min.:	INT_MIN	I	•	max.:	INT_M	٩X	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X		Х		
write:	Х				X		Х		7
attributes:	global	block sear	rch		link	<u> </u>	1	I	
		Not class	sified		No rest	rictions			

DOUBLE	\$TC TI	PG3[32000	1					descript	io
	• • • • • • • • • • • • • • • • • • •	00[0=000	•					n:	
descriptior	n:			-				•	
\$TC TPO	33[t]								
		wheel rad	ius						
description									
t: T numb	er 1 - 32	2000							
axis dentifier:					NCK ver	sion:	06.00.0	0	
unit:	mm	min.:			· · · · · · · · · · · · · · · · · · ·	max.:	DBL_M	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X		X		
write:	Х				X		Х		7
attributes:	global	block sear	rch		link	1		I	
		Not class	sified		No rest	rictions			

BOLIBLE								1	- 1
DOORLE	\$TC_TP	G4[32000	]					descript	10
description	). 							n:	
\$TC_TP									
		wheel wid	th						
description	n of field lii	mits:							
t: T numb	oer 1 - 32	000							
axis					NCK ver	sion:	06.00.0	0	
identifier:									
unit:	mm	min.:				max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				Х		Х		
write:	Х				Х		Х		7
attributes:	global	block sear	ch	1	link	I.	I .		
		Not class	ified		No resti	rictions			

DOUBLE	\$TC TP	G5[32000]	1					descripti	0
	<b>V</b> • • • • • • • • • • • • • • • • • • •							n:	
description	n:								
\$TC_TPC	G5[t]								
		heel width							
description	n of field lin	mits:							
t: T numb	er 1 - 32	000							
axis					NCK ver	sion:	06.00.0	0	
identifier:									
unit:	mm	min.:			•	max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х		Х		
write:	Х				Х		Х		7
attributes:	global	block sear	ch		link	•	•	•	
		Not class	ified		No rest	rictions			

DOUBLE	\$TC_T	PG6[32000	]					descript n:	io
description	<u>1</u> :			I					
\$TC TPO	36[t]								
Maximun	n speed								
description	n of field I	imits:							
t: T numb	er 1 - 32	2000							
axis identifier:					NCK vei	rsion:	06.00.0	0	
unit:	-	min.:				max.:	DBL_N	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х		Х		
write:	Х				Х		Х		7
attributes:	global	block sear	rch	1	link	1	I.	I.	
		Not class	sified		No rest	rictions			

DOUBLE	STC TP	G7[32000	1					descripti	0
	<b> </b> • • • • • • • • • • • • • • • • • • •	0.[0=000						n:	
description	n:			•				•	•
\$TC TPO	37[t]								
Max. per	pheral sp	peed							
description	n of field li	mits:							
t: T numb	er 1 - 32	000							
axis					NCK ver	sion:	06.00.0	0	
identifier:									
unit:	m/sec	min.:				max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X		X		
write:	Х				Х		Х		7
attributes:	global	block sear	rch		link	1	1		
		Not class	sified		No rest	rictions			

DOUBLE	\$TC_TP	G8[32000]							descriptio n:	
description	1:								1	1
\$TC TPO	38[t]									
Angle of	inclined g	rinding wh	ieel							
description	of field lin	nits:								
t: T numb	er 1 - 320	000								
axis identifier:						NCK ver	sion:	06.00.0	0	
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х		
write:	Х					Х		Х		7
attributes:	global	block sear	ch	•	•	link		•		
		Not class	sified			No rest	rictions			

INT	\$TC TP	G9[32000	1						descript	io
		<b>L</b>	•						n:	
description	1:									
\$TC_TPO	39[t]									
Paramete	er no. f. ra	adius calcu	ulation							
description	n of field lir	nits:								
t: T numb	er 1 - 32	000								
axis						NCK ver	sion:	06.00.0	0	
identifier:										
unit:	-	min.:				•	max.:	INT_M	ΑX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х		
write:	Х					Х		X		7
attributes:	global	block sear	rch	•	•	link	•	•	•	
		Not class	sified			No rest	rictions			

# 1.1.13 Magazine location data

BOOL	\$TC M	PP3[32000	.320001					descript	10
			,					n:	
description	n:								
\$TC_MP	P3[n,m]								
Consider	adjacen	t location C	n/Off						
description									
n: Physic	al maga	zine numbe	er						
m: Physic	cal locati	on number							
axis					NCK ver	sion:	06.00.0	00	
identifier:									
unit:		min.:	FALSE			max.:	TRUE		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch	· · · · · · · · · · · · · · · · · · ·	link		1		
		Not class	sified		No rest	rictions			

INT	\$TC_MF	P1[32000	,32000]						descriptio	
description	<u> </u> า:								n:	
\$TC_MP	P1[n,m]									
Location										
description										
		ine numbe								
m: Physic	cal location	on number				NCK ver	oion:	10000		
identifier:						NCK VEI	SIOI1.	06.00.0	00	
unit:	_	min.:				L	max.:	INT M	AX	
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	ı		link	+	I		
		Not class	sified			No rest	rictions			
		NOT CIAS	Silicu			NO ICSU	ilctions			
INT	¢TC ME	P2[32000	220001						descriptio	
		772[32000	,32000]						n:	
description	า:									
\$TC_MP										
Location		!4								
description										
		ine number on number								
axis		on number				NCK ver	sion:	00.00.0	20	
identifier:								00.00.0	30	
unit:	_	min.:					max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
rood										rights
read:	Х					Х				
write:	Х					X				7
attributes:	global	block sea	rch			link				
		Not class	sified			No rest	rictions			
INT	\$TC ME	P6[32000	.320001						descriptio	
	-		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,						n:	
description										
\$TC_MP		location								
T no. of to	ooi in this	mits:								
-		ine numbe	or.							
		on number								
axis						NCK ver	sion:	06.00.0	00	
identifier:		Tuelle :					I and a second			
unit:		min.:					max.:	INT_M		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	V	1			1	V				rights
write:	X	1	1		ļ	X				
wille:	Х				1	Χ			1	7

attributes: global

Not classified

No restrictions

INT	\$TC M	PP4[32000	,320001					descriptio	)	
docorintio			,					n:		
description										
\$TC_MP Location										
descriptio		imits:								
		zine numbe	⊇r							
		on number								
axis		OH Hallibol			NCK vei	rsion:	06.00.	00		
identifier:							00.00.			
unit:	-	min.:				max.:	INT_M	IAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access	
									rights	
read:	X				X					
write:	Х				Х				7	
attributes:	global	block sea	rch	I I	link	!	l l	l		
		Not class	sified		No rest	rictions			-	
<u> </u>		140t Glast	Silica .		140 1030					
INT	ATO BA		200001	1				descriptio	) T	
	\$ I C_IVII	PP5[32000	,32000]					n:		
descriptio	n:			I				1	!	
\$TC_MP	P5[n,m]									
		Location t	ype index							
Real mag	gazines:\	Near group								
descriptio	n of field li	imits:								
n: Physic	al maga:	zine numbe	er							
m: Physi	cal locati	on number	•							
axis					NCK vei	rsion:	06.00.	00		
identifier: unit:		Imin				Imay :				
uriit.	-	min.:				max.:	INT_M			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access	
read:									rights	
	Х				X					
write:	X				X				7	
attributes:	global	block sea	rch		link					
		Not class	sified		No rest	rictions			+	
					1.10.1001				.1	
INT	¢TC M	DD7[22000	220001					descriptio	i I	
	\$ I C_IVII	PP7[32000	,32000]					n:		
descriptio	n:			l				L	. 1	
\$TC_MP	P7[n,m]									
Adapter	number o	of tool adap	ter in this	location						
descriptio	n of field li	imits:								
n: Physic	al maga:	zine numbe	er							
		on number								
axis					NCK vei	rsion:	15.00.	00		
identifier:		I mailing :	1			lua e · · ·				
unit:	-	min.:				max.:	INT_M			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access	
rood:									rights	
read:	Х				X					
write:	Х	1			X				7	

No restrictions

Not classified

attributes: global

INT	\$TC MI	PP66[3200	0.320001						descripti	0
			.,.						n:	
description	n:									
\$TC_MP	P66[n,m]	]								
T no. of t	ool store	d in buffer								
for which	the loca	tion define	d by n,m i	s reserved	<b>l</b> .					
A write o	peration	is meaning	ful only w	hen a bac	kup file is	loaded t	o the NC	<.		
The nam	e assign	ment is bas	sed on \$T	C_MPP6 -	T no. of t	ool store	ed in the n	nagazine	location.	
description	n of field li	mits:								
n: Physic	al maga:	zine numbe	er							
m: Physic	cal locati	on number								
axis						NCK ver	sion:	43.00.0	00	
identifier:										
unit:	-	min.:					max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•		link	· ·	•	•	
		Not class	sified			No rest	rictions			

# 1.1.14 Magazine location data for OEM users

INT	\$TC_M	PPC1[3200	0,32000]						descript	io
									n:	
description	า:									
The type	can be s	specified by	/ machine	data. INT i	is the def	ault setti	ng			
\$TC MP	PC1[n,m	1								
description	n of field l	mits:								
n: Physic	al maga:	zine numbe	er							
		on number								
axis						NCK ver	sion:	06.00.	00	
identifier:										
unit:	-	min.:	INT_MIN				max.:	INT_M	IAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				rigino
write:	Х					Х				7
attributes:	global	block sear	rch	•		link	•	•	•	
		Not class	sified			No resti	rictions			

INT	\$TC M	PPC2[3200	0.320001						descript	iO
			, c, c_c c_						n:	
description	า:									
The type	can be s	specified by	/ machine	data. INT	is the def	ault setti	ng			
\$TC_MP	PC2[n,m	n]								
description	n of field I	imits:								
n: Physic	al maga	zine numbe	er							
m: Physic	cal locati	ion number	•							
axis						NCK ver	sion:	06.00.0	00	
identifier:										
unit:	-	min.:	INT_MIN				max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sea	rch	1.	l.	link	- P	1	· · · · · · · · · · · · · · · · · · ·	
		Not class	sified			No rest	rictions			
	•	•				•				
INT	\$TC_M	PPC3[3200	00,32000]						descript	10

								n:	
description	n:								
The type	can be s	pecified by	/ machine	data. INT is t	he default setti	ng			
\$TC_MP	PC3[n,m	j							
description	n of field li	mits:							
n: Physic	al magaz	zine numbe	er						
m: Physic	cal locati	on number							
axis					NCK vers	sion:	06.00.0	00	
identifier:									
unit:	-	min.:	INT_MIN			max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				X				7
attributes:	global	block sea	rch		link	*	-	•	
		Not class	sified		No restr	ictions			

INT	\$TC_M	PPC4[3200	00,32000]						descriptio	
		-	, <u> </u>						n:	
description	า:									
The type	can be s	specified by	/ machine	data. INT is	the default	setti	ng			
\$TC_MP	PC4[n.m	ıl .								
description										
n: Physic	al maga	zine numbe	er							
-	•	on number								
axis		on namber			INC	K ver	sion:	06.00.00	`	
identifier:					1.10.			06.00.00	,	
unit:	-	min.:	INT_MIN		4		max.:	INT_MA	X	
	run-in	main run	runin stp	Mrun syn	PP		SA	OPI	OEM	access rights
read:	Х					Χ				
write:	Х					Χ				7
attributes:	global	block sear	rch	I	link	(	1		1	
		Not class	sified		No	restr	rictions			

INT	\$TC M	PPC5[3200	0.320001					descript	io
	*		,					n:	
description	n:			-					
The type \$TC_MP description	PC5[n,m	n]	/ machine	data. INT is th	e default sett	ing			
n: Physic	al maga	zine number							
axis identifier:					NCK ver	rsion:	06.00.	00	
unit:	-	min.:	NCK version:   06.00.00	1AX					
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				X				7
attributes:	global	block sear	rch		link	Į.	1	L	
		Not class	sified		No rest	rictions			

IIN I	STC_MI	PPC6[3200	00,32000]						descripti	0
									n:	
description	1:									
The type	can be s	specified by	/ machine	data. INT is	the default	setti	ng			
\$TC_MP	PC6[n,m	]								
description	of field li	mits:								
n: Physic	al maga:	zine numbe	er							
-	•	on number								
axis					NC	ver	sion:	06.00.0	00	
identifier:										
unit:	-	min.:	INT_MIN	I			max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn	PP		SA	OPI	OEM	access
										rights
read:	Х					Χ				
write:	Х					Χ				7
attributes:	global	block sear	rch	I	link		1	1	T.	
		Not class	sified		No	restr	rictions			

INT	\$TC_M	PPC7[3200	0,32000]						descript	io
description	<u> </u> n:								n:	
'	can be s PC7[n,m	n]	/ machine	data. INT is	the def	ault setti	ing			
n: Physic	al maga	zine numbe ion number								
axis identifier:						NCK ver	sion:	06.00.		
unit:	-	min.:	INT_MIN			•	max.:	INT_M	IAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	<u> </u>		link				
		Not class	sified			No rest	rictions			

INT	\$TC_MI	PPC8[3200	00,32000]						descriptio n:	
description	n:									
\$TC_MP	PC8[n,m	specified by	/ machine	data. INT	is the def	ault setti	ing			
description	n of field li	mits:								
		zine numbe								
	cal locati	on number	•							
axis identifier:						NCK ver	sion:	06.00.0	)0	
unit:	-	min.:	INT_MIN				max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch			link	•			
		Not class	sified			No rest	rictions			
INT	\$TC_MI	PPC9[3200	00,32000]						descriptio	

								11.	
description	n:								
The type	can be s	pecified by	/ machine	data. INT is	the default setti	ing			
\$TC MP	PC9[n,m]					•			
description	n of field lii	nits:							
n: Physic	al magaz	ine numbe	er						
	•	on number							
axis					NCK ver	sion:	06.00.0	00	
identifier:									
unit:	-	min.:	INT_MIN			max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X				
write:	Х				X				7
attributes:	global	block sear	rch		link		I	I	
		Not class	sified		No rest	rictions			

INT	\$TC M	PPC10[320	000.32000	)]		·		descript	io	
	<b>*</b> · · ·		,	1				n:		
description	1:									
\$TC_MP	PC10[n,	m]	/ machine	data. INT is t	ne default setti	ing				
descriptior	n of field l	imits:								
n: Physic	al maga	zine numbe	er							
m: Physic	cal locat	ion number								
axis					NCK ver	sion:	06.00.0	00		
identifier:										
unit:	-	min.:	INT_MIN	I	·	max.:		AX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х					
write:	Х				X				7	
attributes:	global	block sea	rch		link	•	•	•		
		Not class	sified		No rest	rictions				

INT	\$TC M	PPCS1[320	000,32000	01				descript	io
		-	,	-				n:	
descriptio	n:								
The type	can be	specified by	/ machine	data. INT is t	he default setti	ing			
\$TC_MP	PCS1[n,	m]							
descriptio	n of field l	imits:							
n: Physic	al maga	zine numbe	er						
		ion number							
axis					NCK ver	sion:	18.00.	00	
identifier:									
unit:		min.:	INT_MIN	I		max.:	INT_M	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch	•	link	•	•	,	
		Not class	sified		No rest	rictions			

INT	\$TC_M	PPCS2[32	000,32000	)]				descript	io
		-	•	-				n:	
description	า:								
The type	can be	specified by	/ machine	data. INT is t	the default setti	ng			
\$TC MP	PCS2[n,	m]				•			
description	n of field l	imits:							
n: Physic	al maga	zine numbe	er						
		ion number							
axis					NCK ver	sion:	18.00.	00	
identifier:									
unit:	=	min.:	INT_MIN			max.:	INT_N	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sea	rch	1	link	I.			
		Not class	sified		No restr	rictions			

INT	\$TC_MI	PPCS3[320	000,32000	<b>D</b> ]					descript n:	io
description	n:									
The type \$TC_MP		specified by m]	/ machine	data. INT	is the def	ault setti	ng			
description	n of field li	mits:								
n: Physic	al magaz	zine numbe	er							
m: Physic	cal locati	on number								
axis identifier:						NCK ver	sion:	18.00.0	00	
unit:	-	min.:	INT_MIN			!	max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link	· ·	I.		
		Not class	sified			No rest	rictions			

INT	\$TC M	PPCS4[32	000.32000	01				descript	io
	<b>V</b> • •		,	•				n:	
descriptior	n:								
			/ machine	data. INT is th	e default sett	ing			
\$TC_MP									
descriptior	n of field l	imits:							
n: Physic	al maga	zine numbe	er						
m: Physic	cal locati	on number							
axis identifier:					NCK vei	rsion:	18.00.	00	
unit:	-	min.:	INT_MIN	I		max.:	INT_M	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sea	rch		link		· · · · · · · · · · · · · · · · · · ·	<b>.</b>	
		Not class	sified		No rest	rictions			

11 1	\$ 1 C_IVII	<sup>2</sup> PC55[320	JUU,32UUL	ין					ucscriptic	<b>'</b>
									n:	
description	า:									
The type	can be s	pecified by	/ machine	data. INT is	s the def	ault setti	ng			
\$TC MP	PCS5[n,ı	n]								
description										
n: Physic	al magaz	zine numbe	er							
•	•	on number								
axis						NCK ver	sion:	18.00.0	20	
identifier:								10.00.		
unit:	-	min.:	INT_MIN				max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	<u> </u>		link				
		Not class	sified			No restr	rictions			

INT	\$TC_M	PPCS6[32	000,32000	)]				descript n:	io
description	n:			<u>\</u>				II.	
\$TC_MP	PCS6[n,	m]	/ machine	data. INT is th	e default sett	ing			
description	n of field I	imits:							
n: Physic	al maga	zine numbe	er						
m: Physic	cal locati	on number							
axis identifier:					NCK ver	rsion:	18.00.	00	
unit:	-	min.:	INT_MIN		•	max.:	INT_M	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sea	ch	1	link				
		Not class	sified		No rest	rictions			

INT	\$TC M	PPCS7[320	000,32000	01				descript	io
			,	-				n:	
descriptio	n:								
The type	can be	specified by	/ machine	data. INT is t	the default setti	ing			
\$TC_MP	PCS7[n,	m]							
descriptio	n of field l	imits:							
n: Physic	al maga	zine numbe	er						
		ion number							
axis					NCK ver	sion:	18.00.	00	
identifier:									
unit:		min.:	INT_MIN	I		max.:	INT_N	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch	•	link		•	,	
		Not class	sified		No rest	rictions			

INT	\$TC_M	PPCS8[32	000,32000	)]				descripti n:	io
description	า:							I.	
\$TC_MP	PCS8[n	,m]	/ machine	data. INT is th	ne default setti	ng			
description	n of field I	limits:							
n: Physic	al maga	zine numbe	er						
m: Physic	cal locat	ion number							
axis identifier:					NCK ver	sion:	18.00.	00	
unit:	-	min.:	INT_MIN		l .	max.:	INT_N	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sea	rch		link	•	•	•	
		Not class	sified		No resti	rictions			

INT	\$TC_M	PPCS9[320	000,32000	)]				descript n:	io
description	ո:							1	
\$TC_MP	PCS9[n,	m]	/ machine	data. INT is th	e default sett	ing			
description									
•	•	zine numbe							
m: Physic	cal locati	on number							
axis identifier:					NCK ver	sion:	18.00.	00	
unit:	-	min.:	INT_MIN		•	max.:	INT_M	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				X				7
attributes:	global	block sear	ch		link	1		L	
		Not class	sified		No rest	rictions			

INT	\$TC M	PPCS10[32	2000,3200	001				descript	io
		•	,	-				n:	
descriptio	n:								
The type	can be	specified by	/ machine	data. INT is t	the default setti	ing			
\$TC MP	PCS10[i	n,m]				Ū			
description	n of field l	imits:							
n: Physic	al maga	zine numbe	er						
		ion number							
axis					NCK ver	sion:	18.00.	00	
identifier:									
unit:	-	min.:	INT_MIN			max.:	INT_N	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				X				7
attributes:	global	block sea	rch		link	-	•	•	
		Not class	sified		No rest	rictions			

IIN I	\$TC_M	OP1[32000	,32000]					descript	Ю
descriptio	n. 							n:	
•									
\$TC_MD									
		nange poin							
betw. ma	igazine n	and location	on m						
of 1st inte	ernal mag	gazine							
internal r	nag. 1 dis	stance para	ameter						
descriptio									
n: Physic	al magaz	zine numbe	er						
-	•	on number							
axis					NCK ver	sion:	06.00.	nn	
identifier:							00.00.	50	
unit:	-	min.:	INT_MIN	l	I.	max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch	1	link			1	
		Not class	sified		No rest	rictions			

INT	\$TC_M	DP2[32000	,32000]					descript	io
		<u> </u>						n:	
description	n:								
\$TC_MD	P2[n,m]								
Distance	to tool o	hange poin	ıt						
betw. ma	igazine r	and locati	on m						
of 2nd in	ternal ma	agazine							
		stance para	ameter						
description									
n: Physic	al maga	zine numbe	er						
		ion number							
axis					NCK ver	sion:	06.00.	00	
identifier:									
unit:	-	min.:	INT_MIN			max.:	INT_M	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
read:	V			-					rights
	Х				X				
write:	X				X				7
attributes:	global	block sear	rch	<u>l</u>	link		<u> </u>		
		Not class	sified		No rest	rictions			

INT	\$TC_MLSR[32000,32000]	description	
		n:	

description:

\$TC MLSR[n,m]=0

Assignment of buffer location n to buffer location m

m must identify a location of type 'Spindle'.

n must identify a location which is not a 'Spindle' type location.

In this way it is possible, for example, to define which grippers, spindles, etc.

are assigned. The default parameter setting is 0.

The write operation defines a relationship, the read operation checks whether

a particular relationship exists. If it does not exist, the read operation generates an alarm.

define links of grippers,... to spindles. description of field limits:

n: Physical magazine location number of location type other than SPINDLE

m: Physical magazine location number of location type SPINDLE

axis identifier:					NCK ver	sion:	06.00.0	00	
unit:	-	min.:	INT_MIN			max.:	INT_M	4X	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch	l	link	1			
		Not class	sified		No resti	rictions			

INT	_	. –		RARCHY					descript n:	0
description	า:									
\$TC_MP	TH[n,m]									
Magazine	e location	type hiera	ırchy							
mag.loca	tion (place	e)types hie	erarchy pa	arameter						
description	n of field lin	nits:								
n: Hierar	chy 0 - SL	.MAXHIEF	RARCHYN	NUMBER-	1					
m: Locati	on type 0	- SLMAXI	HIERARC	HYENTR	IES - 1					
axis						NCK ver	sion:	06.00.	00	
identifier:										
unit:	-	min.:	INT_MIN				max.:	INT_M	IAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	•	•	link	•	•	•	
		Not class	sified			No rest	rictions			

# 1.1.15 Magazine description data for tool management

STRING	<b>\$TC MA</b>	P2[32000	1						descriptio	
			•						n:	
description	1:									
\$TC MA	P2[n]									
Identifier	of magaz	ine								
description										
n: Magaz	ine numb	er 1								
axis						NCK vers	ion:	06.00.00		
identifier:										
unit:	-	min.:				•	max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:										
write:										
attributes:	global	block sear	ch	•	•	link	•	•		
		Not class	ified			No restri	ctions			

INT	\$TC M	AP1[32000	)]					descript	io
	. –	•	-					n:	
description	n:			-				-	
\$TC MA	P1[n]								
Type of r		Э							
description									
n: Magaz	ine num	ber 1							
axis					NCK ver	sion:	06.00.	00	
identifier:									
unit:	-	min.:	INT_MIN		•	max.:	INT_N	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sea	rch	l l	link		<u> </u>		
		Not class	sified		No rest	rictions			

INT	\$TC M	AP3[32000	1					descript	io	
	<b>V</b> 1 <b>U</b>		•					n:		
description	า:			•				•	•	
\$TC MA	P3[n]									
Status of	magazir	ne								
description										
n: Magaz	ine num	ber 1								
axis					NCK ver	sion:	06.00.00			
identifier:			100.00.00							
unit:	=	min.:	INT_MIN	I		max.:	INT_M	IAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х				<u> </u>	
write:	Х				Х				7	
attributes:	global	block sear	rch		link	1	1			
		Not class	sified		No rest					

INT	STC MA	P4[32000	1						descript	0
	-	•	•						n:	
description	n:									
\$TC_MA	P4[n]									
Chaining	to next m	nagazine								
description	n of field lir	nits:								
n: Magaz	zine numb	er 1								
axis						NCK ver	sion:	06.00.	00	
identifier:										
unit:	=	- min.: INT_MIN					max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•		link		•	•	
		Not class	sified			No rest	rictions			

INT	\$TC_M	AP5[32000	)]						description:			
descriptio	n:								11.			
\$TC MA												
		ous magaz	ine									
descriptio	n of field	imits:										
n: Magaz	zine num	ber 1										
axis identifier:					NCK	versio	n:	06.00.0	00			
unit:	-	min.:	INT MIN			r	nax.:	INT M	AX			
	run-in	main run	_	Mrun syn	IPP		SA	OPI	IOEM	access		
										rights		
read:	Х				X							
write:	Х				X					7		
attributes:	global	block sea	rch		link							
		Not class	sified		No re	estrict	ions					
					•					•		
INT	\$TC_M	AP6[32000	)]						description	)		
descriptio	n·								n:			
•												
\$TC_MA Number												
descriptio	n of field	limits:										
n: Magaz												
axis	l line man				NCK	versio	n:	06.00.0	20			
identifier:								00.00.				
unit:	-	min.:	INT_MIN	l		r	nax.:	INT_M	AX			
	run-in	main run	runin stp	Mrun syn	PP	5	SA	OPI	OEM	access		
read:	X				X	,				rights		
write:	X				X					7		
attributes:		block sea	rch		link					7		
attributes.	giobai											
		Not class	sified		No re	estrict	ions					
INT	¢TC M	A D7[22000	17						description	) I		
	⊅ I C_IVI	AP7[32000	ני						n:			
descriptio	n:								<u> </u>			
\$TC_MA	.P7[n]											
Number	of colum	ns										
descriptio												
n: Magaz	zine num	ıber 1										
axis identifier:					NCK	versio	n:	06.00.0	00			
unit:		min.:	INT MIN	I	ļ	Ir	nax.:	INT M	ΛΥ			

SA

Χ

Χ

No restrictions

link

OPI

OEM

access rights

7

block search

Not classified

main run runin stp Mrun syn

run-in

Χ

Χ

read:

write:

attributes: global

INT	\$TC MA	AP8[32000	)]						descriptio	
			•						n:	
description	า:									
\$TC_MA	P8[n]									
Current n	nagazine	position in	relation t	o tool cha	nge positi	on				
description	n of field li	mits:								
n: Magaz	ine numb	oer 1								
axis						NCK ver	sion:	06.00.0	00	
identifier:										
unit:	-	min.:	INT_MIN			•	max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•		link	•	•	•	
		Not class	sified			No rest	rictions			
		Not class	sitied			No rest	rictions			<u> </u>

INT	\$TC_M	AP9[32000	)]					descript	io
description								n:	
\$TC_MA									
		up number							
descriptior	n of field I	imits:							
n: Magaz	ine num	ber 1							
axis					NCK vei	rsion:	15.00.00		
identifier:									
unit:	-	min.:	INT_MIN			max.:	INT_MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				X				7
attributes:	global	block sear	rch		link	•		•	
		Not class	sified		No restrictions				

INT	\$TC M	AP10[3200	001						descript	io
	. –		•						n:	
descriptio	n:									
\$TC_MA	P10[n]									
Current s	search st	trategies of	magazine	<del>)</del> .						
- Tool se	arch stra	ategy								
- Empty I	ocation	search stra	tegy							
The NCk	enters	the value of	f \$TC_MA	MP2 per d	efault.					
descriptio	n of field l	limits:								
n: Magaz	zine num	nber 1								
axis identifier:						NCK ver	sion:	20.00.	00	
unit:	-	min.:	INT_MIN	MIN			max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:										
attributes:	global	block sea	rch	1		link	1			
		Not class	sified			No rest	rictions			

## 1.1.16 Magazine description data for OEM user tool management

INT	\$TC_M	APC1[3200	00]		_			description			
descriptio	<u>l</u> n:							n:			
The type	can be	specified by	/ machine	data. INT is	the default sett	ing					
\$TC_MA											
descriptio											
n: Magaz	zine num	ber 1			INCK	!					
axis identifier:					NCK ve	rsion:	06.00.0	00			
unit:	_	min.:	INT MIN	1		max.:	INT_M	AX			
	run-in	main run	runin stp	Mrun syn	IPP	SA	OPI	IOEM	access		
									rights		
read:	Х				X						
write:	Х				X				7		
attributes:	global	block sear	rch		link						
		Not class	sified		No rest	rictions					
		NOT Class	Silicu		140 103	inctions					
INI	CTC N	A DCOICOO	201					description			
	\$ I C IN	APC2[3200	נטט					n:	<b>^</b>		
descriptio	n:								I		
The type	can be	specified by	/ machine	data. INT is	the default sett	ing					
\$TC_MA											
descriptio											
n: Magaz	zine num	ber 1			INOK						
axis identifier:					NCK ve	NCK version: 06.00					
unit:	_	min.:	INT_MIN	1		max.: INT MAX					
	run-in	main run	runin stp	Mrun syn	IPP	SA	OPI	TOEM	access		
			· ci otp			0,1		02	rights		
read:	Х				X				Ĭ		
write:	Х				Х				7		
attributes:	global	block sear	rch		link						
		Not class	oified		No root	rictions					
		TINUL CIASS	siii <del>c</del> u								
					140 163	.110110113					
INIT	 		201		140 163	rictions		Idescription	<u> </u>		
INT	\$TC_M	APC3[3200	00]		INO TEST	rictions		description			
INT description			00]		INO TEST	ricuoris		description:			
descriptio	n:	APC3[3200		data. INT is							
description The type \$TC_MA	 n: can be : .PC3[n]	APC3[3200		data. INT is	the default sett						
description The type \$TC_MA description	n: can be s PC3[n] n of field l	APC3[3200 specified by imits:		data. INT is							
description The type \$TC_MA description n: Magaz	n: can be s PC3[n] n of field l	APC3[3200 specified by imits:		data. INT is	the default sett	ing		n:			
description The type \$TC_MA description n: Magazaxis	n: can be s PC3[n] n of field l	APC3[3200 specified by imits:		data. INT is		ing	06.00.0	n:			
description The type \$TC_MA description n: Magazaxis identifier:	n: can be s PC3[n] n of field l	APC3[3200 specified by imits: ber 1	/ machine		the default sett	ing		n: 00			
description The type \$TC_MA description n: Magaz axis identifier:	n: can be s PC3[n] n of field I zine num	APC3[3200 specified by imits: ber 1	/ machine		the default sett	rsion:	INT_M	n: 00 AX			
descriptio	n: can be s PC3[n] n of field l	APC3[3200 specified by imits: ber 1	/ machine	I	the default sett	ing		n: 00	access		

No restrictions

7

block search

Not classified

write:

attributes: global

Χ

INT	STC M	APC4[3200	001					descript	io	
	\ \ . \ \	•	~,					n:		
descriptior	n:									
\$TC MA	PC4[n]		/ machine	data. INT is th	e default setti	ing				
description	n of field l	imits:								
n: Magaz	ine num	ber 1								
axis identifier:					NCK version: 06.0			.00.00		
unit:	-	min.:	INT_MIN			max.: INT_MAX				
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				X					
write:	Х				Х				7	
attributes:	global	block sea	rch		link		1	I		
		Not class	sified		No restrictions					

INT	\$TC_M	APC5[3200	00]					descript n:	io
description	n:			I					
The type	can be	specified by	/ machine	data. INT is th	ne default setti	ing			
\$TC_MA						-			
description	n of field I	imits:							
n: Magaz	zine num	ber 1							
axis identifier:					NCK ver	sion:	06.00.00		
unit:	-	min.:	INT_MIN			max.:	INT_N	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				Ĭ
write:	Х				Х				7
attributes:	global	block sea	rch		link	1	1		
		Not class	sified		No rest	rictions			

INT	\$TC_MA	APC6[3200	00]						description	)
		-	-						n:	
description	1:									
\$TC_MA	PC6[n]	pecified by	/ machine	data. INT	is the def	ault setti	ing			
description n: Magaz										
axis identifier:	ine name	JCI 1				NCK ver	sion:	06.00.	00	
unit:	-	min.:	INT_MIN			max.:		INT_MAX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link	•	•	•	
		Not class	sified			No rest	rictions			

INT	\$TC_M	APC7[3200	00]						descript n:	io
description	<u>1</u> :								1	
7 1		specified by	/ machine	data. INT	is the def	ault setti	ng			
\$TC_MA										
description	n of field l	imits:								
n: Magaz	ine num	ber 1								
axis						NCK ver	sion:	06.00.0	00	
identifier:										
unit:	-	min.:	INT_MIN				max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sea	rch			link				
		Not class	sified			No rest	rictions			
	•	•				•				•

INT	\$TC_M	APC8[3200	00]					descript n:	io
description	h:			<u> </u>					I
		specified by	/ machine	data. INT is th	e default sett	ing			
\$TC_MA									
description									
n: Magaz	ine num	ber 1							
axis identifier:					NCK ver	rsion:	06.00.	00	
unit:	-	min.:	INT_MIN			max.:	INT_N	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				X				7
attributes:	global	block sear	rch		link	•		<b>,</b>	
		Not class	sified		No rest	rictions			

INT	STC M	APC9[3200	001						descript	io
	<b>V</b> 1 <b>U</b>								n:	
description	า:									
\$TC_MA	PC9[n]		/ machine	data. INT is	s the def	ault setti	ng			
description n: Magaz										
axis identifier:						NCK ver	sion:	06.00.	00	
unit:	-	min.:	INT_MIN				max.:	INT_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link	•			
		Not class	sified			No rest	rictions			

INT	\$TC M	APC10[320	0001					descript	io
			•					n:	
descriptior	n:			-					
\$TC_MA	PC10[n]		/ machine	data. INT is th	e default sett	ing			
description									
n: Magaz	zine num	ber 1							
axis identifier:					NCK ver	sion:	06.00.	00	
unit:	-	min.:	INT_MIN		•	max.:	INT_N	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch	•	link			Į.	
		Not class	sified		No rest	rictions			

INT	\$TC_M	APCS1[32	000]					descript n:	io
description	n:			L L					1
The type	can be	specified by	/ machine	data. INT is th	ne default sett	ing			
\$TC MA	PCS1[n]								
description	n of field l	imits:							
n: Magaz	zine num	ber 1							
axis identifier:					NCK ver	rsion:	18.00.	00	
unit:	-	min.:	INT_MIN			max.:	INT_M	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sea	rch	<u> </u>	link	1	1		
		Not class	sified		No rest	rictions			

INT	\$TC_MA	PCS2[320	000]						descripti n:	0
description	1:				l.					•
The type \$TC_MA description	PCS2[n]	•	machine	data. INT	is the def	ault setti	ing			
n: Magaz										
axis identifier:						NCK ver	sion:	18.00.	00	
unit:	-	min.:	INT_MIN			•	max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	•		link	•	•	•	
		Not class	sified			No rest	rictions			

\$TC_M	APCS3[32	000]					descript n:	io
n:							•	•
PCS3[n]		/ machine	data. INT is	the default set	ting			
n of field I	imits:							
zine num	ber 1							
				NCK ve	rsion:	18.00.	00	
-	min.:	INT_MIN		•	max.:	INT_M	AX	
run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
Х				X				
Х				X				7
global	block sear	rch		link	•			
	Not class	sified		No res	trictions			
	can be s PCS3[n] n of field l zine num - run-in	can be specified by PCS3[n] n of field limits: zine number 1  min.: run-in main run  X  X  global block sea	can be specified by machine PCS3[n] n of field limits: zine number 1  -   min.:   INT_MIN   run-in   main run   runin stp   X   X	n: can be specified by machine data. INT is PCS3[n] n of field limits: zine number 1  -   min.:   INT_MIN   run-in   main run   runin stp   Mrun syn   X   X   global   block search	n: can be specified by machine data. INT is the default settent per setting in the per se	n: can be specified by machine data. INT is the default setting PCS3[n] n of field limits: zine number 1    NCK version:    -   min.:   INT_MIN   max.:     run-in   main run   runin stp   Mrun syn   PP   SA     X	n: can be specified by machine data. INT is the default setting PCS3[n] n of field limits: zine number 1    NCK version:   18.00.0  -   min.:   INT_MIN   max.:   INT_M   run-in   main run   runin stp   Mrun syn   PP   SA   OPI     X	n:  can be specified by machine data. INT is the default setting  PCS3[n] n of field limits:  zine number 1    NCK version:   18.00.00    -   min.:   INT_MIN   max.:   INT_MAX    -   run-in   main run   runin stp   Mrun syn   PP   SA   OPI   OEM    -   X   X   X   X   X   INT_MIN    -   global   block search   link

INT	\$TC_M	APCS4[32	000]					descript n:	io
descriptio	n:			•					
The type	can be	specified by	/ machine	data. INT is th	e default sett	ing			
\$TC_MA	PCS4[n]								
descriptio	n of field l	imits:							
n: Magaz	zine num	ber 1							
axis identifier:					NCK vei	NCK version: 18.00.00			
unit:	-	min.:	INT_MIN			max.:	INT_N	ИАХ	
<del></del>	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sea	rch	<u> </u>	link	1	1	1	
		Not class	sified		No rest	rictions			

INT	\$TC M	APCS5[320	0001						descript	io
			,						n:	
description	n:									
The type \$TC_MA description	PCS5[n]		/ machine	data. INT is	s the def	ault setti	ng			
n: Magaz										
axis identifier:						NCK ver	sion:	18.00.	00	
unit:	-	min.:	INT_MIN			•	max.:	INT_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link	•			
		Not class	sified			No rest	rictions			

INT	STC M	APCS6[32	0001					descript	io
								n:	
description	า:								
\$TC_MA	PCS6[n]		/ machine	data. INT is th	e default sett	ing			
description	n of field I	imits:							
n: Magaz	ine num	ber 1							
axis identifier:					NCK ver	rsion:	18.00.	00	
unit:	-	min.:	INT_MIN		*	max.:	INT_N	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch		link			1	
		Not class	sified		No rest	rictions			

INT	\$TC_M	APCS7[32	000]					descript n:	io
description	h:							ı	<b>I</b>
The type	can be s	specified by	/ machine	data. INT is th	e default sett	ing			
\$TC MA						•			
description	n of field l	imits:							
n: Magaz	ine num	ber 1							
axis identifier:					NCK vei	rsion:	18.00.	.00	
unit:	-	min.:	INT_MIN		•	max.:	INT_M	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sea	rch	l l	link		1	1	
		Not class	sified		No rest	rictions			

INT	\$TC_MA	APCS8[320	000]						descriptio	
		-	-						n:	
description	1:									
\$TC_MA	PCS8[n]		machine	data. INT	is the def	ault setti	ing			
description n: Magaz										
axis identifier:						NCK ver	sion:	18.00.0	00	
unit:	-	min.:	INT_MIN			•	max.:	INT_M	4Χ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	•		link	•		•	
		Not class	sified			No rest	rictions			

INT	\$TC M	APCS9[320	0001					descript	iio
		<b>L</b>	•					n:	
description	า:								•
The type \$TC_MA description	PCS9[n]		/ machine	data. INT is t	ne default setti	ing			
		ililis. iber 1							
axis identifier:	ine num	ibei i			NCK ver	sion:	18.00.	00	
unit:	-	min.:	INT_MIN			max.:	INT_M	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch	1	link	1	1	ı	
		Not class	sified		No rest	rictions			

INT	STC MA	APCS10[32	20001						descripti	0
	*		,						n:	
description	n:									
The type	can be s	pecified by	/ machine	data. INT	is the def	ault setti	ing			
\$TC MA							•			
description										
n: Magaz	ine numb	oer 1								
axis						NCK ver	sion:	18.00.0	00	
identifier:										
unit:		min.:	INT_MIN				max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch			link				
		Not class	sified			No rest	rictions			

## 1.1.17 Magazine block parameters

STRING	STC MA	AMP1[-1]							descript	io
									n:	
description	n:									
\$TC_MA	MP1									
		zine block								
description	n of field li	mits:								
Scalar va	ariable									
axis						NCK ver	sion:	06.00.	00	
identifier:										
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	· · ·	l .	link	- II		1	
		Not class	sified			No restr	rictions			

INT	\$TC_M	AMP2[-1]						descript n:	io
description	n:							1	L
\$TC MA	MP2								
Type of t		ch							
description	n of field I	imits:							
Scalar va	ariable								
axis identifier:					NCK vers	sion:	06.00.	00	
unit:	-	min.:	INT_MIN			max.:	INT_M	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch		link	1	I .	Į.	
		Not class	sified		No restr	rictions			

INT	STC MA	MP3[-1]							descript	io
	-								n:	
description	n:									
\$TC_MA	MP3									
Handling	of tools i	n wear gro	ups							
description	n of field lir	nits:								
Scalar va	ariable									
axis						NCK vers	sion:	15.00.	00	
identifier:										
unit:	-	min.:	INT_MIN				max.:	INT_M	IAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•	•	link	•	•	•	
		Not class	sified			No restr	rictions			

#### 1.1.18 Adapter data

INT	\$TC AD	PTT[3200	01					descripti	0
		•						n:	
description	n:								
\$TC_AD	PTT[a]								
		ation numl	per						
description	n of field lin	nits:							
a: Adapte	er number	r 1 - 32000	)						
axis					NCK ver	sion:	15.00.	00	
identifier:									
unit:	=	min.:	INT_MIN			max.:	INT_M	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch		link	I.	I .		
		Not class	sified		No resti	rictions			

DOUBLE	T.			1				1.1	
DOORLE	\$TC_AD	PT1[3200	0]					descriptio n:	
descriptio	n:							111.	
\$TC AD	PT1[a]								
Adapter	geometry	: Length 1							
descriptio	n of field li	mits:							
a: Adapte	er numbe	r 1 - 32000	)						
axis					NCK ver	sion:	15.00.0	00	
identifier:						1			
unit:	mm	min.:	DBL_MII			max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch	I I	link				
		Not class	sified		No rest	rictions			
DOUBLE	Ta							Idooorintio	,
DOOBLE	\$TC_AE	PT2[3200	0]					descriptio n:	
descriptio	n:							· ·	
\$TC AD	PT2[a]								
Adapter	geometry	: Length 2 mits:							
descriptio	n of field li	mits:							
a: Adapte	er numbe	r 1 - 32000	)						
axis					NCK ver	sion:	15.00.0	00	
identifier:		Inches :							
unit:	mm	min.:	DBL_MI			max.:	DBL_N		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
read:	.,								rights
	Х				Х				
write:	Х				Х				7
attributes:	global	block sea	rch		link				
		Not class	sified		No rest	rictions			
DOUBLE	\$TC_AD	PT3[3200	0]					descriptio n:	
descriptio	n:							1	
\$TC AD	PT3[a]								
Adapter	geometry	: Length 3							
descriptio	n of field li	mits:							
	er numbe	r 1 - 32000	)						
axis					NCK ver	sion:	15.00.0	00	
identifier:		Imin :	laa			may:			
unit:	mm	min.:	DRI MII	N		max.:	DRI M	1AX	

SA

Χ

Χ

No restrictions

link

DBL\_MAX

OEM

access rights

7

OPI

DBL\_MIN

runin stp Mrun syn

main run

block search

Not classified

mm

read:

write:

attributes: global

run-in

Χ

Χ

#### 1.1.19 Measuring system compensation values

DOORLE	\$AA_EN	C_COMP	[n,m]					descript	10
description	<u> </u> า:							n:	
	C COMP	[n,m,a]							
	sation valu								
a: Machir	ne axes								
	n of field lin	nits:							
	er no. 0-1								
m: Point		1D value>			INCK ver	oion:	100.00		
identifier:	MACHA				NCK ver		06.00.0		
unit:	Linear / angular position	min.:	DBL_MI	N		max.:	DBL_N	ИАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch	1	link				
		Not class	sified		No resti	rictions			
DOUBLE	\$AA_EN	C_COMP	_STEP[n,	,31]				descript	io
description	<u> </u> า:			31]					io
description	 n: C_COMP <sub>.</sub>	C_COMP _STEP[n,a		31]					io
description \$AA_ENGINCE	l n: C_COMP <sub>.</sub> nt			31]					io
description \$AA_ENGINCEMENT Increment a: Machin	l n: C_COMP nt ne axes	_STEP[n,a		31]					io
description \$AA_ENGINGER Increment a: Machinel description	l n: C_COMP nt ne axes n of field lin	_STEP[n,a		31]					io
description \$AA_ENG Increment a: Machin description n: Encod	l n: C_COMP nt ne axes n of field lin er no. 0-1	_STEP[n,a		31]					io
description \$AA_ENI Incremer a: Machin description n: Encod to be defi	l n: C_COMP nt ne axes n of field lin er no. 0-1	_STEP[n,a		31]	NCK ver	sion:	06.00.0	n:	io
description \$AA_ENGINCTEMENT Increment a: Machin description n: Encod to be defi	n: C_COMP  t ne axes n of field lin er no. 0-1 ined  MACHA	_STEP[n,a	a]		NCK ver	sion:		n: ·	10
description \$AA_EN Incremer a: Machin description n: Encod to be def axis identifier:	n: C_COMP  t ne axes n of field lin er no. 0-1 ined  MACHA  Linear /	_STEP[n,a			NCK ver		06.00.0 DBL_N	n: ·	io
description \$AA_EN Incremer a: Machin description n: Encod to be def axis identifier:	n: C_COMP  t ne axes n of field lin er no. 0-1 ined  MACHA	_STEP[n,a	a]		NCK ver			n: ·	io
description \$AA_EN Incremer a: Machin description n: Encod to be def axis identifier:	n: C_COMP  t ne axes n of field lin er no. 0-1 ined  MACHA  Linear / angular	_STEP[n,a	a]		NCK ver			n: ·	access rights
description \$AA_EN Incremer a: Machin description n: Encod to be def axis identifier:	n: C_COMP.  t ne axes n of field lin er no. 0-1 ined MACHA Linear / angular position	_STEP[n,anits:	a]  DBL_MIN	N		max.:	DBL_N	n:	access
description \$AA_EN Incremer a: Machin description n: Encod to be defi axis identifier: unit:	n: C_COMP the axes n of field liner no. 0-1 ined MACHA Linear / angular position run-in	_STEP[n,anits:	a]  DBL_MIN	N	PP	max.:	DBL_N	n:	access
description \$AA_EN Incremer a: Machin description n: Encod to be defi axis identifier: unit:  read:	C_COMP  tt ne axes n of field lin er no. 0-1 ined MACHA  Linear / angular position run-in  X	_STEP[n,anits:	DBL_MIN	N	PP X	max.:	DBL_N	n:	access

DOORLE	\$AA EN	C COMP	_MIN[n,3	1]				descript	io
		_		•				n:	
descriptior	1:								
\$AA_EN	C_COMP	_MIN[n,a]							
Start pos	ition of co	mpensation	on						
a: Machir	ne axes								
description	n of field lin	nits:							
n: Encod	er no. 0-1								
to be defi	ined								
axis identifier:	MACHAX	<			NCK ver	rsion:	06.00.	00	
unit:	Linear / angular position	min.:	DBL_MII	N		max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	rch		link	1	1	1	
		Not class	sified		No rest	rictions			

DOUBLE	\$AA EN	C_COMP	MAX[n.3	311				descript	io
			,					n:	
description	1:								
\$AA_EN	C_COMP	_MAX[n,a	]						
End posit	tion of cor	mpensatio	n						
a: Machir	ne axes								
description	n of field lin	nits:							
n: Encod	er no. 0-1								
to be defi	ined								
	MACHAX	<			NCK ver	sion:	06.00.	00	
identifier:									
unit:	Linear /	min.:	DBL_MIN	N		max.:	DBL_N	ЛΑХ	
	angular								
	position								
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	ch	,	link				
		Not class	sified		No rest	rictions			

BOOL	\$AA_EN	IC_COMP	_IS_MOD	ULO[n,3				description	
	1]							n:	
description	n:							· I	
\$AA EN	C COMP	IS MOD	ULO[n,a]						
Compens									
a: Machir									
description	n of field lir	nits:							
n: Encod	er no. 0-1								
to be defi	ined								
axis identifier:	MACHA	X			NCK ver	rsion:	06.00.00	l	
unit:	-	min.:	FALSE			max.:	TRUE		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch	1	link			I	
		Not class	sified		No rest	rictions			

# 1.1.20 Quadrant error compensation

DOUBLE	\$AA_QE	EC[n.m]						descript	io
		. , .						n:	
description	n:								
\$AA_QE	C[n,m,a]								
Result of	learning	process							
a: Machii	ne axes								
description	n of field lii	mits:							
n: 0									
m: No. of	f point: 0	- \$MA_MN	1_QEC_M	AX_POINTS	<b>;</b>				
axis	MACHA			_	NCK ver	sion:	06.00.	00	
identifier:									
unit:	-	min.:	DBL_MIN	٧		max.:	DBL_N	ЛΑХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				X				7
attributes:	global	block sea	rch	<u> </u>	link			1	
atti ibatoo.	_								

INT	\$AA_Q	EC_COAR	SE_STEF	PS[n,31]				descript	io
				- ' -				n:	
description	n:								
\$AA_QE	C_COAF	RSE_STEP	S[n,a]						
Compens	sation va	lues: Roug	h quantiza	ation of chara	cteristic				
a: Machir	ne axes		•						
description	n of field l	imits:							
n: 0									
to be def	ined								
axis	MACHA	λX			NCK ver	sion:	06.00.	00	
identifier:									
unit:	-	min.:	INT_MIN			max.:	INT_MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	X				X				
write:	Х				Х				7
attributes:	global	block sear	ch	<u> </u>	link			L	
		Not class	sified		No rest	rictions			

INI	\$AA Q	EC_FINE_	STEPS(n.	.311				descript	10
				, - 1				n:	
description	1:								
\$AA_QE	C_FINE	_STEPS[n,	a]						
Fine qua	ntization	of characte	eristic						
a: Machir	ne axes								
descriptior	n of field l	limits:							
n: 0									
to be defi	ined								
axis	MACHA	ΑX	NCK version: 06.00.00						
identifier:									
unit:	-	min.:	INT_MIN	l		max.:	INT_MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	rch	•	link	1	1		
		Not class	sified		No rest	rictions			

DOUBLE	\$AA QE	C ACCE	L_1[n,31]						descript	io
			= 1 /- 1						n:	
description	n:									
\$AA QE	C_ACCEL	_ 1[n,a]								
_	_		nt accordir	ng to defin	ition [mm/	s2 or inc	ch/s2 or d	egree/s2		
a: Machii				J	•				•	
description	n of field lin	nits:								
n: 0										
to be def	ined									
axis	MACHA	·				NCK vei	rsion:	06.00.	00	
identifier:	100 100	`						00.00.	00	
unit:	Linear /	min.:	DBL MIN	٧			max.:	DBL N	ЛАX	
	angular		_					_		
	position									
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	IOEM	access
				'						rights
read:	Х					Х				J
write:	Х					Х				7
attributes:	global	block sea	rch	1	ı	link	L	I		
		Not class	sified			No rest	rictions			

DOUBLE	\$AA_QE	C_ACCEI	L_2[n,31]						descripti n:	0
description	1:				•				•	
\$AA_QE	C_ACCEL	_2[n,a]								
Accelerat	ion at 2nd	l knee poi	nt accordi	ing to defii	nition [mm	n/s2 or in	ch/s2 or d	legree/s2]		
a: Machir	ne axes									
description	of field lim	nits:								
n: 0										
to be defi	ned									
axis identifier:	MACHAX	(				NCK vers	sion:	06.00.00	)	
unit:	Linear /	min.:	DBL_MIN	N		I	max.:	DBL_M	ΑX	
	angular position									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch		•	link	•	-	•	
		Not class	ified			No restr	rictions			

DOUBLE	\$AA_QE	C_ACCE	L_3[n,31]						descript n:	io
description	l 1:								111.	
\$AA_QEO Accelerate a: Machin description n: 0 to be defi	tion at 3rd ne axes n of field lin	l knee poi	nt accordi	ng to defin	ition [mm	/s2 or in	ch/s2 or d	egree/s2	1	
axis identifier:	MACHA)	Κ				NCK ver	rsion:	06.00.	00	
unit:	Linear / angular position	min.:	DBL_MI	N		max.: DBL_MAX			ИАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch			link	1	1	1	
		Not class	sified			No rest	rictions			

DOUBLE	\$AA_Q	EC_MEAS	_TIME_1	[n,31]				descripti	0
description	<u> </u> า:							n:	
		S_TIME_1[i	n.al						
		or range \$A		ACCEL 1					
a: Machir	•	J - ,		_					
description	n of field I	imits:							
n: 0									
to be def	ined								
axis identifier:	MACHA	X			NCK ver	sion:	06.00.0	00	
unit:	s	min.:				max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch		link				
		Not class	sified		No rest	rictions			

DOUBLE	\$AA Q	EC_MEAS	TIME 2	n,31]				descript	io	
				, ,				n:		
description	n:									
\$AA_QE	C_MEAS	S_TIME_2[i	n,a]							
Measurin	ng time fo	or range \$A	A_QEC_/	ACCEL_2						
a: Machir	ne axes			_						
description	n of field l	imits:								
n: 0										
to be def	ined									
axis	MACHA	λX			NCK ver	sion:	06.00.	00		
identifier:										
unit:	s	min.:				max.:		DBL_MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access	
									rights	
read:	X				X					
write:	Х				Х				7	
attributes:	global	block sear	ch	1	link		I			
		Not class	sified		No rest	rictions				

DOUBLE	\$AA_Q	EC_MEAS	_TIME_3[	n,31]				descript	10
description	<u> </u> า:							n:	
\$AA_QE Measurin a: Machir	C_MEAS g time fo ne axes	S_TIME_3[ı or range \$A		ACCEL_3					
description n: 0	n of field I	imits:							
to be defi	ned								
axis identifier:	MACHA	·Χ			NCK ver	rsion:	06.00.00		
unit:	s	min.:			<u>,</u>	max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	rch	1	link	1	1	<u> </u>	
		Not class	sified		No rest	rictions			

DOUBLE	\$AA Q	EC_TIME_	1[n,31]					descript	io		
								n:			
description	n:										
\$AA_QE	C_TIME	_1[n,a]									
1. Filterin	ng time fo	or feedforwa	ard eleme	ent							
a: Machir	ne axes										
description	n of field l	imits:									
n: 0											
to be def	ined										
axis identifier:	MACHA		NCK version:			00					
unit:	s	min.:			max.:			DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights		
read:	Х				Χ						
write:	Х				Х				7		
attributes:	global	block sear	rch	I	link	I.		I .			
		Not class	sified		No rest	rictions					

DOUBLE	\$AA_Q	EC_TIME_	2[n,31]					descript n:	:10
description	1:			<u> </u>				1	
\$AA_QE	C_TIME	_2[n,a]							
2. Filterin	g time fo	or feedforwa	ard eleme	ent					
a: Machir	ne axes								
description	n of field I	imits:							
n: 0									
to be defi	ned								
axis identifier:	MACHA	·Χ			NCK ver	NCK version: 06.00.00			
unit:	s	min.:			•	max.:	: DBL_MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	ch		link				
		Not class	sified		No rest	rictions			

DOUBLE	\$AA Q	EC_LEARI	NING RA	TE[n,31]				descript	io	
								n:		
description	n:									
\$AA_QE	C_LEAR	NING_RAT	ΓE[n,a]							
Learning	rate for	network								
a: Machir	ne axes									
description	n of field I	imits:								
n: 0										
to be def	ined									
axis identifier:	MACHA	X			NCK ver	NCK version:		00		
unit:	-	min.:				max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х				Ĭ	
write:										
attributes:	global	block sear	rch	1	link	1	- 1	1		
		Not class	sified		No rest	rictions				

ROOF	\$AA QI	C DIREC	TIONALI	n.311				descript	10
	. –			,.				n:	
description	1:								
\$AA_QE	C_DIREC	CTIONAL[r	ı,a]						
TRUE: D	irection-c	lependent	compensa	ation					
FALSE: N	No directi	on-depend	lent comp	ensation					
a: Machir	ne axes	•	•						
description	n of field li	mits:							
n: 0									
to be def	ned								
axis identifier:	MACHA	X			NCK vei	rsion:	06.00.	00	
unit:	-	min.:	FALSE		•	max.:	TRUE		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				X				7
attributes:	global	block sear	ch	1	link	ļ			
		Not class	sified		No rest	rictions			

#### 1.1.21 Interpolatory compensation

DOUBLE	\$AN CE	C[n.m]							descriptio	
									n:	
description	1:									
\$AN_CE	C[n,m]									
Compens	sation valu	ue								
description	n of field lin	nits:								
n: Numbe	er of comp	ensation	table 0 - (	maximum	value car	n be set i	n MD)			
m: Numb	er of inter	polation p	oint 0 - (m	naximum v	alue can	be set in	MD)			
axis						NCK ver	sion:	06.00.0	00	
identifier:										
unit:	-	min.:	DBL_MIN	٧			max.:	DBL_N	<b>MAX</b>	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	X					Х				
write:	Χ					Х				7
attributes:	global	block sear	rch	•	l .	link		<b>.</b>	<b>.</b>	
		Not class	sified			No rest	rictions			
1	1									1

AXIS	\$AN_C	EC_INPUT	_AXIS[n]						descript	io
description	J								n:	
•		T 41/101 1								
_	_	T_AXIS[n]:								
Name of	axis who	ose setpoin	t is used a	as the comp	pensation	ı table in	put			
description	n of field l	imits:								
n: Numbe	er of con	npensation	table 0 - (	maximum v	/alue can	be set i	n MD)			
axis		•				NCK ver	sion:	06.00.	00	
identifier:										
unit:	-	min.:				•	max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	<u> </u>		link				
		Not class	sified			No rest	rictions			

AXIS	\$AN_C	EC_OUTP	JT_AXIS	[n]					descripti	0
									n:	
descriptio	n:									
\$AN_CE	C_OUTF	PUT_AXIS[I	n]:							
Name of	axis to v	vhich the ou	utput of th	e compens	sation tab	le is app	lied			
descriptio	n of field l	imits:								
n: Numb	er of con	npensation	table 0 - (	maximum	value car	n be set i	n MD)			
axis						NCK ver	sion:	06.00.	00	
identifier:										
unit:	-	min.:				•	max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link	•	*	•	
		Not class	sified			No rest	rictions			

DOUBLE	CAN CE	C CTEDI	1		ſ				description	
DOODLL	∌AIN_CE	C_STEP[	nj							1
									n:	
description	1.									
\$AN_CE	C_STEP[r	ո]								
Distance	of offset v	/alues								
description	n of field lin	nits:								
n: Numbe	er of comp	ensation	table 0 - (	maximum	value can	be set i	n MD)			
axis						NCK vers	sion:	06.00.0	0	
identifier:										
unit:	-	min.:	DBL_MIN	١			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch			link				
		Not class	sified			No restr	rictions			
		•								•

DOUBLE	\$AN CI	EC_MIN[n]							descript	io
	<b>*</b>		l						n:	
description	n:								•	•
AN CEC	MIN[n]									
Start pos	ition of c	ompensatio	on table							
description	n of field li	mits:								
n: Numbe	er of com	pensation	table 0 - (	maximum v	alue car	be set i	n MD)			
axis			,			NCK ver		06.00.	00	
identifier:		Tarata .	Г				T			
unit:	-	min.:	DBL_MII	N			max.:	DBL_N	ΛAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•		link		•	•	
		Not class	sified			No rest	rictions			

DOUBLE	\$AN CE	C_MAX[n	1						descriptio	
			-						n:	
description	1:									
AN_CEC	_MAX[n]									
End posit	ion of cor	npensatio	n table							
description	of field lim	nits:								
n: Numbe	er of comp	ensation	table 0 - (	maximum	value car	be set in	n MD)			
axis						NCK vers	sion:	06.00.00		
identifier:										
unit:	-	min.:	DBL_MIN	٧		•	max.:	DBL_MA	X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link	•	-		
		Not class	ified			No restri	ictions			

INT	\$AN C	EC DIREC	TION[n]					descript	io
	<b>V</b> •							n:	
descriptior	n:							•	•
SAN CE	C DIRE	CTION[n]							
Activates	directio	n-dependei	nt action o	of compensatio	n table				
description	n of field I	imits:							
n: Numbe	er of con	npensation	table 0 - (	maximum valu	e can be set i	n MD)			
axis					NCK ver	sion:	06.00.	00	
dentifier:									
unit:	-	min.:	INT_MIN	I	•	max.:	INT_N	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch		link		<u> </u>		
		Not class	sified		No rest	rictions			

INT	\$AN_CI	EC MULT	BY TAB	LE[n]					description	)
	-								n:	
description	า:									
\$AN_CE	C_MULT	_BY_TABI	_E[n]							
Number (	of table v	vhose outp	ut value is	s to be mu	Itiplied by	the outp	ut			
value of t	he comp	ensation ta	able			•				
	•	ctions of ba								
1: Positiv	e travel	direction of	basic axi	s						
-1: Negat	tive trave	I direction	of basic a	xis						
description										
n: Numbe	er of com	pensation	table 0 - (	maximum	value car	n be set i	n MD)			
axis		<u> </u>	(			NCK ver		06.00.0	00	
identifier:								00.00.	00	
unit:	-	min.:	-1				max.:	1		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•		link	•			
		Not class	sified			No rest	rictions			

BOOL	\$AN C	EC IS MC	DULO[n]					descript	io
								n:	
description	n:								
\$AN CE	C IS M	ODULO[n]							
		epetition of	compens	ation table					
	•	•	•	ensation table	<u> </u>				
description					•				
n: Numbe	er of con	npensation	table 0 - (	maximum val	ue can be set i	in MD)			
axis	1	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	10.0.0		INCK ver		06.00.0	<u> </u>	
identifier:							00.00.0	50	
unit:	-	min.:	FALSE		•	max.:	TRUE		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				rigitis
write:	Х				X	+			7
attributes:	global	block sea	rch		link		I		
		Not class	sified		No rest	rictions			

#### 1.1.22 **NCK-specific protection areas**

BOOL	\$SN P	A ACTIV	MMED[n]	1					descripti	0
				•					n:	
escriptio										
SN_PA	_ACTIV_	_IMMED[n]								
rotectio	n zone ir	nmediately	active aft	ter boot						
RUE: T	he prote	ction zone	is activate	d immedia	ately					
ne contr	ol has bo	ooted and t	he axes h	ave been	reference	d				
ALSE:	The prote	ection zone	is not imi	mediately	active					
√ote: Thi	s variab	le can only	be writter	n as a syst	em variat	le and is	not affec	ted by		
ne NC c	ommand	ls between	NPROTD	EF() and	EXECU1	E(n).				
Note: Thi	s variab	le is not res	stored dur	ing REOR	G.					
Note: Thi	s variab	le is saved	during da	ta backup						
		PRO, N	•			II IAITIN	NI			
	of field I				<u> </u>					
ı: Numbe	er of prof	tection zon	<del>.</del>							
axis			<u>-                                      </u>			NCK ver	sion:	06.00.0	10	
dentifier:								00.00.0		
ınit:	-	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
ead:	Х					X		X		
/rite:	Х					Х		Х		7
ttributes:	global	block sea	rch	I		link	_ I			
		Not class	sified			No rest	rictions			
CHAR	4011 0				1				description	21
) 1/\l	\$SN_P	A_T_W[n]							n:	
lescription	1:				<u> </u>					
•	_T_W[n]									
)		ifi- t	/	41						

Protection zone specific to workpiece/tool

- 0: Workpiece-specific protection zone
- 3: Tool-specific protection zone

Note: This variable is not restored during REORG.

Note: This variable is saved during data backup.

Blocks: \_N\_NCK\_PRO, \_N\_COMPLETE\_PRO and \_N\_INITIAL\_INI

description of field limits:

n: Number of protection zone

axis					NCK ver	sion:	06.00.0	0	
identifier:								-	
unit:	-	min.:	0			max.:	3		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х		Х		
write:	Х				Х		Х		7
attributes:	global	block sea	rch		link			•	
		Not class	sified		No rest	rictions			

INT	\$SN_P	A_ORI[n]							description	)
									n:	
description	1:									
\$SN PA	ORI[n]									
Orientation	on of pro	tection zon	е							
	-			the 1st and	d 2nd ged	axes (	G17)			
				the 3rd and	•	•	,			
		•		the 2nd an	•	•	•			
Note: Thi	s variabl	e is not res	tored dur	ing REORG	3.					
				Ü						
Note: Thi	s variabl	e is saved	during da	ta backup.						
Blocks:	N NCK	PRO, N	COMPLE	TE_PRO a	ind N IN	NITIAL I	NI			
description				<del>_</del>						
n: Numbe	er of prot	ection zone	Э							
axis						NCK ver	sion:	06.00.0	00	
identifier:										
unit:	-	min.:	0				max.:	2		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х		Х		
write:	Х	1				Х		Х		7
attributes:		block sear	rch			link		1 1		-
	3.2.20.									
		Not class	sified			No rest	rictions			

INT	\$SN PA LIM 3DIM[n]	descriptio	1
		n:	

description:

\$SN PA LIM 3DIM[n]

Identifier for limitation of protection zone in the axis

perpendicular to the polygon definition

- 0: No limitation
- 1: Limitation in the positive direction
- 2: Limitation in the negative direction
- 3: Limitation in both directions

Note: This variable is not restored during REORG.

Note: This variable is saved during data backup.

Blocks: \_N\_NCK\_PRO, \_N\_COMPLETE\_PRO and \_N\_INITIAL\_INI description of field limits:

n: Number of protection zone

axis identifier:					NCK vers	sion:	06.00.00	)	
unit:	-	min.:	0			max.:	3		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х		Х		
write:	Х				Х		Х		7
attributes:	global	block sear	ch		link	•		•	
		Not class	ified		No restr	ictions			

lescription: SSN_PA_ Positive lir perpendic	: PLUS_L mitation							n:	
SSN_PA_ Positive lir perpendic	PLUS_L								
Positive lir perpendic	mitation								
Positive lir perpendic	mitation								
erpendic			on zones i	n the axis					
•		ne polygon							
-ffective c				]=1 or = 3.					
	νy ψ	, , , <u>, , ,</u>	05[	,					
Jote: This	variable	e is not res	tored duri	ng REORG.					
1010. 11110	variable	0 10 1100 100	ntorea aari	ng record.					
Note: This	variable	e is saved	during dat	ta hackun					
					_N_INITIAL_II	NII.			
lescription			COIVII LL	TL_I ITO and		11			
•		ection zone	2						
ixis	i oi piot	collon zone			INCK ver	sion.	06.00.0	^	
dentifier:					Tronc von	51011.	06.00.0	U	
ınit:	mm	min.:	DBL MIN	1	l .	max.:	DBL M	AX	
1	run-in	main run	runin stp	Mrun syn	PP	SA	OPI _	OEM	access
									rights
ead:	Х				X		Х		
vrite:	Х				Х		Х		7
ttributes:	global	block sear	rch	1	link	1	1	1	
		Not class	sified		No restr	rictions			1
		ı			1				

DOUBLE	\$SN PA	_MINUS_	LIM[n]						descript	io
	<b>V</b> • • • • •		[]						n:	
descriptio	n:								•	
\$SN_PA	MINUS	LIM[n]								
perpendi	cular to th	ne polygon	definition		rection ir	the axis				
Effective	only if \$5	SN_PA_LIN	մ_3DIM[n	]=2 or = 3.						
Note: Th Blocks: _	is variable	e is saved PRO, _N_	during da	ng REOR0 ta backup. TE_PRO a		NITIAL_I	NI			
		ection zone	<u> </u>							
axis identifier:	or prote	COLIOIT ZOTIC	<u>-</u>			NCK ver	sion:	06.00.0	00	
unit:	mm	min.:	DBL_MIN	١			max.:	DBL_M	IAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х		
write:	V									7

No restrictions

attributes: global

block search
Not classified

descriptio \$SN\_PA\_CONT\_NUM[n] n: description: \$SN\_PA\_CONT\_NUM[n] Number of valid contour elements Protection zones need at least 2 contour elements for a complete description. Note: This variable is not restored during REORG. Note: This variable is saved during data backup. Blocks: \_N\_NCK\_PRO, \_N\_COMPLETE\_PRO and \_N\_INITIAL\_INI description of field limits: n: Number of protection zone NCK version: 06.00.00 identifier: unit: min.: max.: 10 0 OPI run-in main run runin stp Mrun syn SA OFM access rights read: Х X Х write: Χ Χ X 7 attributes: global block search link

INT	\$SN_PA_CONT_TYP[n,m]	C	descriptio	
		r	า:	

No restrictions

description:

\$SN PA CONT TYP[n,m]

Type (G1, G2, G3) of contour element

- =0: Contour not defined
- =1: Straight
- =2: Circle element (clockwise)
- =3: Circle element (counterclockwise)

The end point is determined by \$SN\_PA\_CONT\_ORD or \$SN\_PA\_CONT\_ABS. With contour types G2 and G3, \$SN\_PA\_CENT\_ORD or \$SN\_PA\_CENT\_ABS determines the center point of the circle element.

Note: This variable is not restored during REORG.

Not classified

Note: This variable is saved during data backup.

Blocks: \_N\_NCK\_PRO, \_N\_COMPLETE\_PRO and \_N\_INITIAL\_INI description of field limits:

n: Number of protection zone

m: Number of the contour element

axis identifier:					NCK ver	sion:	06.00.00			
unit:	-	min.:	0			max.:	3			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Χ		Х			
write:	Х				Χ		Х		7	
attributes:	global	block sear	rch	<u>.</u>	link		<b>.</b>	· ·		
		Not class	sified		No rest	rictions				

	35N P	A_CONT_C	DRD[n.m]					descript	10
			.,.					n:	
description	1:								
SN_PA_	CONT_	ORD[n,m]							
End point	t of conto	our elemen	t (ordinate	e)					
See also	descript	ion of \$SN	_PA_CON	NT_TYP					
Note: This	s variabl	e is not res	tored duri	ing REORG.					
Note: This	s variabl	e is saved	during da	ta backup.					
			COMPLE	TE_PRO and _	N_INITIAL_I	NI			
lescription	n of field li	mits:							
ı: Numbe	er of prot	ection zone	Э						
n: Numb	er of the	contour ele	ement						
axis					NCK ver	sion:	06.00.0	0	
dentifier:									
ınit:	mm	min.:	DBL_MIN	N		max.:	DBL_M	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
ead:	Х				X		X		
vrite:	Х				Х		Х		7
ttributes:	global	block sear	ch	• •	link		1	ı	
		Not class	sified		No rest	rictions			

DOUBLE	\$SN_PA_CONT_ABS[n,m]	descriptio	
		n:	
description	n:		
\$SN_PA	_CONT_ABS[n,m]		

End point of contour element (abscissa)

See also description of \$SN\_PA\_CONT\_TYP

Note: This variable is not restored during REORG.

Note: This variable is saved during data backup.

Blocks: \_N\_NCK\_PRO, \_N\_COMPLETE\_PRO and \_N\_INITIAL\_INI description of field limits:

n: Number of protection zone

m: Number of the contour element

axis					NCK ver	sion:	06.00.0	0	
identifier:									
unit:	mm	min.:	DBL_MIN	٧		max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х		Х		
write:	Х				Х		Х		7
attributes:	global	block sear	ch		link	•			
		Not class	ified		No rest	rictions			

DOUBLE	\$SN P	A_CENT_C	RD[n,m]					descript	io
								n:	
descriptio	n:								
SN_PA	_CENT_	ORD[n,m]							
		ontour elem							
Relevant	only if \$	SN_PA_C	ONT_TYP	[n,m] = 2  or  =	3.				
Note: Th	is variab	le is not res	stored dur	ing REORG.					
Note: Th	is variab	e is saved	during da	ta backup.					
			COMPLE	TE_PRO and	_N_INITIAL_I	NI			
descriptio	n of field I	imits:							
n: Numb	er of prot	ection zone	е						
m: Numb	er of the	contour ele	ement						
axis					NCK ver	sion:	06.00.0	0	
identifier:						1			
unit:	mm	min.:	DBL_MII	V		max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X		X		
write:	Х				X		Х		7
attributes:	global	block sear	rch		link		•	-	
		Not class				rictions			

DOUBLE   \$SN PA CENT ABS[n,m]	descript	io
	n:	

description:

\$SN\_PA\_CENT\_ABS[n,m]

Center point of contour element (abscissa)

Relevant only if  $SN_PA_CONT_TYP[n,m] = 2$  or = 3.

Note: This variable is not restored during REORG.

Note: This variable is saved during data backup.

Blocks: \_N\_NCK\_PRO, \_N\_COMPLETE\_PRO and \_N\_INITIAL\_INI description of field limits:

n: Number of protection zone

m: Number of the contour element

axis					NCK ver	sion:	06.00.0	0	
identifier:									
unit:	mm	min.:	DBL_MIN	V		max.:	DBL_M	AX	,
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х		X		
write:	Х				Х		Х		7
attributes:	global	block sear	ch		link	<del>.</del>	1	•	
		Not class	sified		No rest	rictions			

## 1.1.23 Cycle parameterization

DOUBLE	\$C A								descripti	0
									n:	
description	1.									
\$C_A	nrogramn	ned addre	ee A in IS:	02/3 mode	a for cycle	narama	terization			
axis	programi	iica adaici	33 / ( 111 10 )	02/0 111000	c for cycle	NCK ver		17.00.0	00	
identifier:										
unit:	-	min.:	DBL_MIN				max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	1	I.	link				
		Not class	sified			No restr	rictions			
DOUBLE	\$C B								descripti	0
									n:	
description	1.									
\$C_B	nrogramn	ned addre	ee B in IS:	02/3 mode	a for cycle	narama	torization			
axis	programi	neu auure.	33 111 10	02/3 111000	e ioi cycle	NCK ver		17.00.0	<u> </u>	
identifier:	entifier:									
unit:							max.:	DBL_N	1AX	
	run-in main run runin stp Mrun syn			PP	SA	OPI	OEM	access rights		
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch		I.	link			I	
		Not class	sified			No restr	rictions			
DOUBLE	\$C C								descripti	0
									n:	
description \$C_C			0: 10	00/0						
value of axis	programn	ned addre	ss C in IS	U2/3 MOde	e ior cycle	parame	sion:	17.00.0	10	
identifier:	-					NOR VCI	31011.	17.00.0	)()	
unit:						I	max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	1				Х				J
write:	Х	1				Х				7
attributes:	1	block sear	ch	<u> </u>		link				•
Not classified					No restrictions					

DOUBLE	\$C D							descript	io
								n:	
descriptio	n:								
\$C_D									
	program	nmed addre	ss D in IS	O2/3 mode for			1		
axis					NCK ve	rsion:	17.00.	00	
identifier:			,						
unit:	-	min.:	DBL_MII	N		max.:	DBL_N	ИΑХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X				
write:	Х				X				7
attributes:		block sear	rch		link				<del></del>
attributes.	giobai								
		Not class	sified		No rest	rictions			
	1				1				
DOUBLE	\$C F							descript	io
								n:	
descriptio	n:							•	
\$C E									
	program	nmed addre	ss E in IS	O2/3 mode for	cycle parame	eterization	1		
axis	i				NCK ve		17.00.	00	
identifier:							17.00.		
unit:	-	min.:	DBL MII	N	<u> </u>	max.:	DBL N	ЛАX	
	run-in	main run	runin stp	Mrun syn	IPP	SA	OPI	IOEM	access
				,					rights
read:	Х				Х				<b>—</b>
write:	X				X				7
		blaskass							
attributes:	global	block sea	rcn		link				
		Not class	sified		No rest	rictions			
DOUBLE	¢C E							descript	rio I
DOODLL	∌C_L							n:	
descriptio	n:			Į.				1	
\$C F									
_	nrogram	med addre	ee F in IS	O2/3 mode for	cycle narame	terization	1		
axis	Program	inica addic	331 11110	OZ/3 IIIOGC IOI	INCK vei		17.00.	00	
identifier:					1101110	101011.	17.00.	00	
unit:	<u> </u>	min.:	DBL MII	N		max.:	DBL N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	IPP	SA	OPI	OEM	1200000
	i di i-iii	Illiaiii iuli	ruiiii stp	Ivii uii Syii		34	OFI	OLIVI	access rights
read:	Х					+			rigillo
					X				
write:	X				X				7
attributes:	global	block sear	rch	1	link				

No restrictions

Not classified

DOUBLE	\$C_G								descript	io
descriptio	u. 								n:	
\$C G										
	program	med addre	ss G in IS	O2/3 mod	e for cycle	e narame	eterization	1		
axis	Program	inica addic	00 0 111 10	02/011100	c for cycli	NCK ver		17.00.0	าก	
identifier:								17.00.	30	
unit:	-	min.:	DBL_MII	N			max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
				1						rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sea	rch			link				
		Not class	sified			No rest	rictions			
		111111111111				1111111111				
DOUBLE	\$C H								descript	io
									n:	
descriptio	n:								•	
\$C H										
Value of	program	med addre	ss H in IS	O2/3 mode	e for cycle	e parame	eterization			
axis	Ì					NCK ver		17.00.0	00	
identifier:										
unit:	-	min.:	DBL_MII	N			max.:	DBL_N	ЛAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	X					X				
write:	Х					Х				7
attributes:	global	block sea	rch	11	u .	link			·	
		Not class	sified			No rest	rictions			
DOUBLE	\$C II10	01							descript	io
									n:	
descriptio	n:									
\$C_I[]										
		med addre			for cycle	paramet	terization			
and mac	ro progra	amming wit	h G65/G6	6.						
descriptio	n of field	limits:								

									n:	
description	1:									
\$C_I[]										
and mac	o progra	med addre mming wit			for cycle	paramet	erization			
description	n of field li	mits:								
Up to 10	entries v	ith addres	s K can b	e made in	the block	for macr	o progran	nming		
axis identifier:						NCK ver	sion:	17.00.0	00	
unit:	-	min.:	DBL_MI	N			max.:	DBL_N	ИАХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sea	rch			link				
		Not class	sified			No resti	rictions			

DOUBLE	\$C J[10	1							descripti	0
		•							n:	
description	า:								•	
\$C_J[]										
Value of	programn	ned addre	ss J in IS0	D2/3 mode	for cycle	parame	terization			
and mac	ro prograr	nming witl	h G65/G6	6.						
description	n of field lin	nits:								
Up to 10	entries w	ith addres	s K can b	e made in	the block	for macr	o progran	nming		
axis						NCK ver	sion:	17.00.0	0	
identifier:										
unit:	-	min.:	DBL_MI	V			max.:	DBL_N	IAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					X				
write:	Х					Х				7
attributes:	global	block sear	rch	1.		link	<del>- 1</del>	<b>!</b>		
		Not class	sified			No rest	rictions			
	1	1				I.				

DOUBLE	\$C K[10	01							descriptio	
		-							n:	
description	า:									
\$C_K[]										
Value of	programr	ned addres	ss K in IS	O2/3 mode	e for cycle	paramet	erization			
and mac	ro progra	mming with	n G65/G6	6.						
description	n of field li	mits:								
Up to 10	entries w	ith addres	s K can be	e made in	the block	for macro	progran	nming		
axis						NCK vers	ion:	17.00.0	0	
identifier:										
unit:	-	min.:	DBL_MIN	٧			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	•		link	•	•	•	
		Not class	ified			No restri	ctions			

DOUBLE	\$C L								descriptio	
									n:	
description	1:									
\$C_L										
Value of	program	med addres	ss L in IS	O2/3 mode	for cycle	parame	terization			
axis identifier:					-	NCK ver	sion:	17.00.00	)	
unit:	-	min.:	DBL_MIN	V			max.:	DBL_M/	λX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch			link	<b>I</b>		· •	
		Not class	sified			No rest	rictions			

DOUBLE	\$C M							descriptio	
								n:	
descriptior	1:								
\$C_M									
Value of	program	med addre	ss M in IS	O2/3 mode for	cycle parame	eterization	1		
axis identifier:					NCK vei	rsion:	17.00.	00	
unit:	-	min.:	DBL_MII	N	•	max.:	DBL_N	ЛАХ	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch	1	link	<u> </u>	I		
		Not class	sified		No rest	rictions			
		I.			<u> </u>				1
DOUBLE	\$C_N							descriptio	
	_							n:	

DOUBLE	\$C N								descriptio	
	ΨΟ								n:	
description	n:								•	
\$C_N										
Value of	programr	ned addres	ss N in IS	O2/3 mod	e for cycle	parame	terization			
axis						NCK ver	sion:	17.00.0	0	
identifier:										
unit:	-	min.:	DBL_MIN	١			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	•		link	<b>.</b>		<b>.</b>	
		Not class	ified			No resti	rictions			

DOUBLE	\$C O							descripti	0
								n:	
description	า:								
\$C_O									
Value of	program	med addres	ss O in IS	O2/3 mode for	cycle parame	eterization	1		
axis identifier:					NCK ver	sion:	17.00.0	00	
unit:	-	min.:	DBL_MIN	V		max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch	•	link		•	•	
		Not class	sified		No rest	rictions			

DOUBLE	¢C D				1				descript	io I
DOOBLE	\$C_P								n:	
descriptio	n:				I					ı
\$C_P										
Value of	program	med addre	ss P in IS	O2/3 mode	e for cycle			l		
axis						NCK ver	sion:	17.00.0	00	
identifier: unit:		min.:					Imov :			
uriit.	-		DBL_MII				max.:	DBL_N		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	V					V				rights
	Х					Х				
write:	Х					X				7
attributes:	global	block sea	rch			link	•			
		Not class	sified			No rest	rictions			
DOUBLE	\$C_Q								descript	io l
									n:	
descriptio	n:									
\$C_Q										
	program	med addre	ss Q in IS	O2/3 mode	e for cycle			1		
axis						NCK ver	sion:	17.00.0	00	
identifier: unit:		min.:	DDI MI				max.:	DDI A	443/	
unit.	-		DBL_MII					DBL_N		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	X					Х				rights
write:										7
	X	late et e e e				X				7
attributes:	global	block sea	rcn			link				
		Not class	sified			No rest	rictions			
		•				•				•
DOUBLE	\$C_R								descript	io
docorintio	n.								n:	
descriptio	11.									
\$C_R		مسلمام مامم مس	D :- IC	00/0	a famanal					
axis	program	med addre	SS R III IS	O2/3 mode	e for cycle	NCK ver			20	
identifier:						NOIX VEI	31011.	17.00.0	JU	
unit:	-	min.:	DBL MII	N		1	max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	IOEM	access
										rights
read:	Х					Х				
write:	Y	+				Y				7

link

No restrictions

block search

Not classified

attributes: global

DOUBLE	\$C S							descript	io
								n:	
description	า:								
\$C_S									
Value of	program	med addre	ss S in IS	O2/3 mode for	cycle parame	eterization			
axis					NCK vei	rsion:	17.00.	00	
identifier:									
unit:				max.:	DBL_N	ЛΑХ			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X				
write:	Х				X				7
attributes:	global	block sear	rch	I I	link	<u> </u>			
		Not class	sified		No rest	rictions			

DOUBLE	\$C T								descript	io
	<b>~</b>								n:	
description	n:				•				•	•
\$C T										
Value of	program	med addre	ss T for c	vcle param	neterizatio	n (ISO2/	3 mode)			
		bstitution (I				`	,			
axis						NCK ver	sion:	17.00.	00	
identifier:										
unit:	-	min.:	DBL_MII	N		max.: DBL_M/			ИΑХ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	1	link					
		Not class	sified			No restrictions				

DOUBLE	\$C U							descripti	0
	<b>*</b>							n:	
description	า:			<u> </u>					
\$C_U									
Value of	program	med addres	ss U in IS	O2/3 mode for	cycle parame	terization			
axis					NCK ver	sion:	17.00.0	00	
identifier:									
unit:	-	min.:	DBL_MIN	٧		max.:	DBL_N	1AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х				X				
write:	Х				X				7
attributes:	global	block sear	ch		link	<u>_</u>		I.	
		Not class	sified		No resti	rictions			

DOUBLE	OUBLE  \$C_V								descriptio	
									n:	
description	n:									
\$C_V										
	program	med addre	ss V in IS	O2/3 mode	e for cycle					
axis						NCK ver	sion:	17.00.0	00	
identifier: unit:		min.:	DDI 1411				max.:	DD: 1	4437	
uriit.	-		DBL_MI					DBL_N		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					X				7
attributes:	global	block sea	rch							
		Not class	sified			No rest	rictions			
DOUBLE	\$C_W								description:	)
description	n:								1	
\$C W										
Value of	program	med addre	ss W in IS	O2/3 mod	le for cycl	e param	eterizatior	ı		
axis						NCK ver		17.00.	00	
identifier: unit:							may.			
uriit.						max.:	DBL_N			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	1	1	link		I		1
		Not class	sified			No rest	rictions			
						<u> </u>				
DOUBLE	\$C X								descriptio	
									n:	
description	n:								•	. •
\$C_X										
Value of	program	med addre	ss X in IS	O2/3 mode	e for cycle	parame	eterization			
axis						NCK ver	sion:	17.00.0	00	
identifier:		Tanaka .	1				T			
unit:	-	min.:	DBL_MIN	1			max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				giilo
write:	Х					Х				7
attributes:		block sear	k search			link				
Not classified					No restrictions					

DOUBLE	\$C Y								descript	10
	-								n:	
description	n:									
\$C_Y										
Value of	programi	med addre	ss Y in IS	O2/3 mod	e for cycle	parame	terization			
axis					-	NCK ver	sion:	17.00.0	00	
identifier:										
unit:	-	min.:	DBL_MIN	V			max.:	DBL_N	ЛАX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch			link	· · ·	1	<u>'</u>	
		Not class	sified			No resti	rictions			
DOUBLE	\$C_Z								descript	iO
	T								n.	1

DOUBLE	\$C Z							descript	io	
								n:		
description	n:									
\$C_Z										
Value of	program	med addre	ss Z in IS	O2/3 mode for	cycle parame	terization				
axis					NCK ver	sion:	17.00.0	00		
identifier:										
unit:	-	min.:	DBL_MIN	٧		max.:	DBL_MAX			
r	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access	
									rights	
read:	Х				X					
write:	Х				Х				7	
attributes:	global	block sear	ch		link					
		Not class	sified		No restrictions					

DOUBLE	\$C DL							descript	io	
								n:		
description	า:									
Value of	program	med addre	ss DL (ad	ditive tool offse	et) in the case	of a				
subprogr	am call l	by M/T fund	tion subst	titution	,					
axis identifier:					NCK ver	rsion:	43.00.	00		
unit: .	-	min.:	DBL_MIN	N	*	max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х				_	
write:	Х				Х				7	
attributes:	global	block sear	rch		link					
		Not class	sified		No rest					

DOUBLE	\$C_PI							descript	io	
	ΨΟ							n:		
descriptio	n:			•					•	
Program	number	of interrupt	routine p	rogrammed wit	h M96 Pxx in	ISO2/3 n	node			
axis identifier:		-			NCK vei	rsion:	52.00.	00		
unit:	-	min.:	DBL_MIN	V	•	max.:	DBL_N	ЛАХ		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				X					
write:	Х				Х				7	
attributes:	global	block sear	block search			link				
		Not class	sified		No rest	rictions				
STRING	\$C TS	[-1]						descript	io	

STRING	\$C TSI	[-1]							descriptio	
		•							n:	
description	n:									
\$C_TS										
String of	the tool	identifier pr	ogramme	d under add	dress T fo	or				
				l monitoring						
description					, ,,					
The tool	name ap	pears once	only in th	ne block.						
axis						NCK ver	sion:	18.00.00	)	
identifier:								10.00.0		
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sea	rch			W.				
		Not class	sified			No rest	rictions			

		a	-
INT	\$C_A_PROG	descriptio	
	V-2-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	n:	
descriptio	n:		
A0 A D	500		

\$C\_A\_PROG

Address A is programmed in a block with cycle call

- 0 = Not programmed
- 1 = Programmed
- 3 = Programmed incrementally

Bit 0 is set if the address is programmed absolutely or incrementally.

Bit 1 is set in addition if the address is programmed incrementally.

axis					NCK ver	sion:	17.00.0	00	
identifier:									
unit:	-	min.:				max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	X				Х				7
attributes:	global	block sear	ch	•	link	1	•		
		Not class	sified		No resti	rictions			

INT	\$C B	PROG						io	
	,							n:	
descriptio	n:								
\$C_B_P	ROG								
Address	B is prog	grammed in	a block v	vith cycle call					
0 = Not p	orogramr	ned							
1 = Prog	rammed								
3 = Prog	rammed	incrementa	ally						
Bit 0 is s	et if the a	address is p	orogramm	ed absolutely	or incremental	ly.			
					incrementally.				
axis					NCK ver		17.00.	00	
identifier:									
unit:	-	min.:				max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sea	rch	I	link			1	
		Not class	sified		No rest				

INT	\$C_C_PROG	descr	iptio	
		n:		

description:

\$C\_C\_PROG

Address C is programmed in a block with cycle call

- 0 = Not programmed
- 1 = Programmed
- 3 = Programmed incrementally
- Bit 0 is set if the address is programmed absolutely or incrementally.

Bit 1 is set in addition if the address is programmed incrementally.

axis						NCK version:		17.00.0	17.00.00		
identifier:											
unit:	-	min.:					max.:				
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х					Х					
write:	Х					Х				7	
attributes:	global block search					link					
		Not class	sified			No restrictions					

INT	\$C_D_F	PROG						descriptio	
								n:	
description	1:								
\$C_D_PI	ROG								
Address	D is prog	rammed in	a block v	vith cycle call					
0 = Not p	rogramn	ned							
1 = Progi	ammed								
3 = Progi	ammed	incrementa	ılly						
Bit 0 is se	et if the a	iddress is p	rogramm	ed absolutely	or incremental	lly.			
Bit 1 is se	et in add	tion if the a	iddress is	programmed	incrementally.	•			
axis					NCK ver	sion:	17.00.	00	
identifier:									
unit:	-	min.:				max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	ch	•	link	•	•	•	
		Not class	sified		No rest	rictions			

IIN I	\$C_E_PROG	descriptio	
		n:	

description:

\$C\_E\_PROG

Address E is programmed in a block with cycle call

- 0 = Not programmed
- 1 = Programmed
- 3 = Programmed incrementally

Bit 0 is set if the address is programmed absolutely or incrementally.

axis						NCK ver	sion:	17.00.0	17.00.00		
identifier:											
unit:	-	min.:					max.:				
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х					Х					
write:	Х					Х				7	
attributes:	global	block sear	ch			link		•	•		
		Not class	ified	ed			rictions				

INT	\$C F F	PROG							descript	io
									n:	
description	n:									
\$C_F_PF	ROG									
Address	F is prog	rammed in	a block w	ith cycle o	all					
0 = Not p	rogramn	ned								
1 = Progi	rammed									
3 = Progi	rammed	incrementa	ally							
Bit 0 is se	et if the a	address is p	orogramm	ed absolut	tely or inci	remental	ly.			
Bit 1 is se	et in add	ition if the a	address is	programn	ned incren	nentally.	-			
axis						NCK ver	sion:	17.00.	00	
identifier:										
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•	•	link	•		•	
		Not class	sified			No resti	rictions			

INT	\$C_G_PROG	descripti	0
		n:	

description:

\$C\_G\_PROG

G function for cycle call is programmed in this block

- 0 = Not programmed
- 1 = Programmed
- 3 = Programmed incrementally
- Bit 0 is set if the address is programmed absolutely or incrementally.

axis						NCK ver	sion:	17.00.0	00	
identifier:										
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch			link				
		Not class	ot classified			No restr	rictions			

INT	\$C_H_I	PROG						description	
								n:	
description	n:								
\$C_H_PI	ROG								
Address	H is prog	grammed in	a block v	vith cycle cal	I				
0 = Not p	orogramn	ned							
1 = Progi	rammed								
3 = Progi	rammed	incrementa	ılly						
Bit 0 is se	et if the a	address is p	rogramm	ed absolutely	or incrementa	ılly.			
Bit 1 is se	et in add	ition if the a	address is	programmed	d incrementally				
axis				-	NCK ve	rsion:	17.00.	00	
identifier:									
unit:	-	min.:				max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	ch	•	link	•	•		
		Not class	sified		No res	No restrictions			

III	\$C_I_PROG	descriptio	
	·	n:	

description:

\$C I PROG

Address I is programmed in a block with cycle macro call

- 0 = Not programmed
- 1 = Programmed
- 3 = Programmed incrementally

Bit 0 is set if the address is programmed absolutely or incrementally.

				programmed						
axis					NCK ver	sion:	17.00.	17.00.00		
identifier:										
unit:	-	min.:				max.:				
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access	
									rights	
read:	Х				Х					
write:	Х				Х				7	
attributes:	global	block sear	rch	1	link		•	<b>.</b>		
		Not class	sified		No resti	No restrictions				

INT	\$C_J_F	ROG							descript	io
									n:	
description	า:									
\$C_J_PF	ROG									
Address	J is prog	rammed in	a block w	ith cycle m	nacro call					
0 = Not p	rogramn	ned								
1 = Progi	rammed									
3 = Progi	rammed	incrementa	ally							
Bit 0 is se	et if the a	iddress is p	orogramm	ed absolut	ely or inci	remental	ly.			
Bit 1 is se	et in addi	ition if the a	address is	programm	ned increr	nentally.				
axis identifier:						NCK ver	sion:	17.00.	00	
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch			link		I	1	
		Not class	sified			No rest	rictions			

INT	\$C_K_PROG	descrip	tio	
		n:		

description:

\$C\_K\_PROG

Address K is programmed in a block with cycle macro call

- 0 = Not programmed
- 1 = Programmed
- 3 = Programmed incrementally
- Bit 0 is set if the address is programmed absolutely or incrementally.

axis identifier:		lmin ·				NCK version:		17.00.0	17.00.00	
unit:	-	min.:				I	max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	<u>'</u>		link	•	•	•	
		Not class	sified			No rest	rictions			

INT	\$C_L_F	PROG						descript	io
								n:	
description	n:								
\$C_L_PF	ROG								
Address	L is prog	rammed in	a block w	ith cycle call					
0 = Not p	rogramr	ned		•					
1 = Progi	rammed								
3 = Progi	rammed	incrementa	ally						
Bit 0 is se	et if the a	address is p	orogramm	ed absolutely	or incremental	ly.			
Bit 1 is se	et in add	ition if the a	address is	programmed	incrementally.				
axis				· •	NCK ver	sion:	17.00.	00	
identifier:									
unit:	-	min.:				max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				X				7
attributes:	global	block sear	rch		link	•	•	•	
		Not class	sified		No rest	No restrictions			

IIN I	\$C_M_PROG	descriptio	
		n:	

description:

\$C\_M\_PROG

Address M is programmed in a block with cycle call

- 0 = Not programmed
- 1 = Programmed
- 3 = Programmed incrementally

Bit 0 is set if the address is programmed absolutely or incrementally.

axis					NCK ver	sion:	17.00.0	17.00.00		
identifier:										
unit:	-	min.:				max.:				
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х					
write:	Х				Х				7	
attributes:	global	block sear	ch		link		•	•		
	Not classified			No restrictions						

INT	\$C N	PROG						descript	io	
								n:		
descriptio	n:									
\$C_N_P	ROG									
Address	N is prog	grammed ir	n a block v	vith cycle call						
0 = Not p	orogramr	ned		•						
1 = Prog	rammed									
3 = Prog	rammed	incrementa	ally							
Bit 0 is s	et if the a	address is p	orogramm	ed absolutely	or incremental	ly.				
					incrementally.					
axis				· •	NCK ver	sion:	17.00.	00		
identifier:										
unit:	-	min.:				max.:				
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				X					
write:	Х				Х				7	
attributes:	global	block sea	rch	1	link					
		Not class	sified		No rest	No restrictions				

INT	\$C_O_PROG	descr	iptio	
		n:		

description:

\$C\_O\_PROG

Address O is programmed in a block with cycle call

- 0 = Not programmed
- 1 = Programmed
- 3 = Programmed incrementally
- Bit 0 is set if the address is programmed absolutely or incrementally.

axis					NCK ver	sion:	17.00.0	17.00.00		
identifier:										
unit:	-	min.:				max.:				
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х					
write:	Х				Х				7	
attributes:	global	block sear	ch		link					
		Not class	sified		No rest	rictions				

INI	\$C_P_P	ROG							aescripti	9
									n:	
description	1:									
\$C_P_PF	ROG									
Address	P is progi	rammed in	a block v	vith cycle o	all					
0 = Not p	rogramm	ied								
1 = Progr	ammed									
3 = Progr	ammed i	ncrementa	ally							
Bit 0 is se	et if the a	ddress is p	rogramm	ed absolut	ely or incr	emental	ly.			
Bit 1 is se	et in addit	tion if the a	address is	programm	ned incren	nentally.				
axis						NCK ver	sion:	17.00.0	00	
identifier:										
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Χ				
write:	Х					Х				7
attributes:	global	block sear	ch	I		link	I.	-	l .	
		Not class	sified			No resti	rictions			
l	l	<u> </u>			<u>_</u>					

IIN I	\$C_Q_PROG	descriptio	
		n:	

description:

\$C\_Q\_PROG

Address Q is programmed in a block with cycle call

- 0 = Not programmed
- 1 = Programmed
- 3 = Programmed incrementally

Bit 0 is set if the address is programmed absolutely or incrementally.

axis						NCK ver	sion:	17.00.0	17.00.00		
identifier:											
unit:	-	min.:					max.:				
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х					Х					
write:	Х					Х				7	
attributes:	global	block search				link					
		Not classified				No rest	rictions				

INT	\$C R F	PROG							descript	io
									n:	
description	n:									
\$C_R_PI	ROG									
Address	R is prog	grammed ir	n a block v	vith cycle o	call					
0 = Not p	rogramn	ned								
1 = Progi	rammed									
3 = Progi	rammed	incrementa	ally							
Bit 0 is se	et if the a	address is p	orogramm	ed absolut	tely or inci	remental	ly.			
Bit 1 is se	et in add	ition if the a	address is	programn	ned incren	nentally.				
axis				<u> </u>		NCK ver	sion:	17.00.	00	
identifier:										
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•	•	link	•		•	
		Not class	sified			No resti	rictions			

INT	\$C_S_PROG	descrip	otio
		n:	

description:

\$C\_S\_PROG

Address S is programmed in a block with cycle call

- 0 = Not programmed
- 1 = Programmed
- 3 = Programmed incrementally
- Bit 0 is set if the address is programmed absolutely or incrementally.

axis					NCK ver	sion:	17.00.0	17.00.00		
identifier:										
unit:	-	min.:				max.:				
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х					
write:	Х				Х				7	
attributes:	global	block sear	ch		link					
		Not class	sified		No rest	rictions				

IN I	\$C_T_PI	ROG							description	9
									n:	
description	1:									
\$C_T_PF	ROG									
Address	T is progr	ammed in	a block w	ith cycle o	all or T fu	nction su	ubstitution			
0 = Not p	rogramm	ed								
1 = Progr	ammed									
3 = Progr	ammed in	ncrementa	ılly							
Bit 0 is se	et if the ac	ddress is p	rogramm	ed absolut	ely or incr	emental	ly.			
Bit 1 is se	et in addit	ion if the a	address is	programm	ned incren	nentally.				
axis						NCK ver	sion:	17.00.0	00	
identifier:										
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•		link	<b>.</b>		<b>'</b>	
		Not class	sified			No restr	rictions			
1	l	1								-

III	\$C_U_PROG	descriptio	
		n:	

description:

\$C\_U\_PROG

Address U is programmed in the current block

- 0 = Not programmed
- 1 = Programmed
- 3 = Programmed incrementally

Bit 0 is set if the address is programmed absolutely or incrementally.

axis					NCK ver	sion:	17.00.0	00	
identifier:									
unit:	-	min.:				max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch		link		•	•	
		Not class	ified		No rest	rictions			

INT	\$C_V_I	PROG						descript	io	
								n:		
description	n:									
\$C_V_PI	ROG									
Address	V is prog	grammed in	a block v	vith cycle call						
0 = Not p	rogramr	ned								
1 = Progi	rammed									
3 = Progi	rammed	incrementa	ally							
Bit 0 is se	et if the a	address is p	orogramm	ed absolutely	or incremental	lly.				
Bit 1 is so	et in add	ition if the a	address is	programmed	incrementally.					
axis identifier:				-	NCK ver	NCK version:		17.00.00		
unit:	-	min.:			ļ	max.:				
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х					
write:	Х				Х				7	
attributes:	global	block sear	rch	<u> </u>	link					
		Not class	sified		No rest	rictions				

IIN I	\$C_W_PROG	descriptio	
		n:	

description:

\$C\_W\_PROG

Address W is programmed in a block with cycle call

- 0 = Not programmed
- 1 = Programmed
- 3 = Programmed incrementally

Bit 0 is set if the address is programmed absolutely or incrementally.

axis identifier:					NCK ver	sion:	17.00.0	00	
unit:	-	min.:			I	max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	rch	<u>'</u>	link	•	•	•	
		Not class	sified		No rest	rictions			

INT	\$C X I	PROG						descripti	0
	. – –							n:	
description	n:								
\$C_X_PI	ROG								
Address	X is prog	grammed in	a block v	vith cycle call					
0 = Not p	rogramr	ned							
1 = Progi	rammed								
3 = Progi	rammed	incrementa	ally						
Bit 0 is so	et if the a	address is p	rogramm	ed absolutely	or incremental	lly.			
Bit 1 is se	et in add	ition if the a	address is	programmed	incrementally.	-			
axis					NCK ver	sion:	17.00.	00	
identifier:									
unit:	-	min.:				max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X				
write:	Х				Х				7
attributes:	global	block sear	rch	, <u>, , , , , , , , , , , , , , , , , , </u>	link			•	
		Not class	sified		No rest	rictions			

INT	\$C_Y_PROG	descriptio	
		n:	

description:

\$C\_Y\_PROG

Address Y is programmed in a block with cycle call

- 0 = Not programmed
- 1 = Programmed
- 3 = Programmed incrementally

Bit 0 is set if the address is programmed absolutely or incrementally.

axis identifier:					NCK vers	sion:	17.00.0	00	
unit:	-	min.:				max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch		link	•		'	
		Not class	ified		No restr	rictions			

INT	\$C_Z_P	ROG							descriptio n:	
description	1: 1:								1111	L
\$C Z PF	ROG									
		rammed in	a block w	ith cycle o	all					
0 = Not p				•						
1 = Progi	ammed									
3 = Progi	ammed i	ncrementa	ılly							
Bit 0 is se	et if the a	ddress is p	rogramm	ed absolut	ely or incr	emental	ly.			
Bit 1 is se	et in addit	tion if the a	address is	programn						
axis						NCK ver	sion:	17.00.0	00	
identifier:										
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	•		link	'	•	1	
		Not class	sified			No rest	rictions			
										·
INT	\$C_PI_F	PROG							descriptio	
									n:	

INT	\$C_PI	PROG							descripti	0
	<b>,</b> , _, ,_								n:	
description	า:									
0 = Not p	rogramr	med								
1 = M96	Pxx inte	rrupt routine	e program	ımed						
axis identifier:					1	NCK ver	sion:	52.00.0	00	
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn	F	PP	SA	OPI	OEM	access rights
read:	Х					Х				J
write:	Х					Χ				7
attributes:	global	block sea	rch		I	ink	•	•	•	
		Not class	sified		1	No rest	rictions			

INT	\$C_G60	PROG							descripti	0
		_							n:	
description	1:									
0 = not p	rogramme	ed								
		mmed in th	ie cycle ca	all block						
axis						NCK ver	sion:	67.00.0	0	
identifier:										
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	1	I	link	ı	Г	I	
		Not class	sified			No rest	rictions			

INT	\$C DL	PROG						descript	io
	• •							n:	
descriptior	n:							-	
	ned for a	a subprogra		L (additive too r M/T function		een			
I = An ac	ditive to	ol offset ha	is been pr	ogrammed un	der address D	L.			
axis identifier:					NCK ver	rsion:	43.00.	00	
unit: _	-	min.:			•	max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
ead:	Х				Х				
write:	Х				Х				7
attributes:	global	block sear	ch	<u> </u>	link				
		Not class	sified		No rest	rictions			

INT	\$C_TS	_PROG						descript n:	io
description	n:			L				I	ı
address '	T for a s ve tool r	ubprogram nonitoring o	call per T	tifier has been function subsi	. •	under			
1 = Progi	rammed								
axis identifier:					NCK vei	rsion:	18.00.	00	
unit:	-	min.:				max.:	1		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х				
write:	Х				Х				7
attributes:	global	block sea	rch		link	1	1	I	
		Not class	sified		No rest	rictions			

INT	\$C_ALI	PROG							descript	io
									n:	
description	n:									
\$C_ALL_	PROG									
Bit patter	n of all p	rogramme	d address	es in a bloc	k with cy	cle call				
		" Bit25			•					
		s programn								
		not progra								
axis	1	, p. eg				NCK ver	sion:	17.00.0	20	
identifier:								17.00.0	J0	
unit:	-	min.:	INT_MIN				max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	<u> </u>		link		II.		
		Not class	sified			No resti	rictions			

INT	\$C_INC_	PROG							descripti n:	0
description	J.								111.	
\$C INC										
		rementall	v program	nmed addr	accae in	a block w	ith cycle	call		
		Bit25			CSSCS III	a block w	nui cycic	can		
		increment								
		absolutely								
axis	Addicas	absolutory	program	ilicu		NCK ver	sion:	18.00.0	Λ	
identifier:								10.00.0	U	
unit:	-	min.:	INT MIN			1	max.:	INT MA	λX	
	run-in	main run	_	Mrun syn		IPP	SA	OPI	IOEM	access
										rights
read:	Х					Х				Ĭ
write:	Х					Х				7
attributes:	global	block sear	ch	ı	l	link				
		Not class	sified			No resti	rictions			
						1.10.100				
INT	\$C_TYP	DDOG			l				descripti	0
	<b>ФС_11</b> Г	_FKOG							n:	
description	n:				,					•
\$C_TYP_	PROG									
				ed with val	lue INT o	REAL				
Bit0 = Ad	dress "A"	Bit25 :	<ul><li>Address</li></ul>	s "Z"						
Bit = 1 ->	Address	programm	ned with re	eal value						
	Address	programm	ned with ir	nt value						
axis						NCK ver	sion:	51.00.0	0	
identifier:		Imin :	I—				may			
unit:	-	min.:	INT_MIN				max.:	INT_M		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				rigitio
write:	Х					Х				7
attributes:		block sear	rch			link				<u> </u>
		Not class	rified			No resti	rictions			
		1401 01833	meu			140 1030	10110113			
INT	<b>60 1 1</b>				ı				descripti	01
11111	\$C_I_NU	J IVI							uescripti	ا

INT	\$C I NU	JM							descripti	0
	*								n:	
description	1:									
\$C I NU	M									
The num	ber of "I" a	addresses	programi	med in the	block is s	stored in	\$C I NU	M.		
				mming if b						
\$C I PR	•	,		Ū						
In the cas	se of mac	ro progran	nmina wit	h G65/G66	6. this vari	able cor	ntains the	number o	of	
				k (max. 10						
axis					,	NCK ver	sion:	18.00.0	00	
identifier:										
unit:	-	min.:					max.:	10		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
			-							rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	ch	ı		link		I	1	

No restrictions

Not classified

INT	\$C_J_N	IUM							descript	io
									n:	
description	n:									
\$C_J_NU	JM									
The num	ber of "J	" addresses	s program	med in the	block is	stored in	\$C_J_N	JM.		
This valu	e is alwa	ys 1 for cy	cle progra	mming if bit	0 is set	in				
\$C J PF	ROG.									
In the cas	se of ma	cro prograr	nming wit	h G65/G66,	this vari	able cor	tains the	number o	f	
				k (max. 10)						
axis				· · · · · ·		NCK ver	sion:	18.00.0	0	
identifier:										
unit:	-	min.:	INT_MIN				max.:	INT_M	ΑX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch	l		link	I.		1	
		Not class	sified			No rest	rictions			

	NI	\$C_K_NUM	descriptio	
			n:	

description:

\$C\_K\_NUM

The number of "K" addresses programmed in the block is stored in \$C\_K\_NUM.

This value is always 1 for cycle programming if bit 0 is set in

\$C K PROG.

In the case of macro programming with G65/G66, this variable contains the number of

"K" addre	esses pro	ogrammed	in the bloo	ck (max. 10).						
axis					NCK ver	sion:	18.00.0			
identifier:										
unit:	-	min.:	INT_MIN			max.:	INT_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х				Х					
write:	Х				Х				7	
attributes:	global	block sear	ch		link					
		Not class	sified		No rest	rictions				

7

## 1.1 List of system variables

INT	\$C_I_O	RDER[10]							descripti	0
descriptio	l n:								n.	
\$C   OF										
		lock in whi	ch I hac h	oon nroar	ammed					
		ith address				or macro	programn	ning with (	CEFICEE .	This allows
•		JK blocks t			IE DIOCK IC	n macro	programii	illing with v	303/300.	THIS allows
					notod					
descriptio		between I	JK DIOCKS	is always	notea.					
•		vith addres	o K oon b	o mada in	the block	for moor	o program	nmina		
axis	Lillies v	vitii auules	5 K Call D	e made in	tile block	INCK ver		49.00.0	10	
identifier:						TVOIC VOI	0.011.	49.00.0	10	
unit:	-	min.:	DBL MII	V		ļ	max.:	DBL N	IAX	
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI -	IOEM	access
										rights
read:	Х					Х				
write:	Х					Х				7
attributes:	global	block sear	rch		<u> </u>	link				
		Not class	sified			No rest	rictions			
INT	\$C J C	RDER[10]							descripti	0
	. – –								n:	
descriptio	n:									
\$C_J_OI										
		ock in whicl								
Up to 10	entries v	vith addres	s J can be	e made in	the block	for macre	o progran	nming with	n G65/G66	5. This
allows th	e sequer	nce of IJK b	olocks to b	e evaluate	ed					
The ass	sociation	between I.	IK blocks	is always	noted.					
descriptio	n of field l	imits:		·						
Up to 10	entries v	vith addres	s K can b	e made in	the block	for macr	o progran	nming		
axis						NCK ver	sion:	49.00.0	00	
identifier:										
unit:	-	min.:	DBL_MII	٧			max.:	DBL_N	IAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
rood:	1		1	1	1	1				

Χ

Χ

No restrictions

link

read:

write:

attributes: global

Χ

Χ

block search

Not classified

INIT										
INT	\$C_K_C	RDER[10	]						description:	
description	n:								111.	
\$C K O										
		ck in whicl	h K has be	een progra	ammed.					
						for macr	o progran	nming with	h G65/G66.	This
allows th	e sequen	ce of IJK b	olocks to b	e evaluate	ed			•		
The ass	sociation	between I.	IK blocks	is always	noted.					
description	n of field li	mits:								
	entries w	ith addres	s K can b	e made in	the block			nming		
axis						NCK ver	sion:	49.00.0	00	
identifier: unit:	_	lmin.:	DDI MI	VI		ļ	max.:	DDI M	14 🗸	
			DBL_MII			IDD		DBL_N		1
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				riginio
write:	Х					Х				7
attributes:	1	block sear	rch			link				'
		Not class	ified			No resti	riotiono			
		NOL Class	silled			No resti	rictions			
INT	laa								Idocerintio	1
IINI	\$C_ME								description:	
description	n:									1
\$C_ME										
Address	extension	n for addre	ss M for s	ubprograr	n call per	M function	on			
axis						NCK ver	sion:	42.00.0	00	
identifier: unit:		min.:					max.:			
unit.	-							0.51		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	Х					Х				rights
write:	X					X				7
attributes:	1	block sear	rch			link				,
attributes.	giobai									
		Not class	sified			No resti	rictions			
INT	\$C_TE								description:	
description	n:								111.	
\$C TE										
_	extension	n for addre	ss T for s	ubprogram	n call per l	M functio	n			
axis						NCK ver		42.00.0	00	
identifier:										
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	Х					X				rights
write:			-							7
attributes:	X	block sear	rch			X link				7
attributes.	gionai									
		Not class	sitied			No resti	rictions			

DOUBLE	\$C_MA	CPAR[33]						descript n:	io
description	n:							I	
\$MAC P	AR[n]								
_		Iso2/3 mod	de prograi	mmed in the o	riginal progran	n with # <r< td=""><td>number&gt;</td><td></td><td></td></r<>	number>		
description	n of field l	imits:							
The max	imum nu	mber of IS	O macrop	arameters is 3	33				
axis					NCK ver	sion:	47.00.	00	
identifier:									
unit:	-	min.:	DBL_MII	V		max.:	DBL_I	MAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	X				X				
write:	Х				X				7
attributes:	global	block sea	rch		link		<b>!</b>	L	
		Not class	sified		No rest	rictions			

# 1.1.24 System data

DOOBLE	\$AN_S	ETUP_TIM	E						n:	0
description	n:								1	
The \$AN minutes)	_	P_TIME time	er counts	the time el	apsed sin	ice the c	ontrol last	booted w	vith default	values (in
The time	r is auto	matically re	set each t	time the co	ntrol boot	ts with d	efault data	a.		
Use in No IF \$AN_S		ım: TIME> 600	00 GOTO	F MARK0	1					
axis identifier:						NCK ver	sion:	19.00.0	00	
unit:	S	min.:	DBL_MII	V		ļ	max.:	DBL_N	IAX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:	Х	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sear	rch	I I		link	1	1	1	
		Current v	/alue			No rest	rictions			

i	ΨΛΙ1_Ι \	\$AN_POWERON_TIME   descriptio   n:								
descriptio	n:								1	1
The \$AN	_POWEI	RON_TIME	timer cou	unts the tin	ne elapse	ed since t	he contro	l last boot	ed (in minu	ites).
The time	r is autor	natically re	set each t	time the co	ntrol boo	ots.				
Use in N										
	POWERO	ON_TIME =	== 480 GC	OTOF MAR	RK02	INICK				
axis identifier:						NCK ver	Sion:	19.00.0	0	
unit:	s	min.:	DBL MI	V			max.:	DBL M	AX	
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	TOEM	access
							0, 1		02	rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:	Х	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sear	rch			link				
		Current v	/alue			No rest	rictions			
		Our one v	- uiuo			140 1000	110010110			
DOUBLE	¢ A NI NI	CK VERSI	ON						descriptio	
	DAIN IN	CK VERSI								
	. –								n:	
	. –								n:	
description	n: sion								n:	
description NCK vers	n: sion sion: only	the intege	er places i						n:	
description NCK vers NCK vers the decir	n: sion sion: only nal place	the intege	er places i	iers for inte	ermediate	e versions	s used by	the	n:	
description NCK vers NCK vers the decirate	n: sion sion: only nal place nent dep	/ the intege s can conta artment. Tr	er places in ain identifi ne integer	iers for inte places cor	ermediate	e versions official so	s used by oftware ve	the	n:	
description NCK vers NCK vers the decirate	n: sion sion: only nal place nent dep	the intege	er places in ain identifi ne integer	iers for inte places cor	ermediate	e versions official so	s used by oftware ve	the	n:	<u> </u>
description NCK vers NCK vers the decin developm identifier variable	n: sion sion: only nal place nent dep: of the NO	/ the intege s can conta artment. Th CK: For exa	er places in ain identifi ne integer ample, the	iers for inte places cor	ermediate	e versions official so	s used by oftware ve	the	n:	
description NCK vers NCK vers the decin developm identifier variable compare	n: sion sion: only nal place nent dep: of the NO	/ the intege s can conta artment. Th CK: For exa	er places in ain identifi ne integer ample, the	iers for inte places cor	ermediate	e versions official so sion 20.0	s used by oftware ve 0.00 is	the rsion		
description NCK vers NCK vers the decin developm identifier variable compare axis	n: sion sion: only nal place nent dep: of the NO	/ the intege s can conta artment. Th CK: For exa	er places in ain identifi ne integer ample, the	iers for inte places cor	ermediate	e versions official so	s used by oftware ve 0.00 is	the		
description NCK vers NCK vers the decin developm identifier variable compare	n: sion sion: only nal place nent dep: of the NO	/ the intege s can conta artment. Th CK: For exa	er places in ain identifi ne integer ample, the	iers for inte places cor	ermediate	e versions official so sion 20.0	s used by oftware ve 0.00 is	the ersion 18.02.0	0	
description NCK vers NCK vers the decin developr identifier variable is compare axis identifier:	n: sion sion: only nal place ment dep of the NO 200000.0 OPI N/Y	the integes can conta artment. The CK: For exa nckVersio	er places in identification in the integer ample, the n	iers for inte places cor e value for	ermediate	e versions official so sion 20.0	s used by oftware ve 0.00 is sion:	the prision 18.02.0 DBL_M	0 AX	lacress
description NCK vers NCK vers the decin developr identifier variable compare axis identifier:	n: sion sion: only nal place nent dep: of the NO	the intege s can conta artment. Th CK: For exa ) nckVersio	er places in ain identifi ne integer ample, the	iers for inte places cor	ermediate	e versions official so sion 20.0	s used by oftware version:	the ersion 18.02.0	0	access
description NCK vers NCK vers the decin developr identifier variable compare axis identifier:	n: sion sion: only nal place ment dep of the NO 200000.0 OPI N/Y	the integes can conta artment. The CK: For exa nckVersio	er places in identification in the integer ample, the n	iers for inte places cor e value for	ermediate	e versions official so sion 20.0	s used by oftware ve 0.00 is sion:	the prision 18.02.0 DBL_M	0 AX	
description NCK verification NCK verific	n: sion sion: only nal place ment dep of the N0 200000.0 OPI N/Y	the integes can contartment. The CK: For example of the contact of	er places in identification in the integer ample, the n	iers for inte places cor e value for	ermediate	e versions official so sion 20.0	s used by oftware verol. 0.00 is sion:	the trision 18.02.0 DBL_M	O AX OEM	
description NCK verification NCK verific	n: sion sion: only nal place nent dep: of the N(200000.0 OPI N/Y	the integes can contartment. The CK: For example of the contact of	er places in identification in the street in	iers for inte places cor e value for	ermediate	e versions official so sion 20.0	s used by oftware verol. 0.00 is sion:	the trision 18.02.0 DBL_M	O AX OEM	
description NCK vers NCK vers the decin developr identifier variable s compare axis identifier: unit:  read:	n: sion sion: only nal place nent dep: of the N(200000.0 OPI N/Y	/ the intege s can conta artment. The CK: For example of nckVersion min.:  main run  X  block sear	er places in ain identification integer ample, the number runin stp	iers for inte places cor e value for	ermediate	e versions official so sion 20.0	s used by oftware verol. 0.00 is sion:    max.:   SA	the trision 18.02.0 DBL_M	O AX OEM	
description NCK vers NCK vers the decin developr identifier variable s compare axis identifier: unit:  read:	n: sion sion: only nal place nent dep: of the N(200000.0 OPI N/Y	/ the integes can contartment. The CK: For example of the contact	er places in ain identification integer ample, the number runin stp	iers for inte places cor e value for	ermediate	e versions official so sion 20.0	s used by oftware verol. 0.00 is sion:    max.:   SA	the trision 18.02.0 DBL_M	O AX OEM	
description NCK versithe decindevelopridentifier variable compare axis identifier: unit: read: write:	n: sion sion: only nal place nent dep: of the N(200000.0 OPI N/Y	/ the intege s can conta artment. The CK: For example of nckVersion min.:  main run  X  block sear	er places in identification in the street in	iers for inte places cor e value for	ermediate	e versions official so sion 20.0	s used by oftware verol. 0.00 is sion:    max.:   SA	the trision 18.02.0 DBL_M	O AX OEM	rights

									' ' '	
description	า:									
\$MN_IPC	D_MAX_L which var	OAD is us iable \$AN	sed to spe	cify the gr	oss interp	olator ope	erating tim	nit is reach ne (in % of falls below	the interp	olation
axis						NCK versi	on:	54.00.00		
identifier:										
unit:	-	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access

DOUBLE	\$AN_IF	PO_ACT_L	OAD					descript n:	io
description	n:							1	
\$AN_IPC		• •	lies the cu	ırrent interpo	lator runtime i	ncluding th	e runtime	of the syr	nchronized
axis identifier:					NCK v	ersion:	54.00.0	0	
unit:	-	min.:	DBL_MIN	V		max.: DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:		Х				Х	Х	Х	Ĭ
write:									
attributes:	global	block sear	ch	<u> </u>	link	<u> </u>			
		Not class	sified		Not cl	assified			

DOUBLE	\$AN IP	O_MAX_L	OAD					descripti	0
								n:	
description	1:								
\$AN IPC	MAX L	OAD supp	lies the lo	ngest interpola	tor runtime of	f one inter	polation o	ycle (inclu	iding the
		chronized					•	, ·	Ü
axis			·		NCK ver	sion:	54.00.0	0	
identifier:						_		•	
unit:	-	min.:	DBL_MIN	١		max.:	DBL_M		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			Х	Х	Х	Х	
write:	Х	Х			Х	Х		Х	7
attributes:	global	block sear	ch		link				
		Not class	sified		Not clas	ssified			

DOUBLE	\$AN_IF	O_MIN_LC	DAD					descripti n:	0
description	n:			,					
\$AN IPC	MIN L	OAD suppl	ies the sh	ortest interpola	ator runtime in	cluding th	ne runtime	of the syr	nchronized
actions p	er interp	olation cycl	le in all ch	annels.		•		•	
axis identifier:		•			NCK ver	sion:	54.00.0	0	
unit:	-	min.:	DBL_MIN	N	!	max.:	DBL_M	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			X	Х	Х	Х	
write:	Х	Х			Х	Х		Х	7
attributes:	global	block sear	rch		link				
		Not class	sified		Not clas	ssified			

				-						
DOORLE	\$AN_IP	O_LOAD_	PERCEN	Т					descriptio	
description	u. 								n:	
		PERCENT	T sunnlige	the currer	nt internal	ator load	l nercenta	ne across	all channe	le le
									polation cy	
interpolat			iic iiitcipo	iator runtin	110 001033	an chan		c last litter	polation cy	CIC to tric
axis	I	·•				NCK ver	sion.	E4 00 0	^	
identifier:						11011101	01011.	54.00.0	U	
unit:	-	min.:	DBL MII	V		I.	max.:	DBL M	AX	
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	TOEM	access
	l all ill	Indin run	runnin otp	Wildir Syri			0,1	011	OLIVI	rights
read:	Х	Х				Х	Х	Х	Х	1.3
write:										+
attributes:	global	block sea	rch			link				
		Not class	sified			Not clas	ssified			
DOUBLE	CAN C	NC_ACT	LOAD						descriptio	1
	DAIN_S	INC_ACT	LUAD						n:	
description	n:			l						.1
\$AN SY	NC ACT	LOAD su	pplies the	current rui	ntime for	svnchror	nized actio	ons of the	last interpo	olation
cycle acr						-,				
axis						NCK ver	sion:	54.00.0	0	
identifier:								01.00.0	•	
unit:	-	min.:	DBL_MII	V			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
				-						rights
read:		X					Х	Х	Х	
write:										
attributes:	global	block sear	rch			link				
	3	<b>.</b>	.6. 1							-
		Not class	sified			Not clas	ssified			
DOUBLE	\$AN_S\	NC_MAX	LOAD						descriptio	
4									n:	
description										
			ipplies the	longest ru	intime for	synchro	nized acti	ons of one	e interpolat	ion cycle
across al	l channe	S.				INIOIZ				
axis						NCK ver	sion:	54.00.0	0	
identifier: unit:		Imin.:	DDI MI	VI.			lmax.:	DDI M	A \/	
unit.	-		DBL_MII					DBL_M		
]	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \				.,	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		- V	rights
	Х	Х				Х	Х	Х	X	
write:	Х	Х				X	Х		Х	7
attributes:	global	block sear	rch	<u> </u>		link				

Not classified

Not classified

DOUBLE	\$AN S	YNC_TO_I	PO						descriptio	
									n:	
description	n:								•	•
		IPO suppli								asured
against tl	ne overal	II interpolat	ion runtim	e of the la	st interpo	lation cyc	cle across	all chann	els.	
axis						NCK vers	sion:	54.00.0	0	
identifier:										
unit:							max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:		Х					Х	Х	Х	
write:										
attributes:	global	block sear	ch			link	-			_
		Not class	sified			Not clas	sified			
DOUBLE	\$AN_SI	ERVO_AC	T_LOAD						descriptio n:	

DOUBLE	\$AN_SE	RVO_AC	T_LOAD					descripti n:	0
description	n:			l.				·	•
\$AN_SEI	RVO_AC	T_LOAD s	upplies th	e current r			oller.		
axis identifier:					NCK vers	ion:	54.00.00	)	
unit:	-	min.:	DBL_MIN	١		max.:	DBL_MA	λX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:		Х				Х	Х	Х	
write:									
attributes:	global	block sear	rch		link	1	•		
		Not class	sified		Not class	sified			

DOUBLE	\$AN S	ERVO_MA	X LOAD					descript	io
	· -	_	_					n:	
description	า:								
\$AN_SEI	RVO_M	AX_LOAD s	supplies th	ne longest runt	ime of the pos	sition con	troller.		
axis				-	NCK vei	rsion:	54.00.0	0	
identifier:									
unit:	-	min.:	DBL_MIN	V		max.:	DBL_M	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			Х	Х	X	X	
write:	Х	Х			Х	Х		Х	7
attributes:	global	block sear	rch	•	link	¥		1	
		Not class	sified		Not cla	ssified			

DOUBLE	\$AN S	ERVO_MIN	LOAD					descript	io
	<b>*</b> •							n:	
description	n:							•	
\$AN_SE	RVO_MI	N_LOAD s	upplies th	e shortest runti	me of the pos	sition cont	roller.		
axis identifier:	_				NCK ver	rsion:	54.00.0	0	
unit:	-	min.:	DBL_MIN	N	*	max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			Х	Х		Х	
write:	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sear	rch		link	<b>!</b>	II.		
		Not class	sified		Not clas	ssified			

DOUBLE SAN REBOOT DELAY TIME		descriptio	
	1	n:	

description:

A value higher than zero indicates that the NCK has received the "NCK Reset" signal from the HMI and displays the time period (in seconds) programmed on the NCK for rebooting (Power Off followed by Power ON).

The user can thus identify a reboot operation in a synchronized action and prepare his application accordingly.

\$AN\_REBOOT\_DELAY\_TIME is 0.0 provided that no "NCK Reset" has been received.

Example:

A synchronized action reacts to the variable and switches the

axes to "Safe standstill" in a Safety Integrated application.

Comments:

- See also: \$MN REBOOT DELAY TIME

- The "NCK Reset" is implemented on the OPI by means of PI "\_N\_IBN\_SS".

axis					NCK ver	sion:	56.00.0	0	
identifier:									
unit:	S	min.:	0.0			max.:	DBL_M	4X	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:		X				Х	Х	Х	
write:									
attributes:	global	block sear	ch		link		1		
	Х	Independ	dent		No restr	rictions			

DOUBLE	\$AN T	MER[n]						descript	0
								n:	
description	n:								
\$AN_TIN									
Timer un									
				interpolation of					
				R[n]= <start td="" val<=""><td>ue&gt;.</td><td></td><td></td><td></td><td></td></start>	ue>.				
The time	rs are st	opped by \$	AN_IIME	R[n]=-1.					
when a t	imer is s	stopped, the	e last curre	ent time value	is stored.				
description	n of fiold l	imito:							
•			N 4 1	NANA NILINA AL	NI TIMED				
axis	ension is	delined in	אואול חואו_	MM_NUM_A	N_TIIVIER. INCK ver	eion:	150.00.0		
identifier:					Non ver	31011.	56.00.0	0	
unit:	-	min.:	DBL MII	V	L .	max.:	DBL MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	X	Х	Х		X	X	Х	Х	
write:	Х	Х	Х		X	Х		Х	7
attributes:	global	block sear	rch		link		<u> </u>	W	
	Х	Not class	sified		Not clas	ssified			
INT	\$A_PR	OBE[2]						descript	0

INT	\$A_PR	OBE[2]						descripti n:	0
description	l 1:							111.	
\$A PRO	BE[1]: S	tatus of firs	t probe						
		tatus of sec		е					
0 => not	deflected	d	-						
1 => defl									
description	n of field l	imits:							
n: Numbe	er of pro	be							
axis identifier:					NCK vei	rsion:	13.00.00		
unit:	-	min.:	0			max.:		1	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		X	Х	Х	Х	
write:									
attributes:	global	block sear	ch		link		l	L	
		Not class	sified		Not clas	ssified			

DOUBLE	\$AN_PI	ERSDIAG[	4,6]						description	
description	<u> </u>								n:	
•		for data pe	raiatanaa	(frogueno)	, timo roc	nuirod): c	a Comp	ootEloob d	ord	
									ieve data p	orgiotopo
		ies can be	•	OK HOIII UI	e viewpoi	iii oi iiie	INC SUILWA	are to acri	ieve uata p	CISISICIIC
Index1Me	•	ies can be	ieau.							
		all sub-fun	octione							
•		ssive file s								
		tive file sys	•							
		achine data								
Index2Me		aoi inito data	•							
	_	rsistence c	pperations							
		persistend			m deficie	ncv)				
		of all pers	•	` ,		• ,				
	•	quired for		•						
		veraged ac					conds			
5Maximu	m time r	equired for	a persiste	ence opera	ation in se	conds				
Application	on in NC	program:	•	•						
		AG[0, 1] >	0 GOTOF	check car	rd					
description	n of field li	mits:								
to be defi										
to be defi	ined									
axis identifier:						NCK ver	sion:	62.00.0	0	
unit:	s	min.:	DBL MII	V			max.:	DBL M	AX	
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	OEM	access
										rights
read:	Х	Х				Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch	1	l	link	1	1		
		Current v	/alue			No rest	rictions			
	<u>I</u>					1				1

INT	\$AN V	MODEL_S	TATUS			descriptio					
	*							n:			
description	n:								•		
TO DO!											
axis identifier:					NCK version: 62.00			0			
unit:	-	min.:	INT_MIN	I	•	max.:	INT_MAX				
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights		
read:	Х	Х	Х		Х	Х	Х	Х			
write:	Х	Х	Х		Х	Х	Х	Х	3		
attributes:	global	block sear	ch		link	•	•	•			
	X Not classified				Not clas						

INT	\$A_DPSB_IN[MD_MAXNUM_DPIO_	descriptio	
	RANGE_IN,MD_MAXNUM_DPIO_B	n:	
	YTES_RANGE_IN]		

#### description:

The field variable \$A\_DPSB\_IN[n,m] is used to read a data byte (8 bits) from PROFIBUS IO.

n:= Index for the input data area

m:= Byte Index for the data

The value is shown as signed.

The data area to be read can become invalid during power up or even during operation as connected devices may not yet have been detected or are already no longer connected to the PROFIBUS. In this case, the old value or initial value 0 is always read.

Whether a data area is valid can be queried with the variables \$A\_DP\_IN\_STATE[n] or \$A\_DP\_IN\_VALID description of field limits:

to be defined

to be defined

axis identifier:					NCK ve	rsion:	65.00.00		
unit:	-	min.:	-128		•	max.:	127		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	X	Х		Х	Х	Х	Х	
write:									
attributes:	global	block sea	rch		link	L	<u> </u>	L	
	Х	Not class	sified		Not cla	ssified			

INT	\$A DPB IN[MD MAXNUM DPIO R	descrip	otio
	ANGE_IN,MD_MAXNUM_DPIO_BYT	n:	
	ES_RANGE_IN]		

#### description:

The field variable \$A\_DPB\_IN[n,m] is used to read a data byte (8 bits) from PROFIBUS IO.

n:= Index for the input data area

m:= Byte Index for the data

The value is shown as unsigned.

The data area to be read can become invalid during power up or even during operation as connected devices may not yet have been detected or are already no longer connected to the PROFIBUS. In this case, the old value or initial value 0 is always read.

Whether a data area is valid can be queried with the variables \$A\_DP\_IN\_STATE[n] or \$A\_DP\_IN\_VALID. description of field limits:

to be defined

axis identifier:			·				NCK version:		65.00.00		
unit:	-	min.:	0				max.:	255			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Χ	Х	Х			Х	Х	Х	Х		
write:											
attributes:	global	block sear	ch	•		link	•	•	•		
	Х	Not class	ified			Not class	sified				

INT	\$A DP	IN VALID	)						description	
	<b>*</b>								n:	
description	n:			•					•	•
The varia	ble \$A I	OP IN VAI	LID is use	d to read all	l valid ing	ut data	areas of tl	he PROFI	BUS IO. T	he value is
				f the bits co						
				ea could not						
		-		during norm						
		ariable \$A	•	•	ai opoiai		, otatao oi	an input	adia di ca (	Jan Do
axis	Viai aic v	unable w		717 (1 ⊑[iij.		NCK ver	sion:	65.00.0	<u></u>	
identifier:								05.00.0	U	
unit:	-	min.:	INT_MIN				max.:	INT_M	ΑX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch			link				
	Х	Not class	sified			Not clas	ssified			

INT \$A_DP_IN_STATE[MD_MAXNUM_D	descriptio	
PIO_RANGE_IN]	n:	

description:

The variable \$A\_DP\_IN\_STATE[n] is used to read the status of the input data area.

n:= Index for the input data area

The following states can be read:

- 0: Data area has not been configured
- 1: Data area could not be activated yet
- 2: Data area is available
- 3: Data area is currently not available

Whether an input data area is available can be queried with the variable \$A\_DP\_IN\_VALID. description of field limits:

axis identifier:					NCK ve	rsion:	65.00.0	65.00.00			
unit:	-	min.:	0		<b></b>	max.:	3				
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights		
read:	Х	Х	Х		Х	Х	Х	X			
write:											
attributes:	global	block sea	rch		link	Į.	I.	L			
	Х	Not class	sified		Not cla	ssified					

descriptio

## 1.1 List of system variables

\$A\_DP\_OUT\_STATE[MD\_MAXNUM

	_DPIO	RANGE_C	DUT] _						n:	
description	n:								<b>l</b>	
The varia	able \$A_	DP_OUT_S	STATE[n]	is used to	read the	status of	the outpu	ıt data are	a.	
		output data								
		tes can be								
		s not been	•							
		uld not be a	ictivated y	⁄et						
		available								
3: Data	area is	currently no	t available	е						
۰۰ مالم ما/۸	- d-4	المريم أم مري	ا محمد ماطم		و مالا مالاندي	ا ملطمنسمی	¢Λ DD 0	<del></del> ./^	<u> </u>	
description		rea is avail	able can i	oe queriea	with the	variable	\$A_DP_C	UI_VALI	D.	
to be def		iiiiii.								
axis	IIIeu					INCK ver	sion.	65.00.0	10	
identifier:						05.00.00			10	
unit:	-	min.:	0			•	max.:	3		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sea	rch	1		link	l.	I .		
	Х	Not class	sified			Not clas	ssified			
	•	•								
INT	\$A_DP	_OUT_VAL	.ID						description	)
description	<u>.</u>								n:	
		DP OUT \	/ALID IN	is used to	road all s	ralid autr	vut data a	oas of the	DD/CIDI	18 10
		ed as a bit f								
		t data area								

areas. The output data area is invalid if the output data area could not be logged on during power up or the communication with the PROFIBUS has been interrupted during normal operation. The status of an output data area can be queried with the variable \$A\_DP\_OUT\_STATE[n]. 65.00.00 identifier: unit: min.: max.: INT\_MIN INT\_MAX OPI run-in runin stp Mrun syn OEM rights read: Χ Χ Χ Χ Χ Χ Χ write: attributes: global block search link Not classified Not classified Χ

INT	\$A_DP_	N_CONF							descriptio n:	
description	<u> </u> า:								111.	
value is o A configu via mach	coded as a red input ine data \$	a bit field. data area	The assig is presen _LOGIC_	nment of t	the bits co al starting	rrespond address	ls to the in has been	idices of to entered in	PROFIBUS he input da n an input d can be qu	ita areas. data area
axis	 		[].			NCK vers	sion:	65.00.00	)	
identifier: unit:		lmin.:	INT MIN				max.:	INT MA	Y	
	run-in	main run	runin stp	Mrun syn	1	IPP	SA	OPI	TOEM	access
										rights
read:	Х	Х	Х			Х	X	Х	Х	
write:										
attributes:	global	block sear	rch			link				
	Х	Not class	sified			Not clas	sified			
INT	\$A_DP_	OUT_COM	٧F						descriptio n:	
description	<u> </u> า:				l				111.	
The value areas. A area via	e is coded configure machine d	l as a bit fi d data are	ield. The a a is prese _DPIO_LC	assignmer nt if a logi OGIC_ADE	nt of the bi ical startin DRESS_C	ts corres g addres	ponds to t s has bee	he indices n entered	ne PROFIE s of the out in an outp data area	put data ut data
axis	VILLI LIIC VE	mable $\psi A_{}$	_DI _OO I	_01/11/1	ıj.	NCK vers	sion:	65.00.00	)	
identifier:		Imin :	1				lmov :			
unit:	-	min.:	INT_MIN runin stp	Mrun syn	1	IPP	max.:	INT_MA	IOEM	access
	run-in	main run	runin stp	IVII UIT SYTT			SA	OFI	OEIVI	rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch		•	link		•		
	Х	Not class	sified			Not clas	sified			
	l	•				•				
INT		N_LENG		IAXNUM_	-				descriptio n:	
1	_	ANGE_IN	]						11.	
	able \$A_D	P_IN_LEN put data a		s used to I	read the le	ength of t	he input d	ata area.		
\$A_DP_I	an input on N_STATE of field line	[n].	s availabl	e can be c	queried wi	th the va	riables \$A	_DP_IN_\	VALID and	
to be def										
axis						NCK vers	sion:	65.00.00	)	
identifier: unit:		min.:	0				max.:	INT MA	Y	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	3
write:										
attributes:	global	block sear	rch	<u>I</u>	l	link	1		1	
	Х	Not class	sified			Not clas	sified			

INT	\$A DP (	OUT_LEN	IGTHIMD	MAXNU					descriptio	
		RANGE		_1117171110					n:	
description	_									
The varia	ble \$A D	P OUT I	FNGTHIr	nl is used t	to read the	e lenath o	f the outpu	ıt data are	a.	
		utput data		.,		- · · · · · · · · · · · · · · · · · · ·				
	an output OUT STA		ı is availal	ole can be	queried v	vith the va	ariables \$ <i>A</i>	A_DP_OU	T_VALID	and
description	of field lim	nits:								
to be defi	ned									
axis identifier:						NCK vers	ion:	65.00.00		
unit:	-	min.:	0			•	max.:	INT_MAX	(	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:			.,			.,				rights
	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch			link				
	Х	Not class	sified			Not class	sified			
		1				l .				ı
INT	\$A DPW	/ IN[MD	MAXNUM	_DPIO_R					descriptio	
				PIO_BYT					n:	
	ES_RAN	GE_IN]								
description	1:				1					1
				used to re	ead a data	word (16	6 bits) from	PROFIB	US IO.	
		put data a	area							
	Index for									
		n as unsig								
							en during			
						longer c	onnected t	to the PR	ofibus. I	n this
				always rea						
Whether	a data are	ea is valid	can be qu	ieried with	the varia	bles \$A_I	DP_IN_ST	A I E[n] or	\$A_DP_I	N_VALID.
•		iits:								
to be defi to be defi										
axis	neu					NCK vers	ion <sup>.</sup>	65.00.00		
identifier:						11010		00.00.00		
unit:	-	min.:	0			I.	max.:	65535		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
			·	,						rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:			]							

Not classified

attributes: global

Χ

block search

Not classified

DOUBLE  \$A_DPR_OUT[M	ID_MAXNUM_DPIO	descriptio
_	/ID_MAXNUM_DPIO	n:
_BYTES_RANGE	E_OUT]	

#### description

The field variable \$A\_DPR\_OUT[n,m] is used to write output data (32 bits REAL) to PROFIBUS IO.

n:= Index for the output data area

m:= Byte Index for the data

The value is compressed to 4 bytes IEEE (real).

The data area to be written can become invalid during power up or even during operation as connected devices may not yet have been detected or are already no longer connected to the PROFIBUS. In this case the transfer of the value cannot be ensured.

Whether a data area is valid can be queried with the variables \$A\_DP\_OUT\_STATE[n] or \$A DP OUT VALID.

description of field limits:

to be defined

to be defined

axis identifier:						rsion:	65.00.0	65.00.00		
unit:	-	min.:	DBL_MII	V	•	max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х		X	Х	Х	Х		
write:	Х	Х	Х		X	Х		Х	7	
attributes:	global	block sea	rch		link	•	•	1		
	Х	Not class	sified		Not clas	ssified				

ı	INT	\$A_DPB_OUT[MD_MAXNUM_DPIO	descriptio	
		_RANGE_OUT,MD_MAXNUM_DPIO	n:	
		_BYTES_RANGE_OUT]		

### description:

The field variable \$A\_DPB\_OUT[n,m] is used to write a data byte (8 bits) to PROFIBUS IO.

n:= Index for the output data area

m:= Byte Index for the data

The value is shown as unsigned.

The data area to be written can become invalid during power up or even during operation as connected devices may not yet have been detected or are already no longer connected to the PROFIBUS. In this case the transfer of the value cannot be ensured.

Whether a data area is valid can be queried with the variables \$A\_DP\_OUT\_STATE[n] or

\$A\_DP\_OUT\_VALID. description of field limits:

to be defined

to be dei	iiica									
axis					١	NCK ver	sion:	65.00.0	0	
identifier:										
unit:	-	min.:	0				max.:	255		
	run-in	main run	runin stp	Mrun syn	F	PP	SA	OPI	OEM	access
										rights
read:	Х	Х	Х			Χ	Х	Х	Х	
write:	Х	Х	Х			Χ	Х		Х	7
attributes:	global	block sear	rch		li	ink	•		•	
	Х	Not class	sified		١	Not clas	sified			

INT \$	A_DPW_OUT[MD_MAXNUM_DPIO	descriptio	
	RANGE OUT, MD MAXNUM DPIO	n:	
	BYTES_RANGE_OUT]		

#### description:

The field variable \$A\_DPW\_OUT[n,m] is used to write a data word (16 bits) to PROFIBUS IO.

n:= Index for the output data area

m:= Byte Index for the data

The value is shown as unsigned.

The data area to be written can become invalid during power up or even during operation as connected devices may not yet have been detected or are already no longer connected to the PROFIBUS. In this case the transfer of the value cannot be ensured.

Whether a data area is valid can be queried with the variables \$A\_DP\_OUT\_STATE[n] or \$A DP OUT VALID.

description of field limits:

to be defined

to be defined

axis identifier:	ier:				NCK ver	rsion:	65.00.0	65.00.00			
unit:	-	min.:	0			max.:	65535				
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights		
read:	Х	Х	Х		Х	Х	Х	Х			
write:	Х	Х	Х		Х	Х		Х	7		
attributes:	global	block sea	rch	1	link						
	Х	Not class	sified		Not clas	ssified					

DOUBLE  \$A_DPR_IN[MD_MAXNUM_DPIO_R		descriptio	
ANGE_IN,MD_MAXNUM_DPIO_BYT	1	n:	
ES_RANGE_IN]			

### description:

The field variable \$A DPR IN[n,m] is used to read input data (32 bits REAL) from PROFIBUS IO.

n:= Index for the input data area

m:= Byte Index for the data

The value is expanded to 8 bytes IEEE (double).

The data area to be read can become invalid during power up or even during operation as connected devices may not yet have been detected or are already no longer connected to the PROFIBUS. In this case, the old value or initial value 0.0 is always read.

Whether a data area is valid can be queried with the variables \$A\_DP\_IN\_STATE[n] or \$A\_DP\_IN\_VALID. description of field limits:

to be defined

axis identifier:					NCK ver	sion:	65.00.0	0	
unit:	-	min.:	DBL_MIN	N	max.:		DBL_MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х	Х	
write:									
attributes:	global	block sear	ch		link	I	l	l .	
	Х	Not class	sified		Not clas	sified			

INT	\$A_DPSW_IN[MD_MAXNUM_DPIO_	descriptio	
	RANGE_IN,MD_MAXNUM_DPIO_B	n:	
	YTES_RANGE_IN]		

#### description

The field variable \$A\_DPSW\_IN[n,m] is used to read a data word (16 bits) from PROFIBUS IO.

n:= Index for the input data area

m:= Byte Index for the data

The value is shown as signed.

The data area to be read can become invalid during power up or even during operation as connected devices may not yet have been detected or are already no longer connected to the PROFIBUS. In this case, the old value or initial value 0 is always read.

Whether a data area is valid can be queried with the variables \$A\_DP\_IN\_STATE[n] or \$A\_DP\_IN\_VALID description of field limits:

to be defined

to be defined

axis identifier:					NCK ve	rsion:	65.00.0	00	
unit:	-	min.:	-32768		<b>,</b>	max.:	32767		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	X	Х		Х	Х	Х	Х	
write:									
attributes:	global	block sea	rch		link				
	Х	Not class	sified		Not cla	ssified			

INT   \$A DPSD_IN[MD_MAXNUM_DPIO	descriptio	
RANGE_IN,MD_MAXNUM_DPIO_B	n:	
YTES_RANGE_IN]		

#### description:

The field variable \$A\_DPSD\_IN[n,m] is used to read a data double word (32 bits) from PROFIBUS IO. n:= Index for the input data area

m:= Byte Index for the data

The value is shown as signed.

The data area to be read can become invalid during power up or even during operation as connected devices may not yet have been detected or are already no longer connected to the PROFIBUS. In this case, the old value or initial value 0 is always read.

Whether a data area is valid can be queried with the variables \$A\_DP\_IN\_STATE[n] or \$A\_DP\_IN\_VALID. description of field limits:

to be defined

axis identifier:						NCK vers	sion:	65.00.00			
unit:	-	min.:	INT_MIN	NT_MIN			max.:	INT_MA	INT_MAX		
	run-in	main run	runin stp	unin stp Mrun syn			SA	OPI	OEM	access rights	
read:	Χ	Х	X			Х	Х	Х			
write:											
attributes:	global	block search			link						
	Х	Not classified				Not classified					

Ī	INT	\$A_DPSB_OUT[MD_MAXNUM_DPI	descriptio	
		O_RANGE_OUT,MD_MAXNUM_DPI	n:	
		O_BYTES_RANGE_OUT]		

description

The field variable \$A\_DPSB\_IN[n,m] is used to write a data byte (8 bits) to PROFIBUS IO.

n:= Index for the output data area

m:= Byte Index for the data

The value is shown as signed.

The data area to be written can become invalid during power up or even during operation as connected devices may not yet have been detected or are already no longer connected to the PROFIBUS. In this case the transfer of the value cannot be ensured.

Whether a data area is valid can be queried with the variables \$A\_DP\_OUT\_STATE[n] or \$A DP OUT VALID.

description of field limits:

to be defined

to be defined

axis identifier:					NCK vei	rsion:	65.00.00				
unit:	-	min.:	-128			max.:	127	127			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights		
read:	Х	Х	Х		Х	Х	Х	Х			
write:	Х	Х	Х		Х	Х		Х	7		
attributes:	global	block sea	ch		link	link					
	Х	Not class	sified		Not cla	Not classified					

INT	\$A_DPSW_OUT[MD_MAXNUM_DPI	descriptio	
	O_RANGE_OUT,MD_MAXNUM_DPI	n:	
	O_BYTES_RANGE_OUT]		

description:

The field variable \$A\_DPSW\_IN[n,m] is used to write a data word (16 bits) to PROFIBUS IO.

n:= Index for the output data area

m:= Byte Index for the data

The value is shown as signed.

The data area to be written can become invalid during power up or even during operation as connected devices may not yet have been detected or are already no longer connected to the PROFIBUS. In this case the transfer of the value cannot be ensured.

Whether a data area is valid can be queried with the variables \$A\_DP\_OUT\_STATE[n] or

\$A\_DP\_OUT\_VALID. description of field limits:

to be defined

axis identifier:					NCK ver	sion:	65.00.0	65.00.00			
unit:	-	min.:	-32768			max.:		32767			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights		
read:	Х	Х	Х		Х	Х	Х	X			
write:	Х	Х	Х		Х	Х		Х	7		
attributes:	global	block sea	rch	h		link					
	Х	X Not classified			Not clas	Not classified					

O_RANGE_OUT,MD_MAXNUM_DPI O_BYTES_RANGE_OUT]	INT	\$A_DPSD_OUT[MD_MAXNUM_DPI	descriptio	
O_BYTES_RANGE_OUT]		O RANGE OUT, MD MAXNUM DPI	n:	
		O_BYTES_RANGE_OUT]		

description:

The field variable \$A\_DPSD\_OUT[n,m] is used to write a data double word (32 bits) to PROFIBUS IO. n:= Index for the output data area

m:= Byte Index for the data

The value is shown as signed.

The data area to be written can become invalid during power up or even during operation as connected devices may not yet have been detected or are already no longer connected to the PROFIBUS. In this case the transfer of the value cannot be ensured.

Whether a data area is valid can be queried with the variables \$A\_DP\_OUT\_STATE[n] or \$A\_DP\_OUT\_VALID.

description of field limits:

to be defined

to be deli	Heu									
axis identifier:					NCK ver	sion:	65.00.00			
unit:	-	min.:	INT_MIN	I		max.:	INT_MA	INT_MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	access rights		
read:	Х	Х	Х		X	Х	Х	Х		
write:	Х	Х	Х		Х	Х		Х	7	
attributes:	global	block sear	ch		link	link				
	Х	Not class	sified		Not clas	Not classified				

# 1.1.25 Axial system variables

DOUBLE	OUBLE   <b>\$P_EP[31]</b>					descrip					
		• 1							n:		
description											
\$P_EP[X											
									The numer		
		dentical to	the value	programi	med in the	e part pro	gram. Th	e two valı	ues differ in	the	
following											
situations											
		programm									
		changed									
					alculation,	the posi	tions in th	e interpre	eter are syn	chronized	
		. \$P_EP th									
				es in the A	sub. The	collected	search p	osition ca	in be interro	ogated via	
system v	ariable \$A	C_RETP	OINT.								
•	n of field lin	nits:									
to be def						INOK		-			
axis identifier:	GEOAX					NCK vers	sion:	06.00.0	0		
identiller.	CHANA										
	MACHAX										
	SPINDLE										
unit:	Linear /	min.:	DBL_MIN	1			max.:	DBL_M	IAX		
	angular										
	position										
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access	
										rights	
read:	Х					Х					
write:											
attributes:	global	block sear	rch			link				1	
	3.0.0										
		Not class	sified			Not clas	sified				
DOUBLE	\$P_EPM	[31]							descriptio	)	
al a a a si sa ki a s									n:		
description		-DMC 1 1		0			00 1 1		0		
				tne currer	nt progran	nmea ivic	S target p	osition in	the prepro	cessor for	
	fied axis ( n of field lin	see also	\$P_EP).								
-		III.S.									
to be def						NCK vers	sion:	00.00.0			
identifier:	GEOAX					INCR VEIS	SIUII.	20.09.0	20.09.00		
identiner.	CHANA										
	MACHAX										
	SPINDLE	=									
unit:	Linear / min.: DBL_MIN						max.:	DBL_M	IAX		
	angular										
	position										
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access	
										rights	
read:	Х					Х					
write:							1	1		1	
attributes:	global	block sear	rch	l	<u> </u>	link	1				
	J						1				
		Not class	sified			Not clas	sitied				
<u></u>	<u></u>	<u></u>	<u></u>	·	<u></u>						

DOUBLE	\$P_APR	[31]							descripti	0	
									n:		
description											
\$P_APR											
			coordinat								
of approa	ach mover	ment on si	mooth app	proach to t	the contou	ır					
	n of field lin	nits:									
to be def						INICIZ	-1	1			
axis identifier:	GEOAX					NCK ver	Sion:	13.00.00			
lucituilei.	CHANA										
	MACHAX										
	SPINDLE										
unit:	Linear /	min.:	DBL_MIN	1			max.:	DBL_N	1AX		
	angular										
	position										
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access	
										rights	
read:	Х					X					
write:											
attributes:	global	block sear	rch			link					
		Not class	sified			Not clas	ssified				
						I					
DOUBLE	\$P_AEP	[31]							descripti	0	
									n:		
description											
\$P_AEP											
			r point in v	vorkpiece	coordinat	te systen	n on smoo	oth			
approach	to conto	Jr									
	n of field lin	nits:									
to be def						INCK	-1				
axis identifier:	GEOAX					NCK ver	Sion:	13.00.0	00		
lucituliei.	CHANA										
	MACHAX										
	SPINDLE										
unit:	Linear /	min.:	DBL_MIN	1			max.:	DBL_N	1AX		
	angular										
	position										
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access	
										rights	
read:	Х					Х					
write:					<u> </u>						
attributes:	global	block sear	rch			link					
		Not class	sified			Not clas	ssified				
		•									

DOUBLE	\$P POL	F[31]							descriptio	
									n:	
description										
\$P_POLI										
	tne progra	ammed re	traction po	sition of t	ne axis					
X: Axis	n of field lin	nite:								
•		ilito.								
to be def						NCK ver	eion.	F4 00 0	0	
identifier:	GEOAX CHANAX	,				INOIK VCI	31011.	51.00.0	U	
	MACHA)	-								
	SPINDLE	=								
unit:		min.:	DDI MIN				max.:	DDI M	A \ /	
unit.	Linear /	111111	DBL_MIN	N			IIIax	DBL_M	AX	
	angular									
	position			I N 4	1	IDD	0.4	ODI	IOEM	T
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				rigins
write:	^					^				
	alahal	blaskass				limb.				
attributes:	global	block sear	rcn			link				
		Not class	sified			Not clas	ssified			
										•
INT	\$P_POL	F_VALID	[31]						descriptio	
description	<u> </u>		-						n:	
		\/1								
	F_VALID[		OL EIVI							
X: Axis	the status	s of \$P_P	JLF[A]							
Return va	aluee.									
		ogrammed	4							
			osition pro	ogrammed	1					
			s distance		4					
	n of field lin		o diotario							
to be def	ined									
axis	GEOAX					NCK ver	sion:	51.00.0	0	
identifier:	CHANA	(							-	
	MACHA	X								
	SPINDLE									
unit:	_	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn	1	IPP	SA	OPI	IOEM	access
										rights
read:	Х					Х				
write:									1	
attributes:	global	block sear	rch		1	link				-
		Not class	sified			Not clas	eeifiad			-
l	l	INUL CIASS	mcu			וויטנ טומנ	ooiii <del>c</del> u			1

DOUBLE	\$AA_IW	[31]							descriptio n:	
description	า:								111.	
Axial vari	able \$AA	IW[ax] de	etermines	the currer	nt setpoint	in the wo	orkpiece c	oordinate	system (W	/CS) for
									rent interp	
cycle. Th	e WCS va	alue conta	ins no axi	al offset co	omponent	s (DRF, A	AA_OFF,	ext. work	offset, etc.)	).
description	n of field lin	nits:								
to be defi	ned									
axis	GEOAX					NCK vers	sion:	06.00.00	)	
identifier:	CHANAX									
	MACHA									
	SPINDLE									
unit:	Linear /	min.:	DBL_MIN	1			max.:	DBL_MA	λX	
	angular									
	position									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	V					V	V	V	V	rights
	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch			link				
		Not class	ified			Not clas	sified			
		•								
BOOL	\$AA_RE	POS_DEL	_AY[31]						descriptio	
description	 n:								n:	
	POS DEL	AY[X]								
			is current	ly active fo	or this axis	S.				
	otherwise	•		.,						
	n of field lin									
to be defi	ined									
axis	GEOAX					NCK vers	sion:	51.00.00		
identifier:	CHANAX	(								
	MACHAX	<								
	SPINDLE	Ξ								
unit:	-	min.:	TRUE			I	max.:	FALSE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:		X	X				Х	X	Х	
write:										
attributes:	global	block sear	ch			link	•		•	
		Program	sensitive			Not for le	ead link ax	ces		

DOUBLE	\$AA_IEN	V[31]							descriptio n:	
description	n:								111.	1
									ate system	
				x]. The SZ	ZS value c	ontains	no axial of	ffset comp	onents (Di	RF,
AA_OFF	, ext. work	coffset, et	:c.).							
· ·	n of field lin	nits:								
to be def										
axis	GEOAX					NCK ver	sion:	13.00.0	0	
identifier:	CHANA									
	MACHAX									
	SPINDLE									
unit:	Linear / angular position	min.:	DBL_MIN	I			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch			link	ļ.			
		Not class	sified			Not clas	ssified			
						<u>l</u>				
DOUBLE	\$AA_IBN	N[31]							descriptio	
description	l n:								n:	
•		IBN[ax] c	determines	s the curre	nt setnoir	nt in the I	nasic zero	coordina	te system (	BZS) for
									onents (Di	
	F, ext. wo			/.je ==					, , , , , , , , , , , , , , , , , , ,	,
description	n of field lin	nits:								
to be def	ined									
axis	GEOAX					NCK ver	sion:	13.00.0	0	
identifier:	CHANA	(								
	MACHAX	<								
	SPINDLE	Ξ								
unit:	Linear /	min.:	DBL MIN	ı		l	max.:	DBL M	AX	
	angular		_					_		
	position									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	Х	X	X			X	X	X	X	rights
write:	^	^	^			^	_ ^		^	
attributes:	lalohal	block sear	rch			link				
attributes.	giobai	Not class				Not clas	- :£:l			

DOUBLE	\$AA_IB[	31]							descriptio	
description		_							n:	
		IDfavil da		ما مسام	4 4 1 - 4	مما مماله منا			(DCC) f	46
								nate syster componen		
	offset, et		_ivv[ax]. i	THE BUS V	alue Corile	allis IIO a	xiai oliset	componen	is (DKF, ֆ	AA_OFF,
description	n of field lir	nits:								
to be defi										
axis	GEOAX					NCK ver	sion:	06.00.00		
identifier:	CHANA	(						00.00.00		
	MACHA									
	SPINDLE									
unit:	Linear /	min.:	DBL MIN	J			max.:	DBL_MA	Y	
	angular		DDL_IVIII	V				DDL_IVIA	<b>.</b>	
	position									
	run-in	main run	runin stp	Mrun syn	1	IPP	SA	OPI	OEM	access
		inain ran	raimir otp	ivii dir oyri			0, 1		O L IVI	rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch	I.	1	link	L			
		Not class	sified			Not clas	ssified			
	1					I				1
DOUBLE	\$AA_EN	C_AMPL	[n,31]						descriptio n:	
description	<u> </u> n:								n.	]
		n axl sunr	olies the a	ain factor o	of the clos	sed-loon	amplitude	control for	diagnosti	cs and
monitorin	o_,[	es The sta	andard en	coder volta	age is 1V	= 100%	the gain c	an fluctuate	hetween	0.5V and
1.3V sch						,	9			0.01 0
The mea	ning of the	e indices a	are as follo	ows:						
	er numbe									
ax: Mach	ine axes									
description	n of field lin	nits:								
n: Encod	er numbe	r								
to be defi	ined									
axis	GEOAX					NCK ver	sion:	51.00.00		
identifier:	CHANA	(								
	MACHA	X								
unit:	-	min.:	DBL_MIN	1			max.:	DBL_MA	X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:		Х	Х				X		Х	ngnis
write:										
attributes:	global	block sear	rch	<u>I</u>	1	link	<u> </u>			
		Not class	sified			No rest	rictions			<del>                                     </del>

	\$AA_IM[	[31]						descripti	0
		•						n:	
specified ext. work	iable \$AA axis. See offset, etc	also \$AA c.).			etpoint in the m e contains all a				
-	n of field lin	nits:							
to be defi	1				INCK ver	oion:	T		
identifier:	GEOAX CHANAX MACHAX SPINDLE	X			NOR VEI	31011.	06.00.0	U	
unit:	Linear / angular position	min.:	DBL_MII	N	,	max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		X	Х	Х	Х	
write:									
attributes:	global	block sear	rch		link				
		Program	sensitive		Not clas	ssified			
			AY PO	S NO[31]				descripti	0
INT	\$AA_AC	T_INDEX						n·	
INT description		T_INDEX						n:	
description \$AA_AC <sup>-</sup> 0: Not an > 0: Num description	l n: T_INDEX i indexing iber of las n of field lin	_AX_POS axis, no ir t reached	_NO[X]	osition is thus				n:	
description \$AA_AC^ 0: Not an > 0: Num description to be defi	Lan: T_INDEX indexing ber of las of field linined	_AX_POS axis, no ir t reached	_NO[X]	osition is thus	g position				
description \$AA_AC' 0: Not an > 0: Num description to be defi	l n: T_INDEX i indexing iber of las n of field lin	_AX_POS axis, no ir t reached nits:	_NO[X]	osition is thus		sion:	13.00.0		
description \$AA_AC 0: Not an > 0: Num description to be defi axis identifier:	In: T_INDEX_I indexing aber of las in of field linined GEOAX CHANAX	_AX_POS axis, no ir t reached nits:	_NO[X]	osition is thus	g position	sion:	13.00.0	0	
description \$AA_AC 0: Not an > 0: Num description to be defi axis identifier:	In: T_INDEX_I indexing aber of las in of field linined GEOAX CHANAX	_AX_POS axis, no ir t reached nits:	_NO[X] ndexing por last cro	osition is thus	g position			0	access
description \$AA_AC 0: Not an > 0: Num description to be defi axis identifier: unit:	n: T_INDEX_ indexing ber of las of field lin ined GEOAX CHANAX MACHAX SPINDLE	_AX_POS axis, no ir t reached nits:	_NO[X] ndexing por last cro	osition is thus	g position	max.:	INT_MA	0 AX	
description \$AA_AC <sup>2</sup> 0: Not an > 0: Num	n: T_INDEX_ indexing ber of las of field lin ined GEOAX CHANAX MACHAX SPINDLE - run-in	_AX_POS axis, no ir t reached nits:  ( K = min.: main run	_NO[X] ndexing por last cro INT_MIN runin stp	osition is thus	g position    NCK ver	max.:	INT_MA	O AX	access

Not classified

INT	\$AA_PR	OG_INDE	X_AX_P	OS_NO[3					descriptio	
	1]								n:	
description	1:				l.					u.
\$AA_PR	OG_INDE	X_AX_PC	S_NO[X]							
0: Not an	indexing	axis, no ir	ndexing po	sition is th	nus availa	ble or				
the index	ing axis is	not curre	ntly appro	aching an	indexing	position				
> 0: Num	ber of pro	grammed	indexing	position						
description	n of field lim	nits:								
to be defi	ned									
axis	GEOAX					NCK vers	sion:	13.00.00	)	
identifier:	CHANAX									
	MACHAX	(								
	SPINDLE	Ē								
unit:	-	min.:	INT_MIN				max.:	INT_MA	·Χ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch			link		1		
		Not class	ified			Not clas	sified			

BOOL	\$AA_EN	IC_ACTIV	E[31]						descriptio	
									n:	
description	า:									
Axial vari	able \$AA	_ENC_AC	TIVE[ax]	determine	s whether	r the acti	ve measu	ring syste	m is operat	ing below
the enco	der limit fr	requency.								
description	n of field lir	nits:								
to be def	ined									
axis	GEOAX					NCK ver	sion:	13.00.0	0	
identifier:	CHANA	<								
	MACHA	Χ								
	SPINDLI	E								
unit:	-	min.:	FALSE			1	max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch	L	ı	link	<u> </u>		1	
		Not class	sified			Not clas	ssified			

BOOL	\$AA_EN	IC1_ACTI	VE[31]						descript n:	io
description	<u> </u> า:								111.	
Axial vari	able \$AA	_ENC1_A	CTIVF(ax	1 determin	es whethe	er the firs	st measuri	na systen	n is opera	tina below
		requency.	o m Elax	1 40101111111		51 ti 10 111 t	ot mododi.	ng cyclon	по орога	ung bolow
description	of field lir	mits:								
to be def	ined									
axis	GEOAX					NCK ver	sion:	13.00.0	0	
identifier:	CHANA									
	MACHA	Χ								
	SPINDL	E								
unit:	-	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	X	Х			Х	Х		X	
write:										
attributes:	global	block sear	rch	I	I.	link				
		Not class	sified			Not clas	ssified			
	l					l				I
BOOL	\$AA EN	IC2 ACTI	VE[31]						descript	10
	_								n:	
description										
		_ENC2_A		] determin	es whethe	er the se	cond mea	suring sys	stem is op	erating
below the	e encoder n of field lir	r limit frequ	iency.							
		IIIIS.								
to be def						INCK ver	eion:	140.00.0	•	
identifier:	GEOAX					INCIX VEI	31011.	13.00.0	U	
identiner.	CHANA									
	MACHA	-								
!4	SPINDL		1				T			
unit:	-	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х		Х	Ĭ
write:										
attributes:	global	block sear	ch	<u> </u>	<u> </u>	link				
		Not class	sified			Not classified				
	l	1					-			

	\$\/A IR#F	241							descriptio	
DOUBLE	\$VA_IIVI	31]							n:	
description	n:				I					
Axial vari	able \$VA	_IM[ax] de	etermines	the encod	er actual	value (m	easured b	y active m	neasuring s	system) in
								orrected (	leadscrew	error
				n, quadrar						
When a s	spindle or	axis disab	ole is activ	e, this var	iable retu	rns the c	urrent setp	oint by de	efinition. If	it is
			value in t	his situation	on, BIT3 i	n \$MA_N	MSC_FUN	ICTION_N	//ASK mus	t be set.
	n of field lin	nits:								
to be defi						INCK vers	nion:	140.00.00		
identifier:	GEOAX	,				INCR VEIS	SIUII.	13.00.00	)	
	CHANAX									
	MACHAX SPINDLE									
unit:			DD: 1411				max.:	DDI 14	A > /	
uiiit.	Linear /	min.:	DBL_MIN	1			IIIax	DBL_M	ЧX	
	angular									
	position		munic ata	Maria	Т	l D D	C 4	ODI	IOEM	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	X	X	X	riginto
write:										
attributes:	global	block sear	ch			link		1		
		Not class	sified			Not clas	sified			
	I	I				I				
DOUBLE	\$VA_IM1	[31]							descriptio n:	
description	<u> </u> า:								111.	
										•
Axial vari	able \$VA	IM1[ax] c	letermines	the enco	der actua	l value (n	neasured	by encode	er 1) in the	machine
									er 1) in the	
coordinat	e system	(MCS). A	ll actual va		ensations				er 1) in the ror compe	
coordinat backlash	e system compens	(MCS). A ation, qua	ll actual va drant erro	alue comp r compens	ensations sation).	are corr	ected (lea	dscrew er		nsation,
coordinat backlash When a s preferred	e system compens pindle or to return	(MCS). A ation, qua axis disat the actual	ll actual va drant erro ble is activ	alue comp r compen: e, this var	ensations sation). iable retu	are corr	ected (lea urrent setp	dscrew er	ror compe	nsation, it is
coordinat backlash When a s	e system compens pindle or to return	(MCS). A ation, qua axis disat the actual	ll actual va drant erro ble is activ	alue comp r compen: e, this var	ensations sation). iable retu	are corr	ected (lea urrent setp	dscrew er	ror compe	nsation, it is
coordinat backlash When a s preferred description to be defi	te system compens spindle or to return of field lined	(MCS). A ation, qua axis disat the actual	ll actual va drant erro ble is activ	alue comp r compen: e, this var	ensations sation). iable retu	are corr rns the constant series	ected (lea urrent setp IISC_FUN	dscrew er point by de ICTION_N	ror compe efinition. If MASK mus	nsation, it is
coordinate backlash When a spreferred description to be defination	ce system compens spindle or to return of field lined GEOAX	(MCS). A ation, qua axis disab the actual nits:	ll actual va drant erro ble is activ	alue comp r compen: e, this var	ensations sation). iable retu	are corr	ected (lea urrent setp IISC_FUN	dscrew er	ror compe efinition. If MASK mus	nsation, it is
coordinat backlash When a s preferred description to be defi	compens compens spindle or to return of field lin ined GEOAX CHANAX	(MCS). A ation, qua axis disab the actual nits:	ll actual va drant erro ble is activ	alue comp r compen: e, this var	ensations sation). iable retu	are corr rns the constant series	ected (lea urrent setp IISC_FUN	dscrew er point by de ICTION_N	ror compe efinition. If MASK mus	nsation, it is
coordinate backlash When a spreferred description to be defination	ce system compens spindle or to return of field lined GEOAX CHANAX	(MCS). A ation, qua axis disab the actual	ll actual va drant erro ble is activ	alue comp r compen: e, this var	ensations sation). iable retu	are corr rns the constant series	ected (lea urrent setp IISC_FUN	dscrew er point by de ICTION_N	ror compe efinition. If MASK mus	nsation, it is
coordinat backlash When a s preferred descriptior to be defi axis identifier:	ce system compens spindle or to return of field lin med GEOAX CHANAX MACHAX SPINDLE	(MCS). A ation, qua axis disab the actual nits:	Il actual va drant erro ble is activ I value in t	alue comp r compens e, this var his situation	ensations sation). iable retu	are corr rns the constant series	ected (lea urrent setp IISC_FUN sion:	dscrew er point by de ICTION_N	ror compe efinition. If MASK mus	nsation, it is
coordinate backlash When a spreferred description to be defination	te system compens spindle or to return of field linined GEOAX CHANAX MACHAX SPINDLE Linear /	(MCS). A ation, qua axis disab the actual	ll actual va drant erro ble is activ	alue comp r compens e, this var his situation	ensations sation). iable retu	are corr rns the constant series	ected (lea urrent setp IISC_FUN	dscrew er point by de ICTION_N	ror compe efinition. If MASK mus	nsation, it is
coordinat backlash When a s preferred descriptior to be defi axis identifier:	te system compens spindle or to return of field linined GEOAX CHANAX MACHAX SPINDLE Linear / angular	(MCS). A ation, qua axis disab the actual nits:	Il actual va drant erro ble is activ I value in t	alue comp r compens e, this var his situation	ensations sation). iable retu	are corr rns the constant series	ected (lea urrent setp IISC_FUN sion:	dscrew er point by de ICTION_N	ror compe efinition. If MASK mus	nsation, it is
coordinat backlash When a s preferred descriptior to be defi axis identifier:	de system compens spindle or to return of field lined GEOAX CHANAX MACHAX SPINDLE Linear / angular position	(MCS). A ation, qua axis disab the actual nits:	Il actual va drant erro ole is activ value in t	alue comp r compen: e, this var his situation	ensations sation). iable retu	rns the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the cons	ected (lea urrent setp fISC_FUN	dscrew er point by de ICTION_N 13.00.00	efinition. If MASK mus	nsation, it is t be set.
coordinat backlash When a s preferred descriptior to be defi axis identifier:	te system compens spindle or to return of field linined GEOAX CHANAX MACHAX SPINDLE Linear / angular	(MCS). A ation, qua axis disab the actual nits:	Il actual va drant erro ble is activ I value in t	alue comp r compens e, this var his situation	ensations sation). iable retu	are corr rns the constant series	ected (lea urrent setp IISC_FUN sion:	dscrew er point by de ICTION_N	ror compe efinition. If MASK mus	nsation, it is t be set.
coordinat backlash When a s preferred descriptior to be defi axis identifier:	de system compens spindle or to return of field lined GEOAX CHANAX MACHAX SPINDLE Linear / angular position	(MCS). A ation, qua axis disab the actual nits:	Il actual va drant erro ole is activ value in t	alue comp r compen: e, this var his situation	ensations sation). iable retu	rns the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the constant of the cons	ected (lea urrent setp fISC_FUN	dscrew er point by de ICTION_N 13.00.00	efinition. If MASK mus	nsation, it is t be set.
coordinat backlash When a s preferred description to be defi axis identifier: unit:	de system compens spindle or to return of field lined GEOAX CHANAX MACHAX SPINDLE Linear / angular position run-in	(MCS). A ation, qua axis disab the actual nits:	Il actual va drant erro ole is activ value in t	alue comp r compen: e, this var his situation	ensations sation). iable retu	ns the constant of the constan	ected (lea urrent setp MISC_FUN sion:	dscrew er point by de ICTION_N  13.00.00  DBL_M/	efinition. If MASK mus	nsation, it is t be set.
coordinat backlash When a s preferred description to be defi axis identifier: unit:	ge system compens spindle or to return of field lining GEOAX CHANAX MACHAX SPINDLE Linear / angular position run-in X	(MCS). A ation, qua axis disab the actual nits:	Il actual va drant erro ole is activ value in t	alue comp r compen: e, this var his situation	ensations sation). iable retu	ns the constant of the constan	ected (lea urrent setp MISC_FUN sion:	dscrew er point by de ICTION_N  13.00.00  DBL_M/	efinition. If MASK mus	nsation, it is t be set.

block search

Not classified

attributes: global

DOUBLE	\$VA IM2	2[31]							descriptio	
		-[0.]							n:	
coordinat backlash When a s preferred description to be defi	able \$VA e system compens spindle or to return n of field lin	(MCS). A ation, qua axis disat	ll actual va drant erro le is activ	alue comp or compens e, this var	ensations sation). iable retu	s are corr rns the c n \$MA_N	rected (lea urrent set MISC_FUI	adscrew er	er 2) in the ror compe efinition. If MASK mus	nsation, it is
axis identifier:	GEOAX CHANAX MACHAX SPINDLE	<				NCK ver	sion:	13.00.00	0	
unit:	Linear / angular position	min.:	DBL_MIN				max.:	DBL_M		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch	I	ı	link			l .	
		Not class	ified			Not clas	ssified			
DOUBLE	\$VA_LA	G_ERROI	R[31]						description:	1
interpolat	\$VA_LAG or actual of field lin	position va		es the con	tour-relat	ed follow	ing error,	i.e. positio	n setpoint	after fine
axis identifier:	CHANAX MACHAX	•				NCK ver	sion:	53.00.00	0	
unit:	-	min.:	DBL_MIN	١		ļ.	max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:		Х	Х				Х	Х	Х	Ī
write:										1

DOUBLE	\$AA_MV	V[31]						descripti	0
-ll - 4' -								n:	
descriptio									
\$AA_MV									
Probe m	easured v	alue in wo	orkpiece c	oordinate syste	m				
	n of field lir	nits:							
to be def axis					INCK ve	roioni	T	_	
axis identifier:	GEOAX				INCK VE	SIOH.	06.00.0	00	
deritiner.	CHANA	=							
	MACHA								
	SPINDLI								
unit:	Linear /	min.:	DBL_MII	N		max.:	DBL_N	IAX	
	angular								
	position								
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Х	X	X		X	X	X	X	
write:	Х	Х	Х		Х	Х	Х	X	7
attributes:	global	block sea	rch	I.	link			l .	
		Not class	sified		Not cla	ssified			
	l	I			I				
DOUBLE	\$AA_MN	<i>I</i> [31]						descripti	0
descriptio	n·							n:	
•									
\$AA_MN		مم ما میام							
description	n of field lir	nite	achine co	ordinate system					
to be def		iiito.							
axis					INCK ve	reion:	100.00.0		
dentifier:	GEOAX	,			NOR VE	31011.	06.00.0	00	
	CHANA)								
	MACHA)								
	SPINDLI								
unit:	Linear /	min.:	DBL_MII	N		max.:	DBL_N	IAX	
	opaulor	1	1						

angular position run-in

Χ

Χ

read:

write:

attributes: global

main run

Χ

Χ

block search

Not classified

runin stp

Χ

Χ

Mrun syn

PP

link

Χ

Χ

Not classified

SA

Χ

Χ

OPI

Χ

Χ

OEM

Χ

Χ

access rights

7

DOUBLE	\$AA_MV	V1[31]						descripti	io
	Ψ/1/1_1111	• • • • • • • • • • • • • • • • • • • •						n:	
descriptior	1:							•	•
\$AA_MW	'1[X]								
Measure	ment resu	ılt axial me	easureme	nt					
Trigger e	vent 1 in	WCS							
descriptior	of field lin	nits:							
to be defi	ned								
axis	GEOAX				NCK ver	sion:	13.00.0	0	
identifier:	CHANA	(							
	MACHA	X							
	SPINDLE	Ξ							
unit:	Linear /	min.:	DBL_MIN	١	•	max.:	AX		
	angular		_				_		
	position								
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Χ	Х	Х		X	Х	X	X	
write:	Х	Х	Х		X	Х	Х	Х	7
attributes:	global	block sear	ch		link				
		Not class	sified		Not clas	ssified			
		1			· ·				
DOUBLE	\$AA_MV	V2[31]						descripti	i0

DOUBLE	\$AA_MV	V2[31]							description:	0
description	1:				ı					
\$AA_MW	/2[X]									
Measure	ment resu	It axial me	easureme	nt						
Trigger e	vent 2 in \	NCS								
description	n of field lin	nits:								
to be defi	ined									
axis	GEOAX					NCK vei	rsion:	13.00.0		
identifier:	CHANAX	(								
	MACHA	(								
	SPINDLE	Ξ								
unit:	Linear /	min.:	DBL MI	V		•	max.:	DBL_M	4Χ	
	angular									
	position									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:	Х	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sear	ch	•		link	•	•	•	
		Not class	ified			Not cla	ssified			

DOUBLE	\$AA_MV	V3[31]						description	)
		10[01]						n:	
descriptio	n:								
\$AA_MV	/3[X]								
Measure	ment resu	ılt axial me	easureme	nt					
	vent 3 in								
	n of field lin	nits:							
to be def					111017		_		
axis	GEOAX				NCK ve	rsion:	13.00.0	0	
identifier:	CHANA								
	MACHAX	=							
	SPINDLE								
unit:	Linear /	min.:	DBL_MII	N		max.:	DBL_M	AX	
	angular								
	position								
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
read:	V	V	V				V		rights
write:	Х	Х	Х		Х	X	X	Х	
	Х	Х	X		Х	Х	Х	Х	7
attributes:	global	block sea	rch		link				
		Not class	sified		Not cla	ssified			
					J				
DOUBLE	\$AA_MV	V4[31]						description	0
		[]						n:	
descriptio									
\$AA_MV									
			easureme	nt					
I rigger e	vent 4 in 'n of field lin	WCS							
		IIIS.							
to be def					INCK ve	reion:	40.00.0	.0	
identifier:	GEOAX	,			INCIN VE	101011.	13.00.0	U	
	CHANA	=							
	MACHA) SPINDLE								
mit.			T==			Imay :			
unit:	Linear /	min.:	DBL_MI	N		max.:	DBL_M	AX	

PP

link

Χ

Χ

Not classified

SA

Χ

Χ

OPI

Χ

Χ

OEM

Χ

Χ

access rights

7

angular position

Χ

Χ

main run

Χ

Χ

block search

Not classified

runin stp

Χ

Χ

Mrun syn

run-in

read:

write:

attributes: global

DOUBLE	\$AA_MN	/l1[31]						descript n:	0
description	n:							1	
\$AA_MM	11[X]								
		ılt axial me	easureme	nt					
Trigger e	vent 1 in	MCS							
description	n of field lin	nits:							
to be def	ined								
axis	GEOAX				NCK ver	sion:	13.00.0	0	
identifier:	CHANA	<							
	MACHAX								
	SPINDLE	Ε							
unit:	nit: Linear / min.: DBL_MIN		V		max.:	DBL_M	AX		
а	angular								
	position								
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		X	Х	Х	X	
write:	Х	Х	Х		X	Х	Х	Х	7
attributes:	global	block sea	rch	<u>'</u>	link	· · · · · · · · · · · · · · · · · · ·	· · · · · · · · · · · · · · · · · · ·	W	
		Not class	sified		Not clas	ssified			
					•				
DOUBLE	\$AA_MN	/12[31]						descript	0
description	<u> </u>							n:	

DOUBLE	\$AA_MN	12[31]							description:	0
description	n:				ı					
\$AA_MM	2[X]									
Measure	ment resu	It axial me	easureme	nt						
Trigger e	vent 2 in I	MCS								
description	n of field lin	nits:								
to be defi	ined									
axis	GEOAX					NCK vei	rsion:	13.00.00		
identifier:	CHANAX	(								
	MACHA	(								
	SPINDLE	Ξ								
unit:	Linear /	min.:	DBL_MIN	V			max.:	DBL_M	ΑX	
	angular									
	position									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:	Х	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sear	ch	•		link	-	•	•	
		Not class	ified			Not cla	ssified			

DOUBLE	<b>\$ΔΔ ΜΝ</b>	13[31]						descriptio	
		<u></u>						n:	
description									
\$AA_MM									
		ılt axial me	asureme	nt					
Trigger ev	vent 3 in I	MCS							
description		nits:							
to be defi									
	GEOAX				NCK ver	sion:	13.00.0	0	
	CHANAX	=							
	MACHA								
	SPINDLE	Ξ							
unit:	Linear /	min.:	DBL_MIN	١	•	max.:	DBL_M	AX	
	angular		_				_		
	position								
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
									rights
read:	Χ	X	Х	Γ [	X	Х	Х	Х	<u> </u>
write:	Х	Х	Х		X	Х	Х	Х	7
attributes:	global	block sear	rch	J. I	link				
		Not class	ified	_	Not clas	ssified			
		1101 0100			1,101,012				
DOUBLE	ΦAA RAR	14[24]		<del></del>				descriptio	ı İ
DOGELL	\$AA_IVIIV	14[31]						n:	
description	1:								ı
\$AA_MM	4[X]								
Measurer	nent resu	ılt axial me	easureme	nt					
Trigger ev	vent 4 in I	MCS							
description		nits:							
	nod								
to be defi					NCK ver	sion:	13.00.0	<u> </u>	
axis	GEOAX				11011101		10.00.0	U	
axis identifier:	GEOAX CHANAX				1101110		10.00.0	O	
axis identifier:	GEOAX CHANAX MACHAX	<					10.00.0	O	
axis identifier:	GEOAX CHANAX	<			THEIR VOI		10.00.0	O	
axis identifier:	GEOAX CHANAX MACHAX	<	DBL MIN	٨		max.:	DBL M		
axis identifier: unit:	GEOAX CHANAX MACHAX SPINDLE	<b>K</b> ≣	DBL_MIN	N	THE RESERVE	max.:			

PP

link

Χ

Χ

Not classified

SA

Χ

Χ

OPI

Χ

Χ

OEM

Χ

Χ

access rights

7

1-447

main run runin stp

Χ

Χ

Χ

Χ

block search

Not classified

Mrun syn

run-in

Χ

Χ

read:

write:

attributes: global

BOOL	\$AA_MEAACT[31]								description:		
description	n:								1		
\$AA_ME	AACT[X]										
	TRUE wh	en									
axial mea	asuremen	t is active	for X								
Correspo	nds to PL	.C interfac	e signal D	B31DB	X62.3						
	n of field lin	nits:									
to be def											
axis	GEOAX					NCK vers	sion:	13.00.00	0		
identifier:	CHANA										
	MACHAX										
	SPINDLE										
unit:	-	min.:	FALSE				max.:	TRUE			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:		Х	Х				Х		Х	Ingilio	
write:											
attributes:	attributes: global block search					link					
Not classified						Not clas	sified				
	•	•									
DOUBLE	\$AC_DR	F[31]							description		
description	<u> </u> n:								n:		
		DRF[ax]	determine	es the axia	al override	value ca	used by t	he handw	heel (DRF	offset).	
description	n of field lin	<u>nits:</u>		70 11.10 11.110						· · · · · · · · · · · · · · · · · · ·	
to be def	ined										
axis	GEOAX					NCK vers	sion:	06.00.00	)		
identifier:	CHANA	(									
	MACHAX	<									
	SPINDLE										
unit:	Linear /	min.:	DBL MIN	J			max.:	DBL M	ΔX		
	angular			•							
	position										
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	IOEM	access	
			·						J =	rights	
read:	Х	Х	Х			Х	X	Х	Х		
write:								<u> </u>			
attributes:	attributes: global block search					link					
		Not class	sified								

DOUBLE	\$AC PR	ESET[31]							descriptio	
			-						n:	
description		DDEOE	FF1 -1-4		14-1-6		>==			
	n of field lir		[ax] detei	mines the	last defin	ied PRES	se i value	· .		
to be def		ilito.								
axis	GEOAX					NCK ver	sion:	06.00.00	)	
identifier:	CHANA	(						00.00.00	,	
	MACHA									
	SPINDLI									
unit:	Linear /	min.:	DBL MII	V .			max.:	DBL MAX		
	angular		DDL_!\\	•						
	position									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
			•	,						rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:								Х		7
attributes:	global	block sear	rch			link	I	I		
		Not class	sified			Not clas				
	1									
DOUBLE	\$AA ET	RANS[31]	1						descriptio	
		- •	•						n:	
description		ETDANC	New lie we	-d tt-		والمعادد المما	offootlo:		antivestant h	46.0
									activated b	
PLC. AIR	eractivati	on by the	PLC, the t	onset valu	e is traver	sed as a	n axiai ov	erriae in tr	ne next blo	CK.
If Rit 1 is	set in \$M	C MM S	YSTEM E	RAME M	ASK and	active mo	vement is	s stonned i	mmediatel	v on
									zed with th	
									e interrupt	
									rrent syste	
									ot the fine	
				TRANS[a				(		,
	n of field lir				-					
to be def	ined									
axis	GEOAX					NCK ver	sion:	06.00.00	)	
identifier:	CHANA	<								
	MACHA	Χ								
	SPINDLI	Ε								
unit:	Linear /	min.:	DBL_MII	V		1	max.:	DBL MA	λX	
	angular		_							
	position									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
rood										rights
read:	Х					Х		X		
write:	Х					Х		Х		7
attributes:	global	block sea	rch		link					
		Not class	sified		Not classified					

#### 1.1 List of system variables

INT	\$AA_ME	EAS_P1_V	'ALID[31]						descriptio n:			
description	<u> </u> า:								11.	<u> </u>		
-		iece and to	ool measi	rement.								
					d to unlate	ch the cu	irrent axis	position w	ith referen	ce to a		
									oordinate s			
Application		, , , , , , , , , , , , , , , , , , , ,		_						,		
		/ALID[ax] :	= 0 : 1st	measuring	point of a	axis is in	valid					
		/ALID[ax] :										
_						•						
The unlat	tched me	asuring po	int is store	ed in \$AA_	MEAS_P	OINT1[a	ax].					
descriptior	n of field lir	nits:										
to be defi	ined											
axis	GEOAX					NCK version: 43.00.0		43.00.00	)			
identifier:	CHANA	<										
	MACHA:	X										
	SPINDL	E										
unit:	-	min.:										
	run-in	main run	runin stp					access				
										rights		
read:	Х	Х				Х	Х	Х	Х			
write:	Х	Х	Х			X	X	X	X	7		
attributes:	global	block sear	ch			link						
		Not class	sified			Not clas	ssified					
	l									<u> </u>		
INT	SAA ME	AS_P2_V	ALID[31]						descriptio			
			,						n:			
description												
		iece and to										
									ith referen			
		e system.	Variable 9	BAC_MEA	S_P2_CC	ORD is	used to se	elect the co	oordinate s	system.		
Application												
		/ALID[ax] :										
\$AA_ME	AS_P2_VALID[ax] = 1 ; Determining 2nd measuring point of axis											
The unlat	tched me	asuring po	int is store	ed in \$AA_	_MEAS_P	OINT2[a	ax].					
	n of field lir	nits:										
to be defi						NOK		1				
axis	GEOAX					NCK ver	sion:	43.00.00	)			
identifier:	CHANA											
	NAA OLIA											

unit:

read:

write:

attributes:

MACHAX **SPINDLE** 

run-in

Χ

Χ

global

min.:

Χ

Χ

block search

Not classified

main run runin stp Mrun syn

max.:

Χ

Χ

OPI

Χ

Χ

OEM

Χ

Χ

access

7

rights

SA

Χ

Χ

Not classified

link

INT	\$AA_M	EAS_P3_V	'ALID[31]						descriptio	
description	<u> </u> า:								n:	
Axial vari selected Applicatio \$AA_ME. \$AA_ME.	able \$AA coordina on: AS_P3_ AS_P3_	piece and to A_MEAS_F ate system. VALID[ax] = VALID[ax] =	23_VALID Variable 9 = 0 ; 3rd = 1 ; Det	[ax] is use \$AC_MEA measurino ermining 3	S_P3_C0 g point of Brd measu	OORD is axis is in ıring poir	used to solvalid nt of axis			
description				-						
to be defi	ned									
axis identifier:	GEOAX CHANA MACHA SPINDL	XX AX				NCK ver	sion:	43.00.0	0	
unit:	-	min.:					max.:	1		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х				Х	Х	Х	Х	
write:	Х	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sear	ch	L	I	link	I.			
		Not class	ified			Not clas	ssified			
INT	\$AA M	EAS P4 V	ALID[31]						descriptio	

INI	\$AA_MEAS_P4_VALID[31]	descriptio
	= = =	n:

#### description:

Variable for workpiece and tool measurement.

Axial variable \$AA\_MEAS\_P4\_VALID[ax] is used to unlatch the current axis position with reference to a selected coordinate system. Variable \$AC\_MEAS\_P4\_COORD is used to select the coordinate system. Application:

Not classified

\$AA\_MEAS\_P4\_VALID[ax] = 0 ; 4th measuring point of axis is invalid \$AA\_MEAS\_P4\_VALID[ax] = 1 ; Determining 4th measuring point of axis

The unlatched measuring point is stored in \$AA\_MEAS\_POINT4[ax].

description of field limits:

attributes: global

to be def	ined							
axis identifier:	GEOAX CHANAX MACHAX SPINDLI	X		NCK versi	on:	43.00.0	00	
unit:	-	min.:				max.:	1	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	
read:	Х	Х			Х	Х	Х	
write:	Х	Х	Х		Х	Х	Х	T

OEM

Χ

Χ

access rights

7

block search

DOUBLE  \$AA_MEAS_POINT1[31]									descriptio	
description									n:	
		ece and to	ool maasi	ırement						
					o write th	e 1st mea	asurina na	oint for wor	kniece and	d tool
								ed with vari		2 (00)
				P1 VALID						
Application		[-], +			[]-					
		T1[x] = \$A	AA_IW[x]							
		T1[y] = \$A								
\$AA_ME	AS_POIN	T1[z] = \$A	AA_IW[z]							
-	n of field lin	nits:								
to be defi						TNOW				
axis identifier:	GEOAX					NCK vers	sion:	43.00.00		
identiller.	CHANAX									
	MACHA									
	SPINDLE		_				_			
unit:	Linear /	min.:	DBL_MIN	1			max.:	DBL_MA	X	
	angular									
	position									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х		rigino
write:	Х					Х		Х		7
attributes:	global	block sear	rch	ı	l	link		I	I	
		Not class	sified			Not clas	sified			
										1
DOUBLE	\$AA_ME	AS_POIN	IT2[31]						descriptio	
description	J.								n:	
-		ece and to	nol measi	ırement						
					o write th	e 2nd me	asurina r	oint for wo	rkniece an	nd tool
								ed with vari		ia 1001
				P2 VALID						
Application		1 1/		_						
\$AA_ME	AS_POIN	T2[x] = \$A	AA_IW[x]							
		T2[y] = \$A								
\$AA_ME	AS_POIN	T2[z] = \$A	AA_IW[z]							
description		nits:								
to be defi						INIOIZ				
axis identifier:	GEOAX					NCK vers	SION:	43.00.00		
identifier.	CHANAX									
	MACHA)									
mit.	SPINDLE		I==	_			Imav			
unit:	Linear /	min.:	DBL_MIN	١			max.:	DBL_MA	ιX	
	angular									
	position			T. A	1	IDD		ODI	IOEN.	T
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х		J :-
write:	Х					Х		Х		7

link

Not classified

attributes: global

block search

DOUBLE	\$AA ME	AS_POIN	IT3[31]	descriptio						
									n:	<u> </u>
description										
		iece and to				- 0		-: <b>-</b>		احمال
								oint for wo		a tool
				P3_VALID		directly d	or uniatorie	eu with van	lables	
Application	_	,⊓[∠], <b>⊅</b> ΑΑ	_IVIEAS_	F3_VALID	ηaxj.					
		T3[x] = \$A	Ιν//[γ]							
		IT3[χ] = \$/								
		T3[z] = \$/								
	n of field lin		<u> </u>							
to be def	ined									
axis	GEOAX					NCK ver	sion:	43.00.00	)	
identifier:	CHANA	(								
	MACHA	X								
	SPINDLE	<b>=</b>								
unit:	Linear /	min.:	DBL MI	V		1	max.:	DBL MA	λX	
	angular			•						
	position									
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	OEM	access
			· ·							rights
read:	Х					Х		Х		
write:	Х					Х		Х		7
attributes:	global	block sear	rch			link			l.	
		Not class	sified			Not clas	ssified			1
						1				_1
DOUBLE	\$AA ME	AS_POIN	IT4[31]						descriptio	
			[]						n:	
description			_							
		iece and to				4.11				
								oint for wo		a tool
				an de eithe P4 VALID		directly d	or uniatene	ed with var	lables	
Application		∍⊓[ა], ֆAA	INIEAS_	P4_VALID	ηaxj.					
		T4[x] = \$A	ΔΔ Ι\Λ/[ν]							
		T4[χ] = \$/  T4[y] = \$/								
		T4[y] = ψ/								
description	n of field lin	nits:	<u> </u>							
to be def	ined									
axis	GEOAX					NCK ver	sion:	43.00.00	)	
identifier:	CHANA	(								
	MACHA	X								
	SPINDLE	=								
unit:	Linear /	min.:	DBL_MIN	V		1	max.:	DBL MA	λX	
	angular									
	position									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х		<u> </u>			Х		Х		
write:	Х					Х		Х		7

link

Not classified

block search

Not classified

attributes: global

INT	\$AA_ME	AS_SP_\	/ALID[31]						descriptio	
									n:	
description										
			ool measu							
		_MEAS_S	SP_VALID	[ax] is use	ed to set th	ne defined	d setpoint	of an axis	to valid or	invalid.
Application										
			= 0 ; Posit							
\$AA_ME	AS_SP_V	'ALID[ax]	= 1 ; Posit	tion setpoi	nt of axis	is valid				
The posit	ion setpo	int is store	ed in \$AA_	MEAS_SI	ETPOINT	[ax]				
description	n of field lin	nits:								
to be defi	ined									
axis	GEOAX					NCK vers	sion:	43.00.00		
identifier:	CHANAX	(								
	MACHA									
	SPINDLE									
unit:	OI IIIDEL	- Imin.:				l	max.:	1		
unit.	-							1		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:								· · · · · ·		rights
	Х					Х		Х		
write:	Х					Х		X		7
attributes:	global	block sear	rch			link				
		Not class	sified			Not clas	sified			
		1101 01000	J			11010140				
DOUBLE	¢ A A B4F	AC CET	OUNITION	1	l				descriptio	l
DOODLL	\$AA_WE	A5_5E11	POINT[31]	l					n:	
description	1:									
Variable	for workni	ece and to	ool measu	rement.						
					ed to defin	ne a nosit	ion setnoi	int for an a	xis This n	osition
	_		calculatin			-	-		г по р	00111011
Application		iou wiioii	odiodia iii	9 410 11011	tpiood pot	, , , , , , , , , , , , , , , , , , ,	10 1001 101	.g		
		OINT[x] =	= n n							
		OINT[x] =								
		OINT[z] =								
	n of field lin		- 0.0							
to be defi										
axis	GEOAX					INCK vers	sion:	43.00.00		
identifier:		,				Tronc voice	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	43.00.00		
	CHANAX									
	MACHAX									
	SPINDLE									
unit:	Linear /	min.:	DBL_MIN	1			max.:	DBL_MA	X	
	angular									
	position	]								
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Χ	1				Х		X		

write:

attributes: global

Χ

block search

Not classified

Х

Χ

Not classified

link

DOUBLE	\$AA_ME	AS_SET	ANGLE[3	1]					descripti n:	0
description	1: 1:				l .				1	
Variable	for workpi	ece and to	ool measu	ırement.						
				E[ax] is us	ed to defi	ne an ar	igle setpo	int for an a	axis. This	angle
				g the work						Ü
Application	on:			-				_		
\$AA_ME	AS_SETA	NGLE[x]	= 0.0							
\$AA_ME	AS_SETA	NGLE[y]	= 0.0							
		NGLE[z]	= 0.0							
	n of field lin	nits:								
to be def	ned									
axis	GEOAX					NCK ver	sion:	48.00.0	0	
identifier:	CHANAX	(								
	MACHAX	=								
	SPINDLE	Ī								
unit:	Linear /	min.:	DBL_MIN	1			max.:	DBL_M	AX	
	angular									
	position									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х		
write:	Х					Х		Х		7
attributes:	global	block sear	rch			link				
		Not class	sified			Not clas	ssified			

DOUBLE	\$AA_OF	F[31]						descripti n:	0
description	n:			<u> </u>					
overlaid i	movemen	t can be c		overlay a n with \$MA_A			med axis.	The beha	vior of the
'	n of field lin	nits:							
to be def axis identifier:	GEOAX CHANAX MACHAX SPINDLE	<			NCK ve	ersion:	06.00.0	00	
unit:	Linear / angular position	min.:	DBL_MII	N		max.:	DBL_M	IAX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:		Х	Х			Х	Х	Х	
write:		Х				Х	Х	Х	7
attributes:	global	block sear	rch	<u> </u>	link				
		Not class	sified		Not cla	assified			

INT	\$AA_OF	F_LIMIT[	31]						description:	
description	n:								111.	
The follow 0:Limit v 1:Limit v -1:Limit v	wing valu alue not r alue reac	es are pos eached hed in pos hed in neg	sible:	direction	terrogate	a limit va	alue for th	e axis offs	set \$AA_O	FF[ax].
to be def										
axis identifier:	GEOAX CHANAX MACHAX SPINDLI	Χ				NCK ver	sion:	13.00.0	0	
unit:	-	min.:	-1			•	max.:	1		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch		I	link		<b> </b>		
		Not class	sified			Not clas	ssified			
DOUBLE	\$AA_OF	F_VAL[3	1]						description:	)
description	n:									
Axial vari	iable \$AA	_OFF_VA	L[ax] dete	rmines the	e integrate	ed value	of the ove	erlaid mov	ement for	an axis.
				ed again by	y means o	of the				
		his variabl								
e.g. \$AA	_OFF[axi: n of field lir	s] = -\$AA_	OFF_VAL	_[axis]						
to be def		illo.								
axis	GEOAX					NCK ver	sion:	20.00.0	n	
identifier:	CHANA	<						20.00.0	O	
	MACHA									
	SPINDL	Ε								
unit:	-	min.:	DBL_MIN	٧		I	max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
rood:				1			ļ.,,	1	1	rights
read:	Х	Х	Х			Х	X	Х	X	
write:										
attributes:	global	block sear	rch			link				
		Not class	sified			Not class	ssified			

DOOBLE	\$AC_RE	TPOINT[3	31]						n:	
description	1:				l .					
\$AC_RE	TPOINT[X	(]								
\$AC_RE	TPOINT[]	supplies t	the WCS p	osition of	an axis a	t which a	n ASUB h	nas been s	started. The	e axis can
then be re	epositione	ed at this p	point in the	e Asub.						
If an Asul	b is starte	d immedia	ately after	a block se	earch with	calculat	ion, \$AC_	RETPOIN	IT then sup	plies the
collected										
For a mo	dulo axis	\$AC_RET	POINT[] s	supplies th	e positior	n as mod	ulo conve	rted.		
									supplying	a valid
reposition	ning point	within the	current p	rogram co	ntext (see	e docume	entation fo	r \$AC_RF	PVALID[]).	
			nchronized							
									eing proce	
									lock start p	oint, etc.)
defined b	y G codes	s RMI, RM	ИВ, RME,	RMN or V	DI signal	are also	taken into	account.		
description	of fiold lin	nite:								
to be defi		1115.								
axis	GEOAX					INCK ver	sion:	06.00.0	n	
identifier:	CHANAX	,						00.00.0	U	
	MACHA	=								
	SPINDLE									
unit:	Linear /	min.:	DDI MIN	.1			max.:	DDI M	^ V	
Grine.			DBL_MIN	N			max	DBL_M	AX	
	angular									
	position	main run	runin atn	Mrun syn	1	IPP	SA	OPI	IOEM	1000000
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	X	X	X	rigitis
write:		, ,					1			
	alobal	block sear	roh			link				
attributes:	yiubai									
		Not class	sified			Not clas	sified			
		•				•				•

DOUBLE \$AA\_TOFF[31] | descriptio | n:

description:

Variable \$AA\_TOFF[geo axis] is used to overlay a movement in the corresponding tool direction. The behavior of the overlaid movement can be configured with \$MC\_TOFF\_MODE.

Activation in the part program is performed using the TOFFON instruction.

The TOFFOF instruction can be used to reset the offset values.

The velocity for the offset can be defined with MD 21194 TOFF\_VELO; the acceleration can be defined with MD21196 TOFF ACCEL.

The variable is only appropriate in conjunction with an active orientation transformation or an active toolholder.

description of field limits:

#### to be defined

axis identifier:	GEOAX					NCK ver	sion:	50.00.00			
unit:	mm	min.:	DDL_WIIN				max.:	DBL_M	DBL_MAX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х			Х	Х	Х	Х		
write:	Х	Х	Х			Х	Х	Х	Х	7	
attributes:	global	block sear	ch			link	II	1	<b></b>		
		Not class	ot classified				Not classified				

DOUBLE  \$AA_TOFF_VAL[31]	de	escriptio	
, = - = <b>L</b> - <b>J</b>	n:		

description:

Variable \$AA\_TOFF\_VAL[geo axis] determines the integrated value of the overlaid movement in the corresponding tool direction.

The variable is only appropriate in conjunction with an active orientation transformation or an active toolholder.

description of field limits:

#### to be defined

axis identifier:	GEOAX		NCK version: 50.00.00							
unit:	mm	min.:	DBL_MIN	N			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch			link	<b>'</b>	1		
		Not class	sified			Not clas	ssified			

descriptio \$AA\_TOFF\_LIMIT[31] description: Axial variable \$AA\_TOFF\_LIMIT[ax] is used to interrogate a limit value for the offset in the tool direction (TCS) via \$AA\_TOFF[geo axis]. The following values are possible: 0: Limit value not reached 1: Limit value reached in positive axis direction -1: Limit value reached in negative axis direction The limit values can be defined with SD 42970 TOFF\_LIMIT. The variable is only appropriate in conjunction with an active orientation transformation or an active toolholder. description of field limits: to be defined axis GEOAX NCK version: 50.00.00 identifier: unit: min.: max.: OPI OEM main run run-in runin stp Mrun syn SΔ access rights read: X Χ X Χ write: attributes: global link block search

DOUBLE	\$AA_TOFF_PREP_DIFF[31]	des n:	scriptio	

Not classified

description:

Variable \$AA\_TOFF\_PREP\_DIFF[geo axis] determines the difference value of the overlaid movement in the corresponding tool direction between the main run and preprocessing run.

The variable is only appropriate in conjunction with an active orientation transformation or an active toolholder.

description of field limits:

Not classified

#### to be defined

		· <del>··</del>									
axis identifier:	GEOAX	GEOAX			NCK v	rersion:	50.00.0	0			
unit:	DDL_IVIIIV				max.:	DBL_M	DBL_MAX				
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights		
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write:											
attributes:	global	block sear	rch	•	link		•	•			
		Not class	sified		Not cl	assified					

DOUBLE	\$AA SO	FTENDP[	31]					descript	io	
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to be def		iiito.								
axis	GEOAX				INCK ve	NCK version: 06.00.00				
identifier:	CHANAX	(					00.00.0	10		
	MACHA									
	SPINDLE									
unit:	Linear /	min.:	DBL_MIN	J.		max.:	DBL N	ΙΔΥ		
	angular						DDL_IV	, VX		
	position									
	run-in main run runin stp Mrun syn				PP	SA	OPI	OEM	access	
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	n of field lin	nits:								
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unit:	Linear / angular position	min.:	DBL_MIN			I D D	max.:	DBL_MA		T
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:		Х	Х				Х	Х	Х	
write:										
attributes:	global	block sear	rch			link				
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DOUBLE  \$AA_DTBB[31]   descriptio										
		BB[31]							descriptio n:	
description Axial vari coordinat to calcula coupling	n: able \$AA te system ate the dis is not con	_DTBB[ax for position trance. If the sidered.	ning and	synchroniz	zed axes.	The progr	rammed <sub>l</sub>	the block in position is t t derived fi	n: n the basion the only fa	ctor used
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description Axial vari coordinat to calcula coupling description to be defi axis identifier: unit:	able \$AA te system ate the dis is not con of field lin ined GEOAX CHANA> MACHA> SPINDLE Linear / angular position	_DTBB[ax for position tance. If the sidered. nits:	DBL_MIN runin stp	synchroniz a coupled	zed axes.	The progr position c	ion:	oosition is to derived fit der	n:  n the basic the only farom the ax	ctor used kis

DOUBLE \$AA_DTEW[31]									descriptio	
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	CHANAX									
	MACHA									
	SPINDLE		ı				T			
unit:	Linear /	min.:	DBL_MIN	1			max.:	DBL_M	4X	
	angular									
	position									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
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write:										
attributes:	global	block sear	ch			link				
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description	J.								n:	
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axis	ned GEOAX CHANAX MACHAX SPINDLE	nits:				considere				axio, tile
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axis identifier:	ned GEOAX CHANAX MACHAX SPINDLE Linear / angular	nits:				considere	sion:			adic, the
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axis identifier:	ned GEOAX CHANAX MACHAX SPINDLE Linear / angular	nits:				considere	sion:			access rights
axis identifier:	ned GEOAX CHANAX MACHAX SPINDLE Linear / angular position	nits:	DBL_MIN	ı		onsidere	sion:	DBL_M	ΑX	access
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axis identifier: unit: read:	ned GEOAX CHANAX MACHAX SPINDLE Linear / angular position	nits:	DBL_MIN runin stp	ı		onsidere	max.:	DBL_M/	AX OEM	access

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to be def		ills.									
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identifier:	CHANA	(						00.00.00			
	MACHA										
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axis	GEOAX										
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unit:	CHANAX MACHAX SPINDLE Linear / angular	<b>(</b> =	DBL_MIN	N Mrun syn		NCK ver				access	
unit:	CHANAX MACHAX SPINDLE Linear / angular position	min.:	runin stp				max.:	DBL_M.	AX OEM	access rights	
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read: write:	CHANAX MACHAX SPINDLE Linear / angular position run-in	min.:	runin stp			PP	max.:	DBL_M.	AX OEM		
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DOORLE	\$AA_OS	CILL_RE	VERSE_F	POS1[31]					n:		
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	n of field lin	nits:									
to be def	ined										
axis	GEOAX					NCK version: 06.00.00					
identifier:	CHANAX										
	MACHAX	<									
unit:	Linear /	min.:	DBL MII	V			max.:	DBL MA	X		
	angular		_					_			
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	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access	
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write:											
attributes:	global	block sea	rch	1	l .	link					
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axis	GEOAX					INCK vers	sion:	06.00.00			
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link

Not classified

write:

attributes: global

block search

DOUBLE  \$AA_DELT[31]									description	)
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description	n of field lin	nits:								
to be def	ined									
axis	GEOAX					NCK vers	NCK version: 06.00.00			
identifier:	CHANAX	(					00.00.00			
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description \$P_FA[X Last prog description to be def axis identifier:	grammed and field lining GEOAX CHANAX MACHAX SPINDLE Linear / angular	axial feedinits:		N		NCK vers			]n:	
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description \$P_FA[X Last prog description to be def axis identifier: unit:	grammed and field lining GEOAX CHANAX MACHAX SPINDLE Linear / angular speed run-in	axial feedinits:	DBL_MIN			PP	max.:	DBL_MA	n:	
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description \$P_FA[X Last prog description to be def axis identifier:  unit:  read:	grammed and field lined GEOAX CHANAX MACHAX SPINDLE Linear / angular speed run-in X	axial feedinits:	DBL_MIN			PP	max.:	DBL_MA	n:	access

DOORLE	\$AA_OV	'R[31]							n:	0
description	n:				l				1	
\$AA OV	R[ <axis>]</axis>									
		notion-syn	chronous	actions.						
				olied in add	dition to o	perator o	override,			
				ional over						
The value	e is limited	d to max. 2	200%. If a	value of <	< 0.0 is en	tered,				
it is assu	med to be	0 and ala	ırm 14756	is output.						
\$AA_OV	R[ <axis>]</axis>	must be r	ewritten ir	n every Ipo	cycle or	else a v	alue of 10	0% is appl	ied.	
Variable	\$AA_OVF	R[ <spindle< td=""><td>&gt;] alters t</td><td>he spindle</td><td>override.</td><td></td><td></td><td></td><td></td><td></td></spindle<>	>] alters t	he spindle	override.					
			ed only fro	m motion-	synchron	ous actio	ons.			
description	n of field lin	nits:								
to be def	ined									
axis	GEOAX					NCK vei	rsion:	06.00.0	0	
identifier:	CHANAX	(								
	MACHAX	=								
	SPINDLE									
unit:	-	min.:					max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:		Х					Х	Х	Х	
write:		Х					Х		Х	7
attributes:	global	block sear	ch			link				
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IDOURI E	I CAA DI		41						description	) I

DOUBLE	\$AA P	LC_OVR[3	11					descripti	0	
	₩2 t3 t <u>_</u> 1							n:		
description	ո:			•				•	•	
\$AA PLO	OVR	ax] supplies	the axial	override define	ed by the PL	.C.				
description										
to be def	ned									
axis identifier:	CHANA	·Χ			NCK ve	ersion:	54.00.0	0		
unit:	-	min.:				max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:		Х				Х	Х	Х		
write:										
attributes:	global	block sea	rch		link	link				
		Not class	sified		Not cla	assified				

DOORLE	\$AA_TO	TAL_OVE	₹[31]						n:	
description	n:								111-	1
\$AA_TO	TAL_OVF	R[ax] supp	lies the ov	erall axial o	override (	PLC_O	VR*NC_O	VR).		
-	n of field lir	nits:								
to be def		,				NCK ver	eion:	F4.00.00	`	
identifier:	CHANA	(				INCIT VEI	31011.	54.00.00	)	
unit:	-	min.:					max.:	DBL_MA	λX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:		Х					X	X	X	rights
write:		^					^	^	^	
attributes:	dlohal	block sear	rch			link				
attributes.	giobai									
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DOUBLE	\$AA_VC	1311							descriptio	İ
		/[O1]							n:	
description										
\$AA_VC			ida fan maa	tion ourseless		4:				
				tion-synchr			oluo of Ω i	a applied		
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				gative by a			ille Overri	ue value.		
				t the maxim			es and acc	eleration r	ates canno	nt he
exceede		ppilou to o	niouro tria	t tilo maxim	Tarri axio	VOICOILIC	o ana aoo	Ciciation	atoo oariire	)
		other feed	l compone	ents is not a	affected b	v \$AA \	VC.			
				ne data: \$N				BIN.		
		OR FEED				_		. ,		
				and \$MN_	OVR_FA	ACTOR_	SPIND_S	PEED can	not	
be excee	ded. The	additive fe	eedrate ov	erride is lin	nited sucl	h that th	e resultant	feedrate	does not e	xceed the
	n override									
		ammed fee								
			ed only fro	m synchror	nized acti	ons.				
	n of field lir	nits:								
to be def	1					NCK ver	sion.	100.00.00		
identifier:	GEOAX CHANAX	,				TVOIC VOI	01011.	06.00.00	,	
	MACHA									
	SPINDLI									
unit:	Linear /		DBL_MII	N.			max.:	DBL_MA	7X	
	angular		DDL_IVIII	1				DDL_IVIA	•	
	speed									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
						•				rights
read:		Х					Х	Х	Х	
write:		Х					Х		Х	7
attributes:	global	block sear	rch			link				

Not classified

DOUBLE	\$AA_VA	CTB[31]							description:		
description	n:								111.		
	-		ax] determ	ines the a	axis veloci	ty in the b	asic coor	dinate sys	tem.		
	n of field lin	nits:									
to be def						NCK vers	ion:	100 00 00			
identifier:	GEOAX CHANAX	,				NOIC VCIS	1011.	06.00.00			
	MACHA	-									
	SPINDLE										
unit:	Linear /	min.:	DBL_MIN	١		1	max.:	DBL_MA	Х		
	angular										
	speed										
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:		Х	Х				Х	Х	Х	rigitis	
write:											
attributes:	global	block sear	ch			link			<u> </u>		
		Not class	sified			Not class	sified				
										1	
DOUBLE	\$AA_VA	CTW[31]							descriptio		
description	<u>l</u> n:								n:		
		VACTW	ax] detern	nines the	axis veloc	ity in the v	workpiece	coordinat	e system.		
			•			,			,		
description	n of field lin	nits:									
to be def											
axis	GEOAX					NCK vers	ion:	06.00.00			
identifier:	CHANAX										
	MACHAX										
	SPINDLE										
unit:	Linear /	min.:	DBL_MIN	1			max.:	DBL_MA	X		
	angular										
	speed run-in	main run	runin otn	I Maria ara	T	IPP	SA	OPI	IOEM	Tanana	
	run-m	main run	runin stp	Mrun syn		PP		OPI	OEM	access rights	
read:		Х	Х				Х	Х	Х		
write:											
attributes:	global	block sear				link					
		Not class	sified			Not class	sified				

DOUBLE	\$AA_VA	CTM[31]							descriptio	
description	l n:				<u> </u>				n:	
		VACTMI	axl determ	nines the a	axis veloci	tv on the	setpoint s	ide in the	machine c	oordinate
		ole also re								
description	n of field lin	nits:			'					
to be def	ined									
axis	GEOAX					NCK vers	ion:	06.00.00	)	
identifier:	CHANA	(								
	MACHA	<								
	SPINDLE									
unit:	Linear /	min.:	DBL_MIN	1			max.:	DBL MA	X	
	angular		_					_		
	speed									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:		Х	X				Х	X	Х	
write:										
attributes:	global	block sear	ch		1	link			.1	
		Not class	vified			Not class	oified			
		NOL CIASS	silleu			NOL CIASS	silieu			
DOUBLE									docorintio	
DOUBLE	\$VA_VA	CTM[31]							descriptio n:	
description	n:								1	l
Axial vari	iable \$VA	VACTMI	ax1 determ	ines the a	xis velocit	tv actual v	alue in the	e machine	coordinat	e svstem.
									hen a spir	
									turn the a	
velocity in	n this situ	ation, BIT3								
description	n of field lir	nits:								
to be def	ined									
axis	GEOAX					NCK vers	ion:	13.00.00		
identifier:	CHANA	(								
	MACHA	<								
	SPINDLE	Ξ								
unit:	Linear /	min.:	DBL MIN	1			max.:	DBL MA	X	
	angular		_					_		
	speed									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
				,						rights
read:		Х	Х				Х	Х	Х	
write:										
attributes:	global	block sear	ch	l .	I	link	I.	1	_1	
		Not class	rified			Not class	sified			
		I NOT CIASS	micu			וייטני טומא	Jiilea			

DOOBLL	\$AA_LC	)AD[31]							uescriptio	
description	] n:								n:	
\$AA_LO										
Drive loa										
		611D and	Profibus o	drives. On	the Profit	ous, the v	alue mus	t be prepa	red explicit	ly by the
drive and	d transpor	ted across	the bus b	y variable	telegram	program	ıming.		•	
description		mits:								
to be def								_		
axis identifier:	GEOAX					NCK vers	sion:	06.00.0	0	
identiller.	CHANA									
	MACHA									
.,	SPINDL						_			
unit:	-	min.:	-100				max.:	100		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch	I		link	1			
		Current v	/alue			Not clas	sified			
						•				
DOUBLE	\$VA_LC	AD[31]							descriptio	
description	n:								n:	
\$VA LO										
Drive loa										
Only ava	ilable for	611D and	Profibus of	drives. On	the Profib	ous, the v	alue mus	t be prepa	red explicit	ly by the
drive and	transpor	ted across	the bus b	y variable	telegram	program	ıming.			
description		mits:								
to be def						INIOIZ		1		
axis identifier:	GEOAX					NCK vers	sion:	17.00.0	0	
identilier.	CHANA									
	MACHA									
.,	SPINDL									
unit:	-	min.:	-100				max.:	100		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х		
write:							, ,	, ,		
write.										

Not classified

Current value

DOUBLE	\$AA_TO	RQUE[31	]						description:	
description	n:								11111	
\$AA TO	RQUE[X]									
Drive tor	que setpo	int in Nm								
or actual	force in N	N (for 611E	HLA only	y)						
Only ava	ilable for	611D and	Profibus of	drives. On	the Profib	ous, the v	alue mus	t be prepa	red explic	itly by the
drive and	transpor	ted across	the bus b	y variable	telegram	program	ıming.			
description	n of field lir	nits:								
to be def	ined									
axis	GEOAX					NCK vers	sion:	06.00.00	)	
identifier:	CHANA	<								
	MACHA	X								
	SPINDLE	Ξ								
unit:	-	min.:	DBL_MIN	١			max.:	DBL_M	4X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch			link				
		Current v	/alue			Not clas	sified			
DOUBLE	4 ==		_		i				Idosorintia	, i
DOUBLE	\$VA_IO	RQUE[31]	J						description:	ή
description										
	RQUE[X]									
	que setpo									
		l (for 611E								
		611D and						t be prepa	red explic	itly by the
drive and	transpor	ted across	the bus b	y variable	telegram	program	ıming.			
	n of field lin	nits:								
to be def						INICIZ		1	_	
axis identifier:	GEOAX	_				NCK vers	sion:	17.00.00	)	
identilier.	CHANA									
	MACHA									
	SPINDLE									
unit:	-	min.:	DBL_MIN				max.:	DBL_M		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х			Ĭ
write:										
attributes:	global	block sear	ch	•		link	•	•	•	i e

DOUBLE	\$AA PC	WER[31]							description	1
									n:	
description										
\$AA_PO\		r in \\/								
Drive acti			Drofibuo d	drives. On th	o Drofib	ua tha v	oluo muo	t ha propa	rod ovolici	tly by the
				y variable te				t be prepa	irea explici	uy by uie
description	of field lin	nits	tile bus t	y variable te	elegram	program	iiiiiig.			
to be defi		iiito.								
axis	GEOAX					NCK ver	sion:	06.00.0	n	
identifier:	CHANA	<b>/</b>						00.00.0	J	
	MACHA	=								
	SPINDL									
unit:	OI IIVDLI	Imin.:	DD: 1411				lmax.:	DD: 14	A > /	
uiiit.	-		DBL_MIN				-	DBL_M		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	Х	X	Х			Х	X	X	X	rights
write:	^	^	^			^	^	^	^	1
attributes:	global	block sear	ch			link				
		Current v	alue			Not clas	sified			
										1
DOUBLE	\$VA PO	WER[31]							description	
		W LINES I							n:	
description	n:								•	•
\$VA_PO\										
Drive acti										
				drives. On th				t be prepa	red explici	tly by the
drive and	transpor	ted across	the bus b	y variable te	elegram	program	nming.			
description		nits:								
to be defi										
axis						NO.				
_	GEOAX					NCK ver	sion:	17.00.0	0	
identifier:	CHANA					NCK vers	sion:	17.00.0	0	
	CHANA) MACHA	X				NCK vers	sion:	17.00.0	0	
	CHANA	X				NCK ver	sion:	17.00.0	0	
_	CHANA) MACHA	X	DBL_MIN	N		NCK ver	sion:	17.00.0		
identifier:	CHANA) MACHA	X E	DBL_MIN			NCK vers				access
identifier: unit:	CHANAX MACHAX SPINDLI	X E min.:	_				max.:	DBL_M	AX	access rights
identifier:	CHANAX MACHAX SPINDLI	X E min.:	_				max.:	DBL_M	AX	
identifier: unit:	CHANAX MACHAX SPINDLI - run-in	X E min.: main run	runin stp			PP	max.:	DBL_M.	AX	

Not classified

Current value

DOOBLL	\$AA_CU	וופואאי							uescriptio	
description	<u> </u> า:								n:	
\$AA CU										
		xis or spin	dle in A							
				drives. On	the Profit	ous, the v	alue mus	t be prepa	red explicit	ly by the
				y variable					•	, ,
description	n of field lin	nits:		,						
to be defi	ined									
axis	GEOAX					NCK ver	sion:	06.00.00	)	
identifier:	CHANA	(								
	MACHAX	<								
	SPINDLE	Ξ								
unit:	-	min.:	DBL_MIN	١			max.:	DBL_M	4X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	X	X	Х			X	X	X	X	
write:										
attributes:	global	block sear	rch		I	link		1		
		Current v	/alue			Not clas	sified			
DOUBLE	\$VA CU	RR[31]							descriptio	
DOUBLE		RR[31]							descriptio n:	
description	<u> </u> า:	RR[31]								
description \$VA_CU	l n: RR[X]									
description \$VA_CUI Actual cu	l n: RR[X] irrent of a:	xis or spin		dia a	the Drest	41			n:	
description \$VA_CUI Actual cu Only ava	l n: RR[X] irrent of a: ilable for (	xis or spin 311D and	Profibus of					t be prepa		ly by the
description \$VA_CUI Actual cu Only ava drive and	 n: RR[X] irrent of a: ilable for ( I transport	xis or spin 311D and ted across	Profibus of	drives. On by variable				t be prepa	n:	ly by the
description  \$VA_CUI  Actual cu  Only ava  drive and  description	l RR[X] Irrent of a ilable for ( I transport n of field lin	xis or spin 311D and ted across	Profibus of					t be prepa	n:	ly by the
description \$VA_CUI Actual cu Only ava drive and description to be defi	ln: RR[X] Irrent of a. Itable for ( I transport n of field lin	xis or spin 311D and ted across	Profibus of			program	nming.		n:	ly by the
description  \$VA_CUI  Actual cu  Only ava  drive and  description	n: RR[X] Irrent of a. Illable for ( I transport of field lin ined GEOAX	xis or spin 611D and ted across nits:	Profibus of				nming.	t be prepa	n:	ly by the
description \$VA_CUI Actual cu Only ava drive and description to be defi	RR[X] Irrent of a. Illable for 6 I transport of field linitined GEOAX CHANA	xis or spin 611D and ted across nits:	Profibus of			program	nming.		n:	ly by the
description \$VA_CUI Actual cu Only ava drive and description to be defi	RR[X] Irrent of a. Illable for 6 I transport of field linitined GEOAX CHANAA MACHAA	xis or spin 611D and ted across nits:	Profibus of			program	nming.		n:	ly by the
description \$VA_CUI Actual cu Only ava drive and description to be defi axis identifier:	RR[X] Irrent of a. Illable for 6 I transport of field linitined GEOAX CHANA	xis or spin 611D and ted across nits:	Profibus (	oy variable		program	nming.	17.00.00	n: red explicit	ly by the
description \$VA_CUI Actual cu Only ava drive and description to be defi	RR[X] Irrent of all ilable for (all transport) of field linitined GEOAX CHANAS MACHAS SPINDLE	xis or spin 611D and ted across nits: ( ( C	Profibus of the bus b	oy variable		NCK ver	ming.	17.00.00 DBL_M	red explicit	
description \$VA_CUI Actual cu Only ava drive and description to be defi axis identifier:	RR[X] Irrent of a. Illable for 6 I transport of field linitined GEOAX CHANAA MACHAA	xis or spin 611D and ted across nits:	Profibus (	oy variable		program	nming.	17.00.00	n: red explicit	access
description \$VA_CUI Actual cu Only ava drive and description to be defi axis identifier:	RR[X] Irrent of all ilable for (all transport) of field linitined GEOAX CHANAS MACHAS SPINDLE	xis or spin 611D and ted across nits: ( ( C	Profibus of the bus b	oy variable		NCK ver	ming.	17.00.00 DBL_M	red explicit	access
description \$VA_CUI Actual cu Only ava drive and description to be defi axis identifier: unit:	RR[X] Irrent of all ilable for (I transport of field linited GEOAX CHANA) MACHA) SPINDLE - run-in	xis or spin 611D and ted across nits:  ( (   min.:	Profibus of the bus bus bus bus bus bus bus bus bus bus	oy variable		NCK ver	max.:	17.00.00 DBL_M/	red explicit	access
description \$VA_CUI Actual cu Only ava drive and description to be defi axis identifier:  unit:  read:	RR[X] Irrent of a. ilable for 6 I transport of field lin ined GEOAX CHANAX MACHAX SPINDLE run-in	xis or spin 611D and ted across nits:  ( (   min.:	Profibus of the bus to	oy variable		NCK ver	max.:	17.00.00 DBL_M/	red explicit	access

Current value

DOLIDIT									I al a a a minaki	-1
DOORLE	\$VA_DI	ST_TORQ	UE[31]						descripti n:	10
description	1 N:			Į.					11.	
	T TORG	UEIXI								
			e (disturbir	ng torque/n	nax. moto	or torque	e) = output	signal of	disturban	ce monitor
on drive -	only ava	ailable on F	Profibus w	ith Telegra	m 203	•	, .	Ū		
description	n of field li	mits:								
to be def	ined									
axis	GEOAX					NCK ver	sion:	45.00.0	0	
identifier:	CHANA:	X								
	MACHA	X								
	SPINDL	E								
unit:	-	min.:	-100				max.:	100		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	X	X			X	X	X	X	
write:										
attributes:	global	block sear	rch	I I		link			I	
		Current v	/alue			Not clas	ssified			
		Current	raido			TTO CIA	Joined			
DOUBLE	\$VA VA	LVELIFT	311						descripti	0
		*F & F F II I I	.51]						n:	
description				•					•	•
	LVELIFT									
Actual va	lve lift in	mm (for 6'	11D hydra	ulic module	e only)					
	n of field li	mits:								
to be def						INICK				
axis identifier:	GEOAX					NCK ver	sion:	17.00.0	0	
identinei.	CHANA									
	MACHA									
	SPINDL						•			
unit:	-	min.:	DBL_MIN	١			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	ļ .,	.,	.,							rights
	Х	Х	Х			Х	X		Х	
write:										
	global	block sear	Z. L.			link		•		_

DOUBLE	\$VA P	RESSURE	A[31]						descripti	0
		KLOOOKL.	_/,[0.]						n:	
descriptio	n:									
\$VA_PR										
Pressure	at A end	d of cylinde	r in bar (fo	or 611D hy	/draulic m	odule or	ıly)			
descriptio		imits:								
to be def	ined									
axis	GEOAX	(				NCK ver	sion:	17.00.0	0	
identifier:	CHANA	·Χ								
	MACHA	λX								
	SPINDL	_E								
unit:	-	min.:				1	max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	Х	Х			Х	X	X	Х	
write:										
attributes:	global	block sear	rch	<u> </u>	<u> </u>	link				
		Current v	/alue			Not clas	ssified			
	1					1				
DOUBLE	\$VA P	RESSURE	B[31]						descripti	0
			[ - 1						n:	
descriptio										
\$VA_PR										
Pressure	at B end	d of cylinde	r in bar (fo	or 611D hy	/draulic m	odule or	ıly)			
descriptio		imits:								
to be def						INCK ver	olon.	T.=	_	
identifier:	GEOAX					INCK Ver	SIOH.	17.00.0	0	
identinei.	CHANA									
	MACHA									
	SPINDL									
unit:	-	min.:					max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	X		X	rigitis
write:										
attributes:	global	block sear	rch	<u> </u>	l	link				

Not classified

Current value

IINI	\$VA_DP	_ACI_IE	L[20,31]						n:	
description	<u> </u> า:								ļii.	
\$VA DP	ACT TE	L[b.a]								
			) in Profib	us telegra	m					
a: Machir	•		,							
Actual va	lue telear	am conter	nts - only a	available fo	or Profibu	S.				
				guration in			ve docum	entation		
description	n of field lin	nits:		<del>,</del>						
•			tual value	telegram						
to be defi				10.09.0						
axis	GEOAX					NCK vers	sion:	50.00.00	1	
identifier:	CHANAX	<b>'</b>						00.00.00	,	
	MACHA)									
	SPINDLE									
unit:	OI IIVDEL	- Imin.:					max.:	05505		
unit.	-							65535		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:		· · ·	· · ·				V	V	· · · · · · · · · · · · · · · · · · ·	rights
	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch			link		•	•	
		Not class	sified			Not clas	sified			
INT	\$AA ST	AT[31]							description	
	\$AA_ST	AT[31]				1			description:	
description	 n:						-		n:	
description The axial	l n:   variable	\$AA_STA		determine					n: '	
description The axial from the	 n:   variable	\$AA_STA		determine NPOS_ST					n: '	
description The axial from the 0: No axi	l r: variable : servo stat s status a	\$AA_STA us. See a vailable	lso \$AA_I						n: '	
description The axial from the 0: No axi 1: Traver	l variable s servo stat s status a sing move	\$AA_STA us. See a vailable ement per	lso \$AA_I						n: '	
description The axial from the 0: No axi 1: Traver 2: Axis ha	   variable   servo stat s status a sing move as reache	\$AA_STA us. See a vailable ement per d IPO end	Iso \$AA_I nding I						n: '	
description The axial from the 0: No axi 1: Traver 2: Axis ha 3: Axis in	 n:   variable :  servo stat  s status a  sing move  as reache   position (	\$AA_STA us. See a vailable ement per d IPO end (exact sto)	Iso \$AA_I nding I p coarse)						n: '	
description The axial from the 0: No axi 1: Traver 2: Axis ha 3: Axis in	 n:   variable :  servo stat  s status a  sing move  as reache   position (	\$AA_STA us. See a vailable ement per d IPO end	Iso \$AA_I nding I p coarse)						n: '	
description The axial from the 0: No axi 1: Traver 2: Axis ha 3: Axis in 4: Axis in Note:	n: variable servo states status a sing move as reache position (apposition TA' us. See a vailable ement per d IPO enc (exact stop (exact stop	Iso \$AA_I nding I p coarse) p fine)	NPOS_ST	AT[ <axis< td=""><td>&gt;]. The fo</td><td>ollowing va</td><td>alues are <sub>l</sub></td><td>n: op fine" is oossible:</td><td>derived</td></axis<>	>]. The fo	ollowing va	alues are <sub>l</sub>	n: op fine" is oossible:	derived	
description The axial from the 0: No axi 1: Traver 2: Axis ha 3: Axis in 4: Axis in Note: With a po	l variable servo states status a sing move as reache position (	\$AA_STA' us. See a vailable ement per d IPO end (exact stop (exact stop ault settin	Iso \$AA_I  Inding I I I I I I I I I I I I I I I I I I I	NPOS_ST xis / spindl	AT[ <axis< td=""><td>&gt;]. The fo</td><td>ollowing va</td><td>alues are  </td><td>n: op fine" is oossible:</td><td>derived</td></axis<>	>]. The fo	ollowing va	alues are	n: op fine" is oossible:	derived
description The axial from the 0: No axi 1: Traver 2: Axis ha 3: Axis in 4: Axis in Note: With a po	l variable servo states status a sing move as reache position (	\$AA_STA' us. See a vailable ement per d IPO end (exact stop (exact stop ault settin	Iso \$AA_I  Inding I I I I I I I I I I I I I I I I I I I	NPOS_ST	AT[ <axis< td=""><td>&gt;]. The fo</td><td>ollowing va</td><td>alues are  </td><td>n: op fine" is oossible:</td><td>derived</td></axis<>	>]. The fo	ollowing va	alues are	n: op fine" is oossible:	derived
description The axial from the 0: No axi 1: Traver 2: Axis ha 3: Axis in 4: Axis in Note: With a pocoarse / 1 Remedy:	l variable servo states status a sing move as reache position of position define during Also que	\$AA_STA' us. See a vailable ement per d IPO enc (exact stop (exact stop fault setting g block ch ry \$AC_TI	Iso \$AA_I  Inding I I I I I I I I I I I I I I I I I I I	NPOS_ST xis / spindl	AT[ <axis< td=""><td>&gt;]. The fo</td><td>ollowing va</td><td>alues are  </td><td>n: op fine" is oossible:</td><td>derived</td></axis<>	>]. The fo	ollowing va	alues are	n: op fine" is oossible:	derived
description The axial from the 0: No axi 1: Traver 2: Axis ha 3: Axis in 4: Axis in Note: With a pocoarse / 1 Remedy:	l variable servo states status a sing move as reache position of position define during	\$AA_STA' us. See a vailable ement per d IPO enc (exact stop (exact stop fault setting g block ch ry \$AC_TI	Iso \$AA_I  Inding I I I I I I I I I I I I I I I I I I I	NPOS_ST xis / spindl	AT[ <axis< td=""><td>&gt;]. The fo</td><td>ollowing va</td><td>alues are  </td><td>n: op fine" is oossible:</td><td>derived</td></axis<>	>]. The fo	ollowing va	alues are	n: op fine" is oossible:	derived
description The axial from the 0: No axi 1: Traver 2: Axis ha 3: Axis in 4: Axis in Note: With a pocoarse / 1 Remedy:	l variable servo states status a sing move as reache position (a position define' during Also que	\$AA_STA' us. See a vailable ement per d IPO enc (exact stop (exact stop fault setting g block ch ry \$AC_TI	Iso \$AA_I  Inding I I I I I I I I I I I I I I I I I I I	NPOS_ST xis / spindl	AT[ <axis< td=""><td>&gt;]. The fo</td><td>ollowing va</td><td>alues are  </td><td>n: op fine" is oossible:</td><td>derived</td></axis<>	>]. The fo	ollowing va	alues are	n: op fine" is oossible:	derived
description The axial from the 0: No axi 1: Traver 2: Axis ha 3: Axis in 4: Axis in Note: With a po coarse / 1 Remedy: description to be defi	l variable servo states status a sing move as reache position (a position define' during Also que	\$AA_STA' us. See a vailable ement per d IPO end (exact stop (exact stop fault setting g block ch ry \$AC_TI	Iso \$AA_I  Inding I I I I I I I I I I I I I I I I I I I	NPOS_ST xis / spindl	AT[ <axis< td=""><td>&gt;]. The fo</td><td>ollowing va still indic rting to tra</td><td>alues are  </td><td>n: op fine" is possible: atuses 'Ex</td><td>derived</td></axis<>	>]. The fo	ollowing va still indic rting to tra	alues are	n: op fine" is possible: atuses 'Ex	derived
description The axial from the 0: No axi 1: Traver 2: Axis ha 3: Axis in 4: Axis in Note: With a po coarse / 1 Remedy: description to be defi	l variable servo states status a sing move as reache position (a position define' during Also que n of field linined	\$AA_STA us. See a vailable ement per d IPO end (exact stop (exact stop ault setting g block ch ry \$AC_Ti nits:	Iso \$AA_I  Inding I I I I I I I I I I I I I I I I I I I	NPOS_ST xis / spindl	AT[ <axis< td=""><td>&gt;]. The fo</td><td>ollowing va still indic rting to tra</td><td>ate the sta</td><td>n: op fine" is possible: atuses 'Ex</td><td>derived</td></axis<>	>]. The fo	ollowing va still indic rting to tra	ate the sta	n: op fine" is possible: atuses 'Ex	derived
description The axial from the 0: No axi 1: Traver 2: Axis ha 3: Axis in 4: Axis in Note: With a po coarse / 1 Remedy: description to be defi	r:   variable     servo state     s status a     sing move     as reache     position (   position define     during     Also que     of field linined     GEOAX	\$AA_STA us. See a vailable ement per d IPO end (exact stop (exact stop ault setting g block ch ry \$AC_Ti nits:	Iso \$AA_I  Inding I I I I I I I I I I I I I I I I I I I	NPOS_ST xis / spindl	AT[ <axis< td=""><td>&gt;]. The fo</td><td>ollowing va still indic rting to tra</td><td>ate the sta</td><td>n: op fine" is possible: atuses 'Ex</td><td>derived</td></axis<>	>]. The fo	ollowing va still indic rting to tra	ate the sta	n: op fine" is possible: atuses 'Ex	derived
description The axial from the 0: No axi 1: Traver 2: Axis ha 3: Axis in 4: Axis in Note: With a po coarse / 1 Remedy: description to be defi	r:   variable     servo state     s status a     sing move     as reache     position (   position (   position define     during     Also que     of field linined     GEOAX     CHANAX	\$AA_STA us. See a vailable ement per d IPO end (exact stop (exact stop ault setting g block ch ry \$AC_TI	Iso \$AA_I  Inding I I I I I I I I I I I I I I I I I I I	NPOS_ST xis / spindl	AT[ <axis< td=""><td>&gt;]. The fo</td><td>ollowing va still indic rting to tra</td><td>ate the sta</td><td>n: op fine" is possible: atuses 'Ex</td><td>derived</td></axis<>	>]. The fo	ollowing va still indic rting to tra	ate the sta	n: op fine" is possible: atuses 'Ex	derived
description The axial from the 0: No axi 1: Traver 2: Axis ha 3: Axis in 4: Axis in Note: With a po coarse / 1 Remedy: description to be defi	r:   variable     servo state     s status a     sing move     as reache     position (   position (   position define     during     Also que     of field linined     GEOAX     CHANAX     MACHAX	\$AA_STA us. See a vailable ement per d IPO end (exact stop (exact stop ault setting g block ch ry \$AC_TI	Iso \$AA_I  Inding I I I I I I I I I I I I I I I I I I I	NPOS_ST xis / spindl	AT[ <axis< td=""><td>&gt;]. The fo</td><td>ollowing va still indic rting to tra</td><td>ate the sta</td><td>n: op fine" is possible: atuses 'Ex</td><td>derived</td></axis<>	>]. The fo	ollowing va still indic rting to tra	ate the sta	n: op fine" is possible: atuses 'Ex	derived
description The axial from the 0: No axi 1: Traver 2: Axis ha 3: Axis in 4: Axis in Note: With a pocoarse / 1 Remedy: description to be defi	r:   variable     servo state     s status a     sing move     as reache     position (   position (   position define     during     Also que     of field linined     GEOAX     CHANAX     MACHAX	\$AA_STA us. See a vailable ement per d IPO enc (exact stop (exact stop ault settin g block ch ry \$AC_TI	Iso \$AA_I  Inding I I I I I I I I I I I I I I I I I I I	NPOS_ST xis / spindl	AT[ <axis< td=""><td>&gt;]. The fo</td><td>ollowing va</td><td>ate the state of t</td><td>n: op fine" is possible: atuses 'Ex</td><td>derived</td></axis<>	>]. The fo	ollowing va	ate the state of t	n: op fine" is possible: atuses 'Ex	derived
description The axial from the 0: No axi 1: Traver 2: Axis ha 3: Axis in 4: Axis in Note: With a pocoarse / 1 Remedy: description to be defi	r: I variable servo states status a sing move as reache position (a position define' during Also que of field linined  GEOAX CHANAX MACHAX SPINDLE	\$AA_STA us. See a vailable ement per d IPO end (exact stop (exact stop ault setting g block ch ry \$AC_Ti nits:	Iso \$AA_I  Inding If If If If If If If If If If If If If	NPOS_ST xis / spindl ough the a	AT[ <axis< td=""><td>&gt;]. The formal control</td><td>still indic tring to tra</td><td>ate the staverse.</td><td>n: ns ns ns ns ns ns ns ns ns ns ns ns ns</td><td>derived</td></axis<>	>]. The formal control	still indic tring to tra	ate the staverse.	n: ns ns ns ns ns ns ns ns ns ns ns ns ns	derived

Not classified

write:

attributes: global

Χ

INT	\$AA_SI	NGLAX_S	Γ <b>ΑΤ</b> [31]					descriptio	
descriptio	u.							n:	
•		T / T I / I							
\$AA_SN Axis stat	_	ΙΑΙ[Λ]							
		anta assia							
0: Axis is									
1: Single									
2: Single									
		terrupted							
4: Single									
5: Single	axis alar	m is active	;						
descriptio		mits:							
to be def	ined								
axis	GEOAX				NCK ver	sion:	48.00.0	0	
identifier:	CHANA	Χ							
	MACHA	Х							
	SPINDL	.E							
unit:	-	min.:				max.:	4		
	run-in	main run	runin stp	Mrun syn	IPP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х	Х	
write:									
attributes:	global	block sear	ch	1	link				
		Not class	sified		Not clas	ssified			
INT	¢ A A DI	EE[24]						descriptio	

INT	\$AA_RE	F[31]							description:	0
description	n:									
\$AA_RE	F[X]									
Axis statu										
0: Axis is	not home	ed								
1: Axis is										
description	n of field lin	nits:								
to be def	ined									
axis identifier:	GEOAX CHANAX	(				NCK ver	sion:	06.00.0	00	
	MACHAX	<								
	SPINDLE	Ξ								
unit:	-	min.:					max.:	1		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch	1	ı	link	L	L	L	
	Х	Not class	sified			Not clas	ssified			

INT	CAA TV	DIO41			1				descriptio	Ī
	\$AA_TY	P[31]							n:	
descriptio	n:				l				1	I
\$AA TYI	P[ <axis>]</axis>									
Axis type										
	another	channel								
		f own chan	inel							
2: Neutra										
3: PLC a	xis									
4: Oscilla	ating axis									
		ich is curre	ently exec	uting a JO	G or hom	ing motio	n			
		coupled via				Ū				
		following								
	nand axis	Ū								
	ileCycles	axis								
		axis (mas	ter-slave f	function)						
		which is cu			JOG or ho	omina ma	otion			
descriptio	n of field lir	mits:	, 3/1			3				
to be def										
axis	GEOAX					NCK vers	sion:	13.00.0	0	
identifier:	CHANA							10.00.0	-	
	MACHA									
	SPINDL									
unit:	OI IIIDE	Imin.:	10				max.:	44		
unit.	-		0					11		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	V	V					V			rights
	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch			link				
		Not class	ified			Not clas	eified			
		TVOL CIASS	Silicu			TVOL CIAS	Silicu			
INIT	1				i				l de a enimbie	
INT	\$AA_MA	ASL_STAT	Γ[31]						descriptio n:	
descriptio	n:								111.	
		of a mast	er-slave c	ounling						
		a slave axi			active					
		g is active,				ımher of	the			
	xis is sup		, tile relevi	ant macm	ile axis ile		uic			
	SL STAT									
	n of field lir	<del></del>								
to be def										
axis	GEOAX					NCK vers	sion:	42.00.0	<u> </u>	
identifier:	CHANA							72.00.0	U	
	MACHA									
	SPINDL									
unit:	OI INDL		1				Imay :			
uriit.							max.:	Machine		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
ĺ		1								rights
road:										
read:	Х	Х	X			Х	Х	Х	X	
read: write:	Х	Х	Х			X	X	X	X	
		X block sear				X	X	X	X	
write:			rch					X	X	

INT	\$P_SEA	RCH_MA	SLC[31]						descriptio	
alaa asisatia.									n:	
description		01.01::	-1 4: <i>C</i> :1							
		SLC[axis i								
			er-siave c	oupling ha	is been cr	ianged				
description	block sean	nite:								
to be def		illo.								
axis	GEOAX					NCK ver	sion.	42.00.0	^	
identifier:	CHANA	,				I VOIC VOI	01011.	43.00.0	U	
	MACHA	=								
	SPINDLE									
unit:	OI INDLI	- Imin.:	1				max.:	4		
unit.	-							1		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	X					Х				rights
	^					^				
write:										
attributes:	global	block sear	rch			link				
		Not class	sified			Not clas	sified			
		1								
DOUBLE	\$P SEA	RCH_MA	SLD[31]						descriptio	
			0						n:	
description										
		SLD[axis i								
				slave axes	calculate	d				
during blo	ock searc	h as coup	ling was c	losed.						
	n of field lin	nits:								
to be def						INICK	-!			
axis identifier:	GEOAX					NCK ver	Sion:	43.00.0	0	
identiner.	CHANA									
	MACHA)									
	SPINDLE									
unit:	Linear /	min.:	DBL_MIN	1			max.:	DBL_M	AX	
	angular									
	position									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
road:	,,,					.,				rights
read:	Х					Х				
write:	1		1							1
attributes:	global	block sear	rch			link				
		Not class	sified			Not clas	sified			

INT	\$AA_F	XS[31]						descript	0
								n:	
descriptio									
\$AA_FX									
		ate "Travel	to fixed st	op"					
0: Axis n									
		been succ		pproached					
		ed stop ha							
		ivel to fixed	•	ve					
		been dete							
		travel to fix	ed stop a	ctive					
descriptio		imits:							
to be det					INOK				
axis identifier:	GEOAX				NCK ver	sion:	06.00.0	00	
identinei.	CHAINA								
	MACHA								
	SPINDI		1						
unit:	-	min.:				max.:	5		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	X	Х	Х		Х	Х	X	Х	
write:	Х	Х	Х		Х	Х	Х	Х	7
attributes	global	block sea	rch		link	•	•	•	
		Program	sensitive		Not clas	ssified			

INT	\$VA_FX	<b>C</b> [31]							descripti	0
	Ψ ν Α_ι Λ	O[J]							n:	
description	n:									•
\$VA FXS	S[X]									
_		"Travel to	fixed sto	<b>"</b> g						
	ot at limit			•						
			essfully a	oproached						
		ed stop has		ор. ос. ос.						
		el to fixed		/e						
		peen dete		, ,						
		ravel to fix		ctive						
	n of field lir		ca otop a	01110						
to be def										
axis	GEOAX					NCK ver	sion:	44.00.00	<u> </u>	
identifier:	CHANA	,						44.00.00	J	
	MACHA	=								
	SPINDLI	=								
unit:	OI IINDLI	_ Tmin.:	ı				lmax.:			
uriit.	-							5		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:			.,			.,			.,	rights
	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch	1	1	link		<u> </u>	1	
		Current v	/alue			Not clas	sified			

INT	\$VA_FX	S_INFO[3	1]						descript	О
									n:	
description										
	S_INFO[X									
				ixed stop"	if \$VA_F	XS[]=2				
0: No add	ditional inf	formation a	available							
		ovement p								
				motion co	mpleted					
3: Abort I	by NC RE	SET (key	reset)							
		fixed stop								
5: Torque	e reductio	n rejected	by drive							
		led enable	es							
description	n of field lin	nits:								
to be def	ined									
axis	GEOAX					NCK ver	sion:	45.00.0	0	
identifier:	CHANA	(								
	MACHA	<								
	SPINDLE	<b>E</b>								
unit:	-	min.:				•	max.:	6		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:		.,				.,				rights
	Х	Х	Х			Х	Х	Х		
write:										
attributes:	global	block sear	rch		I.	link	I		I	
		Not class	sified			Not clas	ssified			
l .						1				

IIN I	\$VA_TO	RQUE_A	T_LIMIT[3	31]					n:	
description	n:								•	
\$VA_TO	RQUE_A	$T_LIMIT[X]$	[]							
"Torque I	imit reach	ned" status	3							
0: Torque	e limit not	yet reache	ed							
1: Torque	e limit rea	ched								
In digital	611D sys	tems, the	drive retu	rns a statu	ıs signal iı	ndicating				
			que limit l	has been r	reached.					
description	n of field lir	nits:								
to be def	ined									
axis	GEOAX					NCK ver	sion:	20.00.0	0	
identifier:	CHANA	(								
	MACHA:	X								
	SPINDLI	Ξ								
unit:	-	min.:					max.:	1		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	X	Х			Х	Х	X	X	
write:										
attributes:	global	block sear	ch		ı	link				
		Not class	sified			Not clas	ssified			
	1									

INT	\$AA_F	OC[31]						descripti	0
								n:	
description	า:								
\$AA_FO	C[X]								
Status de	esired sta	ate "ForceC	Control"						
0: Force(	Control n	ot active							
1: Force(	Control a	ctive moda	lly						
		ctive non-n							
description			•						
to be def	ined								
axis	GEOAX	(			NCK ver	sion:	20.00.0	00	
identifier:	CHANA	X							
	MACHA	λX							
	SPINDL	.E							
unit:	-	min.:				max.:	2		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х	Х	
write:	Х	Х	Х		Х	Х	Х	Х	7
attributes:	global	block sear	rch	•	link	•		•	
		Not class	sified		Not clas	ssified			

INT	\$VA_F	DC[31]						description:	
description	n:								1
\$VA FO	C[X]								
_		e "ForceCo	ntrol"						
0: Force(	Control n	ot active							
1: Force(	Control a	ctive moda	lly						
2: Force(	Control a	ctive non-n	nodally						
description	n of field li	mits:							
to be defi	ined								
axis	GEOAX	•			NCK ver	sion:	44.00.0	00	
identifier:	CHANA	X							
	MACHA	X							
	SPINDL	.E							
unit:	-	min.:			•	max.:	2		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х	Х	
write:									
attributes:	global	block sear	ch	1	link	<u> </u>		1	
		Not class	ified		Not clas	ssified			

INT	\$AA_CC	UP_ACT	[31]						description:	
description	<u> </u> n:								11.	
\$AA CO	UP ACT	C]								
		or S2: fol	lowing spi	ndle 2						
It is poss	ible to det	termine wh	nether an	axis / spin	dle is beir	ng used b	y a coupl	ing. The co	oupling typ	e is
returned	when the	coupling i	s active.	he syster	n variable	must be	read out t	for the follo	wing axis	/ spindle.
Values:										
0: Axis / s	spindle is	not couple	ed with a l	eading sp	indle / lea	ding axis				
1,2,3: Ax	is is tange	entially tra	cked (TAN	lG)						
		spindle c								
		ıpled-moti	•	•						
		is in maste			EAD)					
		is for elect								
		in a gant								
		is tangent				mization)				
		is of the g								
If the axis	s / spindle n of field lin	s is a follow	ving axis /	spindle in	n several o	couplings	, the sum	is returned	as the va	ilue.
-		IIIIS.								
to be def						INCK vers	sion:	100 00 00		
identifier:	GEOAX	,				NOIX VCIX	51011.	06.00.00		
	CHANA									
	MACHA) SPINDLE									
unit:	SFINDLE	-  min.:	1				max.:			
uriit.	-									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	Х	X	Х			X	X	X	X	rights
write:										
attributes:	global	block sear	ch			link	<u> </u>			
	Х	Not class	sified			Not clas	sified			
	1	1				1				1
DOUBLE	\$AA_EG	_SYNFA[	31]						descriptio	
									n:	
description		. 1								
	_SYNFA[a	aj								
a: Follow		ion of falls	vuina avia							
description	n of field lin	ion of follo	wing axis							
to be def		illo.								
axis	GEOAX					NCK vers	sion:	16.00.00		
identifier:	CHANA	(						10.00.00		
	MACHA									
	SPINDLE									
unit:		min.:					max.:	DDI MA	V	
uriit.	Linear /		DBL_MIN	N			max	DBL_MA	IX.	
	angular									
	position			1.4	•	IDD		O.D.	TOEM.	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	riginio
write:			1							
attributes:	global	block sear	ch	<u> </u>	j	link	1			-
							-:C!			
1	1	Not class	sitiea			Not clas	SITIED			1

Not classified

CTDIMC					1				Idooorinti	<u> </u>
STRING	\$P_EG_	BC[31]							descripti n:	٥
description	<u> </u> า:								111.	
\$P EG I										
		rion for E0	GONSYN.	EGON, W	VAITC.					
description	n of field lin	nits:								
to be def	ined									
axis	GEOAX					NCK ver	sion:	16.00.0	10	
identifier:	CHANA	(								
	SPINDLE	<b>=</b>								
unit:	-	min.:				I	max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х				
write:										
attributes:	global	block sear	ch	1		link	-	-		
		Not class	sified			Not clas	ssified			
INT	\$AA FG	NUM L	Δ[31]						descripti	0
	_	//	.[0.]						n:	
description										
	_NUM_LA	<b>∖</b> [a]								
a: Follow										
Number	of leading	axes spe	cified with	EGDEF						
		nits:								
to be def						INCK ver	olon.	T	_	
axis identifier:	GEOAX					INCK Vei	SIOH.	16.00.0	00	
identinei.	CHANA	=								
	MACHA)									
	SPINDLE									
unit:	-	min.:	INT_MIN				max.:	INT_M		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:							- V			rights
	Х	Х	Х			Х	X	X	Х	
write:						1				
attributes:		block sear								

DOUBLE	\$VA_EG	SYNCD	IFF[31]						descripti	0
descriptio	l n:								n:	
	 _SYNCDI	FF[a]								
a: Follow		[ω]								
	nism devia	ation								
descriptio	n of field lir	nits:								
to be def	ined									
axis	GEOAX					NCK ver	sion:	16.00.0	0	
identifier:	CHANA	(								
	MACHA									
	SPINDLI	Ē								
unit:	Linear /	min.:	DBL MIN	1			max.:	DBL M	AX	
	angular		_							
	position									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	Х	Х			X	X	X	X	
write:										
attributes:	global	block sear	rch			link				
		Not class	sified			Not clas	sified			
DOUBLE	\$VA EG	SYNCD	IFF_S[31]						descripti	0
									n:	
descriptio										
\$VA_EG	_SYNCDI	FF_S[a]								
a: Follow		aa daydadda								
description	ynchronis n of field lir	m deviation	ווכ							
to be def		illo.								
axis	GEOAX					NCK ver	sion:	50.00.0	<u> </u>	
identifier:	CHANA	(						30.00.0	U	
	MACHA									
	SPINDLI									
unit:	Linear /	min.:	-DBL MA	^ V			max.:	DBL M	^ V	
<b></b>	angular		-DDL_IVIA	<del>1</del> /\				DDL_IVI	AA	
	position									
	run-in	main run	runin stp	Mrun syn	1	IPP	SA	OPI	IOEM	access
	Turi-iii	main run	ται ιιι σιρ	Wildir Syri		' '	54	011	OLIVI	rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch	1	1	link	I.	I.	1	
		Not class	sified			Not clas	ssified			
	l	l .				1				

AXIS	\$AA EG	_AX[31,3	11					descript	io
		_						n:	
description									
\$AA_EG									
	for leading	g axis							
a: Follow									
Identifier	for the nti	n leading a	axis						
			looding o	vio)					
to be defi	-	g axis (nth	leading a	XIS)					
axis	GEOAX				NCK ver	sion.	10.00.0	^	
identifier:	CHANAX	,			I VOIC VOI	01011.	18.00.0	U	
	MACHA	=							
unit:	SPINDLE	Imin.:	ı			Imay :			
unit.	=					max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	X	X	Х		Х	Х	Х	Х	
write:									
attributes:	global	block sear	ch	<u> </u>	link				
		Not class	ified		Not also				
		INOL CIASS	illea		Not clas	ssitiea			
		NOT Class	silleu		inot clas	ssified			
DOUBLE	\$AA LE				NOT Clas	ssified		descript	io
		AD_SP[3			NOT CIAS	ssitied		descript	10
description	n:	AD_SP[3 <sup>2</sup>			Not clas	SSITIEG			io
description	<u> </u> n: AD_SP[LV	AD_SP[3 <sup>2</sup>	1]		inot clas	SSITIEG			10
description \$AA_LEA Simulated	l n: AD_SP[LV d master v	AD_SP[3 <sup>2</sup> V] value posi	1]		Not clas	ssified			io
description \$AA_LEA Simulated description	l n: AD_SP[LV d master v n of field lin	AD_SP[3 <sup>2</sup> V] value posi	1]		Not clas	ssified			10
description \$AA_LEA Simulated description to be defi	 n: AD_SP[LV d master v n of field lin ined	AD_SP[3 <sup>2</sup> V] value posi	1]				142.00.0	n:	10
description \$AA_LEA Simulated description	L  AD_SP[LV d master v n of field lin ined GEOAX	AD_SP[3/ V] value posi nits:	1]		NCK ver		13.00.0	n:	10
description \$AA_LEA Simulated description to be defi	Lensing Inc.  AD_SP[LV density of field lined lensity of the lensi	AD_SP[3/ V] value posi	1]				13.00.0	n:	10
description \$AA_LEA Simulated description to be defi	 h: AD_SP[LV d master v n of field lin ined GEOAX CHANAX	AD_SP[3/ V] value posi nits:	1]				13.00.0	n:	10
description \$AA_LEA Simulated description to be defi axis identifier:	 AD_SP[LV d master v n of field lin ined GEOAX CHANAX MACHAX SPINDLE	AD_SP[3 <sup>2</sup> V] value posi nits:	tion			sion:		n: ·	
description \$AA_LEA Simulated description to be defi	 AD_SP[LV d master v n of field lin ined   GEOAX   CHANAX   MACHAX   SPINDLE	AD_SP[3/ V] value posi nits:	1]	N			13.00.0 DBL_M	n: ·	0
description \$AA_LEA Simulated description to be defi axis identifier:	In: AD_SP[LV d master v n of field lin ined GEOAX CHANAX MACHAX SPINDLE	AD_SP[3 <sup>2</sup> V] value posi nits:	tion	N		sion:		n: ·	0
description \$AA_LEA Simulated description to be defi axis identifier:	n: AD_SP[LV d master v n of field lin ined GEOAX CHANAX MACHAX SPINDLE Linear / angular position	AD_SP[3 <sup>2</sup> V] value posi nits:	tion  DBL_MIN		NCK vers	sion:	DBL_M	0 AX	
description \$AA_LEA Simulated description to be defi axis identifier: unit:	n: AD_SP[LV d master v n of field lin ined GEOAX CHANAX MACHAX SPINDLE Linear / angular position	AD_SP[3 <sup>2</sup> V] value posinits:  ( ( [min.:	tion  DBL_MIN	N Mrun syn	NCK vers	sion:	DBL_M	n: OEM	access
description \$AA_LEA Simulated description to be defi axis identifier: unit:	n: AD_SP[LV d master v n of field lin ined GEOAX CHANAX MACHAX SPINDLE Linear / angular position	AD_SP[3/V] value posinits:  ( (   min.:	tion  DBL_MIN		NCK vers	sion:	DBL_M	0 AX	access
description \$AA_LEA Simulated description to be defi axis identifier: unit:	n: AD_SP[LV d master v n of field lin ined GEOAX CHANAX MACHAX SPINDLE Linear / angular position	AD_SP[3/	tion  DBL_MIN  runin stp  X  X		NCK vers	sion:	DBL_M	n: OEM	access
description \$AA_LEA Simulated description to be defi axis identifier: unit:	n: AD_SP[LV d master v n of field lin ined GEOAX CHANAX MACHAX SPINDLE Linear / angular position run-in X	AD_SP[3/V] value posinits:  ( (   min.:	tion  DBL_MIN  runin stp  X  X		NCK vers	sion: max.:	DBL_M	O OEM	access

DOUBLE	\$AA LE	AD_SV[3	1]					descripti	0
		_ •	•					n:	
description	า:								
\$AA_LEA	AD_SV[LV	V]							
Simulate	d master v	value velo	city						
description	n of field lin	nits:							
to be def	ined								
axis	GEOAX				NCK ver	sion:	13.00.0	0	
identifier:	CHANAX	(							
	MACHAX								
	SPINDLE	Ξ							
unit:	Linear /	min.:	DBL MI	V		max.:	DBL M	AX	
	angular		_				_		
	speed								
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
read:	Х	Х	Х		Х	Х	Х	Х	
write:	Х	Х	Х		Х	Х		Х	7
attributes:	global	block sear	ch		link	1			
		Not class	sified		Not clas	ssified			

DOUBLE	\$AA_LE	AD_P_TU	RN[31]						description:	
description	 n:								J11.	
	AD_P_TU	RNII WI								
			nal compo	nent						
		nodulo rec		71101110						
		value pos								
		the contro								
			LEAD_P	TURNILV	<b>V</b> 1					
			LEAD P							
			DULO RA							
			AA LEAD		l is alway	s 0.				
Example		, ,	_		,					
		ANGE[LW	/]=360							
	AD P[LW]		•							
\$AA LEA	AD P TU	RN[LW] =	720							
The actua	al master	value posi	ition							
(used into	ernally by	the contro	ol) is 1010							
Example	_2:		•							
\$MA_MC	DULO_R	ANGE[LW	/]=360							
\$AA_LEA	AD_P[LW]	=290								
		RN[LW] =								
		value posi								
(used into	ernally by	the contro	ol) is -70.							
	n of field lin	nits:								
to be def	ned									
axis	GEOAX					NCK ver	sion:	13.00.00	)	
identifier:	CHANAX									
	MACHA									
	SPINDLE									
unit:	Linear /	min.:	DBL MIN	1		,	max.:	DBL MA	·Χ	
	angular		_					_		
	position									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
			·	•						rights
read:	Х	Х	Χ			Х	Х		Х	
write:										
attributes:	global	block sear	ch		I	link	I.	1	1	
		Not class	ified			Not clas	sified			
	l	l				1				l l

DOUBLE	\$AA LE	AD P[31]							descriptio	
									n:	
description										
	AD_P[LW]									
		ue positio								
		axis, the fo								
		P[LW] <= \$	MA_MOI	DULO_RA	NGE[LW]					
description		nits:								
to be defi										
axis	GEOAX					NCK vers	sion:	13.00.00		
identifier:	CHANAX	(								
	MACHA	<								
	SPINDLE	Ē								
unit:	Linear /	min.:	DBL MIN	J			max.:	DBL MA	X	
	angular									
	position									
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	OEM	access
			. с оср						0	rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch	l	I	link	L	L	1	
		Not class	sified			Not clas	sified			
	•									
DOUBLE	\$AA_LE	AD_V[31]							descriptio	
description									n:	
	 \D_V[LW]	ı								
		ı ue velocit								
	n of field lin		y							
to be defi		iito.								
axis						INCK vers	sion:	140.00.00		
identifier:	GEOAX	,				THOIR VOIC	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	13.00.00		
	CHANAX	=								
	MACHA									
	SPINDLE		1							
unit:	Linear /	min.:	DBL_MIN	1			max.:	DBL_MA	X	
	angular									
	speed									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch	I	1	link	-1	-I	ı	
		Not class	sified			Not clas	sified			

INT	\$AA S	YNC[31]						descript	io
	\\ \frac{1}{2} \tau \tau_0							n:	
descriptio	n:								
\$AA_SY	NC[FA]								
		of following	axis with ı	master value co	oupling				
0 => No	synchroi	nism							
1 => Coa	arse synd	chronism							
2 => Fine									
3 => Coa	arse and	fine synchr	onism						
descriptio	n of field	imits:							
to be def	ined								
axis	GEOA)	(			NCK vei	sion:	13.00.0	0	
identifier:	CHANA	λX							
	MACHA	XΑ							
	SPIND	LE							
unit:	-	min.:			I	max.:	3		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х	Х	
write:									
attributes:	global	block sea	rch	1	link	1	ı	ı	
		Not class	sified		Not cla	ssified			
	•	•			•				•
INT	\$AA_IN	N_SYNC[31	]					descript	io

IIN I	SAA IN	I_SYNC[31	1					descript	10
			-					n:	
description	n:								
\$AA_IN_	SYNC[F	A]							
Synchror	nization s	status of fol	lowing axi	is with master	value coupling	g and ELC	3		
1 => Syn	chroniza	ition in prog	gress, i.e.	following axis	is being synch	ronized v	vith leadin	g axis	
description	n of field l	imits:							
to be def	ined								
axis	GEOAX	(			NCK ver	rsion:	48.00.0	00	
identifier:	CHANA	·Χ							
	MACHA	λX							
	SPIND	_E							
unit:	-	min.:			1	max.:	1		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х		
write:									
attributes:	global	block sear	rch		link			I	
		Not class	sified		Not clas	ssified			

DOUBLE	\$P_COU	P_OFFS[	31]						descriptio n:	
description	l n:								111.	
S2: spino	P_OFFS[ dle 2 or C: med posit	axis C ion offset	from sync	hronous s	pindle (fo	llowing s	pindle) to	leading s	pindle	
	n of field lin	nits:				-				
to be def	1					INIOIZ				
axis identifier:	GEOAX CHANAX MACHAX SPINDLE	<				NCK ver	SION:	46.00.0	0	
unit:	Linear / angular position	min.:	DBL_MIN				max.:	DBL_M		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:										
attributes:	global	block sear	ch	l		link	1			
		Not class	sified			Not clas	ssified			
						J.				
DOUBLE	\$AA_CO	UP_OFF	S[31]						descriptio n:	
description	n:				I					
	UP_OFFS									
	dle 2 or C:			II. 76.II						
description (	οπset fron n of field lin	n synchror	nous spind	dle (followi	ng spinai	e) to lead	aing spina	ie on setp	oint side	
to be def										
axis identifier:	GEOAX CHANAX MACHAX SPINDLE	<				NCK ver	sion:	06.00.0	0	
unit:	Linear / angular position	min.:	DBL_MIN	N			max.:	DBL_M		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:							+			
attributes:	global	block sear	ch	I	l	link	1	1	1	

DOUBLE	\$VA_CO	UP_OFFS	S[31]						descripti	0
description	u. 								n:	
	UP_OFFS	SIS21								
S2: spind	dle 2 or C:	axis C								
			nous spino	dle (followi	na spindle	) to lead	lina spind	le on actua	al value s	ide
description	n of field lin	nits:	Todo opii i	(101101111	ng opinalo	<i>,</i> 10 1040	mg opma	io on acta	<u> valuo o</u>	
to be def	ined									
axis	GEOAX					NCK vers	sion:	06.00.00	)	
identifier:	CHANAX	(								
	MACHAX	<								
	SPINDLE									
unit:	Linear /	min.:	DBL MIN	J			max.:	DBL MA	Δ X	
	angular		DDL_IVIII	•				DDL_IVII	V	
	position									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	IOEM	access
										rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch			link				
		NI-4 -I	:c:l			NI=4 =1==	-:CI			
		Not class	ытеа			Not clas	sitiea			
BOOL				i					decerint	
BOOL	\$AA_SC	TRACE[3	1]						descripti	0
description	n:								1	L
\$AA SC	TRACE[X	1 = 1								
		trigger fo	r servo tra	ace						
0: No act		33								
!0: Activa	ite trigger									
Read:	00									
Always 0	because	trigger ca	nnot be re	ad back						
Always 0 description	because	trigger ca	nnot be re	ad back						
description to be def	n of field lin	trigger ca nits:	nnot be re	ead back						
description to be defi axis	n of field lin	trigger ca nits:	nnot be re	ead back		NCK vers	sion:	13.00.00	)	
description to be def	n of field lin ined	nits:	nnot be re	ead back		NCK vers	sion:	13.00.00	)	
description to be defi axis	n of field lin ined GEOAX	nits:	nnot be re	ad back		NCK vers	sion:	13.00.00	)	
description to be defi axis	n of field lin ined GEOAX CHANAX	nits:	nnot be re	ead back		NCK vers	sion:	13.00.00	)	
description to be defi axis	n of field lin ined GEOAX CHANAX MACHAX	nits:	nnot be re	ead back		NCK vers	sion:	13.00.00 TRUE	)	
description to be defi axis identifier:	n of field lin ined GEOAX CHANAX MACHAX	nits:		ead back		NCK vers			OEM	access
description to be defi axis identifier: unit:	n of field linined  GEOAX CHANAX MACHAX SPINDLE - run-in	( ( ( imin.: imain run	FALSE runin stp			PP	max.:	TRUE	OEM	access rights
description to be defined axis identifier: unit:	n of field linined  GEOAX CHANAX MACHAX SPINDLE - run-in	min.:	FALSE runin stp			PP X	max.: SA	TRUE	OEM X	
description to be defi axis identifier: unit:	n of field linined GEOAX CHANAX MACHAX SPINDLE - run-in X	( ( ( imin.: imain run	FALSE runin stp X			PP	max.:	TRUE	OEM	

Not classified

POOL	14177				1				Idogorinti	<u> </u>
BOOL	\$VA_DP	E[31]							descripti n:	٥
descriptio	n:								ļ111.	
\$VA DP	EIX11									
Status of	f power en	able for a	machine	axis						
descriptio	n of field lin	nits:								
to be def	ined									
axis	GEOAX					NCK ver	sion:	16.00.0	0	
identifier:	CHANAX									
	MACHAX									
	SPINDLE	Ξ								
unit:	-	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	J
write:										
attributes:	global	block sear	rch			link				
	9.020.									
		Not class	sified			Not clas	ssified			
DOUBLE	\$AA_AC	C[31]							descripti n:	0
descriptio	n:				I					<u> </u>
\$AA_AC	С									
				single-axi						
			_ACCEL '	progr. ac	celeration	override	<del>)</del> .			
-	n of field lin	nits:								
to be def						INCK ver	oloni	1	_	
identifier:	GEOAX	,				NCK Vei	51011.	16.00.0	0	
identiner.	CHANAX	=								
	MACHAX SPINDLE									
	_						T			
unit:	Linear /	min.:	DBL_MI	N			max.:	DBL_M	AX	
	angular									
	accelerat	4								
	ion			T. M	ı	IDD	0.4	ODI	LOEM	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	X	Х	X	<del> </del>		Х	X	X	X	rigitis
write:	^		^	1			_ ^		^	
	alabal	blook occ	rob			link				
attributes:	giobai	block sear	CH			link				

Not classified

INT	\$AA_A	CC_PERC	ENT[31]					descript	io
								n:	
descriptio	n:								
Variable	\$AA AC	C PERCE	NT suppli	es the current	acceleration v	alue of th	e axis for	single-axi	s
interpola	tion in pe	ercent.						Ū	
descriptio	n of field l	imits:							
to be def	ined								
axis	I				NCK vei	rsion:	53.00.0	<u></u>	
identifier:							33.00.0	10	
unit:	-	min.:	INT MIN	<u> </u>	I	max.:	INT M	ΔX	
	run-in	main run	runin stp	Mrun syn	IPP	SA	OPI	IOEM	access
	Tull-III	IIIaiii Tuii	Turiir Sip	Wirum Sym	FF	SA	OFI	OEIVI	rights
read:	Х	Х	Х		X	Х	Х	Х	
write:									
attributes:	global	block sea	rch	1 1	link		1		
		Not class	sified		Not cla	ssified			

INT	\$PA_AC	CLIMA[31	1]						descripti n:	0
description	າ:								•	
\$PA_AC	CLIMA									
Accelerat	tion overri	ide set wit	h ACCLIM	1A in prepr	ocessing	run				
description	n of field lin	nits:								
to be defi	ned									
axis identifier:	GEOAX CHANAX MACHAX SPINDLE	X				NCK ver	sion:	50.00.0	0	
unit:	-	min.:	1				max.:	200		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х				Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch	<u> </u>		link	I	1		
		Not class	sified			Not clas	ssified			

INT	¢DA VE	LOLIMA[3	241						descriptio	
	⇒FA_V⊑	LOLIMA	)   ]						n:	
description	n:									
\$PA_VE	LOLIMA									
Velocity (	override s	et with VE	LOLIMA i	n preproce	essing rui	า				
description	n of field lir	nits:								
to be def	ined									
axis	GEOAX					NCK ver	sion:	50.00.00	)	
identifier:	CHANA	<								
	MACHA:	X								
	SPINDLI	E								
unit:	-	min.:	1			1	max.:	200		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	X				Х	Х	X	X	
write:										
attributes:	global	block sear	ch			link				
		Not class	sified			Not clas	sified			
INI	\$PA JE	RKLIMA[3	211						descriptio	
		· · · · · · · · · · · · · · · · · · ·	, · J						n:	
description										
\$PA_JEF										
Jerk over	ride set v	vith JERKL	_IMA in pr	eprocessi	ng run					
	n of field lir	nits:								
to be def						111017				
axis	GEOAX					NCK ver	sion:	50.00.00	)	
identifier:	CHANA									
	MACHA:									
	SPINDLI	E								
unit:	-	min.:	1				max.:	200		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
rood									1	rights
read:	Х	Х				Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch			link				
		Not class	sified			Not clas	sified			
										1

INT	\$AA_AC	CLIMA[3	1]						description:	
description	1 n:								11.	
\$AA AC										
		ide set wit	h ACCLIN	1A in main	run					
description	n of field lin	nits:								
to be def	ined									
axis	GEOAX					NCK ver	sion:	50.00.0	0	
identifier:	CHANA	(								
	MACHA									
	SPINDLE									
unit:	-	min.:	1				max.:	200		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	Х	Х			Х	X	Х	X	
write:										
attributes:	global	block sear	ch	<u> </u>		link		<u> </u>		
		Not class	sified			Not clas	sified			
	l.									
INI	\$AA VF	I OI IMAI:				1.101.010			descriptio	
		LOLIMA[				110100			description:	
description	n:	LOLIMA[								
description	 n: LOLIMA		31]							1
description \$AA_VEI	 n: LOLIMA override s	et with VE	31]	n main run						
description \$AA_VEI Velocity of description	 n: LOLIMA override s n of field lir	et with VE	31]	n main run						
description \$AA_VEI Velocity of description to be defi	 n: LOLIMA override s n of field lir ined	et with VE	31]	n main run	1				n:	
description \$AA_VEI Velocity of description to be defi	LOLIMA override s of field lir ined GEOAX	et with VE	31]	n main run		NCK ver		50.00.0	n:	
description \$AA_VEI Velocity of description to be defi	LOLIMA coverride s n of field lir ined GEOAX CHANA	et with VE	31]	n main run				50.00.0	n:	
description \$AA_VEI Velocity of description to be defi	LOLIMA override s n of field lir ined GEOAX CHANA)	et with VE	31]	n main run				50.00.0	n:	
description \$AA_VEI Velocity of description to be defi axis identifier:	LOLIMA coverride s n of field lir ined GEOAX CHANA	et with VE	31] ELOLIMA i	n main run			sion:		n:	
description \$AA_VEI Velocity of description to be defi	n: LOLIMA override s n of field lir ined GEOAX CHANA) MACHA) SPINDLI	et with VE	31] ELOLIMA i			NCK ver	sion:	200	0	
description \$AA_VEI Velocity of description to be defi axis identifier:	LOLIMA override s n of field lir ined GEOAX CHANA)	et with VE	31] ELOLIMA i	n main run			sion:		n:	access
description \$AA_VEI Velocity of description to be defi axis identifier:	n: LOLIMA override s n of field lir ined GEOAX CHANA) MACHA) SPINDLI	et with VE	31] ELOLIMA i			NCK ver	sion:	200	0	access
description \$AA_VEI Velocity of description to be defi axis identifier: unit:	n: LOLIMA override s n of field lir ined GEOAX CHANA) MACHA) SPINDLE - run-in	et with VE nits:  ( K = min.: main run	31] ELOLIMA i			NCK ver	sion: max.:	200 OPI	0 OEM	access
\$AA_VEI Velocity of description to be defi axis identifier: unit: read:	n: LOLIMA override s n of field lir ined GEOAX CHANA MACHA SPINDLE run-in	et with VE nits:  ( K = min.: main run	1 runin stp			NCK ver	sion: max.:	200 OPI	0 OEM	access

INT	\$AA JI	ERKLIMA[3	31]						descript	0
		•							n:	
description										
BAA_JEF										
Jerk over	ride set	with JERKI	LIMA in m	ain run						
description		imits:								
o be def	ined									
axis	GEOAX	(				NCK vei	rsion:	50.00.0	00	
dentifier:	CHANA	·Χ								
	MACHA	λX								
	SPINDL	_E								
unit:	_	min.:	1			1	max.:	200		
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	IOEM	access
	l'air iir	illaili rail	ranni otp	ivii dir oyri		l	0,1		O L IVI	rights
read:	Х	Х	Х			Х	Х	Х	Х	1.3
write:										
		1	<u> </u>							
attributes:	global	block sear	rcn			link				
		Not class	sified			Not clas	ssified			
NI	фал пл	OTEND[31	1						descript	0
	ֆΑΑ_IVI	CIEND[31	1						n:	
description	า:				1					T.
\$AA MO	TEND									
· —		otion criteri	on with si	nale-axis ir	nterpolatio	าท				
		n with exact			no polati	511				
		n with exact								
		at end of i								
		in braking								
		in braking				ranga wi	ndow for a	octooint		
		in braking							10	
description	of field I	imite	Tallip OI a	XIS IIIUUUUII	WILLI LOIE	iance wi	iluow ioi a	actual valt	JE	
		miles.								
to be def		,				INCK vei	eion.	40.00.0	10	
dentifier:	GEOAX	=				14CIX VEI	SIUII.	16.00.0	JU	
GOTTUITOT.	CHANA									
	MACHA									
	SPINDL									
unit:	-	min.:	1				max.:	6		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
ead:	Х	Х	Х			Х	Х	Х	Х	
write:		1								
	alahal	blook	roh			link				
attributes:	giobai	block sear	ICH			IIIIK				

Not classified

	\$AA_SC	CPAR[31]						description	9
description	 n:							n:	
\$AA SCI									
· —		arameter s	et						
description	n of field li	mits:							
to be defi	ined								
axis	GEOAX				NCK ver	sion:	16.00.0	0	
identifier:	CHANA	Χ							
	MACHA	Χ							
	SPINDL	E							
unit:	-	min.:	INT_MIN		l .	max.:	INT MA	·Χ	
	run-in	main run	runin stp		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		X	Х	Х	Х	
write:									
attributes:	global	block sear	ch		link				
		Not class	sified		Not clas	ssified			
					1.101.0.0.0				
INI	\$AA FS	SR_STAT[	311	İ				description	
		N_OTATI	J.]					n:	
description	٦.								
•									•
, \$AA_ESF	R_STAT[								1
\$AA_ESF Status of	R_STAT[ "Extende	ed stop and		bit-coded:					
\$AA_ESF Status of BIT0: Ge	R_STAT[ "Extendender nerator n	ed stop and node is act		bit-coded:					
\$AA_ESI Status of BIT0: Ge BIT1: Re	R_STAT[ "Extendent nerator neraction is	ed stop and node is act s activated	ivated	bit-coded:					
\$AA_ESI Status of BIT0: Ge BIT1: Rei BIT2: Ext	R_STAT[ "Extendenter nerator nerator is traction is traction is tended st	ed stop and node is act s activated op is activa	ivated	bit-coded:					
\$AA_ESI Status of BIT0: Ge BIT1: Rei BIT2: Ext BIT3: DC	R_STAT[ "Extended nerator not traction is tended st t-link und	ed stop and node is act s activated op is activated ervoltage	ivated	bit-coded:					
\$AA_ESI Status of BIT0: Ge BIT1: Rei BIT2: Ext BIT3: DC BIT4: Ge	R_STAT[ "Extender nerator netraction is tended standed standed stander nerator	ed stop and node is act s activated op is activated ervoltage ninimum sp	ivated	bit-coded:					
\$AA_ESI Status of BIT0: Ge BIT1: Rei BIT2: Ext BIT3: DC BIT4: Ge descriptior	R_STAT[ "Extendence nerator not rection is tended standed standed standed standed in of field ling."	ed stop and node is act s activated op is activated ervoltage ninimum sp	ivated	bit-coded:					
\$AA_ESI Status of BIT0: Ge BIT1: Rei BIT2: Ext BIT3: DC BIT4: Ge description to be defi	R_STAT[ "Extendenerator not rection is tended state in the control of field limits and rection of field limits and	ed stop and node is act s activated sop is activa ervoltage ninimum sp mits:	ivated	bit-coded:	NCK ver	sion:	16 00 0	n	
\$AA_ESF Status of BIT0: Ge BIT1: Rei BIT2: Ext BIT3: DC BIT4: Ge description to be definaxis	R_STAT[ "Extended nerator in traction is tended standard in the control of field like in the control of	ed stop and node is act s activated op is activated ervoltage ninimum sp mits:	ivated	bit-coded:	NCK ver	sion:	16.00.00	0	
\$AA_ESF Status of BIT0: Ge BIT1: Rei BIT2: Ext BIT3: DC BIT4: Ge description to be definaxis	R_STAT[ "Extended nerator in traction is tended standard in the control of the co	ed stop and node is act s activated op is activated ervoltage ninimum sp mits:	ivated	bit-coded:	NCK ver	sion:	16.00.00	0	
\$AA_ESF Status of BIT0: Ge BIT1: Rei BIT2: Ext BIT3: DC BIT4: Ge description to be definaxis	R_STAT[ "Extended nerator in traction is tended standard in the control of the co	ed stop and node is act s activated op is activated ervoltage ninimum sp mits:	ivated	bit-coded:	NCK ver	sion:	16.00.00	0	
\$AA_ESF Status of BIT0: Ge BIT1: Re BIT2: Ext BIT3: DC BIT4: Ge description to be defi axis identifier:	R_STAT[ "Extended nerator in traction is tended standard in the control of the co	ed stop and node is act s activated op is activated ervoltage ninimum sp mits:	ivated	bit-coded:	NCK ver	sion:		0	
\$AA_ESF Status of BIT0: Ge BIT1: Re BIT2: Ext BIT3: DC BIT4: Ge description to be defi axis identifier:	R_STAT[ "Extended nerator in traction is tended stipling in the control of field limit in the co	ed stop and node is activated op is activated op is activated ervoltage ninimum sprints:  X X E	ivated ated peed			max.:	15		James
\$AA_ESF Status of BIT0: Ge BIT1: Re BIT2: Ext BIT3: DC BIT4: Ge description to be defi axis identifier:	R_STAT[ "Extended nerator in traction is tended standard in the control of the co	ed stop and node is activated op is activated op is activated ervoltage ninimum sprints:  X X E	ivated	bit-coded:	NCK ver			OEM	access
\$AA_ESF Status of BIT0: Ge BIT1: Rei BIT2: Ext BIT3: DC BIT4: Ge description to be defination axis identifier:	R_STAT[ "Extended nerator in traction is tended stipling in the control of field limit in the co	ed stop and node is activated op is activated op is activated ervoltage ninimum sprints:  X X E	ivated ated peed			max.:	15		access
\$AA_ESI Status of BIT0: Ge BIT1: Rei BIT2: Ext BIT3: DC	R_STAT[ "Extended nerator in traction is tended stiplication of field limitined GEOAX CHANA: MACHA SPINDL - run-in	ed stop and node is activated op is activated op is activated ervoltage ninimum sprints:  X X E  min.:  main run	ivated ated beed runin stp		PP	max.:	15 OPI	ОЕМ	

Not classified

X: PLC-controlled axis description of field limits:

**GEOAX** 

CHANAX MACHAX SPINDLE

run-in

min.:

main run

Χ

block search

Not classified

**FALSE** 

runin stp

Mrun syn

to be defined

axis

unit:

read:

write:

attributes: global

identifier:

BOOL	\$AA_E	SR_ENABI	LE[31]		descriptio n:							
description	1. 1:							111.				
		BLE[X] = 1										
		nded stop a	and retrac	t"								
description			2114 101140									
to be defi												
axis	GEOAX	<b>(</b>			NCK ver	sion:	16.00.0	0				
identifier:	CHANA							10.00.00				
	MACHA	ΑX										
	SPINDI	LE										
unit:	_	min.:	FALSE		max.:		TRUE					
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights			
read:	Х	Х	Х		X	Х	Х	Х				
write:	Х	Х	Х		Х	Х		Х	7			
attributes:	global	block sear	ch		link							
		Not class	sified		Not classified							
	I				L				I			
BOOL	\$AA E	SR_TRIGG	ER[31]					descript	10			
								n:				
descriptior	า:											
		GER[X] = 1										
Activation	of "NC	-controlled	ESR" for	PLC-controlled	axis (= single	e axis)						

NCK version:

link

Not classified

max.:

Χ

Х

SA

48.00.00

TRUE

Χ

OEM

Х

Χ

access rights

7

OPI

DOUBLE	\$AA_PO	LFA[31]				descriptio						
description	D:								n:			
•												
\$AA_PO												
		axis (= sir			. DI O							
			traction p	osition of t	ne PLC-c	ontrolled	axis					
	n of field lin	IIIIS.										
to be def						INICK	-!					
axis identifier:	GEOAX	_				NCK version:			51.00.00			
identinei.	CHANAX											
	MACHA	=										
	SPINDLE	Ε										
unit:	Linear /	min.:	DBL_MII	1			max.:	DBL_MAX				
	angular											
	position											
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights		
read:	Х	Х	Х			Х	Х	Х	Х	- Ingritt		
write:												
attributes:	global	block sear	rch	J		link						
		Not class	sified			Not classified						
INIT	1								da a anticati			
INT  \$AA_POLFA_VALID[31]								descripti	o			

	Ψ, υ ι ι	J_: /\_ \/.	[0.]						n:		
description	n:										
\$AA_PO	LFA_VAI	_ID[X]									
Supplies	the curre	ent status c	of \$AA_PC	DLFA[X]							
X: PLC-c	ontrolled	axis (= sin	igle axis)								
Return va	alues:										
		orogramme									
		rammed a									
		rammed a	s distance	•							
description		mits:									
to be def						INCK ver	oion:	T=			
axis identifier:	GEOAX					NCK ver	Sion:	51.00.00			
identilier.	CHANA										
	MACHA										
	SPINDL		,								
unit:	-	min.:					max.:	2			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х			Х	Х	Х	Х		
write:											
attributes:	global	block sear	rch	I	1	link					
		Not class	sified			Not classified					

description:  \$AA_ALARM_STAT[31]  description:  \$AA_ALARM_STAT (Selected) alarm reactions for synchronous actions (SYNFCT)  description of field limits:  to be defined  axis     GEOAX identifier: CHANAY    CHANAY	
\$AA_ALARM_STAT (Selected) alarm reactions for synchronous actions (SYNFCT) description of field limits: to be defined axis GEOAX    NCK version:   48.00.00	
(Selected) alarm reactions for synchronous actions (SYNFCT)  description of field limits:  to be defined  axis GEOAX NCK version: 48.00.00	
description of field limits: to be defined  REOAX  NCK version: 48.00.00	
to be defined  axis GEOAX NCK version: 48.00.00	
axis GEOAX NCK version: 48.00.00	
40.00.00	
GERRIEL LOLLANDAY	
Gentifier: CHANAX	
SPINDLE	
run-in main run runin stp   Mrun syn   PP   SA   OPI   OEM	access rights
	(
write:	
attributes: global block search link	
Not classified Not classified	
Trot oldoomod	
BOOL   CAN AYCTSWAI311	rintio
SOOL SAN_AXCTSWA[31]   desc	T C C C C C C C C C C C C C C C C C C C
description:	<u>'</u>
s axis container rotation active ?	
Example: EVERY \$AN_AXCTSWA[n] == TRUE DO M99	
Read:	
TRUE: An axis container rotation is currently being executed on the	
axis container with axis container name n	
FALSE: Axis container rotation is not active.	
description of field limits:	
·	
to be defined	
to be defined Axis GEOAX NCK version: 16.00.00	
to be defined  axis GEOAX CHANAX    NCK version:   16.00.00	
to be defined  Axis GEOAX CHANAX MACHAX  The state of the defined of the state of t	
to be defined  AXIS GEOAX CHANAX MACHAX SPINDLE  O be defined  NCK version:  16.00.00	
to be defined  axis dentifier:  GEOAX CHANAX MACHAX SPINDLE  REPORT NCK version:  16.00.00	
to be defined  AXIS GEOAX CHANAX MACHAX SPINDLE  ODE DEFINITION OF THE COLUMN OF THE C	access
to be defined  axis     GEOAX     CHANAX     MACHAX     SPINDLE  unit: -   min.:   FALSE   max.:   TRUE     run-in   main run   runin stp   Mrun syn   PP   SA   OPI   OEM	
to be defined  axis     GEOAX     CHANAX     MACHAX     SPINDLE  unit: -   min.:   FALSE   max.:   TRUE     run-in   main run   runin stp   Mrun syn   PP   SA   OPI   OEM	rights

Not classified

NT \$AN_AXCTAS[31]					descriptio   n:						
-l											
description											
		rent rotation					( . ( 1				
				container i			rotated				
				axis contai				.:4-:-	4		
	e ranges n of field lii		ne maxim	um numbe	r of occu	piea siot	s in the ax	dis contain	er -1.		
		IIIIS.									
to be defi						INCK ver	eion.	40.00.0	^		
dentifier:	GEOAX					TOIL VOI	olori.	16.00.0	U		
	CHANA										
	MACHA										
	SPINDL		T				I many .				
unit:	-	min.:	INT_MIN				max.:	INT_MA			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
ead:	Х	Х	Х			Х	Х	X	Х		
vrite:											
attributes:	global	block sear	rch	<u> </u>		link					
		Not class	sified			Not classified					
	I	1									
BOOL	SAC AX	(CTSWA[	311						descriptio		
		(0.011)	~ . ]						n:		
description											
				the channe							
				ion for the	axis cont	ainer wit	th axis				
	name n	and this ro	otation is r	ot yet							
inished.											
		container r	otation is	finished.							
•	of field li	mits:									
o be defi						INIOIZ					
axis dentifier:	GEOAX					NCK ver	Sion:	16.00.0	0		
dentiner.	CHANAX										
	MACHA										
	SPINDL	E									
ınit:	-	min.:	FALSE	FALSE			max.:	TRUE			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
ead:	Х	Х	Х			Х	Х	Х	Х	1	
write:											
attributes:	global	al block search link									
	ı	1				l				1	

Not classified

unit:

read:

write:

attributes: global

run-in

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INT	\$VA_PO	SCTRL_N	/IODE[31]					descriptio		
description	J.				 			n:		
\$VA_PO		MODEIXI								
Position										
		osition con	itrol							
		peed contr								
2 = Stop	o loop of	Jeeu conti	OI .							
3 = Park										
4 = Follo	w-un									
description	n of field lin	nits:			 					
to be def	ined									
axis	GEOAX				 NCK ver	sion:	55.00.0	0		
identifier:	CHANA	X								
	MACHA	Χ								
	SPINDLE	E								
unit:	1-	min.:	0			max.:	4			
	run-in	main run	runin stp	Mrun syn	 PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х		Х	Х	Х	Х		
write:										
attributes:	global	block sear	ch	<u> </u>	link	I	I			
		Current v	/alue		 Not clas					
		-1							II.	
BOOL	\$VA_SC	E[31]						descriptio		
d a a animbi a s	<u> </u>				 			n:		
description										
\$VA_SCI										
description	speed co	ontroller en	iable		 					
to be def		IIIIS.								
axis	GEOAX				 NCK version: 55.00.			<u> </u>		
identifier:	CHANA						33.00.0	U		
	MACHA									
	SPINDLE									

max.:

Χ

PP

link

Χ

Not classified

TRUE

Χ

OEM

Χ

access rights

OPI

**FALSE** 

runin stp

Χ

main run

Χ

block search

Not classified

Mrun syn

DOUBLE	\$AA_TR	AVFI DI	ST[31]			descriptio	lescriptio				
		/\\LDI\	0.[0.]				n:				
description											
				CS in mm							
			is since th	ne SRAM o	contents v	vere last	erased is	added.			
	n of field lin	nits:									
to be def											
axis	GEOAX					NCK ver	sion:	56.00.0	0		
identiller.	entifier: CHANAX										
	MACHA	=									
	SPINDLE										
unit:	Linear /	min.:	0.0				max.:	DBL_M	AX		
	angular							_			
	position										
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access	
										rights	
read:	X	Х	Х			X	X	X	Х		
write:											
attributes:	tributes: global block search					link					
		Program	sensitive			Not clas					
		1 3 -									
DOUBLE	\$AA_TR	ΔVFI TII	MF[31]						descriptio		
		AVEL_1	[o.]				n:				
description	n:										
				seconds.		traversin	ng time of	the			
			ts were la	st erased i	is added.						
	n of field lin	nits:									
to be def											
axis	GEOAX					NCK ver	sion:	56.00.0			
identifier:	CHANAX	-									
	MACHA										
	SPINDLE										
unit:	S	min.: 0.0					max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access	
										rights	
read:	X	Х	Х			X	Х	Х	X		
write:											
attributes:	global	block sear	rch			link					

Not classified

Program sensitive

attributes: global

DOODLL	\$AA_TR	AVEL_CO	DUNT[31]					descript	io
								n:	
description				· · · MOO TI					
				is in MCS. The					
	operation of field lin		ne SKAIVI	contents were	e last erased is	s storea.			
o be def		ilito.							
axis	GEOAX				INCK ver	sion.	56.00.0	0	
dentifier:	CHANA	(			1.0	0.0	30.00.0	U	
	MACHA	-							
	SPINDLE								
unit:	OI INDEL	- Imin.:	0.0			Imax.:	DBL_M	۸٧	
	run-in	main run	runin stp	Mrun syn	IPP	SA	OPI	TOEM	access
	run-m	main run	ται ιιι ειρ	Wiluli Syll		SA	OFI	OEIVI	rights
read:	Х	Х	Х	1	X	X	X	X	1191110
write:									
attributes:	alohal	block sear	rch		link				
	giobai								
		Program	sensitive		Not clas	ssified			
				<u> </u>					1
DOUBLE	\$AA_TR	AVEL_DI	ST_HS[3 <sup>2</sup>	1]				descript	Ю
		AVEL_DI	ST_HS[3 <sup>,</sup>	1]				descript n:	10
description	า:				egrees at high	velocity i	e	1 -	Ю
description Total trav	l n: rersing dis	stance of a	axis in MC	S in mm or de			.e.	1 -	10
description Fotal trav	l rersing dis city of >=	stance of a	axis in MC				.e.	1 -	10
description Total travat a veloos stored in	l n: rersing dis	stance of a 80% of the	axis in MC	S in mm or de			.e.	1 -	IO
description Total trav at a veloc stored in description	l rersing dis city of >= o the SRAM n of field lin	stance of a 80% of the	axis in MC	S in mm or de			.e.	1 -	10
description Total trave at a veloce stored in description to be defi	l rersing dis city of >= o the SRAM n of field lin	stance of a 80% of the	axis in MC	S in mm or de			e.	n:	10
description Total travat at a veloo stored in	ersing discity of >= the SRAM of field lin	stance of a 80% of the M. nits:	axis in MC	S in mm or de	v. This value is			n:	10
description Total trave at a veloce stored in description to be defi	rersing discity of >= the SRAM of field lined	stance of a 80% of the M. nits:	axis in MC	S in mm or de	v. This value is			n:	10
description Total trave at a veloce stored in description to be defi	rersing discity of >= the SRAM of field liningd  GEOAX  CHANA	stance of a 80% of the M. nits:	axis in MC	S in mm or de	v. This value is			n:	10
description Total trave at a veloce stored in description to be defi	rersing discity of >= the SRAM of field linined GEOAX CHANA MACHA	stance of a 80% of the M. nits:	axis in MC	S in mm or de	v. This value is			n:	10
description  Total travelor  at a velor  stored in  description  o be defi  axis  dentifier:	rersing discity of >= the SRAM of field lined GEOAX CHANAS	stance of a 80% of the M. nits:	axis in MC e maximu	S in mm or de	v. This value is	sion:	56.00.0	n:	10
description  Total travelor  at a velor  stored in  description  o be defi  axis  dentifier:	rersing discity of >= the SRAM of field lined GEOAX CHANAS MACHAS SPINDLE	stance of a 80% of the M. nits:	axis in MC e maximu	S in mm or de	v. This value is	sion:	56.00.0	n:	10
description  Total trave  at a velou  stored in  description  o be defi  axis  dentifier:	rersing discity of >= of the SRAM of field lined  GEOAX CHANAX MACHAX SPINDLE Linear / angular	stance of a 80% of the M. nits:	axis in MC e maximu	S in mm or de	v. This value is	sion:	56.00.0	n:	
description  Fotal travelor  at a velor  stored in  description  o be defination  dentifier:	rersing discity of >= the SRAM of field lined GEOAX CHANA MACHA SPINDLE Linear / angular position run-in	stance of a 80% of the M. nits:	o.0	S in mm or dem axis velocity	NCK ver	sion:	56.00.0  DBL_M  OPI	n:  O  AX	
description Total trave at a velou stored in description to be defi axis dentifier:	rersing discity of >= the SRAM of field lined GEOAX CHANAX MACHAX SPINDLE Linear / angular position	stance of a 80% of the M. nits:	axis in MC e maximu	S in mm or dem axis velocity	NCK ver	sion:	56.00.0 DBL_M	n:0	access

Not classified

Program sensitive

DOUBLE	\$AA_T	RAVEL_TI	ME_HS[3	1]				descripti n:	io
description	n:			l l				1	
Total trav	ersing ti	ime of axis	in second	s at high veloc	city in MCS, i.e	€.			
				m axis velocity					
s stored	in the SI	RAM.		•					
description	n of field l	limits:							
to be def	ined								
axis	GEOAX	<b>(</b>			NCK ver	sion:	56.00.0	0	
identifier:	CHANA	λX							
	MACHA	ΑX							
	SPIND	LE							
unit:	s	min.:	0.0			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		X	Х	Х	Х	
write:									
attributes:	global	block sea	rch		link				
		Program	sensitive		Not clas	ssified			
DOUBLE	\$AA_T	RAVEL_C	DUNT_HS	[31]				descripti	io
								n:	

DOUBLE	\$AA_TR	RAVEL_CO	DUNT_HS	[31]					descripti n:	0
description	n:				•				•	•
Number (	of travers	ing operat	ions of ax	is in MCS	at high ve	locity, i.e	€.			
at a veloc	city of >=	80% of the	e maximu	m axis vel	ocity. This	value is	;			
stored in	the SRAI	M.								
description	n of field lir	mits:								
to be def	ined									
axis	<b>GEOAX</b>					NCK ver	sion:	56.00.0	0	
identifier:	CHANA	Χ								
	MACHA	Χ								
	SPINDL	E								
unit:	-	min.:	0.0				max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch	1	I	link	I	1	1	
		Program	sensitive			Not clas	ssified			

I	\$AA_JE	RK_IOI[	31]						description:	
description	<u>เ</u> า:								111.	1
Total axia	al jerk in n	n/s^3. The	total jerk	applied						
to the axi	s is adde	d up and s								
	n of field lin	nits:								
to be def										
axis	GEOAX					NCK ver	sion:	56.00.0	0	
identifier:	CHANA	-								
	MACHAX									
	SPINDLE	Ξ								
unit:	Linear / angular jerk	min.:	0.0				max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	X	X	Х	rigitis
write:										
attributes:	global	block sear	rch			link		1	-	
		Program	sensitive			Not clas	ssified			
										•
DOUBLE	\$AA_JE	RK_TIME	[31]						description	
description	<u> </u> า:								n:	
Total trav	ersing tin	ne of axis	in second							
			111 3000110	s in ivics v	with jerk. <sup>-</sup>	The total	time perio	oa		
		traverses v					time perio	oa		
in the SR	AM.						time perio	oa		
in the SR description	AM. of field lin						time perio	oa 		
in the SR description to be def	AM. n of field lin					ed		oa 		
in the SR description to be def axis	AM. of field linined GEOAX	nits:						56.00.0	0	
in the SR description to be def	AM. of field lin ined GEOAX CHANA	nits:				ed			0	
in the SR description to be def axis	AM. of field linined GEOAX CHANA	nits:				ed			0	
in the SR description to be defi axis identifier:	AM. of field lin ined GEOAX CHANA	nits:	with jerk is			ed	sion:	56.00.0		
in the SR description to be def axis	AM. of field linined GEOAX CHANA	nits:		added up		NCK ver	sion:	56.00.0	AX	
in the SR description to be defi axis identifier: unit:	AM. of field lined GEOAX CHANA MACHA SPINDLE	nits:	with jerk is			ed	sion:	56.00.0		access
in the SR description to be defined axis identifier: unit:	AM. of field linined GEOAX CHANA MACHA SPINDLE	nits:  (  (	with jerk is	added up		NCK ver	sion:	56.00.0	AX	
in the SR description to be defi axis identifier: unit:	AM. of field linined GEOAX CHANA MACHA SPINDLE s run-in	nits:  (  (	0.0	added up		NCK ven	sion: max.:	56.00.00  DBL_M. OPI	AX OEM	
in the SR description to be defined axis identifier: unit:	AM. of field linined GEOAX CHANA> MACHA> SPINDLE s run-in	nits:  (  (	0.0 runin stp	added up		NCK ven	sion: max.:	56.00.00  DBL_M. OPI	AX OEM	

DOLIBLE									descriptio	
DOUBLE	\$AA_JE	RK_COUI	NT[31]						n:	
description	n:				<u> </u>				111.	
is stored	in the SR	AM.	ions exec	uted by ax	is in MCS	with jerk	. This valu	ıe		
description	n of field lin	nits:								
to be def	ined									
axis	GEOAX					NCK vers	ion:	56.00.00		
identifier:	CHANA									
	MACHAX									
	SPINDLE									
unit:	-	min.:	0.0				max.:	DBL_MA	X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch			link	_	l.		
		Program	sensitive			Not class	sified			
	II.					ı				
BOOL	\$AC_RP	VALID[31	]						descriptio n:	
description	n:								1	
\$AC_RP	VALID[X]									
\$AC_RP	VALID[ax	is identifie	r] returns	TRUE if a	valid Rep	os positio	on, which	can be inte	errogated	with
				ailable for						
					ile system	n and use	r Asubs a	re being pr	ocessed.	However,
		in the foll								
								ive. \$AC_F		
								ılated Rep	os positioi	ns only
				locks gene						
								hronized a	ctions,	
description	n of field lin	nite:	another ch	annel afte	er axis rep	iacement	).			
to be def		iiito.								
axis	GEOAX					NCK vers	ion:	51.06.00		
identifier:	CHANA	(						01.00.00		
	MACHA									
	SPINDLE									
unit:	-	min.:	FALSE			1	max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	ļ ,,		ļ ,,	ļ	ļ		ļ ,,	.,	ļ ,,	rights
reau.	X	X	X	1	1	X	X	X	X	1

link

Not classified

write:

attributes: global

block search

description:  \$VA_SYNCDIFF[FA]  FA: Following axis/following spindle			
FA: Following axis/following spindle			
l			
Deviation in synchronism between actual values for LEAD, TRAIL, ELG a			
The deviation in synchronism between actual values is the deviation in di		en the serv	o actual
position of the following axis/following spindle and a point calculated (acc			
the servo actual position of the leading axis/leading spindle.	· ·	. •	•
\$VA_SYNCDIFF[FA] = \$VA_IM[FA] - K(\$VA_IM[LA])			
K: Coupling rule			
LA: Leading axis/leading spindle			
description of field limits:			
to be defined			
axis GEOAX NCK version:	56.00.00		
identifier: CHANAX			
MACHAX			
SPINDLE			
unit: Linear / min.: DBL MIN max.:	: DBL MA	X	
angular —	_		
position			
run-in main run runin stp   Mrun syn   PP SA	OPI	OEM	access
			rights
read: X X X X	< X	Х	
write:			
attributes: global block search link	L		
Not classified Not classified			

DOUBLE	\$AA SY	NCDIFF[3	R11						descriptio	
		NODII I [C	· · ]						n:	
description										
· —	NCDIFF[F	-								
		following								
							and COU			
								between th		
		s/following	g spindle a	and a poin	t calculate	ed (accor	ding to the	e coupling	rule) from	the
setpoint p		//!:	- !II -							
		leading s		//	FI A 1\					
K: Coupli		A] = \$AA_	_IIVI[FA] - I	K(\$AA_IM	[LA])					
	•	eading spi	ndlo							
description	n of field lin	nits:	ilule							
to be def		illo.								
axis	GEOAX					NCK ver	sion:	56.00.00		
identifier:	CHANA	,						30.00.00		
	MACHA									
	SPINDLE									
unit:		min.:	DDI MIN				max.:	DDI MA	· · ·	
urnt.	Linear /		DBL_MIN	N			max	DBL_MA	X.	
	angular									
	position	main run	runin otn	I Mrup ovo	ı	IPP	SA	ODL	IOEM	000000
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	X	Х	rigino
write:								_ ^		
	alabal	blook soo	roh			link				
attributes:	giobai	block sear	CH			IIIIK				
		Not class	sified			Not clas	sified			
INT	\$VA SY	NCDIFF_	STAT[31]						descriptio	
									n:	
description										
_	ICDIFF_S									
		s/following								
	•	ism devia	tion betwe	en actual	values:					
-4: Reser		n (t) / A (C)	MODIEE	tangantia	l control (	not TAN	C( "D"\\			
							G( "P") ) simulated l			
		n \$VA_S\		master va	alue coupi	ing and s	simulat <del>e</del> u i	IVI V		
		_		, coupling	not active					
		SVA_SYN		, coupling	not active	•				
description	n of field lin	nits:	ODII I							
to be def										
axis	GEOAX					NCK ver	sion:	56.00.00		
identifier:	CHANA	(						00.00.00		
	MACHA									
	SPINDLE									
unit:		min.:	-4			I	max.:	1		
-	run-in	main run	runin stp	Mrun syn	ı	IPP	SA	OPI	IOEM	access
	u   -	illalli lull	ruiiii sip	IVII UIT SYTT		II-E	SA.	OFI	OLIVI	rights
read:	Х	Х	Х	1		Х	Х	X	Х	9.1.0
write:	<del> </del>			-		<u> </u>	+ ~	<del>                                     </del>	- '`	
	alobal	blook sass	roh	]		link				
attributes:	Igiongi	block sear	UH			link				l

Not classified

INT	\$AA_SY	NCDIFF_	STAT[31]						description	)
docorintion									n:	
description										
		STAT[FA]								
		/following								
	•			een setpoii						
		in \$AA_S\	/NCDIFF,	coupled n	notion fro	m part pr	ogram			
-3: Reser										
-2: Reser										
		n \$AA_S\								
				, coupling	not active	)				
1: Valid	value in S	BAA_SYN	CDIFF							
description		nits:								
to be defi	ned									
axis	GEOAX					NCK ver	sion:	56.00.0	0	
identifier:	CHANA	(								
	MACHA	X								
	SPINDLE	Ξ								
unit:	-	min.:	-4			1	max.:	1		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch	l	I	link	_ L	_ L		
		Not class	sified			Not clas	ssified			

DOUBLE	\$AA OS	CILL_BR	EAK PO	S1[31]					descripti	0
				[]					n:	
description	n:									
\$AA_OS	CILL_BRI	EAK_POS	31[ <axis>]</axis>							
The curre	ent approa	ach to reve	ersal posit	tion 1 is fin	nished at					
this posit	ion or the	last appro	oach to							
reversal	position 1	was finish	ned at this	position (	reversal					
position 2	2 currently	being ap	proached	).						
				is not equ	ıal to					
\$AA_OS	CILL_RE\	/ERSE_P	OS1[ <axi< td=""><td>s&gt;] if the</td><td></td><td></td><td></td><td></td><td></td><td></td></axi<>	s>] if the						
		on was int	errupted b	y an						
	signal (PL									
			ed only fro	m synchro	onized act	ions.				
-	n of field lir	nits:								
to be def	ined									
axis	GEOAX					NCK ve	ersion:	57.00.0	0	
identifier:	CHANAZ	-								
	MACHA	<								
unit:	Linear /	min.:	DBL_MII	N			max.:	DBL_M	AX	
	angular									
	position									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:		Х					Х	X	Х	
write:										
attributes:	global	block sear	rch	L	ı	link		L		
		Not class	sified			Not cla	ssified			

DOUBLE |\$AA\_OSCILL\_BREAK\_POS2[31]

description	n:				l.				l.	I
\$AA_OS	CILL_BRE	EAK_POS	2[ <axis>]</axis>							
				ion 2 is fin	ished at					
		last appro								
				position (	reversal					
		being ap								
				is not equ	al to					
		/ERSE_P on was inte								
	signal (PL		erruptea b	y an						
			ed only fro	m synchro	nized act	ions				
	n of field lin		a only no	iii Syriciiic	mizeu act	10113.				
to be defi	ined									
axis	GEOAX					NCK versi	ion:	57.00.00		
identifier:	CHANAX	(								
	MACHAX	<								
unit:	Linear /	min.:	DBL MIN	١			max.:	DBL MA	Х	
	angular		_					_		
	position									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:		Х					Х	Х	Х	ge
write:										
attributes:	global	block sear	ch	l	I	link		I.		
		Not class	sified			Not class	sified			
	I	I								l
DOUBLE	\$AA_BC	S_OFFSE	T[31]						descriptio	
description	)·								n:	
		BCS OF	ESETION	ic used to	dotormin	o the tota	Lavie offe	ets for an	avic Tho	total
								x]) and the		
								the BCS a		
offset.			2 2				0.00.00.00			
description	n of field lin	nits:								
to be defi	ined									
axis	GEOAX					NCK versi	ion:	58.00.00		
identifier:	CHANAX									
	MACHA									
	SPINDLE									
unit:	-	min.:	DBL_MIN	١			max.:	DBL_MA	Х	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	3
write:						1				

attributes: global

block search
Not classified

IINI	\$AA_CH	ANNO[31	J						n:	
description	<u>l</u> n:								In.	
This varia	able returr	ns the nun	nber of the	e channel	in which t	he axis is	being int	erpolated.		
			could not l	be assigne	ed to a ch	annel.				
-	n of field lin	nits:								
to be def						INCK vers	nion:	T=0.00.00		
identifier:	GEOAX CHANAX	,				INCK VEIS	51011.	59.00.00	)	
	MACHA									
	SPINDLE									
unit:	-	min.:	0				max.:	10		
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	OEM	access
			· ·	,						rights
read:	X	X	Х			X	Х	Х	Х	
write:										
attributes:	global	block sear	rch		•	link	•	•	•	
	Х	Not class	sified			Not clas	sified			
	ı	ı				l				ı
DOUBLE	\$AA_IW	CORR[3	1]						descriptio	
description	u. 								n:	
		\$AA IW (	CORRIaxi	determina	es the act	ual setno	int value (	of the worl	kpiece coo	rdinate
									ie of the in	
									verlay sha	
AA_OFF	, external	WO, retra	ction etc.	).						
	n of field lin	nits:								
to be def						INCK vers	eion:	TEO 00 00		
identifier:	GEOAX CHANAX	,				INOIX VCIX	31011.	59.00.00	)	
	MACHA									
	SPINDLE									
unit:	Linear /	min.:	DBL MIN	J			max.:	DBL_MA	ΑX	
	angular			•						
	position									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:							1	1		
attributes:	global	block sear	rch	l	1	link			1	
		Not class	sified			Not clas	sified			

DOUBLE	\$AA_IEN	I_CORR[	31]						descriptio n:	
description	n:								1	I
coordinat	te system rlay rate (	(ACS) for DRF, AA		ied axis. S	see also \$				e adjustab S-Value coi	
The second secon	n of field lin	nits:								
to be def						NCK vers	nion:	T=		
identifier:	GEOAX CHANAX MACHAX SPINDLE	<				NOR VEIS	SIOII.	59.00.0	U	
unit:	Linear / angular position	min.:	DBL_MIN				max.:	DBL_M		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch			link	-1			
		Not class	sified			Not clas	sified			
DOUBLE	\$AA_IBN	N_CORR[	31]						descriptio	
description	 n:								n:	
description The axial	l n:   variable :	\$AA_IBN_	_CORR[ax						n: e foot coor	dinate
description The axial system (I	l n:   variable : =CS) for t	\$AA_IBN_	_CORR[ax ed axis. Se	ee also \$A	A_IW_C				n:	dinate
description The axial system (I	l n:   variable : =CS) for t	\$AA_IBN_ he specifie \$AA_OFF	_CORR[ax	ee also \$A	A_IW_C				n: e foot coor	dinate
description The axial system (I	l variable : FCS) for tl ate (DRF, n of field lin	\$AA_IBN_ he specifie \$AA_OFF	_CORR[ax ed axis. Se	ee also \$A	A_IW_C				n: e foot coor	dinate
description The axial system (I overlay ra description to be defi	l variable : FCS) for tl ate (DRF, n of field lin	\$AA_IBN_ he specifie \$AA_OFF	_CORR[ax ed axis. Se	ee also \$A	A_IW_C		The FCS		n: e foot coor ntains any	dinate
description The axial system (I overlay ra description to be defi	l variable s FCS) for thate (DRF, n of field lin	\$AA_IBN_ he specifie \$AA_OFF nits:	_CORR[ax ed axis. Se	ee also \$A	A_IW_C	DRR[ax].	The FCS	-Value co	n: e foot coor ntains any	dinate
description The axial system (I overlay ra description to be defi	l variable : FCS) for the term of field lined GEOAX CHANAX	\$AA_IBN_he specific \$AA_OFF hits:	_CORR[ax ed axis. Se	ee also \$A	A_IW_C	DRR[ax].	The FCS	-Value co	n: e foot coor ntains any	dinate
description The axial system (I overlay ra description to be defi axis identifier:	r: variable second for the control of field lining change	\$AA_IBN_he specific \$AA_OFF hits:	_CORR[ax ed axis. Se	ee also \$A	A_IW_C	DRR[ax].	The FCS-	59.00.0	n: e foot coor ntains any	dinate
description The axial system (I overlay ra description to be defi	l variable : FCS) for the term of field lined GEOAX CHANAX	\$AA_IBN_he specific \$AA_OFF hits:	_CORR[ax ed axis. Se	ee also \$A I Frame, e	A_IW_C	DRR[ax].	The FCS	-Value co	n: e foot coor ntains any	dinate
description The axial system (I overlay ra description to be defi axis identifier:	r: variable : FCS) for to ate (DRF, of field linitined GEOAX CHANAX MACHAX SPINDLE Linear / angular	\$AA_IBN_he specific \$AA_OFF hits:	_CORR[ax ed axis. So =, external	ee also \$A I Frame, e	A_IW_C	DRR[ax].	The FCS-	59.00.0	n: e foot coor ntains any	dinate axial
description The axial system (I overlay ra description to be defi axis identifier:	r: variable: CS) for the term of field lining GEOAX CHANAX MACHAX SPINDLE Linear / angular position	\$AA_IBN_he specific \$AA_OFF	_CORR[ax ed axis. So =, external	ee also \$A I Frame, e	A_IW_C	ORR[ax].	The FCS-sion:	59.00.00 DBL_M	e foot coor ntains any	dinate axial
description The axial system (I overlay ra description to be defi axis identifier: unit:	r: variable: CS) for the term of field lining GEOAX CHANAX MACHAX SPINDLE Linear / angular position run-in	\$AA_IBN_he specific \$AA_OFF hits:	CORR[axed axis. So, external	ee also \$A I Frame, e	A_IW_C	DRR[ax].	The FCS-sion:	59.00.0	e foot coor ntains any	dinate axial
description The axial system (I overlay ra description to be defi axis identifier:  unit:  read:	r:   variable	\$AA_IBN_he specific \$AA_OFF hits:	CORR[axed axis. Set], external	ee also \$A I Frame, e	A_IW_C	DRR[ax].	The FCS-sion:	59.00.0	e foot coor ntains any	dinate axial

DOUBLE	\$AA_IB_	_CORR[3	1]						descriptio n:	
description	n:								111.	
								tion of the		
						ORR[ax]	. The BCS	S-Value co	ntains any	axial
	ate (DRF, n of field lir		F, externa	Frame, e	etc. ).					
to be def		ilito.								
axis	GEOAX					NCK ver	sion:	59.00.00	)	
identifier:	CHANA	<						00.00.00		
	MACHA	X								
	SPINDLI	Ε								
unit:	Linear /	min.:	DBL_MIN	1			max.:	DBL_MA	λX	
	angular									
	position			T N 4	1	IDD	0.4	ODI	TOEM.	T
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	X	Х	Х	riginto
write:										
attributes:	global	block sear	rch			link				
		Not class	sified			Not clas	ssified			
		1				l				
INT	\$AA_TY	PE[31]							descriptio	
description	l n:								n:	
\$AA TYI	PE[ <axis></axis>	•]								
Axis type		-								
	s not asce									
	ogram ax	is								
2: Neutra 3: PLC a										
4: Oscilla	_									
	•	ch is curre	ently exec	uting a JO	G or hom	ing motio	on			
6: Follow	ing axis c	oupled via	a måster v	alue		Ü				
		following	axis							
8: Comm										
	ileCycles		4							
			iter-slave f urrently ex		IOG or he	omina m	otion			
description	n of field lir	nits:	inentity ex	ecuting a	300 01 H	Jilling III	Ollon			
to be def	ined									
axis	GEOAX					NCK ver	sion:	59.00.00	)	
identifier:	CHANA									
	MACHA									
	SPINDLI		•				_			
unit:	-	min.:	0				max.:	11		

Mrun syn

SA

Χ

Χ

Not classified

OPI

OEM

Χ

access rights

main run runin stp

Χ

Χ

block search

Not classified

run-in

Χ

Χ

read:

write:

attributes: global

DOUBLE  \$AA_DTSW[31]									descriptio	
description	J								n:	
		DTSWIa	v1 determi	nes the av	rial distan	e (with	algebraic s	sian) from	the start of	motion in
							d axes. The			
							axis, the po			
,		not cons		00. 11 1110 0	27(10 10 0 0	Jupiou c	27.10, ti 10 po	010011 0011	iporiorit do	
uno axio c	oup.iiig it	7 1101 00110	idorod.							
description	n of field lin	nits:								
to be defi	ined									
axis	GEOAX					NCK ve	ersion:	59.00.0	0	
identifier:	CHANA	(						00.00.0		
	MACHA									
	SPINDLE									
unit:	Linear /	min.:	DBL_MIN	.1		1	max.:	DBL M	۸٧	
			DDL_IVIII	V				DDL_IVI	A/\	
	angular position									
	run-in	main run	runin stp	Mrun syn	1	IPP	SA	OPI	IOEM	access
	Turi-iri	main run	Turnir Stp	Ivii uii Syii		FF	SA	OFI	OLIVI	rights
read:		Х	Х				X	X	Х	riginto
write:										
attributes:	global	block sear	rch			link				
		Not class	rified			Not cla	ecified			
		NOL CIASS	Silieu			NOT CIA	issilieu			
DOUBLE	\$AA_DT	CD[24]							descriptio	
	φAA_D1	30[31]							n:	
description	n:				•				•	
Axial vari	able \$AA	_DTSB[ax	determir	nes the axi	ial distand	e (with	algebraic s	ign) from	the start of	motion in
the basic	coordina	te system	for position	ning and	synchroni	zed axe	s. The pro	grammed	position is	the only
factor use	ed to calc	ulate the o	distance. I	f the axis i	is a couple	ed axis,	the positio	n compon	ent derived	d from the
axis coup	oling is no	t consider	ed.							
	n of field lin	nits:								
to be defi	ined									
axis	GEOAX					NCK ve	ersion:	59.00.0	0	
identifier:	CHANA	(								
	MACHA	X								
	SPINDLE	Ξ								
unit:	Linear /	min.:	DBL_MIN	٧			max.:	DBL M	AX	
	angular		_					_		
	position									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	IOEM	access
										rights
read:		Х	Х				Х	Х	Х	
write:										
attributes:	global	block sear	rch			link				
		Not class	sified			Not cla	ssified			

DOUBLE	\$AA_COUP_CORR[31]		descriptio	
			n:	
description	1:			
\$AA CO	UP CORR[Sn]			
with spin	dle Sn (n: spindle number), example S2	2: spindle 2 or C: axis C		
		·		

The variable serves to execute the functionality "Correcting deviation of synchronism" and provides the compensation value for the position offset of the synchronized spindle coupling.

For the duration (MD 30455 MISC\_FUNCTION\_MASK, bit 7) of the activation of the VDI interface signal DB31..,DBX31.6 'Correct synchronism' for the following spindle with active coupling, the actual values of this spindle are compared with the setpoint values. The difference is the compensation value which can be read with system variable \$AA\_COUP\_CORR.

If the compensation value is known, this value can be written directly into the system variable, too. The VDI interface signal DB31..,DBX31.6 must not be activated in this case!

In the coupling module, the variable \$AA\_COUP\_CORR is considered and results in a correction of the setpoint values.

The compensation value is deleted when switching on the synchronized spindle coupling for the relevant following spindle with COUPON(..) or COUPONC(..) as well as in the case of NC RESET, reference point approach or zero mark synchronization. The system variable returns the value 'zero'.

Depending on the application, the compensation value can also be deleted at an earlier point in time by describing the the variables with the value '0'.

description of field limits:

to be defi	ned								
	CHANAX MACHAX SPINDLE	<			NCK ver	sion:	60.00.0	0	
unit:	Linear / angular position	min.:	DBL_MIN	N		max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х		Х	
write:	Х	Х	Х		Х	Х		Х	7
attributes:	global	block sear	ch	•	link	•			
		Not class	ified		No restrictions				

INT	\$AA AX	AA_AXCHANGE_TYP[31]   descriptio											
									n:				
description													
		_TYP[ <ax< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></ax<>											
		egard to a		ement									
0: Axis as	ssigned to	NC progi	ram										
1: Axis as	ssigned to	PLC, or a	active as o	command	or recipro	cating axis	S						
		as right to			•	Ü							
3: Neutra		3											
		trolled by	PI C										
		as right to		a avie re	nuested fo	or NC prod	aram						
		as right to											
								d for NC r	roarom				
		PLC axis or active as command or reciprocating axis, axis requested for NC program PLC axis or active as command or reciprocating axis, axis requested as neutral axis.											
	assigned PLC axis, in neutral axis status												
_	•												
		d PLC axi	s, controll	ed by the	PLC, in ne	eutral axis	status						
	n of field lin	nits:											
to be defi	TNOV.												
axis	GEOAX					NCK versi	ion:	61.00.00					
identifier:	CHANAX												
	MACHAX												
	SPINDLE	<u> </u>											
unit:		lmin.:	0				max.:	10					
			-	Marina	ı	IDD	_	OPI	OEM				
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights			
read:		Х					Х	Х	Х				
write:													
attributes:	global	block sear	ch		<u> </u>	link	l						
		Not class	sified			Not class	sified						
	l .	1											
INT	\$ΔΔ ΔΧ	CHANGE	STATI3	1					descriptio				
	ΨΛΛ_ΛΛ	OHANGE	_טואונט	٠,					n:				
description	n:								l .				
\$AA AXO	CHANGE	STAT[ <a< td=""><td>xis&gt;]</td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></a<>	xis>]										
		ng axis in		:									
	an be inte	•		-									
		-	annel hut	can heco	me the PI	C. comm:	and or red	ciprocating	avis				
		nterchang		can beco		.0, 00111111	and or rec	procating	axis				
	of field lin		eu										
to be defi													
axis						NCK versi	ion·	61.00.00					
identifier:	GEOAX	,						61.00.00					
	CHANAX												
	MACHA												
	SPINDLE	=											
unit:	_	min.:	0				max.:	2					

read:

write:

attributes: global

run-in

main run runin stp Mrun syn

Χ

block search
Not classified

SA

Not classified

Χ

OPI

OEM

Χ

access rights

INT	\$AA INPOS STAT[31]	descriptio	
		n:	
docorintio	n:		

description:

The variable \$AA\_INPOS\_STAT[<axis>] returns the status with regard to a programmed axis position. In the case of indexing axes the indexing position is being used. In the case of spindles, \$AA\_INPOS\_STAT refers to the spindle position of SPOS/SPOSA/M19. In open-loop speed control mode M3/M4/M5/SPCOF and after M70, the value 0 is always read.

\$AA\_INPOS\_STAT always refers to the programmed position. When end positions change during interpolation (delete distance-to-go, NC Stop, REPOS), the programmed position cannot be reached. At zero speed, the variable then gives the value 0.

Axis positions can be programmed through the part program, synchonized actions, FC18 or as indexing positions.

The variable gives the following values:

- 0: No status available (axis / spindle outside the programmed position)
- 1: Awaiting traversing movement
- 2: Position reached via setpoint
- 3: Position reached via 'Exact stop coarse'
- 4: Position reached via 'Exact stop fine'

Note 1: The status referring to the programmed position is independent of the operating mode (AUTOMATIC, JOG, MDI,  $\dots$ )

Note 2: If other additional position shares (e.g. following axis couplings, corrections, compensations etc.) are switched in, then the programmed position is no longer identical with the machine axis position. During the period of additional traversings, exact stop signals are deleted, and the status can be reduced down to value 1

Note 3: When approaching a position in small exact stop limits, the status can drop again for a short time in relation to the dynamics of an axis / spindle due to overshooting.

Note 4: Function-dependent, the signals 'Spindle in position' and 'Indexing axis in position' are output on the axial VDI interface.

description of field limits:

description	i or neia ii	mits:							
to be defi	ined								
axis identifier:	GEOAX CHANA MACHA SPINDL	X X			NCK ver	sion:	61.00.0	00	
unit:	-	min.:	0		•	max.:	4		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		X	Х	Х	Х	
write:									
attributes:	global	block sear	rch		link	1		I	
	Х	Not class	sified		Not clas				

INT	\$VA_EN	C_ZERO_	MON_ER	R_CNT[					descripti	0
	n,31]								n:	
description	n:								•	•
			coded me							
SVA_EN	C_ZERO_	MON_ER	RR_CNT[n	ax] conta,	ins the cu	rrent nur	nber of de	etected ze	ro mark e	rrors.
Absolute	measurin	a systems	s (\$MA EI	NC TYPE	=4).					
			RR_CNT[n			rrent nur	mber of de	eviations i	n 1/2 coar	se bars
		•	al coupled-	•			position of	controller	clock cycl	е
			ormation of							
osition \	/alue new	ly formed	directly fro	om the abs	solute and	lincreme	ental infor	mation of	the encod	ler.
SVA FN	C ZFRO	MON FR	R_CNT[n	axl is initi	alized to (	) durina	Power ON	I. Reset d	oes not c	ause a
eset.				,		9				
	es mean: er of enco	d a								
i: inumbe ax: Mach		aer								
ax. IVIACII	iiic axis									
			_MONITO	RING and	d alarm 25	5020)				
•	n of field lin									
n:Encode to be def	er number									
axis	GEOAX					NCK ver	sion:	64.00.0	0	
dentifier:		(						04.00.0	· ·	
	MACHAX	<								
	SPINDLE	Ξ								
unit:	-	min.:	0				max.:	INT_MA		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	X	X	X			X	X	X	X	rigitis
write:	^	^							+ ^	
attributes:	global	block sear	rch			link				
		Not class				Not clas	reified			
		INOL CIASS	sineu			inot clas	silleu			

INT	\$VA_AB ,31]	SOLUTE_	_ENC_ER	R_CNT[n					descriptio n:	
values. T	nter is inci his can be	e used to	observe th	ne tranmis	sion of ab	solute va	alues.	transmissio		
reset.		_	K_CNT[II,	axj is iriilia	ilized to d	during F	Power ON	. RESET do	oes not ca	use a
n: Numbe ax: Mach	es mean: er of enco ine axis n of field lin	der								
n:Encode to be def	er number ined									
axis identifier:	GEOAX CHANAX MACHAX SPINDLE	<				NCK ver	sion:	64.00.00		
unit:	-	min.:	0				max.:	INT_MAX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch	•		link	•	•	•	
		Not class	sified			Not clas	ssified			

INT	\$VA_AE	<b>SOLUTE</b>	ENC_ST	ATE[n,31					descriptio	
	]								n:	
description	n:			<u> </u>						
The axial	l variable	\$VA_ABS	OLUTE_E	ENC_STAT	TE[n,ax]	determin	es the last	incurred	error status	of the
		interface.								
The indic		=								
	er of enco	oder								
ax: Mach	ine axis									
Details:										
Bit 0 Int	erface ac	ctive								
Bit 1 Eri	ror during	parity che	eck							
Bit 2 Eri										
Bit 3 Eri	ror bit CF	RC error								
Bit 4 Sta	art bit for	EnDat trar	nsmission	missing						
,										
(see also description	Descript	tion of Fun	ctions ivie	asuring Sy	stem ivic	onitoring.				
n:Encode										
to be def		•								
axis	GEOAX					NCK ver	sion:	64.00.0	0	
identifier:	CHANA	Χ								
	MACHA	Χ								
	SPINDL	E								
unit:	-	min.:	0				max.:	31		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch	1		link	1	1	1	
		Not class	sified			Not clas	ssified			

INT	\$P_DIAM	M_STAT[3	31]						descriptio	
description	). 								n:	
•		I= @D DIA	M CTATI	A V1	410			f 4la a alianaa		
the chan		ie \$P_DIA	IN STAIL	AX] return	is the prog	grammed	i status o	f the diame	ter progra	mming in
						:4 l l:				
				er program	nming is b	it-coaea:				
		r programi								
		r programı					1 : C DITO			
				neaning th		evaluate	d it BII0	= 1:		
				rogrammir						
				amming ad						
				mensions						
				ameter, in	crementa	l dimensi	on in the	radius		
		COF not a								
-	_	COF activ	/e							
•	n of field lin	nits:								
to be def	ined									
axis	GEOAX					NCK vers	sion:	65.00.00		
identifier:	CHANA	(								
	MACHA	X								
	SPINDLE									
unit:	-	min.:	0			•	max.:	15		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х				
write:										
attributes:	global	block sear	rch	I	I	link		I	1	
		Not class	sified			Not clas	sified			

	\$AA_DIAW_STAT[31]								n:				
description	n:				l				1	1			
_		e \$AA_DI	AM_STAT	[AX] retur	ns the act	tive main ı	run status	of the diar	meter prog	gramming			
in the cha	-	<b>.</b> ()											
			neter prog		s bit-code	a:							
			ming not a										
			ming activ				1 : C D I T O						
			/ have a m			evaluated	) It BI I 0 =	1:					
			iameter pı										
			eter progra										
		osolute and incremental dimensions in the diameter											
		bsolute dimension in the diameter, incremental dimension in the radius											
		COF not a											
		COF activ	⁄e										
'		of field limits:											
to be defi													
identifier:	GEOAX	,				110111010101		65.00.00					
	CHANAX												
		ACHAX											
	SPINDLE		1				I						
unit:	-	min.:	0				max.:	15	IOEM				
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	access rights				
read:	Х	Х	Х			Х	Х	Х		riginio			
write:													
attributes:	global	block sear	rch			link	•	•					
	Х	Not class	sified			Not class	sified						
	l	l				ı				]			
INT	\$P_SCC	_STAT[31	]						descriptio				
docorintion		•	-						n:				
description		. AD 00	O OTATIA					U	2004/000/	_			
									961/G962	2			
			his has be				d by SCC	[AX] .					
			G962 ass			d:							
			d to G96/		12								
			G96/G96	1/G962									
· ·	n of field lin	IIIS.											
to be defi						INCK versi	ion:	05.00.00					
identifier:	GEOAX	,				INCK VEISI	1011.	65.00.00					
identifier.		CHANAX											
	MACHAX												
	SPINDLE												
unit:	-	min.:	0				max.:	15					
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access			
read:	Х					X			<del>                                     </del>	rights			
1	. ^	1	1	1	1	. ^	1	1	1	1			

write:

attributes: global

block search
Not classified

INT	\$AA_SC	CC_STAT[	31]						description	)
			-						n:	
description										
		ole \$AA_S						e G96/G96	61/G962 a	ssignment
		s has beer					λXJ.			
		G96/G961				d:				
		not assigne			52					
		assigned to	G96/G96	51/G962						
description		mits:								
to be def						INCK ver	oion:	1	_	
identifier:	GEOAX					NCK ver	SIOH.	65.00.0	0	
identinei.	CHANA									
	MACHA									
	SPINDL	Ε								
unit:	-	min.:	0				max.:	15		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	V		V			V		V		rights
write:	Х	Х	Х			Х	X	X		
attributes:	global	block sea	rch			link				
	X	Not class	sified			Not clas	ssified			
									•	
INT	\$AA_CI	PNACTFA	[31]						description:	
description	l n:								[III.	
Still to be	defined									
description		mits:								
to be def	ined									
axis	GEOAX					NCK ver	sion:	65.00.0	0	
identifier:	CHANA								•	
	MACHA									
	SPINDL									
unit:	_	min.:	0				max.:	INT MA	λX	
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	TOEM	access
		inaii ran	ruiiii otp	ivii dii oyii			0, 1		02	rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sea	rch	1	L	link				
	X	Not class	sified			Not clas	ssified			

DOUBLE	\$AA CP	FCMDPT	[31]					descriptio		
			,					n:		
descriptio										
Still to be										
	n of field lin	nits:								
to be def										
axis	<b>GEOAX</b>				NCK vers	sion:	65.00.00			
identifier:	CHANA	(								
	MACHAX									
	SPINDLE	Ē								
unit:	Linear /	min.:	DBL MI	V		max.:	DBL MA	X		
	angular									
	position									
	run-in	main run	runin stp	Mrun syn	IPP	SA	OPI	IOEM	access	
									rights	
read:	Х	Х	Х		Х	Х	Х	Х		
write:										
attributes:	global	block sear	ch		link	•				
	Х	Not class	sified		Not clas	sified				
DOUBLE	\$AA_CP	FCMDVT	[31]					descriptio		
								n:		
descriptio										
Still to be		-14								
-	n of field lin	nits:								
to be def					INIOI		1			
axis identifier:	GEOAX				NCK vers	sion:	65.00.00			
identiller.	CHANA									
	MACHAX									
	SPINDLE									
unit:	Linear /	min.:	DBL_MIN	٧		max.:	DBL_MA	X		
	angular									
	speed									
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access	
									rights	
read:	Х	Х	Х		Х	Х	Х	Х		
write:										

Not classified

attributes: global

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block search

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	MACHA										
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						Not classified					

DOUBLE	\$PA CP	LNUM[31	.311						descriptio	
			,- <u>.</u>						n:	
descriptio										
Still to be	e defined n of field lin	nito								
		IIIS.								
axis nam										
axis	GEOAX					NCK ver	rsion.	66.00.0	<u> </u>	
identifier:	CHANA	(						00.00.0	<i>,</i> 0	
	MACHA									
	SPINDLE									
unit:	Linear /	min.:	DBL_MIN	.1		<u> </u>	max.:	DBL M	1.0 🗸	
	angular		DDF_INIII	N				DDL_IV	IAA	
	position									
	run-in	main run	runin stp	Mrun syn	1	IPP	SA	OPI	IOEM	access
	l'an in	IIIaiii Taii	танит окр	Ivii ari Syri		.	O/ C		OLIVI	rights
read:	Х					Х				
write:										
attributes:	global	block sear	rch			link				
		Not class	eified			Not clas	ceified			-
		INUL CIASS	silleu			INUL CIA	SSIIICU			
DOUBLE	¢DA CD	LDEN[31,	241		1				descriptio	1
DOOBLE	\$PA_CP	LDEN[31,	,31]						n:	
descriptio	n:				ı					
Still to be										
	n of field lir	nits:								
axis nam										
to be def						INIOI				
axis identifier:	GEOAX	_				NCK ver	rsion:	66.00.0	)0	
identiner.	CHANA									
	MACHA									
.,	SPINDLE									
unit:	Linear /	min.:	DBL_MIN	1			max.:	DBL_N	IAX	
	angular									
	position									
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	Х					Х				rights
write:		<del> </del>				<u> </u>		_		
attributes:	alobal	block sear	reh			link				-
attributes.	giobai									
1	1	1 5 1 4 1								
		Not class	sified			Not clas	ssified			

INT	\$PA_CP	LCTID[31	,31]						descript n:	0	
description	n:								1		
Still to be	defined										
description	n of field lir	nits:									
axis nam	ie										
to be def	ined										
axis	<b>GEOAX</b>					NCK ver	sion:	66.00.0	00		
identifier:	CHANA	(									
	MACHA	Χ									
	SPINDLI	Ε									
unit:	-	min.:	INT_MIN			I.	max.:	INT_M	AX		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access	
										rights	
read:	Х					Х					
write:											
attributes:	global	block sear	rch		I	link					
		Not class	sified			Not clas	ssified				
		II.				l					
STRING	\$PA CP	LSETVAL	[31.31]						descript	0	
									n:		
description											
Still to be		-14									
-	n of field lir	nits:									
axis nam											
to be def						NCK ver	cion:	100.00.4			
identifier:	GEOAX	,				INCK VEI	51011.	66.00.0	)()		
identinor.	CHANA										
	MACHA)	=									
!4.	SPINDLI						T				
unit:	-	min.:					max.:				
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х					Х					
write:											
attributes:	global	block sear	rch	l	l	link					
		Not class	sified			Not clas	ssified				

# 1.1.26 Safety Integrated

INT	\$A_STC	PESI							descriptio	
	-								n:	
description	n:									
\$A_STO	PESI									
Current S	Safety Int	egrated St	op E for a	ny axis:						
Val. 0:	No S	top E		-						
Value no	t 0: For c	ne of the a	ixes, a Sto	op E is cur	rently acti	ve				
axis						NCK ver	sion:	48.00.00	)	
identifier:										
unit:	-	min.:	INT_MIN			•	max.:	INT_MA	X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	X	X	Х			Х	Х	X	X	
write:										
attributes:	global	block sear	ch	1	I	link				
		Not class	ified			Not clas	ssified			

BOOL	\$A_INS NBITS]	BE[SF_MA)	KNUM_DI	G_EXT_I					descripti n:	0
descriptio	n:								•	•
\$A INSE	[n]									
n = bit nu	ımber (1	64)								
External	NCK SP	L input sigr	nal							
NCK SP	L interfac	ce for SPL of	control sig	nal I/O into	erface log	ic				
descriptio	n of field l	imits:								
n: Numb	er of inpu	ut 1								
axis identifier:						NCK ver	sion:	10.00.0	0	
unit:	-	min.:	FALSE			III	max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch	1	1	link			1	
		Not class	sified			Not clas	ssified			

INT	\$A_INSI	ED[SF_M/	_MUNXA	IG_EXT_	-				descripti n:	0
description		<b>50</b> ]								
\$A_INSE		ımbar (1.0	\							
n – doub	ieword ni	ımber (1,2	)							
Cutomod	NOK ODI	innut sinu	- ala (20 hi	41						
		_ input sigr e for SPL (			orfoso los	i o				
description	n of field li	# 101 SPL (	control sig	nai i/O int	errace log	IIC				
		t word 1 -								
axis	ст от птри Т	t word i -				NCK ver	sion.	10.00.00	1	
identifier:						Troit voi	0.011.	10.00.00	J	
unit:	-	min.:	INT MIN				max.:	INT MA	X	
	run-in	main run	runin stp	Mrun syn		IPP	SA	OPI	OEM	access
										rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch		1	link				+
		Not class	sified			Not clas	sified			
BOOL	\$A INS	EP[SF_MA	XNUM C	IG EXT					descripti	0
	INBITS]		_						n:	
description	n: -				1					
\$A INSE	P[n]									
n = bit nu		.64)								
ii Diciio										
Image of	an exteri	nal PLC SI	PL input s	ignal						
		for SPL of	•	•	erface log	ic				
					oa.oo.g.					
Readable	e only du	ing the SF	L start-un	phase						
	,			p						
description	n of field lii	mits:								
n: Numbe	er of inpu	t 1								
axis						NCK vers	sion:	10.00.00	)	
identifier:										
unit:	-	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
rood:								.,		rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes.	lalohal	block sear	rch			link				

Not classified

Not classified

\$A\_INSEPD[SF\_MAXNUM\_DIG\_EX

1.1 List of system variables

	T_INWC	DRDSJ							11.	
descriptio					•				•	
\$A_INSE										
n = doub	leword n	umber (1,2	2)							
	4			-l- (00 l-:t)						
		PLC SPL				io				
PLC SPL	_ interiace	e for SPL o	control sig	nai i/O inte	errace log	IC				
Readable	e only du	ring the SF	PL start₋ur	nhase						
- Cadabi	o omy da	inig the or	L otalt ap	pridoc						
descriptio	n of field li	mits:								
n: Numb	er of inpu	t word 0 -								
axis						NCK vei	rsion:	10.00.0	0	
identifier: unit:		min.:	INIT MAIN	1			max.:	INIT NA		
unit.	-		INT_MIN		ı	IDD	SA	INT_MA	TOEM	1
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	X	X	Х			X	X	X	X	riginto
write:	1	, ,				+		1	+	
attributes:	dlobal	block sea	rch			link				
attributes.	giobai									
		Not class	sified			Not cla	ssified			
BOOL	I	rse[sf_m	IAXNUM_	DIG_EXT					descriptio	
	_OUTBI	ITS]							n:	
descriptio										
\$A_OUT		<b>.</b>								
n = bit ni	umber (1.	64)								
Extornal	NCK SDI	_ output sid	anal							
		ະ output ຣເເ e for SPL ເ	,	nal I/O inte	rface loa	ic				
NOIX OF	Linteriae	C IOI OI L	status sigi	iai i/O ii ito	riacc log					
Can be v	vritten on	ly from SP	L (SAFE.S	SPF progra	am)					
	n of field li		,	1 3						

NCK version:

PP

link

Χ

Χ

Not classified

max.:

Χ

Χ

SA

10.00.00

Χ

OEM

Х

Χ

access rights

7

TRUE

OPI

n: Number of output 1 - ...

run-in

Х

Χ

min.:

main run

Х

Χ

block search

Not classified

**FALSE** 

runin stp

Х

Χ

Mrun syn

identifier: unit:

read:

write:

attributes: global

INT		TSED[SF_ WORDS]	MAXNUN	I_DIG_EX				n:	10
description	n:							- N	
\$A OUT	SED[n]								
n = doub	leword n	umber (1,2	2)						
External	NCK SP	L output si	gnals (32-	·bit)					
NCK SPI	L interfac	ce for SPL	status sig	nal I/O interface	e logic				
			L (SAFE.	SPF program)					
description									
	er of out	put word 1							
axis identifier:					NCK ver	sion:	10.00.0	00	
unit:	-	min.:	INT_MIN	1	<b>'</b>	max.:	INT_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		X	Х	Х	Х	
write:	Х	Х	Х		X	Х		Х	7
attributes:	global	block sea	rch	L L	link		1	I	

BOOL	\$A_OUTSEP[SF_MAXNUM_DIG_EX	descriptio	
	T_OUTBITS]	n:	

description:

\$A\_OUTSEP[n]

n = bit number (1...64)

Image of an external PLC SPL output signal

PLC SPL interface for SPL status signal I/O interface logic

Readable only during the SPL start-up phase

description of field limits:

n: Number of output 1 - ...

axis identifier:					NCK ver	sion:	10.00.0	0	
unit:	-	min.:	FALSE			max.:	TRUE		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х	Х		Х	Х	Х	Х	
write:									
attributes:	global	block sea	rch		link	-1	II.		
		Not class	sified		Not clas	ssified			

\$A\_OUTSEPD[SF\_MAXNUM\_DIG\_E

1.1 List of system variables

descriptio

	XT_OUT	WORDS]							n:	
description										11
\$A_OUT										
n = doubl	leword nu	mber (1,2	)							
_										
		PLC SPL								
PLC SPL	ınterface	for SPL s	tatus sign	al I/O inte	rface logic					
D   -   -		:	N -44							
Readable	e only dur	ing the SF	'L Start-up	pnase						
description	of field lin	nits:								
		ut word 0 -	_							
axis	or outp	ut Word 0	•••			NCK ver	sion:	10.00.00		
identifier:										
unit:	-	min.:	INT_MIN				max.:	INT_MA	·Χ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	.,	.,	.,						.,	rights
	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch			link				
		Not class	sified			Not clas				
	l	ı								I
BOOL	\$A INSI	SF MAX	NUM DIG	INT IN					descriptio	
	BITS]	-	_						n:	
description	n:				1					I
\$A_INSI[	n]									
n = bit nu	ımber (1	.64)								
		input sign								
Interface	to the sta	tus signal	s of the ax	kial NCK n	nonitoring	channel	S			
description										
n: Numbe	er of Input	. 1				INCK ver	sion:	10.00.00	<u> </u>	
identifier:						NOIX VOI	01011.	10.00.00	J	
unit:	-	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch	ı	ı	link	ı	· ·		
		Not class	sified			Not clas	sified			

INT	NWORE	ID[SF_MA DS]	XNUM_D	IG_INT_I					n:	
descriptio	n:								•	•
\$A_INSII										
n = doub	leword n	umber (1,2	)							
		input sign		:) xial NCK mo	onitorina	ohonnol	0			
descriptio	n of field li	mits:	S OI LITE A	kiai NCK III	ornioning	CHAIIIIE	3			
•		t word 1 -								
axis		t word i	•••			NCK ver	sion:	10.00.0	0	
identifier:								10.00.0	•	
unit:	-	min.:	INT_MIN			•	max.:	INT_MA	١X	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:										
attributes:	global	block sear	rch	<u> </u>		link				
		Not class	sified			Not clas	eified			
		NOT Class	Silieu			INOL CIAS	Silicu			
BOOL	¢A INC	IP[SF_MA	VALUM D	C INT I					descriptio	
	NBITS]	IP[SF_IVIA	VIACINI_D	IG_INT_I					n:	
descriptio										
\$A_INSII		C4\								
n = bit nu	ımber (1.	64)								
Image of	an interr	nal PLC SP	l innut si	nnal						
				xial 611D m	onitoring	channe	ls			
		a.cao o.ga.				, 0				
Readable	e only du	ring the SF	L start-up	phase						
-l	f f: -   -   1:	:4								
descriptio										
n: Numb	er of inpu	τ1				NCK ver	eion:	40.00.0	•	
identifier:						NOR VEI	51011.	10.00.0	0	
unit:	-	min.:	FALSE			<u>l</u>	max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	X	Х			Х	X	Х	X	
write:	1	1	<u> </u>				1	+		
attributes:	global	block sear	rch	1		link				
	1-	1				l				

Not classified

Not classified

descriptio

INT		SIPD[SF_M	AXNUM_	DIG_INT_					descriptio n:		
	INWOR	RDS]							l''-		
descriptio											
\$A_INSII											
n = doub	leword n	number (1,2	)								
		PLC SPL in									
Interface	to the st	tatus signal	s of the a	xial 611D	monitoring	g channe	els				
Readable	e only du	uring the SF	L start-up	phase							
descriptio											
	er of inp	ut word 1									
axis identifier:						NCK ver	sion:	10.00.0	0		
unit:	-	min.:	INT_MIN	I		1	max.:	INT_M			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х			Х	Х	Х	Х		
write:											
attributes:	global	block sear	rch	I.	<u> </u>	link					
		Not class	sified			Not clas	ssified				
200											
BOOL	\$A_OU OUTBI	ITSI[SF_M <i>i</i> TS]	_MUNXA	DIG_INT_					descriptio n:		
descriptio	n:				I.					1	
\$A_OUT	SI[n]										
n = bit nu	ımber (1	64)									
	`	,									

Internal NCK SPL output signal

Interface to the control signals of the axial NCK monitoring channels

Can be written only from SPL (SAFE.SPF program) description of field limits:

n: Number of output 1 - ...

		Not class	sified		1	Not clas	ssified			
attributes:	global	block sear	rch	•	I	link	-			
write:	Х	Х	Х			Χ	Х		Х	7
read:	X	Х	Х			Χ	X	X	Х	
	run-in	main run	runin stp	Mrun syn	F	PP	SA	OPI	OEM	access rights
unit:	-	min.:	FALSE				max.:	TRUE		
identifier:					ļ,	NCK ver	Sion:	10.00.00	)	

INI		TSID[SF_N /ORDS]	MAXNUM_	_DIG_INT				n:	10
descriptior	1:			•					
A_OUT	SID[n]								
n = doubl	eword n	umber (1,2	)						
		_ output sig ontrol signa	•	•	nitoring channe	els			
			L (SAFE.S	SPF program)					
descriptior	of field I	imits:							
n: Numbe	er of out	out word 1							
axis					NCK ver	sion:	10.00.0	0	
identifier:		Tanaka .	1						
unit:	-	min.:	INT_MIN			max.:	INT_M	4X	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
ead:	Х	Х	Х		Х	Х	Х	X	
write:	Х	Х	Х		X	Х		Х	7
attributes:	global	block sear	ch		link				
		Not class	sified		Not clas	sified			
		•			, 				•
BOOL	\$A_OU	TSIP[SF_N	MUNXAN	_DIG_INT			•	descript n:	io

BOOL	\$A OUTSIP[SF MAXNUM DIG INT	descriptio	
	_оитвітѕј	n:	

description:

\$A\_OUTSIP[n]

n = bit number (1...64)

Image of an internal PLC SPL output signal

Interface to the control signals of the 611D monitoring channels

Readable only during the SPL start-up phase

description of field limits:

n: Number of output 1 - ...

axis identifier:						NCK vers	sion:				
unit:	-	min.:	FALSE				max.:	TRUE			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х			Х	Х	Х	Х		
write:											
attributes:	global	block sear	arch			link					
		Not class	t classified			Not classified					

INI		TSIPD[SF <sub>.</sub> Words]	_MAXNUI	M_DIG_IN					n:			
descriptio												
\$A_OUT												
n = doub	leword n	umber (1,2	!)									
				nals (32-bit)								
Interface	to the co	ontrol signa	als of the 6	311D monit	oring cha	nnels						
Readable	e only du	ring the SF	PL start-up	phase								
descriptio	n of field l	imits:										
	er of outp	out word 1										
axis identifier:						NCK ver	sion:	10.00.0	0			
unit:	-	min.:	INT_MIN	1			max.:	INT_MA	λX			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights		
read:	Х	Х	Х			Х	Х	Х	Х			
write:												
attributes:	tributes: global block search					link	•	•	•			
		Not class	sified			Not classified						
BOOL	¢Λ ΜΛ	RKERSI[S	E MAYN	IIM MAD					descriptio			
	KER]	IXIXEIXOI[O	I _IVIAAIN	OW_WAR					n:			
descriptio									•			
\$A_MAR												
n = bit nu	ımber (1	64)										
NCK SPI	L flags											
Can be v	vritten on	lly from SP	L (SAFE.	SPF progra	m)							
n: Numb												
axis	I III					NCK ver	sion:	10.00.0	0			
identifier: unit:		min.:	Tear of				max.:					
unit.	-		FALSE	IMaria ara I				TRUE	IOEM	T		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights		
read:	Х	Х	Х			Х	Х	Х	Х			
write:	Х	Х	Х			Х	Х		Х	7		
attributes:	global	block sea	rch			link	•	•	•	1		

Not classified

Not classified

INT	\$A_MAF	RKERSID[	SF_MAX	NUM_MA					descripti	0
	RKER_V	VORDS]							n:	
descriptio									•	
	KERSID[i									
n = doub	leword nu	ımber (1,2	)							
NCK CDI	l flog wor	4 (30 Pit)								
NUK SPI	L flag wor	u (32-bit)								
Can be v	vritten onl	y from SP	L (SAFE.S	SPF progra	m)					
descriptio	n of field lin	nits:	•	<u> </u>						
n: Numb	er of flag v	word 1								
axis						NCK ver	sion:	13.09.0	0	
identifier: unit:		Imin.:					Imax.:	15.17. 5.4	A > /	
uiiit.	-		INT_MIN					INT_M		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	X	X	X	rigitto
write:	Х	Х	Х			Х	X		X	7
attributes:	global	block sear	ch			link				
		Not class	sified			Not clas	ssified			
	1	1				<u>l</u>				
BOOL	\$A MAF	RKERSIP[	SF MAXI	NUM MA					descripti	0
	RKER]	_							n:	
descriptio	n:								I	<u> </u>
	KERSIP[ı									
n = bit nu	umber (1	.64)								
lmaga of		Ol floo								
iiilage oi	a PLC SI	-L llay								
Readable	e only dur	ing the SF	L start-up	phase						
d a a a win ti a	. af fialal lia	-:4								
	n of field lin									
n: Numb	er of flag	1				NCK ver	sion:	10.00.0	10	
identifier:								10.00.0	10	
unit:	-	min.:	FALSE			•	max.:	TRUE		

run-in

Χ

read:

write:

attributes: global

main run

block search

Not classified

runin stp

Χ

Mrun syn

OPI

Χ

Χ

Χ

Not classified

link

OEM

Χ

access rights

descriptio \$A\_MARKERSIPD[SF\_MAXNUM\_M n: ARKER\_WORDS] description: \$A\_MARKERSIPD[n] n = doubleword number (1,2)Image of a PLC SPL flag word (32-bit) Readable only during the SPL start-up phase description of field limits: n: Number of flag word 1 - ... axis NCK version: 13.09.00 identifier: unit: min.: max. INT MIN INT MAX run-in main run runin stp Mrun syn SA OPI OEM access rights read: Χ Χ Х Χ Χ Χ Χ write: attributes: global block search link

Not classified

DOUBLE |\$A\_TIMERSI[SF\_MAXNUM\_TIMER]

Not classified

descriptio

description:

\$A\_TIMERSI[n]

n=timer number (1...16)

SPL timers

Unit in seconds

The time is counted internally in multiples of the interpolation cycle.

Incrementation of the time variable is started by value assignment

\$A\_TIMERSI[n]=<start value>

Incrementation of a time variable is stopped through assignment of a negative value

\$A\_TIMERSI[n]=-1

The current timer count can be read while the time variable is running or stopped. When the time variable is stopped by assigning -1, the last count value remains stored in the variable and can continue to be read. The timers are not stopped by a channel/mode group reset.

description of field limits:

n: Number of timer 1 - ..

axis						NCK ver	sion:	10.00.00			
identifier:									•		
unit:	-	min.:	DBL_MI	V			max.:	DBL_MAX			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х			Х	Х	Х	Х		
write:	Х	Х	Х			Х	Х		Х	7	
attributes:	global	block sear	block search				link				
		Not class	sified			Not classified					

INT \$A\_STATSID descriptio n:

description:

\$A\_STATSID

Status of data cross-check between NCK and PLC (SPL DCC)

if the value does not equal zero, an error has occurred in the SPL DCC.

Meaning

Bit 0 ... 27: DCC error in input/output signals or flags

Bit 28:DCC error "SPL protection status" (\$MN\_PREVENT\_SYNACT\_LOCK status not equal to DB18.DBX36.0)

Bit 29:Time error during communication between NCK and PLC (all ext. NCK SPL outputs are set to zero in 5 sec. and the PLC switches to Stop)

Bit 30: Stop signaled from PLC to NCK

axis identifier:					NCK ve	rsion:	13.03.00			
unit:	-	min.:	INT_MIN	I		max.:	INT_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х		Х	Х	Х	Х		
write:										
attributes:	global	block sea	rch	<u> </u>	link	link				
		Not class	sified		Not cla	Not classified				

BOOL   \$A_CMDSI[SF_MAXNUM_CMD_MA	desc	criptio
RKER]	n:	

description:

\$A\_CMDSI[n]

n = bit number (1..0.16)

Control word for data cross-check between NCK and PLC (SPL DCC).

n = 1: Increase time for signal change monitoring to 10 s.

Can be written only from SPL (SAFE.SPF program)

description of field limits:

n: Number of control signal for SPL data cross-check

identifier:					NCK ver	'sion:	13.03.0	0		
unit:	_	min.:	FALSE		l	max.:	TRUE	RUF		
	run-in	main run		Mrun syn	PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х		Х	Х	Х	Х	Ingilio	
write:	Х	Х	Х		Х	Х		Х	7	
attributes:	global	block sea	rch		link	•	•	•		
		Not class	sified		Not clas	ssified				

INT	\$A_LEV	ELSID			descriptio n:						
description	n:								I		
\$A_LEVE	ELSID										
		vel for sign	al change	monitorin	ng during	data cros	s-check b	etween N	CK and PL	.C SPL	
(SPL DC											
		ber of sign									
		dy zero if a					ne NCK ar	nd PLC bu	it the allow	ed	
axis	ncy time	for the sign	iais (2 sec	) nas not	yet expire	ea. INCK ver	cion:	140.00.0			
identifier:						INCK VEI	51011.	13.03.0	Ü		
unit:	-	min.:	INT MIN			1	max.:	INT MA	·Χ		
	run-in	main run	main run   runin stp   Mrun syn   PP SA OPI   OEM						OEM	access	
										rights	
read:	X	X	Х			X	X	X	Х		
write:											
attributes:	global	block sear	rch		1	link	ı	I			
		Not class	rified			Not clas	ssified				
	<u> </u>	140t Glass	mea			140t Glas	Joined				
INT	\$A XFA	ULTSI							description	)	
-1! <b>-</b> !	_								n:		
description											
\$A_XFAU	ULISI										
Informati	on on Sta	p F for a S	Safaty avid								
		l value erro			d by the c	lata cros	s-chack he	atwoon NC	'K and 61	1D for any	
Safety ax		i value circ	or rias bec	iii actooto	a by the c	iata cros.	S CHOOK DO	Stween 140	or and or	ib ioi aii,	
		on any ax	is has bee	n detecte	d by the d	lata cross	s-check be	etween NC	K and 611	D and the	
		e triggering									
		P SWITC				J	•				
axis	_	_		,		NCK ver	sion:	45.00.0	0		
identifier:		Laster	1				Tona and a				
unit:	-	min.:	0				max.:	3			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х	Х	Х			Х	Х	Х	Х		
write:											
attributes:	global	block sear	ch	<u>l</u>	<u>I</u>	link		L	_1		
	Not classified					Not classified					

	\$A_PLC MARKEI	SIIN[SF_N R]	/IAXNUM	_PLCIN_					descriptio n:	
description	1:								.1	
\$A PLCS	SIIN[n]									
n = bit nu		0.32)								
	`	,								
Single-ch	annel sig	ınals from l	PLC SPL	(DB18) to	NCK SP	L.				
Applicatio										
		= \$A_PLC	CSIIN[1]	; Signal fro	om PLC-S	SPL				
description										
	er of signa	al 1 fro	m PLC to	NCK						
axis						NCK ve	rsion:	45.00.00		
identifier: unit:		Imin.:	EALOE				max.: TDITE			
	-		FALSE	T				TRUE	10514	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х	Х			Х	Х	Х	Х	
write:		1				1		1		
attributes:	global	block sear	ch		<u> </u>	link				<u> </u>
		Not class	ified							
500					<del></del>					-
		SIOUT[SF	_MAXNU	M_PLCO					description:	
	UT_MAF	KEKJ								
description										
\$A_PLCS										
n = bit nu	mber (1	0.32)								
Single-ch	annel sig	ınals from I	NCK SPL	to PLC SI	PL (DB18	3).				
Application		0.4 1.4.4.1		];Signal	t- DI O O	DI				

#### description of field limits:

n: Number of signal 1 - ... from NCK to PLC

Can be written only from SPL (SAFE.SPF program)

axis					NCK vers	sion:	45.00.00	)	
identifier:									
unit:	-	min.:	FALSE		•	max.:	TRUE		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Χ	Х	Χ		Х	Х	Х	Х	
write:	Х	Х	Х		Х	Х		Х	7
attributes:	global	block sear	ch		link	•	•	•	
		Not class	ified		Not clas				

read:

write:

attributes: global

Χ

Χ

block search

Not classified

Χ

					I de a avientia l							
DOUBLE	\$VA_IS[	31]							descriptio n:			
description	n:								II.			
\$VA_IS[												
X = axis												
Safe actu	ual positio	n for NCK	monitorin	g channel								
description	n of field lin	nits:		<u> </u>								
to be def	ined											
axis	GEOAX					NCK vers	ion:	06.00.00				
identifier:	CHANA	(										
	MACHAX	<										
	SPINDLE	Ξ										
unit:	Linear /	min.:	DBL_MIN	1			max.:	DBL_MA	λX			
	angular		_					_				
	position											
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access		
										rights		
read:	Х	Х	Х			Х	Х	Х	Х			
write:												
attributes:	global	block sear	rch	I	I.	link	1		<u>.</u>			
		Not class	sified			Not class	sified					
INT	\$VA_ST	OPSI[31]							descriptio			
description	n:								n:			
-												
\$VA_STO												
A - axis	identillei											
Current S	Safety Inte	arated St	on for the	relevant a	vis							
Value M		grateu ot	op ioi tiic	icicvant a	INIS							
-1No Sto												
0Stop A	Ρ											
1Stop B												
2Stop C												
3Stop D												
4Stop E												
5Stop F												
10Test S	top NC											
11Test e	xt. pulse s	suppressio	on									
	n of field lin	nits:										
to be def												
axis	GEOAX					NCK vers	ion:	48.00.00	)			
identifier:	CHANAX							1				
	MACHAX	<u> </u>						<u> </u>				
unit:	-	min.:					max.:	7				
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access		
I					1					rights		

Χ

Χ

Not classified

Х

Χ

INT	\$VA_XF	AULTSI[3	1]						description	
			-						n:	
description	<b>1</b> :									
\$VA_XFA	AULTSI[X]									
X = axis	identifier									
Informati	on about S	Safety Inte	egrated St	op F for th	nis axis:					
						ata cross	-check be	tween NO	CK and 61	1D.
									and the w	
	,			E_STOP_						
	of field lim		//// \ <u>_</u>	0101_	OWITOIL	_ ' ' ' ' ' ' ' '	, 13 14111111	g or mas v	схрігса.	
to be def										
axis						NCK vers	ion.	45.00.0	^	
identifier:	GEOAX	,				TOR VOIS		45.00.0	U	
lacrimici.	CHANAX									
	MACHAX	=								
	SPINDLE									
unit:	-	min.:	0				max.:	3		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	Х				Х	Х	Х	Х	
write:										
attributes:	global	block sear	ch	•		link	•	•	•	
		Not class	ified			Not class	sified			

# 1.1.27 User-specific system variables

DOUBLE	SYG_R	M[n]							descripti	0
									n:	
description	า:									
SYG_RM	l[n] Syna	act Real pa	rameters i	in GUD2 bl	lock.					
A protect	ion level	can be ass	signed to t	the parame	eters with	REDEF.				
In order t	o create	the parame	eters, at le	east four						
GUD bloc	cks must	be activate	ed with M	D \$MN MN	M NUM (	GUD M	ODULES.			
description	n of field I	imits:								
The max	imum nu	mber of Sy	nactGUD	Real is de	fined in m	nachine o	data			
axis						NCK ver	sion:	57.00.0	0	
identifier:										
unit:	-	min.:	DBL_MII	N			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	X				Х	X	X	X	
write:	Х	Х				Х	Х	Х	Х	7
attributes:	global	block sear	rch	I I		link	1	1	-	
		Program	sensitive			No rest	rictions			

INT	SYG_II	/[n]						descript n:	10
description	n:			*					•
SYG IM	n] Synad	ct Integer p	arameters	in GUD2 blo	ock.				
A protect	ion level	can be ass	signed to t	the paramete	ers with REDE	F.			
In order t	o create	the parame	eters, at le	east four					
GUD bloc	cks must	be activate	ed with MI	D \$MN_MM_	NUM_GUD_N	ODULES.			
description	n of field l	imits:							
The maxi	mum nu	mber of Sy	nactGUD	Integers is d	lefined in macl	nine data			
axis				-	NCK ve	ersion:	57.00.0	0	
identifier:									
unit:	-	min.:	INT_MIN	I		max.:	INT_M	٩X	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			X	Х	Х	Х	
write:	Х	Х			X	Х	Х	X	7
attributes:	global	block sear	ch		link	•	•	•	
		Program	sensitive		No res	trictions			

ROOF	SYG_B	M[n]							descripti	10
									n:	
description	า:									
SYG_BM	I[n] Syna	act Boolean	paramete	ers in GUD	2 block.					
A protect	ion level	can be ass	signed to t	the parame	eters with	<b>REDEF</b>				
•		the parame	•							
		t be activate	,		M NUM (	GUD M	ODULES.			
description			********	· · · · · · · · · · · · · · · · · · ·						
The maxi	mum nu	ımber of Sy	nactGUD	Boolean p	arameter	s is defir	ned in ma	chine data	1	
axis						NCK ver	sion:	57.00.0	0	
identifier:										
unit:	-	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х				Х	Х	Х	Х	
write:	Х	Х				Х	Х	Х	Х	7
attributes:	global	block sea	rch			link	1			
		Program	sensitive			No rest	rictions			

AXIS	SYG A	M[n]						descript	0
								n:	
description	n:								
SYG_AM	1[n] Syna	act axis par	ameters ir	n GUD2 block					
A protect	ion level	can be as	signed to t	the parameter	s with REDEF				
In order t	o create	the param	eters, at le	east four					
GUD blo	cks mus	t be activat	ed with M	D \$MN MM N	NUM GUD M	ODULES.			
description				<u> </u>					
The max	imum nu	ımber of Sy	nactGUD	axis is define	d in machine d	lata			
axis		,			NCK ver		61.00.0	00	
identifier:									
unit:	-	min.:				max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			X	Х	Х	Х	
write:	Х	Х			X	Х	Х	Х	7
attributes:	global	block sea	rch	1	link		1	I	
		Program	sensitive		No rest	rictions			

CHAR	SYG_C	:M[n]						uescripti	٥
december 41 e.								n:	
description	1:								
SYG_CM	1[n] Syna	act char par	ameters i	n GUD2 block.					
A protect	ion level	can be ass	signed to t	the parameters	with REDEF				
In order t	o create	the parame	eters, at le	east four					
GUD bloc	cks must	t be activate	ed with M	D \$MN_MM_N	UM GUD M	ODULES.			
description									
The max	imum nu	ımber of Sy	nactGUD	char is defined	d in machine o	data			
axis					NCK ver	sion:	61.00.0	0	
identifier:									
unit:	-	min.:				max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			X	Х	Х	Х	
write:	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sear	ch		link				
		Program	sensitive		No rest	rictions			

STRING	SYG_S	M[n]						descript n:	io
description	n:			1				l .	
SYG_SM	1[n] Syna	act paramet	ter string i	n GUD2 block.	The maximu	m string le	ength has	been limit	ed to 31
characte	rs.								
A protect	ion level	can be ass	signed to t	the parameters	with REDEF				
		the param	,						
			ed with M	D \$MN_MM_N	UM_GUD_M	ODULES.			
description									
	imum nu	ımber of Sy	nactGUD	string is define					
axis identifier:					NCK vei	rsion:	61.00.0	00	
unit:	-	min.:			<u>-</u>	max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			Х	Х	Х	Х	
write:	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sea	rch	, ,	link	1		1	
		Program	sensitive		No rest	rictions			

DOUBLE	SYG RU	J[n]							description	וֹכ
									n:	
description	1:									
SYG_RU	[n] Synac	t Real par	ameters i	n UGUD b	lock.					
A protect	ion level o	can be ass	signed to t	the parame	eters with	REDEF.	•			
In order t	o create t	he parame	eters, at le	east three						
GUD bloc	cks must	be activate	ed with MI	D \$MN_MI	M_NUM_	GUD_M	ODULES.			
description	n of field lin	nits:								
The maxi	mum nun	nber of Sy	nactGUD	Real is de	fined in n	nachine d	data			
axis						NCK ver	sion:	57.00.0	0	
identifier:										
unit:	-	min.:	DBL_MIN	N			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	Х				Х	Х	Х	Х	
write:	Х	Х				Х	Х	Х	Х	7
attributes:	global	block sear	ch	•	•	link	•		•	

No restrictions

Program sensitive

INT	SYG_I	J[n]						descript	0
								n:	
description	n:								
SYG_IU[	n] Synad	ct Integer pa	arameters	in UGUD bloc	ck.				
A protect	ion level	can be ass	signed to t	the parameters	s with REDEF				
In order t	o create	the param	eters, at le	east three					
GUD blo	cks mus	t be activat	ed with M	D \$MN MM N	IUM GUD M	ODULES.			
description	n of field l	imits:							
The max	imum nu	ımber of Sy	nactGUD	Integers is de	fined in machi	ne data			
axis					NCK vei		57.00.0	0	
identifier:									
unit:	-	min.:	INT_MIN	I		max.:	INT_M	4X	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			X	Х	Х	X	
write:	Х	Х			X	Х	Х	Х	7
attributes:	global	block sea	rch	<u>l</u>	link	l .			
		Program	sensitive		No rest	rictions			

BOOL	SYG B	(U[n]							uescripti	٠
	_								n:	
description	า:									
SYG BU	[n] Syna	ct Boolean	paramete	ers in UGU	D block.					
_		can be ass	•			REDEF				
		the param	•							
		t be activate			M NUM	GUD M	ODULES.			
description										
The maxi	imum nu	ımber of Sy	nactGUD	Boolean p	arameter	s is defir	ned in ma	chine data	1	
axis						NCK ver		57.00.0		
identifier:								07.00.0	•	
unit:	=	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х				Х	Х	Х	Х	
write:	Х	Х				Х	Х	Х	Х	7
attributes:	global	block sea	rch			link		•	•	
		Program	sensitive			No rest	rictions			

AXIS	SYG_A	U[n]							descript n:	0
description	n:			<u>'</u>						
SYG AU	[n] Syna	ct Axis par	ameters ir	n UGUD ble	ock.					
A protect	ion level	can be ass	signed to t	the parame	eters with	<b>REDEF</b>				
In order t	o create	the param	eters, at le	east three						
GUD blo	cks mus	t be activate	ed with M	D \$MN MN	MUM N	GUD M	ODULES.			
description										
The max	imum nu	mber of Sy	nactGUD	Real is de	fined in m	nachine (	data			
axis						NCK ver	sion:	61.00.0	00	
identifier:										
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х				Х	Х	Х	Х	
write:	Х	Х				Х	Х	Х	X	7
attributes:	global	block sea	rch	1		link	1	1	I.	
		Program	sensitive			No rest	rictions			

CHAR	SYG_C	:U[n]							descripti	0
	0.0_0	<b>U</b> []							n:	
description	n:								•	•
SYG CU	[n] Syna	ict char par	ameters in	n UGUD blo	ock.					
A protect	ion level	can be ass	signed to t	he parame	ters with	REDEF				
In order t	o create	the parame	eters, at le	east three						
GUD bloc	cks mus	t be activate	ed with MI	D \$MN MN	NUM (	GUD M	ODULES.			
description	n of field l	imits:								
The maxi	imum nu	mber of Sy	nactGUD	Char is def	fined in m	nachine	data			
axis						NCK ver	sion:	61.00.0	0	
identifier:								0110010		
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х				Х	Х	Х	Х	
write:	Х	Х				Х	Х	Х	Х	7
attributes:	global	block sear	rch			link	1	1		
		Program	sensitive			No rest	rictions			

	SYG_S	U[n]						descripti	0			
								n:				
description	n:											
SYG SU	l[n] Syna	ct paramet	er string i	n UGUD block.	The maximum	m string le	ength has	been limit	ed to 31			
characte		•	J			J	J					
A protect	ion level	can be ass	sianed to t	the parameters	with REDEE							
•		the param	•	•		•						
			,	D \$MN MM N	IIM GUD M	ODULES						
description			CG WILLI IVII	υ φινιιν_ινιινι_ιν	101VI_00D_IVI	ODOLLO.						
•			nactCLID	String is define	od in machino	data						
axis	IIIIuIII IIu	illibel of Sy	Пасібор	Sully is deline	NCK ver		04.00.0					
identifier:					NOR Vei	31011.	61.00.0	0				
unit:	_	min.:			ļ	max.:						
	run-in	main run	runin stp	Mrup ovp	IPP	SA	OPI	IOEM	1000000			
	run-in	main run	runin sip	Mrun syn	PP	SA	OPI	OEIVI	access rights			
read:	Х	Х			X	Х	Х	Х				
write:	Х	Х			X	Х	Х	Х	7			
	global	block sea	rch	I	link							
attributes:	3.5.2.5						No restrictions					

DOUBLE	SYG R4	l[n]							descripti	0
									n:	
description	1:									
SYG_R4	[n] Synac	t Real par	ameters ir	n GUD4 block	k.					
A protect	ion level	can be ass	signed to t	the paramete	rs with	REDEF				
In order t	o create t	the parame	eters, at le	east four						
GUD bloc	cks must	be activate	ed with MI	D \$MN MM	NUM (	SUD M	ODULES.			
description	n of field lir	nits:								
The maxi	mum nur	nber of Sy	nactGUD	Real is defin	ed in m	achine o	data			
axis						NCK ver	sion:	57.00.0	0	
identifier:										
unit:	-	min.:	DBL_MIN	V			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х				Х	Х	Х	Х	
write:	Х	Х				Χ	Х	Х	Х	7
attributes:	global	block sear	ch	•						
		Program	sensitive			No rest	rictions			

INT	SYG_I4	l[n]						descript	io		
	_							n:			
description	n:										
SYG_I4[i	n] Synac	t Integer pa	arameters	in GUD4 bloc	k.						
A protect	ion level	can be ass	signed to t	the parameters	s with REDEF						
In order t	o create	the param	eters, at le	east four							
GUD blo	cks mus	t be activat	ed with M	D \$MN MM N	IUM GUD M	ODULES.					
description				<u> </u>							
The max	imum nu	ımber of Sv	nactGUD	Integers is de	fined in machi	ne data					
axis		number of SynactGUD Integers is defined in machine data    NCK version:									
identifier:							0				
unit:	-	min.:	INT_MIN	I		max.:		INT_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights		
read:	Х	Х			X	Х	Х	X			
write:	Х	Х			Х	Х	Х	Х	7		
attributes:	global	block sea	rch	1	link						
		Program	sensitive		No rest	No restrictions					

BOOL	SYG_B	<b>↓</b> [n]							uescriptio	
									n:	
description	າ:									
SYG B4	n] Synac	t Boolean	paramete	rs in GUD	4 block.					
			-	the parame		REDEF				
•		the parame	•	•						
				D \$MN MI	M NUM	GUD M	ODULES.			
description						_				
The maxi	mum nur	nber of Sy	nactGUD	Boolean p	arameter	s is defir	ned in mad	chine data	1	
axis				•		NCK ver	sion:	57.00.0	0	
identifier:								0.100.0		
unit:	-	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
read:	Х	X				Х	X	X	X	rights
write:	Х	X				Х	X	X	X	7
attributes:	utes: global block search					link				
		Program sensitive No restrictions								

AXIS	SYG_A	4[n]							descript n:	0		
description	n:									•		
SYG_A4	[n] Syna	ct Real par	ameters ir	n GUD4 blo	ck.							
A protect	ion level	can be ass	signed to t	the parame	ters with	<b>REDEF</b>						
In order t	o create	the param	eters, at le	east four								
GUD blo	cks mus	t be activat	ed with M	D \$MN MN	/ NUM (	GUD M	ODULES.					
description												
The max	imum nu	mber of Sy	nactGUD	Axis is defi	ined in m	achine o	data					
axis		NCK version:   61.00.00										
identifier:												
unit:	-	min.:					max.:					
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights		
read:	Х	Х				Х	Х	Х	Х			
write:	Х	Х				Х	Х	Х	X	7		
attributes:	global	block sea	rch			link	•	•	•			
		Program	Program sensitive No restrictions									

CHAR	SYG_C	;4[n]						uescript	10
								n:	
description	n:								
SYG C4	[n] Syna	ct Char par	ameters i	n GUD4 block	ζ.				
					s with REDEF.				
•		the param	•	•					
			,		NUM GUD MO	ODULES.			
description				- ·····_					
The max	imum nu	ımber of Sv	nactGUD	Char is define	ed in machine	data			
axis					NCK ver		61.00.0	in .	
identifier:							01.00.0	.0	
unit:	-	min.:				max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			X	Х	Х	Х	
write:	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sea	rch	<u> </u>	link			ı	
		Program	sensitive		No rest				

STRING	SYG_S	4[n]						descript n:	io		
description	n:			•							
SYG_S4	[n] Syna	ct paramete	er string ir	n GUD4 block	. The maximun	n string le	ngth has l	oeen limite	ed to 31		
characte	rs.										
A protect	ion level	can be ass	signed to	the parameter	s with REDEF						
		the param									
			ed with M	D \$MN_MM_I	NUM_GUD_M	ODULES.					
description											
	imum nu	ımber of Sy	nactGUD	String is defir	ned in machine						
axis identifier:					NCK ver	rsion:	61.00.0	00			
unit:	-	min.:			•	max.:					
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights		
read:	Х	Х			X	Х	Х	X			
write:	Х	Х			Х	Х	Х	Х	7		
attributes:	global	block sea	rch	I I	link	1	ı	I.			
	Program sensitive					No restrictions					

DOUBLE	SYG R	5[n]						descripti	0		
	<b>0.0_</b>	~[···]						n:			
description	1:			•							
SYG R5	[n] Syna	ct Real par	ameters ir	n GUD5 block.							
A protect	ion level	can be ass	signed to t	the parameters	with REDEF						
-		the parame	-	-							
GUD bloc	cks must	be activate	ed with MI	D \$MN MM N	UM GUD M	ODULES.					
description											
The max	mum nu	mber of Sv	nactGUD	Real is defined	d in machine	data					
axis					NCK ver	sion:	57.00.0	0			
identifier:											
unit:	-	min.:	DBL_MIN	٧		max.: DBL_N			MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights		
read:	Х	Х			Х	Х	X	Х			
write:	Х	Х			Х	Х	Х	Х	7		
attributes:	global	block sear	rch		link						
		Program	sensitive		No rest						

INT	SYG_I	ว์ไทใ						descript	io		
	_							n:			
description	n:										
SYG I5[i	n] Synac	t Integer pa	arameters	in GUD5 bloc	k.						
A protect	ion level	can be ass	signed to t	the parameters	s with REDEF						
In order t	o create	the param	eters, at le	east five							
GUD blo	cks mus	t be activat	ed with M	D \$MN MM N	IUM GUD M	ODULES.					
description				<u> </u>							
The max	imum nu	ımber of Sv	nactGUD	Integers is de	fined in machi	ne data					
axis		number of SynactGUD Integers is defined in machine data    NCK version:									
identifier:							0	•			
unit:	-	min.:	INT_MIN	I		max.:		INT_MAX			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights		
read:	Х	Х			X	Х	Х	X			
write:	Х	Х			Х	Х	Х	Х	7		
attributes:	global	block sea	rch	<u>l</u>	link						
		Program	sensitive		No rest	No restrictions					

ROOF	SYG_B	5[n]							descripti	0	
		·[]							n:		
description	า:										
SYG B5	[n] Syna	ct Boolean	paramete	rs in GUD	5 block.						
A protect	ion level	can be ass	signed to t	he parame	eters with	REDEF					
		the param	•	•							
GUD bloc	cks must	t be activat	ed with MI	D \$MN MI	M NUM (	GUD M	ODULES.				
description						_					
The maxi	imum nu	mber of Sy	nactGUD	Boolean p	arameter	s is defir	ned in mad	chine data	1		
axis						NCK ver	sion:	57.00.0	0		
identifier:								0.10010			
unit:	-	min.:	FALSE				max.:	TRUE			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights	
read:	Х	Х				Х	Х	Х	Х		
write:	Х	Х				Х	Х	Х	Х	7	
attributes:	block sea		link	•	•	•					
		Program sensitive No restrictions									

AXIS	SYG_A	.5[n]						descript	io
descriptio	u.							n:	
		at Assia man		CUDE block					
_				GUD5 block.					
•			•	the parameters	s with Redef				
In order t	o create	the param	eters, at le	east five					
GUD blo	cks mus	t be activate	ed with M	D \$MN_MM_N	NUM_GUD_M	ODULES.			
descriptio	n of field l	imits:							
The max	imum nu	ımber of Sy	nactGUD	Axis is define	d in machine d	lata			
axis					NCK ver	sion:	61.00.0	00	
identifier:									
unit:	-	min.:				max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			Х	Х	Х	Х	
write:	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sea	rch	· · · · · · · · · · · · · · · · · · ·	link				
		Program	sensitive		No rest	rictions			

CHAR	SYG_C	5[n]							descripti	0
	0.0_0	~[]							n:	
description	n:								•	•
SYG C5	[n] Syna	ct Char par	ameters i	n GUD5 blo	ock.					
		can be ass				REDEF				
•		the parame	•	•						
GUD bloc	cks mus	t be activate	ed with MI	D \$MN MN	/ NUM	GUD M	ODULES.			
description						_				
The maxi	imum nu	mber of Sy	nactGUD	Char is de	fined in n	nachine	data			
axis						NCK ver	sion:	61.00.0	0	
identifier:									•	
unit:	=	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х				Х	Х	Х	Х	
write:	Х	Х				Х	Х	Х	Х	7
attributes:	global	block sear	rch	1		link	1	1		
		Program	sensitive			No rest	rictions			

STRING	SYG_S	5[n]						descripti	io
								n:	
descriptior	<b>า</b> :								
SYG S5	n] Syna	ct paramete	er string ir	GUD5 block.	The maximun	n string le	ngth has b	een limite	ed to 31
characte		•	J			Ū	J		
A protect	ion level	can be ass	sianed to t	the parameters	with REDEF				
•		the param	J	•					
		•		D \$MN MM N	UM GUD M	ODULES.			
description				<del>- •</del> <u>-</u>					
The maxi	mum nu	mber of Sv	nactGUD	String is define	ed in machine	data			
axis		<b>,</b>		<u> </u>	NCK ver		61.00.0	0	
identifier:							01.00.0	•	
unit:	-	min.:			•	max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			Х	Х	Х	Х	
write:	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sea	rch		link				
attributoo.									1

DOUBLE	SYG R	6[n]							descripti	0	
									n:		
description	n:										
SYG R6	[n] Synad	ct Real par	ameters ir	n GUD6 block	۲.						
A protect	ion level	can be ass	signed to t	he paramete	rs with R	REDEF					
		the parame									
				D \$MN MM	NUM G	UD M	ODULES.				
description											
The max	mum nu	mber of Sy	nactGUD	Real is define	ed in ma	chine o	data				
axis					١	NCK ver	sion:	57.00.0	0		
identifier:											
unit:	-	min.:	DBL_MIN	٧		max.:			DBL_MAX		
	run-in	main run	runin stp	Mrun syn	F	PP	SA	OPI	OEM	access rights	
read:	Х	Х				Χ	Х	Х	Х		
write:	Х	Х				Χ	Х	Х	Х	7	
attributes:	global	block sear	ch	•	li	nk			•		
		Program	sensitive		N	No rest	rictions				

INT	SYG_I	ն[ո]						descript	io
	_							n:	
description	n:								
SYG_I6[i	n] Synac	t Integer pa	arameters	in GUD6 bloc	k.				
A protect	ion level	can be ass	signed to t	the parameter	s with REDEF				
In order t	o create	the param	eters, at le	east six					
GUD blo	cks mus	t be activat	ed with M	D \$MN MM N	NUM GUD M	ODULES.			
description									
The max	imum nu	mber of Sy	nactGUD	Integers is de	fined in machi	ne data			
axis					NCK ver		57.00.0	00	
identifier:							0		
unit:	-	min.:	INT_MIN	I		max.:	max.: INT_MAX		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			X	X	X	X	
write:	Х	Х			X	Х	Х	Х	7
attributes:	global	block sea	rch	l l	link	l .			
		Program	sensitive		No rest	rictions			

BOOL	SYG_B6	[n]							descripti	0
									n:	
description	1:									
SYG B6	n] Synac	t Boolean	paramete	rs in GUD	6 block.					
			•	he parame		REDEF.				
In order t	o create t	he parame	eters, at le	east six						
GUD bloc	cks must	be activate	ed with MI	D \$MN MI	M NUM (	GUD M	ODULES.			
description	n of field lin	nits:								
The maxi	mum nun	nber of Sy	nactGUD	Boolean p	arameter	s is defir	ned in ma	chine data	1	
axis						NCK ver	sion:	57.00.0	0	
identifier:										
unit:	-	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х				Х	Х	Х	Х	
write:	Х	Х				Х	Х	Х	Х	7
attributes:	global	block sear	ch			link	•	•		
		Program	sensitive			No rest	rictions			

AXIS	SYG_A	.6[n]							descript n:	0
description	n:									•
SYG_A6	[n] Syna	ct Axis para	ameters in	GUD6 blo	ck.					
A protect	ion level	can be ass	signed to t	the parame	eters with	<b>REDEF</b>				
In order t	o create	the param	eters, at le	east six						
GUD blo	cks mus	t be activate	ed with M	D \$MN MI	M NUM	GUD M	ODULES.			
description										
The max	imum nu	mber of Sy	nactGUD	Axis is def	fined in m	achine d	data			
axis						NCK ver	rsion:	61.00.0	00	
identifier:										
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х				Х	Х	Х	Х	
write:	Х	Х				Х	Х	Х	Х	7
attributes:	global	block sea	rch	1		link	· · · · · · · · · · · · · · · · · · ·		•	
		Program	sensitive			No rest	rictions			

CHAR	SYG_C	6[n]						uescript	<sup>10</sup>
								n:	
descriptio	n:								
SYG C6	[n] Syna	ct Char par	ameters i	n GUD6 block					
				the parameters					
•		the param	•	•					
			,	D \$MN MM N	IUM GUD M	ODULES.			
description			00 11111111	<u> </u>	002	OD OLLO.			
The max	imum nı	ımber of Sv	nactGUD	Char is define	d in machine	data			
axis	T		Hadioob	01101 10 0011110	NCK ver		61.00.0	in.	
identifier:							01.00.0	.0	
unit:	-	min.:				max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			X	Х	Х	Х	
write:	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sea	rch		link				
		Program	sensitive		No rest	rictions			1

STRING	SYG_S	6[n]						descripti	0
								n:	
description	n:								
SYG_S6	[n] Syna	ct paramete	er string ir	n GUD6 bloc	k. The maximu	m string le	ngth has l	oeen limite	d to 31
characte	rs.								
A protect	ion level	can be ass	signed to t	the paramet	ers with REDE	F.			
In order t	o create	the parame	eters, at le	east six					
GUD blo	cks must	t be activate	ed with M	D \$MN_MM	_NUM_GUD_N	ODULES.			
description	n of field l	imits:							
The max	imum nu	mber of Sy	nactGUD	String is de	fined in machin	e data			
axis					NCK v	ersion:	61.00.0	00	
identifier:			T						
unit:	-	min.:				max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			Х	Х	Х	Х	
write:	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sear	rch	· "	link	•	•	•	
		Program	sensitive		No res	trictions			

DOUBLE	SYG R7	[n]		descriptio						)
									n:	
description	า:									
SYG_R7	[n] Synac	t Real para	ameters ir	n GUD6 bl	ock.					
A protect	ion level o	can be ass	signed to t	he parame	eters with	REDEF.				
In order t	o create t	he parame	eters, at le	east seven						
GUD bloc	cks must	be activate	ed with MI	O \$MN MI	M NUM	GUD MO	DDULES.			
description	n of field lin	nits:		<u>-</u>						
The max	imum nun	nber of Sy	nactGUD	Real is de	fined in m	nachine d	data			
axis						NCK vers	sion:	57.00.0	0	
identifier:										
unit:	-	min.:	DBL_MIN	١			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	Х				Х	Х	Х	Х	
write:	Х	Х				Х	Х	Х	Х	7
attributes:	global	block sear	ch	•	•	link	•	•	•	

No restrictions

Program sensitive

INT	SYG_I7	'[n]							descripti n:	0
description	า:			•					•	
SYG_I7[r	n] Synac	t Integer pa	arameters	in GUD6 b	lock.					
A protect	ion level	can be ass	signed to t	the parame	eters with	<b>REDEF</b>	•			
In order t	o create	the parame	eters, at le	east seven						
GUD bloc	cks must	t be activate	ed with MI	D \$MN_MN	M_NUM_	GUD_M	ODULES.			
description	n of field I	imits:								
The max	imum nu	mber of Sy	nactGUD	Integers is	defined	in machi	ne data			
axis						NCK ver	sion:	57.00.0	0	
identifier:										
unit:	-	min.:	INT_MIN				max.:	INT_M	XΑ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х				Х	Х	Х	Х	
write:	Х	Х				Х	Х	Х	Х	7
attributes:	global	block sear	rch	'		link	•	,		
		Program	sensitive			No rest	rictions			

BOOL	SYG B	37[n]						descript	iO
	_							n:	
description	n:								•
SYG B7	[n] Syna	ct Boolean	paramete	rs in GUD7 bl	ock.				
_			•		s with REDEF	_			
•		the param	U	•					
		•	,		NUM GUD M	ODULES			
description			ou with ivi	<u> </u>	10IVI_00B_IVI	ODOLLO.			
			mactGLID	Roolean nara	meters is defir	ned in ma	chine data	1	
axis	I I I I I I I I I I I I I I I I I I I	iniber of Gy	Пасісов	Doolcan para	INCK ver				
identifier:					Nort ver	51011.	57.00.0	10	
unit:	-	min.:	FALSE			max.:	TRUE		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			X	Х	Х	X	
write:	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sea	rch	l l	link		l .		
		Program	sensitive		No rest	rictions			

AXIS	SYG_A	.7[n]						descript n:	io
descriptio	n:							11.	
•		ct Avie nar	ameters in	GUD6 block.					
_				the parameters	with DEDEE				
•			•	•	5 WILLI INLULI				
		the param	,			20111 50			
			ed with Mi	D \$MN_MM_N	IUM_GUD_M	ODULES.			
descriptio	n of field l	imits:							
The max	imum nu	ımber of Sy	nactGUD	Axis is define	d in machine o	lata			
axis		-			NCK ver	sion:	61.00.0	00	
identifier:									
unit:	-	min.:				max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			Х	Х	Х	Х	
write:	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sea	rch	· · · · · · · · · · · · · · · · · · ·	link				
		Program	sensitive		No rest	rictions			

CHAR	SYG_C	7[n]							descripti	0
	0.0_0	. []							n:	
description	n:								•	
SYG C7	[n] Syna	ct Char par	ameters i	n GUD6 blo	ck.					
				he paramet		REDEF				
		the param	•	•						
		•		D \$MN MM	NUM (	GUD M	ODULES.			
description						_				
The max	imum nu	mber of Sy	nactGUD	Char is defi	ned in m	nachine	data			
axis						NCK ver		61.00.0	0	
identifier:								0110010		
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х				Х	Х	Х	Х	
write:	Х	Х				Х	Х	Х	Х	7
attributes:	global	block sea	rch	, <u>, , , , , , , , , , , , , , , , , , </u>		link		•		
		Program	sensitive			No rest	rictions			

STRING	SYG_S	7[n]						description	)
	0.0_0							n:	
description	n:								
SYG_S7	[n] Syna	ct paramete	er string ir	GUD6 block.	The maximun	n string le	ngth has b	een limite	d to 31
characte	rs.								
A protect	ion level	can be ass	signed to t	the parameters	s with REDEF				
		the param							
			ed with M	D \$MN_MM_N	IUM_GUD_M	ODULES.			
description	n of field l	imits:							
	<u>imum nu</u>	mber of Sy	nactGUD/	String is defin					
axis identifier:					NCK ver	rsion:	61.00.0	0	
unit:	-	min.:			•	max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			Х	Х	Х	Х	
write:	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sea	rch	· · · · · · · · · · · · · · · · · · ·	link		I	1	
		Program	sensitive		No rest	rictions			

DOUBLE	SYG R	[n]							descripti	0
									n:	
description	1:									
SYG_R8	[n] Synac	t Real para	ameters ir	n GUD8 ble	ock.					
A protect	ion level	can be ass	signed to t	the parame	eters with	<b>REDEF</b>				
		he parame								
GUD bloc	cks must	be activate	ed with MI	D \$MN_MI	M NUM	GUD M	ODULES.			
description				<del>-</del>						
The max	mum nur	nber of Sy	nactGUD	Real is de	fined in m	nachine o	data			
axis						NCK ver	sion:	57.00.0	0	
identifier:										
unit:	-	min.:	DBL_MIN	٧			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х				Х	Х	Х	Х	
write:	Х	Х				Х	Х	Х	Х	7
attributes:	global	block sear	ch			link		•	•	
		Program	sensitive			No rest	rictions			

INT	SYG_I8	[n]							descript	io
	0.0								n:	
description	n:									
SYG 18[1	n] Synac	t Integer pa	arameters	in GUD8 bl	lock.					
A protect	ion level	can be ass	signed to t	the parame	ters with	REDEF				
In order t	o create	the parame	eters, at le	east eight						
GUD blo	cks must	be activate	ed with MI	D \$MN MM	1 NUM (	GUD M	ODULES.			
description										
The max	imum nu	mber of Sy	nactGUD	Integers is	defined i	n machi	ne data			
axis						NCK ver	sion:	57.00.0	10	
identifier:										
unit:	-	min.:	INT_MIN	I			max.:	INT_M	4Χ	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	X	X				Х	Х	X	X	
write:	Х	Х				Х	Х	Х	Х	7
attributes:	global	block sear	rch			link		ı	ı	
		Program	sensitive			No rest	rictions			

BOOL	SYG_B	8[n]							description	5
									n:	
description	1:									
SYG_B8	n] Syna	ct Boolean	paramete	rs in GUD	3 block.					
A protect	ion level	can be ass	signed to t	the parame	eters with	<b>REDEF</b>				
In order t	o create	the parame	eters, at le	east eight						
GUD bloc	cks must	be activate	ed with M	D \$MN MI	M NUM	GUD M	ODULES.			
description						_				
The maxi	mum nu	mber of Sy	nactGUD	Integers is	defined i	in machi	ne data			
axis						NCK ver	sion:	57.00.0	0	
identifier:										
unit:	-	min.:	FALSE				max.:	TRUE		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	X	Х				Х	Х	X	Х	
write:	X	Х				Х	Х	Х	Х	7
attributes:	global	block sear	ch	I		link	1		· ·	
		Program	sensitive			No rest	rictions			

AXIS	SYG_A	.8[n]							descript n:	0
description	n:									•
SYG_A8	[n] Syna	ct Axis para	ameters in	GUD8 blo	ck.					
A protect	ion level	can be ass	signed to t	the parame	eters with	<b>REDEF</b>				
In order t	o create	the param	eters, at le	east eight						
GUD blo	cks mus	t be activate	ed with M	D \$MN MI	MUM N	GUD M	ODULES.			
description										
The max	imum nu	mber of Sy	nactGUD	Axis is def	ined in m	achine o	data			
axis						NCK ver	sion:	61.00.0	00	
identifier:										
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х				Х	Х	Х	Х	
write:	Х	Х				Х	Х	Х	Х	7
attributes:	global	block sea	rch	II.		link	1		•	
		Program	sensitive			No rest	rictions			

CHAR	SYG_C	8[n]						descript	iO
	_							n:	
description	n:								
SYG C8	[n] Syna	ct Char par	rameters i	n GUD8 block					
A protect	ion léve	l can be as	sianed to t	the parameter	s with REDEF				
•		the param	U	•					
		•		•	NUM GUD M	ODULES.			
description				- <del> </del>					
The max	imum nı	ımber of Sv	nactGUD	Char is define	ed in machine	data			
axis	1		Hadioob	Ondi lo dollilo	NCK ver		61.00.0	ıΩ	
identifier:					1.13.1.13.1		01.00.0	10	
unit:	-	min.:				max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			X	Х	Х	X	
write:	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sea	rch		link				1
		Program	sensitive		No rest	rictions			

STRING	SYG_S	8[n]						descript n:	io
description	n:							· ·	
		ct paramete	er string ir	GUD8 block.	The maximum	n string le	ngth has	been limite	ed to 31
characte		can be acc	cianod to t	the parameters	with DEDEE				
•		the param	U	•	S WILLI NEDEL	•			
				D \$MN_MM_N	IUM GUD M	ODUI ES			
description			CG WIGH IVI	<u> </u>	ccb	ODOLLO.			
The max	imum nu	mber of Sy	nactGUD	String is defin	ed in machine	data			
axis identifier:					NCK vei	rsion:	61.00.0	00	
unit:	-	min.:			<u> </u>	max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			X	Х	Х	Х	
write:	Х	Х			X	Х	Х	Х	7
attributes:	global	block sea	rch	1	link				
		Program	sensitive		No rest	rictions			

DOUBLE	SYG R9	[n]							description	•
		,							n:	
description	n:									
SYG_R9	[n] Synac	t Real para	ameters ir	n GUD9 bl	ock.					
A protect	ion level o	can be ass	signed to t	the parame	eters with	REDEF.				
In order t	o create t	he parame	eters, at le	east nine						
GUD bloc	cks must	be activate	ed with MI	D \$MN_MI	M_NUM_	GUD_MO	DDULES.			
description	n of field lin	nits:								
The max	mum nun	nber of Sy	nactGUD	Real is de	fined in m	nachine d	lata			
axis						NCK vers	sion:	57.00.0	0	
identifier:										
unit:	-	min.:	DBL_MIN	٧			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х	Х				Х	Х	Х	Х	
write:	Х	Х				Х	Х	Х	Х	7
attributes:	global	block sear	ch			link	•	•	•	

No restrictions

Program sensitive

INT	SYG_IS	)[n]						descript	io
	_							n:	
description	n:								
SYG 19[1	n] Synac	t Integer pa	arameters	in GUD9 bloc	k.				
A protect	ion level	can be ass	signed to t	the parameters	s with REDEF				
In order t	o create	the param	eters, at le	east nine					
GUD blo	cks mus	t be activat	ed with M	D \$MN MM N	IUM GUD M	ODULES.			
description				<u> </u>					
The max	imum nu	ımber of Sv	nactGUD	Integers is de	fined in machi	ne data			
axis				<u> </u>	NCK vei		57.00.0	00	
identifier:							0	•	
unit:	-	min.:	INT_MIN	I		max.:	INT_M	4X	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			X	X	X	X	
write:	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sea	rch	<u>l</u>	link	l .			
		Program	sensitive		No rest	rictions			

BOOL	SYG_B	9[n]					descriptio				
								n:			
description	1:										
SYG_B9	n] Syna	ct Boolean	paramete	rs in GUD9 bl	ock.						
A protect	ion level	can be ass	signed to t	the parameter	s with REDEF						
•		the parame	•	•							
GUD bloc	cks must	t be activate	ed with M	D \$MN MM N	NUM GUD M	ODULES.					
description				<u> </u>							
The maxi	mum nu	mber of Sv	nactGUD	Boolean para	meters is defir	ned in ma	chine data	a			
axis		<b>,</b>			NCK ver		57.00.0				
identifier:							07.00.0	.0			
unit:	-	min.:	FALSE			max.:	TRUE				
<del></del>	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights		
read:	Х	Х			Х	Х	Х	Х			
write:	Х	Х			X	Х	Х	Х	7		
attributes:	global	block sea	rch	, ,	link	1					
		Program	sensitive		No rest	rictions					

AXIS	SYG A	9[n]							descripti	0
									n:	
descriptio	n:			<u> </u>						
SYG A9	[n] Syna	ct Axis para	ameters in	GUD9 block	ζ.					
A protect	ion level	can be ass	signed to t	the paramete	rs with F	REDEF				
		the param								
GUD blo	cks mus	t be activate	ed with M	D \$MN MM	NUM G	SUD MO	ODULES.			
descriptio										
The max	imum nu	mber of Sy	nactGUD	Axis is define	ed in ma	chine c	lata			
axis						NCK ver	sion:	61.00.0	00	
identifier:										
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	X	Х				X	X	X	Х	
write:	Х	Х				Χ	Х	Х	X	7
attributes:	global	block sea	rch	1		ink	1	<u> </u>	I	
		Program	sensitive		1	No rest	rictions			

CHAR	SYG_C	:9[n]						descript	10
	0.0_0	·•[]						n:	
description	n:								•
SYG C9	[n] Syna	ct Char par	ameters i	n GUD9 block.					
				the parameters	with REDEF				
•		the parame	•	•					
				D \$MN MM N	UM GUD M	ODULES.			
description									
The max	imum nu	ımber of Sv	nactGUD	Char is defined	d in machine	data			
axis		<b>,</b>			NCK ver		61.00.0	0	
identifier:									
unit:	-	min.:				max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			Х	Х	X	X	
write:	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sea	rch		link	1			
		Program	sensitive		No rest	rictions			

STRING	SYG_S	9[n]							description	)
	0.0_0	-13							n:	
description	n:								•	
SYG S9	[n] Synad	ct paramete	er string ir	GUD9 bloc	ck. The m	naximun	n string ler	ngth has b	een limite	d to 31
characte	rs.	•	J				J	Ü		
A protect	ion level	can be ass	signed to t	the paramet	ters with I	REDEF				
•		the parame	J	•						
GUD bloc	cks must	be activate	ed with M	D \$MN MN	I NUM G	SUD MO	ODULES.			
description				<del>_</del>		_				
The max	imum nu	mber of Sv	nactGUD	String is de	fined in n	nachine	data			
axis						NCK ver		61.00.0	0	
identifier:								000.0		
unit:	=	min.:			•		max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х				Χ	Х	Х	Х	
write:	Х	X				Χ	Х	Х	Х	7
attributes:	global	block sear	rch	•		link		•	•	
		Program	sensitive			No rest	rictions			

DOUBLE	SYG_R	S[n]							descripti	0
									n:	
description	n:									
SYG_RS	[n] Sync	hronization	Real para	ameters in	SGUD bl	ock.				
A protect	ion level	can be ass	signed to t	he parame	eters with	REDEF				
		the parame								
		be activate			I NUM G	SUD MO	DULES.			
description						_				
The max	imum nu	mber of Sy	nactGUD	Real is de	fined in m	nachine (	data			
axis						NCK ver	sion:	57.00.0	0	
identifier:										
unit:	-	min.:	DBL_MIN	٧			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х				Х	Х	Х	Х	
write:	Х	Х				Х	Х	Х	Х	7
attributes:	global	block sear	rch	•		link	•	•	•	
		Program	sensitive			No rest	rictions			

INT	SYG_IS	S[n]						descript	0
	_							n:	
description	n:								
SYG IS[	n] Synac	t Integer pa	arameters	in SGUD blo	ck.				
A protect	ion level	can be ass	signed to t	the parameter	s with REDEF				
In order t	o create	the param	eters, at le	east one					
GUD blo	ck must	be activate	d with MD	\$MN MM N	UM GUD MC	DULES.			
description				<u> </u>					
The max	imum nu	ımber of Sv	nactGUD	Integers is de	efined in machi	ne data			
axis					NCK vei		57.00.0	00	
identifier:							0		
unit:	-	min.:	INT_MIN	I		max.:	INT_M	4X	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			X	Х	Х	X	
write:	Х	Х			X	Х	Х	Х	7
attributes:	global	block sea	rch	<u> </u>	link				
		Program	sensitive		No rest	rictions			

BOOL	SYG_B	SS[n]					descriptio				
								n:			
description	า:										
SYG_BS	[n] Syna	ct Boolean	paramete	ers in SGUD blo	ock.						
A protect	ion level	can be ass	signed to t	the parameters	with REDEF						
In order t	o create	the param	eters. at le	east one							
GUD bloc	ck must	be activate	d with MD	\$MN MM NU	JM GUD MO	DULES.					
description				·							
The maxi	mum nu	ımber of Sv	nactGUD	Boolean parar	neters is defir	ned in ma	chine data	a			
axis		<b>,</b>			NCK ver		57.00.0				
identifier:							01.00.0				
unit:	-	min.:	FALSE			max.:	TRUE				
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights		
read:	Х	Х			X	Х	X	Х			
write:	Х	Х			Х	Х	Х	Х	7		
attributes:	global	block sea	ch		link						
		Program	sensitive		No rest	rictions					

AXIS	SYG_A	S[n]						descript	io
	-							n:	
descriptio	n:								
SYG_AS	[n] Sync	hronization	axis para	meters in SG	UD block.				
A protect	tion level	can be as	signed to t	the paramete	rs with REDEF				
In order t	to create	the param	eters, at le	east one					
GUD blo	ck must	be activate	d with MD	\$MN MM N	IUM GUD MC	DULES.			
descriptio	n of field l	imits:							
The max	imum nu	mber of Sy	nactGUD	Axis is define	ed in machine o	data			
axis		•			NCK ve		61.00.0	00	
identifier:								. •	
unit:	-	min.:				max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			X	X	Х	Х	
write:	Х	Х			X	Х	Х	Х	7
attributes:	global	block sea	rch	l l	link	I .		I	
		Program	sensitive		No rest	rictions			

CHAR	SYG_C	S[n]						uescripti	٥
								n:	
description	า:								
SYG_CS	[n] Sync	hronization	Char par	ameters in SG	UD block.				
A protect	ion level	can be ass	signed to t	the parameters	s with REDEF				
In order t	o create	the parame	eters. at le	east one					
			,	SMN MM NU	JM GUD MO	DULES.			
description									
The maxi	mum nu	mber of Sv	nactGUD	char is defined	d in machine d	lata			
axis					NCK ver		61.00.0	nn	
identifier:							01.00.0	,0	
unit:	-	min.:				max.:			
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х	Х			Х	Х	Х	Х	
write:	Х	Х			Х	Х	Х	Х	7
attributes:	global	block sear	rch	1	link				
		Program	sensitive		No rest	rictions			

STRING	SYG_SS	[n]							description:	0
description	n:									
limited to A protect In order t GUD block	31 chara ion level o o create t ck must b	cters. can be ass he parame e activate	igned to teters, at le	the param	eters with	REDEF		mum strin	g length h	as been
	n of field lin									
	mum nun	nber of Sy	nactGUD	String is c	letined in					
axis identifier:						NCK ver	sion:	61.00.0	0	
unit:	-	min.:					max.:			
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х	Х				Х	Х	Х	Х	
write:	Х	Х				Х	Х	Х	Х	7
attributes:	global	block sear	ch	1	ı	link		_1		
		Program	sensitive			No rest	rictions			

#### 1.1.28 Kinematic chain

STRING	G SNK_CHAIN_NAME[n] description					0				
	-	_							n:	
description	n:									
\$NK_CH	AIN_NAI	ME[n]								
Name of	the nth k	inematic c	hain. The	maximum	possible i	number	of kinema	tic chains	is set by I	MD
\$MN_MN	<b>Λ_MAXN</b>	UM_KIN_C	CHAINS.		•				-	
description	n of field li	mits:								
The max	imum nu	mber of kir	nematic ch	nains is set	in MD \$N	N_MM_	MAXNU	M_KIN_CI	HAINS.	
axis						NCK ver	sion:	58.00.0	0	
identifier:										
unit:	-	min.:	-				max.:	-		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		X	Х	
write:	Х					Х		Х	Х	7
attributes:	global	block sear	rch	1		link		1		
	1	Not class					rictions			+

STRING	\$NK_1	ST_ELEM[i	n]						descript n:	0
description	n:									
\$NK_1S	Γ ELEM	n]								
		n link of a l	kinematic	chain						
description	n of field l	mits:								
The maxi	mum nu	mber of kin	ematic ch	nains is set	in MD \$N	MM_MN	MAXNUN	/_KIN_C	HAINS.	
axis identifier:						NCK ver		58.00.0		
unit:	-	min.:	-				max.:	-		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х	Х	
write:	Х					Х		Х	Х	7
attributes:	global	block sear	ch	1		link		1		
		Not class	sified			No rest	rictions			

STRING	\$NK N	AME[n]					·	descripti	0
								n:	
description	n:								
\$NK_NA	ME[n]								
Name of	the nth	element of	a kinemat	ic chain. The	e maximum po	ssible num	ber of cha	in elemen	ts is set in
				N_ELEMENT	•				
description									
The maxi	imum nu	ımber of ele	ements of	kinematic					
axis	 	iniber or ere	onionio oi	Milomado	INCK	ersion:	58.00.0	١٨	
identifier:					1		30.00.0	,0	
unit:	-	min.:	-		'	max.:	-		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
read:	Х				Х		Х	Х	J
write:	Х				Х		Х	Х	7
attributes:	global	block sea	rch	l l	link	1	1		
		Not class	sified		No re	strictions			

STRING	\$NK_NE	EXT[n]							description:	0
description	1:								1	I
\$NK NE	XT[n]									
Name of	next cha	in element	. An empt	y string "" ı	means the	e end of	the chain			
description	n of field li	mits:		· · · · ·						
The maxi	mum nui	mber of ele	ements of	kinematic						
axis						NCK vers	sion:	58.00.0	0	
identifier:										
unit:	-	min.:	-				max.:	-		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х	Х	
write:	Х					Х		Х	Х	7
attributes:	global	block sear	rch	•		link	•	•	•	
		Not class	sified			No restr	rictions			

write:

attributes: global

Χ

block search

Not classified

1.1 List of system variables

STRING	\$NK_N	EXTP[n]						descripti	0
lescription	<u>.                                    </u>							n:	
NK NA									
_		nevt chain	element	This is needs	ed for chain brar	nches whi	ch occur i	n the case	of narall
					at no further cha			ii tiic casc	oi paran
	n of field li		ipty ourng	mound the	at no lartifor one		nt CAIGLO.		
The max	imum nui	mber of ele	ements of	kinematic					
axis					NCK vers	sion:	58.00.0	0	
dentifier:									
ınit:	-	min.:	-			max.:	-		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
ead:	Х				Х		Х	Х	
vrite:	Х				Х		Х	Х	7
attributes:	global	block sea	rch	<u> </u>	link	- <del> </del>			
		Not class	sified		No restr	rictions			
	l.								
NT	¢NIZ INI	DEVID MA	VALUE IZ	INI CHAL				description	<u> </u>
•		DEX[n,MA L_INDICE:		IN_CHAI				n:	
description		L_INDICE	<b>o</b> j						
•									
_	DEX[n, i]	ovoluotos	l only if CN	IK NAMEIDI	contains a rese	ruod nom	10		
					OLXX or MAC			∩1 refere	to the
				ol or magazin		<b>ΣΧΧΧ, ΨΙΝΙΝ</b>		i, oj icicis	to tric
						IDFX[n 1	1 indicator	the numb	
					ICILXX SINK IN				ner of the
nindie w		tains the to	ool		OLXX, \$NK_IN	. D = , \(\frac{1}{2}\), \(\frac{1}{2}\)	] IIIulcates	the num	er of the
biugie w	mich con	tains the to	ool.		OLXX, \$NK_IN		j iridicates	the num	er of the
pinale w	men con	tains the to	ool.		OOLXX, \$NK_IN	.D.E./.(III, 1	] indicates	the num	er of the
pindie w	mon con	tains the to	ool.		OOLXX, \$NK_IN		] indicates	ine numi	er of the
pindie v	men con	tains the to	ool.		OOLXX, \$NK_IN		j indicates	s trie riurrik	er of the
spindie v	THE CON	tains the to	ool.		OLXX, \$NK_IN		j indicates	s the numb	per of the
	n of field li		ool.		OCLXX, \$NK_IN		] indicates	s the numb	per of the
lescription	n of field li	mits:		kinematic	OCXX, \$NK_IN		] indicates	the numi	per of the
lescription	n of field li imum nui			kinematic	OCXX, \$NK_IN		j iliulcates	s the numb	per of the
escription he max	n of field li imum nui	mits: mber of ele		kinematic	NCK ver		58.00.0		per of the
lescription The max ndex nul xis dentifier:	n of field li imum nui	mits: mber of ele <= i <= 1)		kinematic		sion:			per of the
lescription The max ndex nul xis dentifier:	n of field li imum nui	mits: mber of ele		kinematic					per of the
lescription	n of field li imum nui	mits: mber of ele <= i <= 1)		kinematic Mrun syn		sion:	58.00.0		access
escription The max Index nul Ixis Identifier:	n of field li imum nui mber (0 <	mits: mber of ele <= i <= 1) min.:	ements of		NCK ver	sion:	58.00.0	0	

Χ

Χ

No restrictions

link

Χ

7

DOUBLE	\$NK O	FF_DIR[n,	31					description	1
	<b>,</b>		-,					n:	
description	n:								
\$NK_OF	F[n, i]								
Describe	s the 3 c	omponents	of the off	set vector of	a constant chai	n link or t	he direction	on of the ax	is of a
variable o	chain linl	ζ.							
If the vec	tor desc	ribes a dire	ction, the	value of the	vector must not	equal 0.	Otherwise	not releva	nt.
description	n of field l	imits:							
The max	imum nu	mber of ele	ements of	kinematic					
Index of	the 3 cor	nponents (	0 <= i <= 2	2).					
axis					NCK ver	sion:	58.00.0	0	
identifier:									
unit:	mm	min.:	DBL_MII	N		max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х		Х	Х	
write:	Х				Х		Х	Х	7
attributes:	global	block sear	rch	•	link	•	•	•	
		Not class	sified		No restr	rictions			

STRING   \$NK_AXIS[n]	descriptio	
	n:	

description:

\$NK AXIS[n]

Name of machine axis or frame

If the content of this element is not identical with the name of the machine axis (no difference made between small and capital letters), then the string designates a frame describing the change of this chain link compared to the previous link. In this case, the software using this kinematic chain must provide the frame data for this element.

If \$NK\_AXIS[n] contains the zero string, the entire data block describes a constant chain link.

description of field limits:

The maximum number of elements of kinematic

axis identifier:					NCK ve	ersion:	58.00.0	0	
unit:	-	min.:	-		<u>-</u>	max.:	-		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х		Х	Х	
write:	Х				Х		Х	Х	7
attributes:	global	block sea	rch		link		<b>'</b>		
		Not class	sified		No res	trictions			

DOUBLE	\$NK_A_	OFF[n]							descript n:	io
description	n:									•
\$NK_A_0	OFF[n]									
Is relevar	nt only if t	he chain liı	nk describ	es an axis	. In this ca	se, this	element ir	ndicates th	ne position	of the axis
in the zer	o point.									
In the cas previous description	link.	ar axes, th	is value is	redundar	it as it car	also be	replaced	by a char	iged offse	t of the
	<u>imum nur</u>	nber of ele	ements of	kinematic		IN COLC		ı		
axis identifier:						NCK ver	sion:	58.00.0	0	
unit:	mm	min.:	DBL_MIN	٧		•	max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х	Х	
write:	Х					Х		Х	Х	7
attributes:	global	block sear	ch	1	I	link	L	<u> </u>	1	
		Not class	sified			No rest	rictions			

#### 1.1.29 Protection area elements

STRING	\$NP PR	OT_NAM	E[n]						descripti	0
		_							n:	
description	า:									
\$NP_PR	OT_NAM	E[n]								
Name of										
description	n of field lir	nits:								
The maxi	imum nur	mber of pro	otection a	reas is def	ined by M	D				
axis						NCK ver	sion:	58.00.0	10	
identifier:										
unit:	-	min.:	-			-	max.:	-		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х	Х	
write:	Х					Х		Х	Х	7
attributes:	global	block sear	rch			link				
		Not class	sified			No restr	rictions			

STRING	\$NP C	HAIN NAN	/IE[n]						descripti	0
		_							n:	
description	n:									
\$NP_CH	AIN_NA	ME[n]								
The poin	t in a kine	ematic chai	in to which	the currer	nt protection	n area	has been	assigned,	is defined	by the two
variables	\$NP_CI	HAIN_NAM	1E and \$N	P_CHAIN	ELEM.					
If only \$N	NP CHA	IN NAME i	is indicate	d, the prot	ection are	a is assi	igned to th	ne beginni	ing of the i	ndicated
chain.	_	_		•			•	·	•	
description	n of field l	imits:								
The max	imum nu	mber of pro	otection a	reas is def	ined by MI	D				
axis		•			,	NCK ver	sion:	58.00.0	10	
identifier:										
unit:	-	min.:	-				max.:	-		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х		X	X	
write:	Х					Х		X	Х	7
attributes:	global	block sear	rch	1		link	1	1		
		Not class	sified			No rest	rictions			

STRING	\$NP_CH	IAIN_ELE	M[n]						descripti	0
									n:	
description	າ:									
\$NP_CH	AIN_ELE	M[n]								
		\$NP CHA	AIN NAM	E[n]						
	•	· –	_							
description	n of field lir	mits:								
The maxi	mum nur	nber of pro	tection a	reas is def	ined by M	D				
axis						NCK ver	sion:	58.00.0	0	
identifier:										
unit:	-	min.:	-				max.:	-		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	X					Х		Х	Х	
write:	Х					Х		Х	Х	7
attributes:	global	block sear	ch			link		l	L	
		Not class	sified			No restr	rictions			

STRING	¢ND 10	ST_PROT[i	n1						descriptio	
	PINE_1	ייב_רגטוןו	ניין						n:	
description	n:				l					l
\$NP 1S	Γ PROT	•								
Name of	first eler	nent of a pr	rotection a	area						
description	n of field I	imits:								
The max	imum nu	mber of pr	otection a	reas is de	fined by N	ΛD				
axis						NCK ver	sion:	58.00.0	0	
identifier:			1							
unit:	-	min.:	-				max.:	-		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					X		X	X	
write:	Х					Х		Х	Х	7
attributes:	global	block sear	rch			link				
		Not class	sified			No rest	rictions			
		140t Glast	Silica			140 1030	ilotions			
INT	AND D	T NOT 1			i				descriptio	i
	\$NP_B	IT_NO[n]							n:	
description	า:				l					
\$NP BIT	NO									
		d in the PL	C interfac	e through	which pro	tection a	reas can	be activate	ed once the	v have
									as been as	
									this protect	
				.,				o.g	p. 0.000	
description	n of field I	imits:								
The max	imum nu	mber of pr	otection a	reas is de	fined by N	ΛD				
axis						NCK ver	sion:	58.00.0	0	
identifier:								00.00.0		
unit:	-	min.:	-1				max.:	63		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х		Х	Х	
write:	Х					Х		Х	Х	7
attributes:	global	block sear	rch		l .	link				

No restrictions

Not classified

CHAR	\$NP IN	IIT STAT[r	าไ					descripti	О
	. –		•					n:	
lescriptio	n:								
SNP_INI	T_STAT								
Activatio	n status	of the prote	ction area	a at first selection	on without inc	dication of	an activat	tion status	<b>3.</b>
⁻his stat	us is acti	vated for d	efined pro	tection areas a	ilso during rui	nup of the	control.		
The perr	nitted val	lues are:							
Activated	d ('A' or 'a	a'),							
nactivat	ed ('I' or '	'i'),							
<sup>o</sup> reactiva	ated ('P'	or 'p').							
Default v	/alue is 'l	'							
descriptio	n of field l	imits:							
The max	imum nu	mber of pr	otection a	reas is defined	by MD				
axis					NCK ver	rsion:	64.00.0	0	
dentifier:									
unit:	-	min.:	-			max.:	-		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
ead:	Х				X		Х	Х	
vrite:	Х				Х		Х	Х	7
attributes	global	block sear	rch	•	link	1		1	
	<del> </del>	Not class			<del> </del>	rictions			+

	ISNP N	AME[n]						descript	10
	Ψ. τ τ	/.w[]						n:	
description	n:			<b>"</b>					l .
\$NP NA	ME								
		on zone ele	ment.						
description	n of field l	imits:							
•									
		imhar at alc	mante in	nrotection area	ie ie dafinad l	ov MD			
	1	imber of ele	ements in	protection area			E9 00 0	10	
axis identifier:		imber of ele	ements in	protection area	is is defined b		58.00.0	00	
axis identifier:	-	min.:	ements in	protection area			58.00.0	00	
axis identifier:	- run-in	min.:	-			rsion:		IOEM	laccess
axis	-	min.:		protection area	NCK vei	max.:	-		access
axis identifier:	-	min.:	-		NCK vei	max.:	-		
axis identifier: unit: read:	- run-in	min.:	-		PP X	max.:	- OPI X	OEM X	rights
axis identifier: unit: read: write:	- run-in X	min.: main run	runin stp		PP X X	max.:	- OPI	OEM	access rights
axis identifier: unit:	- run-in X	min.:	runin stp		PP X	max.:	- OPI X	OEM X	rights

STRING	\$NP_NE	XT[n]							description:	
description	1:				ı					
\$NP NE	XT[n]									
Name of	next prote	ection zon	e element	t.						
description	of field lin	nits:								
The max	mum num	nber of ele	ments in	protection	areas is	defined b	y MD			
axis identifier:						NCK vers	sion:	58.00.00	0	
unit:	-	min.:	-			!	max.:	-		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х	Х	
write:	X					Х		Х	Х	7
attributes:	global	block sear	ch	1		link	1	1		
		Not class	sified			No restr	rictions			

STRING	\$NP_AD	)D[n]							description	)
	<b>*</b> 1 11 _ 7 12	-[]							n:	
description	າ:								•	•
\$NP_AD	D[n]									
Name of	protectio	n element	to be add	ed to the c	urrent pro	tection z	one.			
description	of field li	mits:								
The maxi	mum nur	nber of ele	ments in	protection	areas is o	defined b	y MD			
axis				•		NCK vers	sion:	58.00.0	0	
identifier:										
unit:	-	min.:	-				max.:	-		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х		Х	Х	
write:	Х					Х		Х	Х	7
attributes:	global	block sear	ch	1		link	1	1		
		Not class	sified			No restr	rictions			

Not classified

Not classified

STRING	CAID TV	DEInl							descriptio	1
0114110	\$NP_TY	PE[II]							n:	
description	n:								•	
\$NP TYI	PE[n]									
Type of e	elementar	y body. Th	e followin	g element	ary bodie	s are pos	ssible:			
								sions L in t	the X direc	tion, W in
,				•		•		(+/-L/2, +/		
				vith radius				,	,	,
	` , ,	•	•			longitud	dinal axis ı	parallel to	Z axis. The	ecenter
	•				•	•		e parallel t		
lie at +/-F	•			,		3				
description	n of field lin	nits:								
The max	mum nun	nber of ele	ments in	protection	areas is	defined b	y MD			
axis						NCK ver		58.00.00	)	
identifier:										
unit:	-	min.:	-			•	max.:	-		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х		Х	Х	
write:	Х					Х		Х	Х	7
attributes:	global	block sear	ch	1	1	link		I	1	

DOUBLE	\$NP_PA	RA[n,MA]	XNUM_3I	D_PROT_					descripti n:	0
description	n:			•					•	•
\$NP PAI	RA[n, i]									
	elementa	ry body de		an element nder \$NP_		A maxin	num of 5 p	oarameter	s are requ	ired for the
		nber of ele		protection is 3.	areas is o	defined b	y MD			
axis identifier:						NCK ver	sion:	58.00.0	0	
unit:	mm	min.:	DBL_MIN	١			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х	Х	
write:	Х					Х		Х	Х	7
attributes:	global	block sear	ch			link	•	•	•	

No restrictions

No restrictions

DOUBLE	\$NP O	FF[n,3]							descripti	0
		L /- 1							n:	
description	n:									
\$NP_OF	F[n, i]									
Compone	ent i (0<=	i<=2) of th	e offset ve	ector of prot	ection zo	ne elem	nent n.			
description	n of field li	mits:		-						
The max	imum nu	mber of ele	ements in	protection a	reas is d	efined b	y MD			
The 2nd	index i d	esignates t	he coordi	nate axis (0	<= i <= 2	2).	•			
axis				,		NCK ver	sion:	58.00.0	0	
identifier:										
unit:	mm	min.:	DBL_MI	٧			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х	X	_
write:	Х					Х		Х	Х	7
attributes:	global	block sear	rch			link	*			
		Not class	sified			No resti	rictions			

DOUBLE	\$NP DI	R[n,3]							descripti	0
		L /- 1							n:	
description	n:									
\$NP_DIF	₹[n, i]									
Compone	ents of th	e rotary ax	is for a co	ordinate ro	otation in					
description	n of field li	mits:								
The max	imum nu	mber of ele	ements in	protection	areas is	defined b	y MD			
The 2nd	index i de	esignates t	he vector	componer	nt (0 <= i <	<= 2).				
axis						NCK ver	sion:	58.00.0	0	
identifier:			-							
unit:	deg.	min.:	DBL_MIN	٧			max.:	DBL_M	AX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	Х					Х		X	X	
write:	Х					Х		Х	Х	7
attributes:	global	block sear	rch			link	1	1	1	
		Not class	sified			No rest	rictions			

DOUBLE	\$NP AN	G[n]							descriptio	
	. –								n:	
description	1:									
\$NP_AN	G[n]									
Angle (in	degrees)	of a coord	dinate rota	ation in pro	tection ar	ea eleme	ent n			
description	n of field lin	nits:								
The maxi	mum num	nber of ele	ments in	protection	areas is	defined b	y MD			
axis						NCK ver	sion:	58.00.00	)	
identifier:										
unit:	mm	min.:	DBL_MIN	٧			max.:	DBL_MA	λX	
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access
										rights
read:	X					Х		Х	Х	
write:	Х					Х		Х	Х	7
attributes:	global	block sear	ch	•		link	•	•	•	
		Not class	sified			No restr	rictions			

STRING	\$NP G	ROUP_NA	ME[n]					descript	i0
		_						n:	
descriptior	<b>า</b> :								
\$NP_GR	OUP N	AME[n]							
		on area gro	up n						
descriptior	of field I	imits:							
The maxi	mum nu	mber of pro	otection a	reas groups is	defined by Mi	D			
axis identifier:		'			NCK vei		58.00.0	0	
unit:	-	min.:	-		!	max.:	-		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				Х		Х	Х	
write:	Х				Х		Х	Х	7
attributes:	global	block sear	ch	1	link				
		Not class	sified		No rest	rictions			

STRING	\$NP A	DD_GROU	Pſnl					descripti	0
								n:	
description	1:								
\$NP AD	D GROU	JP[n]							
Name of	additive	protection	area grou	p n					
description	n of field li	mits:		•					
The max	mum nu	mber of pro	otection a	reas groups is	s defined by M	ID			
axis					NCK ve	ersion:	58.00.0	10	
identifier:									
unit:	-	min.:	-			max.:	-		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access
read:	Х				X		X	X	rights
	Λ				^		^	^	
write:	Х				X		Х	X	7
attributes:	global	block sear	rch	· ·	link	•		•	
		Not class	sified		No res	trictions			

STRING	\$NP_ME	MBER_1	[n]						description:	0
description	n:									
\$NP_ME	MBER 1	[n]								
		of protect	tion area	group						
description	n of field lir	nits:		-						
The max	mum nur	nber of pro	otection a	reas group	s is defin	ed by MI	)			
axis identifier:				-		NCK ver	rsion:	58.00.0	0	
unit:	-	min.:	-				max.:	-		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х	Х	
write:	Х					Х		Х	Х	7
attributes:	global	block sear	ch			link	•	•	•	
		Not class	sified			No rest	rictions			

STRING	\$NP M	EMBER_2	[n]					descripti	0
	<b>,</b> , , , , , , , , , , , , , , , , , ,							n:	
descriptior	n:								
\$NP ME	MBER 2	2[n]							
2nd prote	ection are	ea of proted	ction area	group					
description				<u> </u>					
The maxi	mum nu	mber of pro	otection a	reas groups is	defined by MI	D			
axis identifier:					NCK ver	rsion:	58.00.0	00	
unit:	-	min.:	-			max.:	-		
	run-in	main run	runin stp	Mrun syn	PP	SA	OPI	OEM	access rights
read:	Х				X		Х	Х	
write:	Х				Х		Х	Х	7
attributes:	global	block sear	rch	<u> </u>	link	1	I	I	
		Not class	sified		No rest	rictions			

STRING	\$NP MI	EMBER_3	[n]						descripti	0
	<b>*</b> • • • • • • • • • • • • • • • • • • •								n:	
description	n:									
\$NP_ME	MBER_3	3[n]								
		a of protec	tion area	group						
description	n of field li	mits:								
The max	mum nu	mber of pro	otection a	reas groups	is define	d by MI	)			
axis						NCK ver	sion:	58.00.0	0	
identifier:										
unit:		min.:	-				max.:	-		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х	Х	
write:	Х					Х		Х	Х	7
attributes:	global	block sear	ch	<u> </u>		link		<u> </u>		
		Not class	sified			No resti	rictions			

STRING	\$NP_M	EMBER_4	[n]						descripti n:	0
description	<u> </u> า:								111.	
\$NP_ME	MBER 4	[n]								
		a of protec	tion area	group						
description	n of field li	mits:								
The maxi	mum nui	mber of pro	otection a	reas group	s is defin	ed by MI	)			
axis identifier:						NCK version:		58.00.00		
unit:	-	min.:	-			!	max.:	-		
	run-in	main run	runin stp	Mrun syn		PP	SA	OPI	OEM	access rights
read:	Х					Х		Х	Х	
write:	Х					Х		Х	Х	7
attributes:	global	block search				link				
		Not classified				No restrictions				

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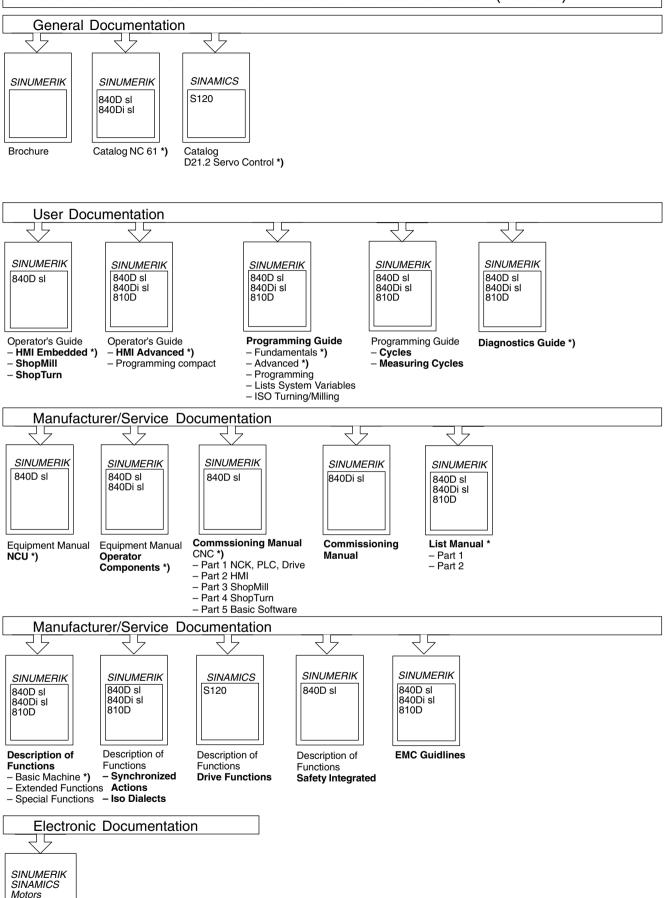
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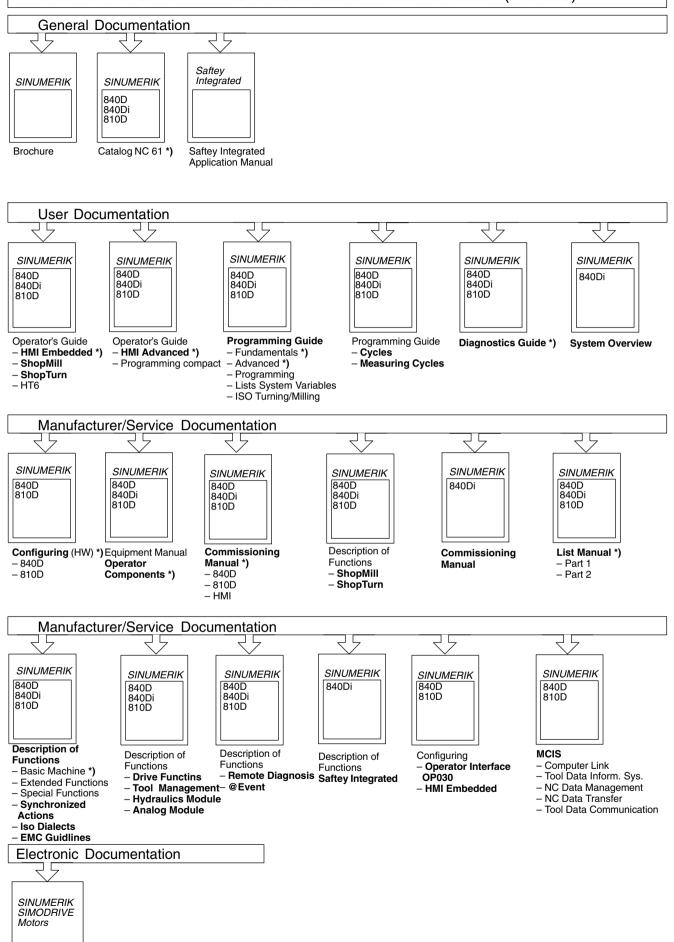
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