

CiA Draft Standard 408



Device profile fluid power technology

proportional valves and hydrostatic transmissions

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History

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1 Scope

This profile describes the functionality of interconnectable proportional valves, hydrostatic pumps and hydrostatic transmissions. The document is based on the profile “Fluid Power Technology”, version 1.5 released by VDMA Verband Deutscher Maschinen- und Anlagenbau e.V. Frankfurt/Main, Germany /VDMAPROP/. The device profile has been defined for hydraulic proportional valves, hydrostatic pumps and hydrostatic transmissions. It can as well be applied on pneumatic devices.

1.1 System environment hydrostatic transmissions

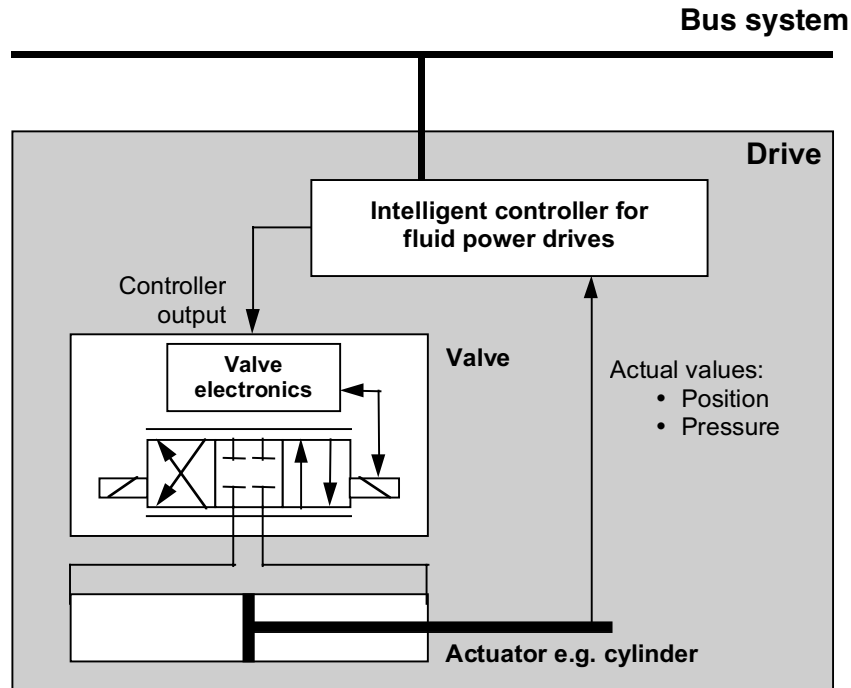


Figure 1: System environment hydrostatic transmissions

1.2 System environment valves

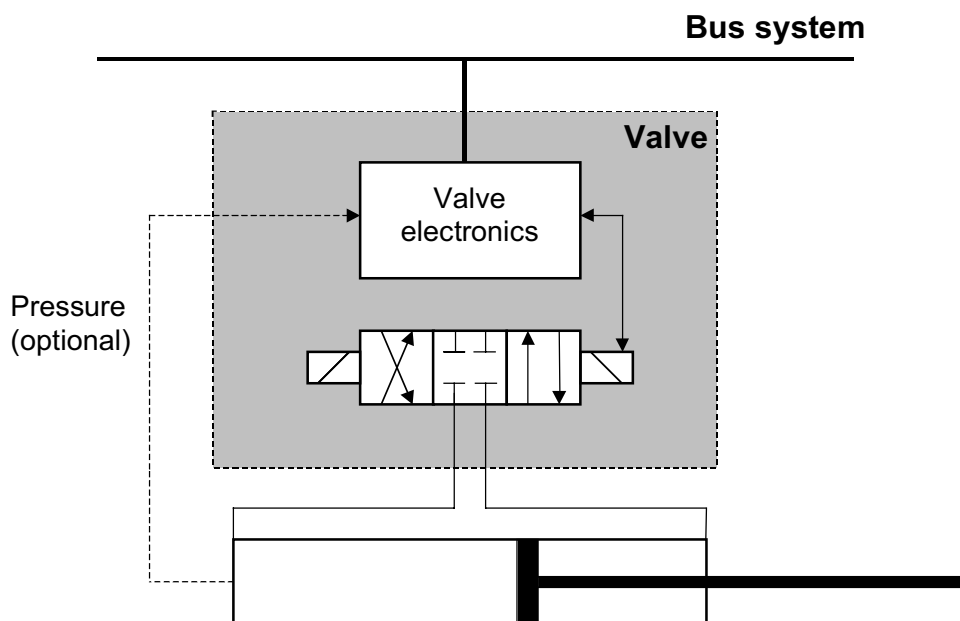


Figure 2: System environment valves

1.3 System environment hydrostatic pumps

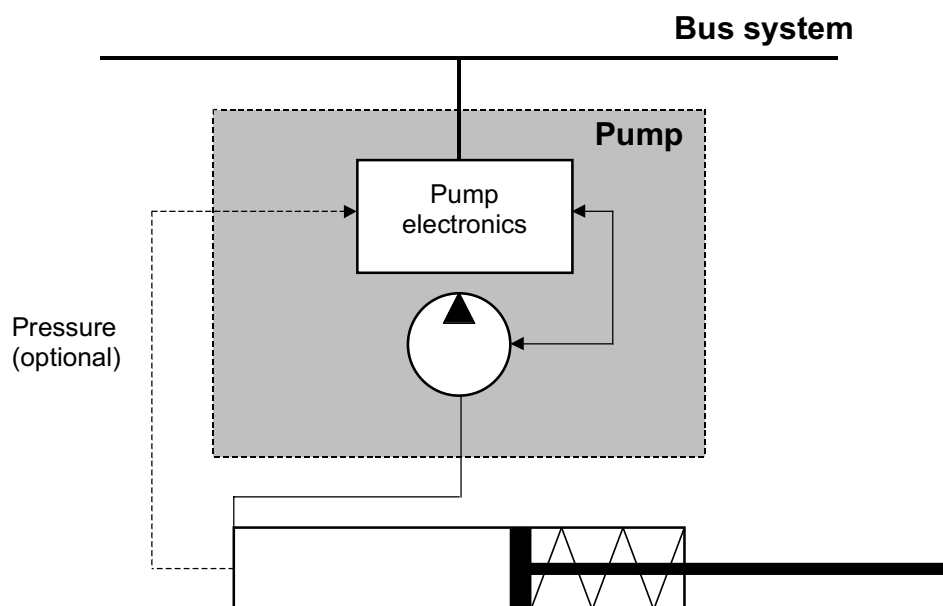


Figure 3: *System environment hydrostatic pumps*

All the above devices use communication techniques which conform to those described in the /CiA301/. This document should be consulted in parallel to this profile.

2 References

2.1 Normative references

- | | |
|------------|--|
| /VDMAPROP/ | Profile Fluid Power Technology. Proportional Valves and Hydrostatic Transmissions:2001 |
| /CiA301/ | CiA DS 301, CANopen application layer and communication profile |
| /CiA303-2/ | CiA DR 303-2, Representation of SI Units Draft Recommendation |

3 Abbreviations and definitions

3.1 Abbreviations

CAN	Controller area network.
COB	Communication object
COB-ID	COB-identifier
NMT	Network management
PDO	Process data object
SDO	Service data object
M	Mandatory
C	Conditional
O	Optional
rw	read/write
ro	read only
ir	internal resolution
dvc	Device
vlv	Valve
drv	Drive
vpoc	Valve position control
vprc	Valve pressure control
vpqc	Valve pQ control
dcol	Drive control open loop
dsp	Drive speed control
dfpc	Drive force pressure control
dpc	Drive position control

3.2 Definitions

The definitions given in /CiA301/ apply for this framework, too.

4 Operating principles

4.1 General definitions

For detailed information, please refer to /VDMAPROP/.

4.1.1 Internal resolution

The internal resolution is 16384 (4000_h) for 100% and -16384 (C000_h) for -100% of the range.

4.1.2 Direction of data

- Input data are transmitted from the transmission or the valve to the bus.
- Output data are transmitted from the bus to the transmission or the valve.

4.1.3 Direction of flow

A positive set point causes a flow from P to A.

4.2 Description of parameters

The description of parameters consists of the describing elements value, unit, and prefix. These describing elements are defined in /VDMAPROP/ by the attributes name, data type, substitute value, default value, value range, access rights, and object class. For each parameter attributes have been established, device mode specific or vendor specific.

NOTE: The profile does not describe when a change of a parameter is possible and/ or becomes valid. This is defined vendorspecifically.

4.2.1 Definition of SI unit and prefix

All objects with SI units and prefixes have to use the coding specified in /CiA303-2/. If SI unit and prefix are configurable, the associated sub-components have rw access, otherwise ro. For entry category and default values for SI unit and prefix see /VDMAPROP/.

SI units and prefixes have been specified together with the parameter definition following the format below:

VALUE DESCRIPTION

For definitions of SI units see /CiA303-2/. In addition, profile specific units have been defined (see 4.2.2).

For definitions of prefixes see /CiA303-2/.

OBJECT DESCRIPTION

INDEX	Profile index number
Name	Name of parameter
Object code	RECORD
Date type	(parameter data type record)
Category	(parameter category)

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of elements
Entry category	Mandatory
Access	ro
PDO mapping	No
Value range	1 to 3
Default value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	(Parameter access rights)
PDO mapping	(Parameter PDO mapping)
Value range	(Parameter value range)
Default value	(Parameter default value)

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	Parameter depending
PDO mapping	no
Value range	UNSIGNED8
Default value	Parameter depending

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	Parameter depending
PDO mapping	no
Value range	INTEGER8
Default value	Parameter depending

4.2.2 Profile-specific units

The following profile-specific units have been defined:

Code	Meaning
A0 _h	m/s
A1 _h	m/min
A2 _h	V/bar
A3 _h	V/m
A4 _h	m/(min * mm)
A5 _h	V/(m/s)
A6 _h	V/(m/s ²)
A7 _h	m ²
A8 _h	m/(s ²)
A9 _h	l/min

4.3 Device architecture

This following device architecture has been chosen in order to describe simple valves as well as complex hydrostatic transmissions (drives).

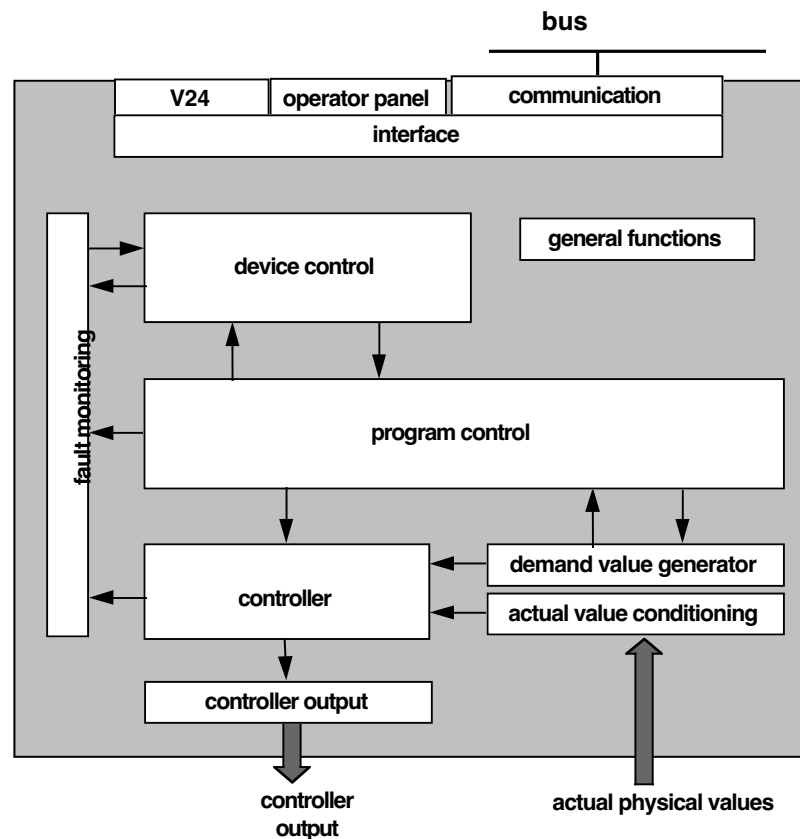


Figure 4: Device architecture

Remark:

When several valves are driven by one electronic circuit (modular device), multiple architectures are used except for the interface.

4.3.1 Mapping of the device architecture to CANopen profile objects

The blocks of the device architecture can be distinguished between controller-mode independent (device-global) blocks and controller-mode depending blocks. While device-global blocks have exactly one instance in a device, controller-mode depending blocks may have multiple instances (one instance per controller mode).

The controller-mode specific blocks have similar internal structure with functionally equivalent sub-blocks. For example, in *control mode* “valve position control” a controller block, a demand value generator (with optional sub-blocks like ramp, offset, or dead band compensation), a control monitoring block, an auxiliary function (dither) and a target monitoring block may be installed. The same block classes, but other instances are used for example in *control mode* “drive speed control” (for a detailed description of the blocks refer to /VDMAPROP/).

In order to have a unique description model, the parameters of the block instances are accessible by CANopen objects following a general device model. This device model is shown in Figure 5.

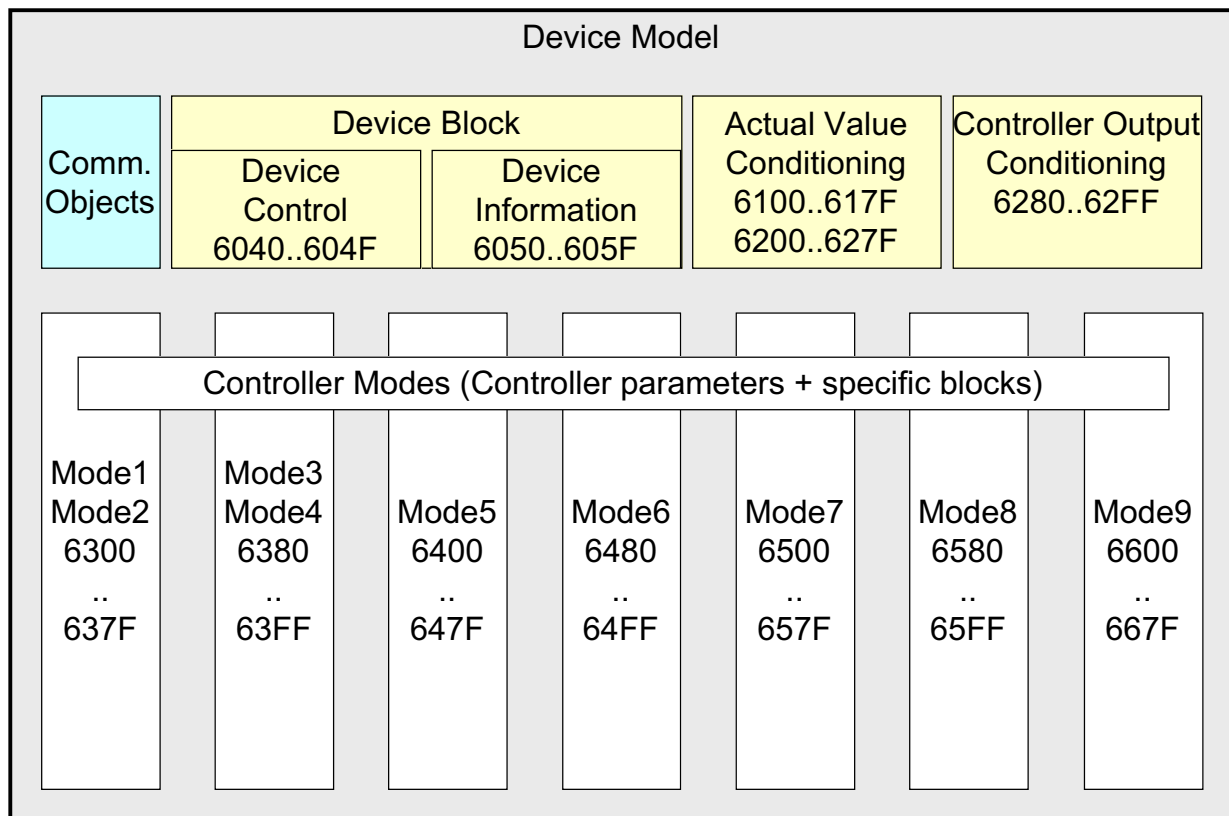


Figure 5: Device model for CANopen mapping

The controller-mode specific block is organised as shown in Figure 6. The offsets of the sub-blocks and objects are the same for all controller-mode specific blocks.

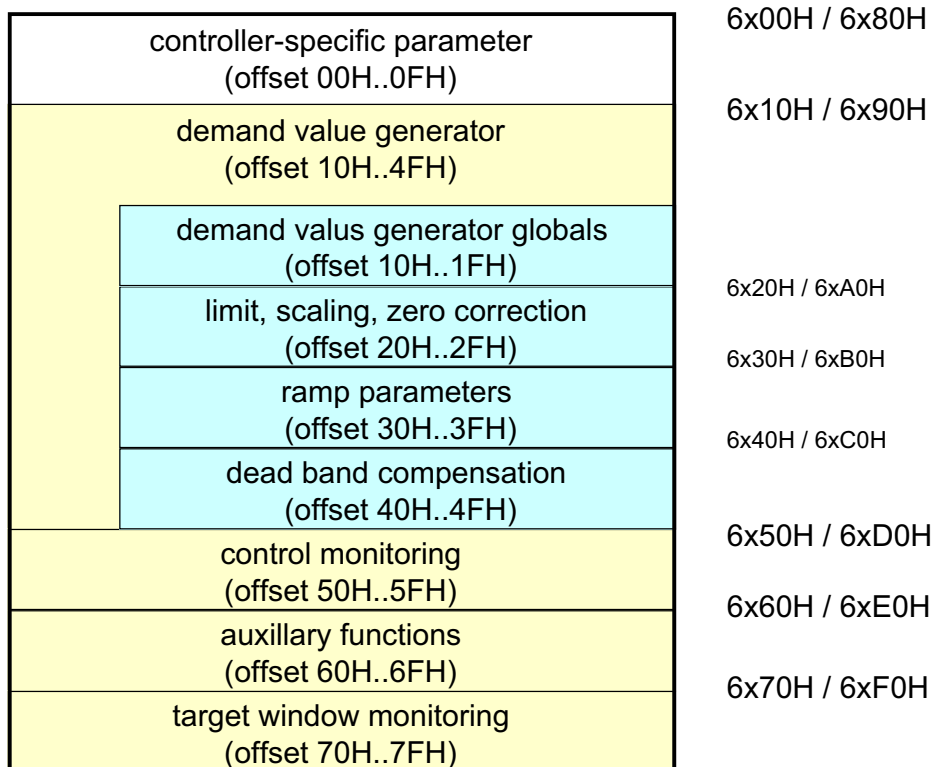


Figure 6: Structure of a controller-mode specific block

If a device is modular (multiple drives or valves driven by one electronic circuit), up to 8 instances (modules) can be implemented with an offset of 0800_h.

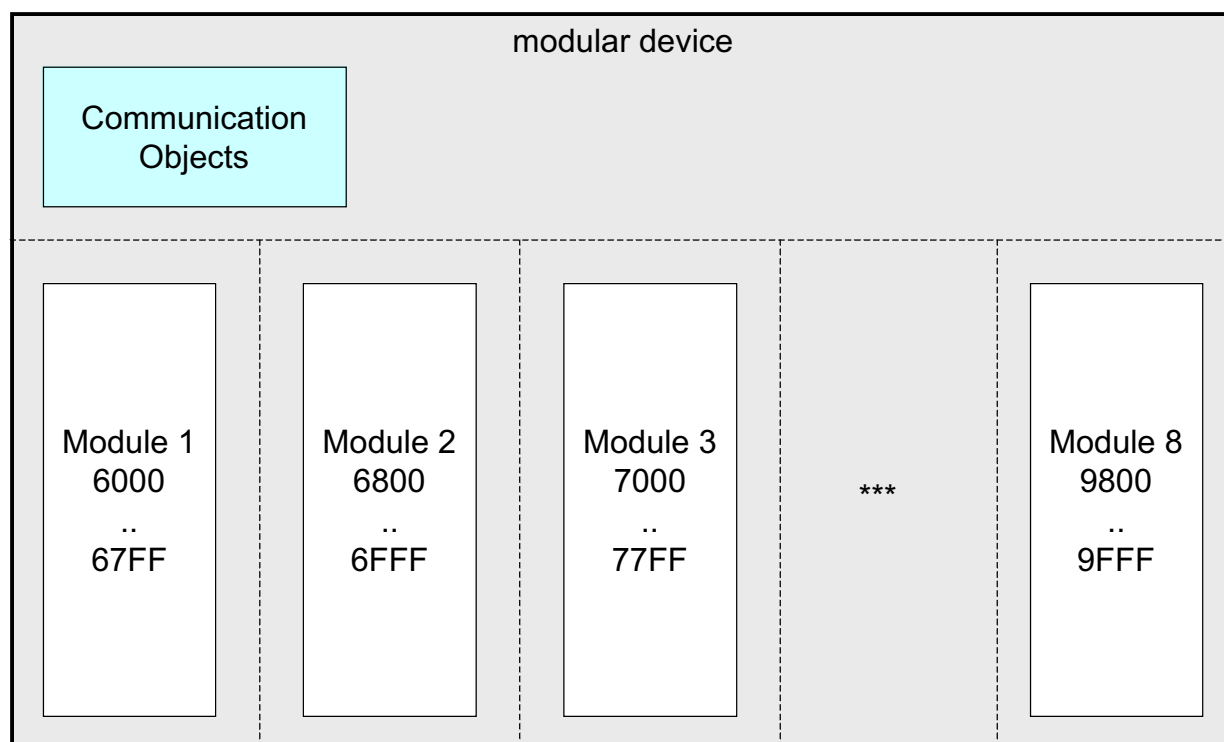


Figure 7: Structure of a modular device

4.3.2 Relation between statemachines

The device state machine defined in /VDMAPROP/, chapter 5.2 has relations to the CANopen communication state machine defined in /CiA301/, chapter 9.4. These relations are shown in Figure 8.

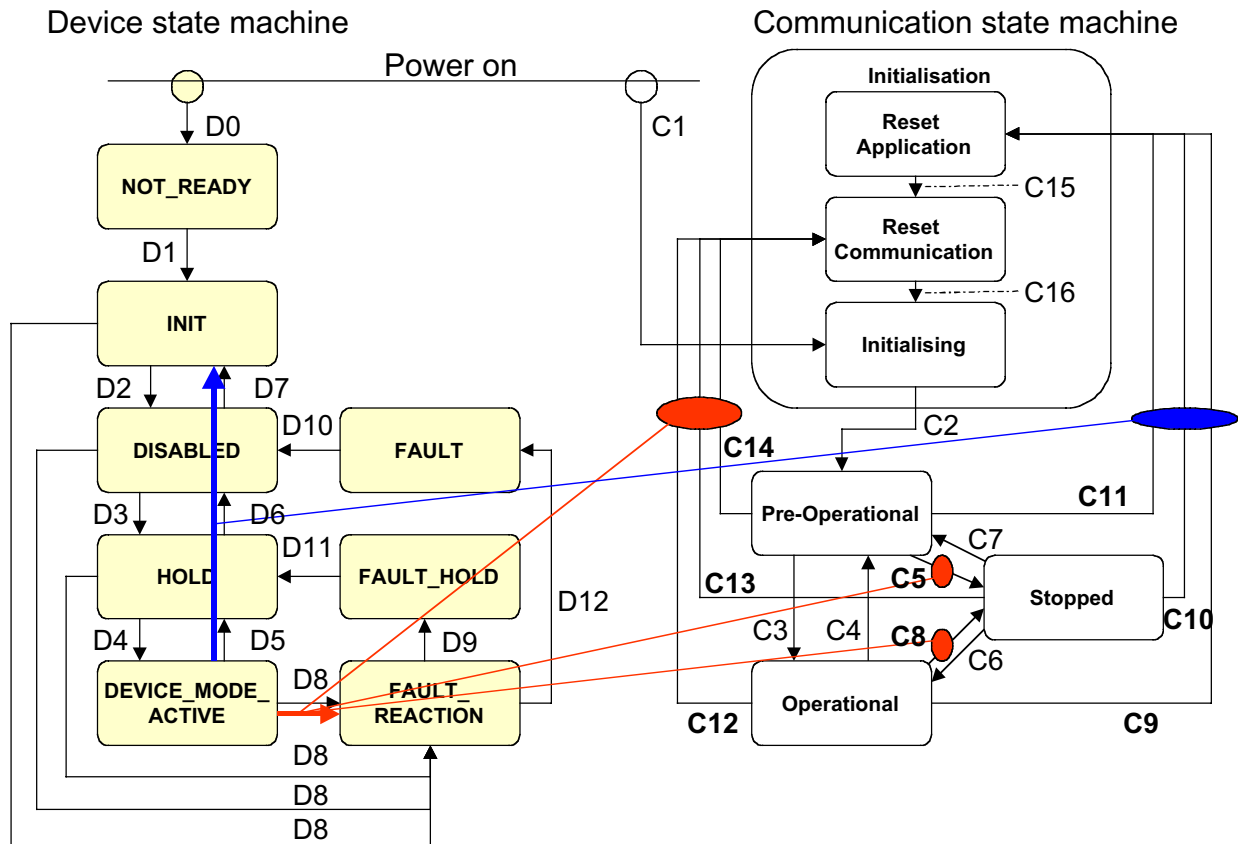


Figure 8: Relations between the state machines

If the device state machine is in mode `DEVICE_MODE_ACTIVE`, transitions in the communication state machine force the following reactions:

- The transitions C5 and C8 in the communication state machine (Pre-operational -> Stopped, Operational -> Stopped) force the transition D8 in the device state machine (`DEVICE_MODE_ACTIVE` -> `FAULT_REACTION`).
- The transitions C12, C13 and C14 in the communication state machine (Operational -> Reset Communication, Stopped -> Reset Communication and Pre-operational -> Reset Communication) force the transition D8 in the device state machine (`DEVICE_MODE_ACTIVE` -> `FAULT_REACTION`).
- The transitions C9, C10 and C11 in the communication state machine (Operational -> Reset Application, Stopped -> Reset Application and Pre-operational -> Reset Application) force a transition in the device state machine from `DEVICE_MODE_ACTIVE` to `INIT` (reset of the application).

5 Emergency messages

5.1 Principle

Emergency messages are triggered by the occurrence of a device internal malfunction and are transmitted from the concerned application device to other devices. This makes them suitable for interrupt type error alerts.

5.2 Error code meaning

In addition to the error codes specified in /CiA301/ the following error codes may be used for fluid power systems:

Error code	Description
2110 _h	Input Current too high
2211 _h	Internal current #1
2212 _h	Internal current #2
3110 _h	Input voltage out of range
3210 _h	Internal voltage too high
3220 _h	Internal voltage too low
3400 _h	Input voltage
3410 _h	Power supply voltage
3411 _h	Power supply voltage too high
3412 _h	Power supply voltage too low
3420 _h	Control voltage
3421 _h	Control voltage too high
3422 _h	Control voltage too low
4110 _h	Ambient temperature too high
4120 _h	Ambient temperature too low
4210 _h	Temperature of electronic components
4211 _h	Temperature of electronic components too high
4212 _h	Temperature of electronic components too low
4220 _h	Temperature of hydraulic components
4221 _h	Temperature of hydraulic components too high
4222 _h	Temperature of hydraulic components too low
5100 _h	Hardware power supply
5110 _h	Internal power supply error
5200 _h	Device control
5210 _h	Measurement circuits
5220 _h	Microprocessor core
5230 _h	Sensors
5231 _h	Sensor #1
5232 _h	Sensor #2
5233 _h	Sensor #3
5234 _h	Sensor #4

Error code	Description
5235 _h	Sensor #5
5236 _h	Sensor #6
5237 _h	Sensor #7
5238 _h	Sensor #8
5300 _h	Local input device
5400 _h	Power electronics
5410 _h	dDriver
5500 _h	Data memory
5510 _h	RAM
5520 _h	EPROM
5530 _h	EEPROM
6010 _h	Software reset (Watchdog)
6310 _h	Parameter loss
6320 _h	Parameter error
7300 _h	Sensor
7310 _h	Pressure sensor
8300 _h	Closed loop control monitoring
8301 _h	Position control monitoring
8302 _h	Pressure control monitoring

6 Communication objects

6.1 Object descriptions

6.1.1 Object 1000_h: Device type

Contains information about the device type. The object at index 1000_h describes the type of device and its functionality. It is composed of a 16 bit field which describes the device profile that is used (device profile number 408_d = 198_h). The other 16 bit field contains additional information.

Byte: MSB

LSB

Device Type																
additional information												Device profile number				
31	30	29	28	27	26	25	24	23	22	21	20	19	18	17	16	408 _d = 198 _h

Bit 16 to 30: reserved

Bit 31 = 1: modular device; capabilities of the single instances (modules) can be read in object *device capability* (offset 5F_h) of each instance

6.2 Default PDO mapping

The PDO mapping depends on the *device control mode* (6043_h, see 7.2.2.1.4) and is different for drives and valves.

If the device is a modular device, the PDO mapping has to be defined manufacturer specific.

6.2.1 Transmit PDO mapping

The assignment of the mappings to corresponding TPDO objects can be defined manufacturer specific. If the mappings are supported, the mapping parameters defined below have to be used.

- Mapping 1 is valid for drives and valves.
- Mapping 2 is valid only for valves supporting *control mode valve position control closed loop* (device control mode = 2 – see *IVDMAPROP*/, chapter 6.2).
- Mapping 3 is valid only for valves supporting *control mode valve pressure control closed loop* (device control mode = 4 – see *IVDMAPROP*/, chapter 6.2).
- Mapping 4 is valid only for valves supporting *control mode valve p/Q control* (device control mode = 5 – see *IVDMAPROP*/, chapter 6.2).
- Mapping 5 is valid only for drives supporting *control mode drive speed control* (device control mode = 7 – see *IVDMAPROP*/, chapter 6.2).
- Mapping 6 is valid only for drives supporting *control mode drive force/pressure control* (device control mode = 8 – see *IVDMAPROP*/, chapter 6.2).
- Mapping 7 is valid only for drives supporting *control modes drive position control closed loop* and *positional dependent deceleration* (device control mode = 9 or device control mode = 10 – see *IVDMAPROP*/, chapter 6.2).

	Object 1	Object 2	Object 3	Transmission type
Mapping 1	6041 _h / 00 _h	-	-	255
Mapping 2	6041 _h / 00 _h	6301 _h / 01 _h	-	255
Mapping 3	6041 _h / 00 _h	6381 _h / 01 _h	-	255
Mapping 4	6041 _h / 00 _h	6301 _h / 01 _h	6381 _h / 01 _h	255
Mapping 5	6041 _h / 00 _h	6501 _h / 01 _h	-	255
Mapping 6	6041 _h / 00 _h	6581 _h / 01 _h	-	255
Mapping 7	6041 _h / 00 _h	6601 _h / 01 _h	-	255

A TPDO with transmission type 255 shall be transmitted immediately after receiving the corresponding RPDO. This ensures, that an application will receive actual values and status information every time after a set point and a control word has been sent to the device.

6.2.1.1 Mapping parameter of mapping 1**OBJECT DESCRIPTION**

Index	1A0x _h
Name	TPDO(x+1)
Object code	RECORD
Data type	PDO mapping parameter

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of mapped application objects
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	0 to 64, 255
Default value	1

Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6041 00 10 _h

6.2.1.2 Mapping parameter of mapping 2**OBJECT DESCRIPTION**

Index	1A0x _h
Name	TPDO(x+1)
Object code	RECORD
Data type	PDO mapping parameter

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of mapped application objects
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	0 to 64, 255
Default value	2

Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6041 00 10 _h

Sub-index	02 _h
Description	2nd application object
Entry category	Madatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6301 01 10 _h

6.2.1.3 Mapping parameter of mapping 3

OBJECT DESCRIPTION

Index	1A0x _h
Name	TPDO(x+1)
Object code	RECORD
Data type	PDO mapping parameter

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of mapped application objects
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	0 to 64, 255
Default value	2

Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6041 00 10 _h

Sub-index	02 _h
Description	2nd application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6381 01 10 _h

6.2.1.4 Mapping parameter of mapping 4

OBJECT DESCRIPTION

Index	1A0x _h
Name	TPDO(x+1)
Object code	RECORD
Data type	PDO mapping parameter

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of mapped application objects
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	0 to 64, 255
Default value	3

Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6041 00 10 _h

Sub-index	02 _h
Description	2nd application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6301 01 10 _h

Sub-index	03 _h
Description	3rd application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6381 01 10 _h

6.2.1.5 Mapping parameter of mapping 5

OBJECT DESCRIPTION

Index	1A0x _h
Name	TPDO(x+1)
Object code	RECORD
Data type	PDO mapping parameter

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of mapped application objects
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	0 to 64, 255
Default value	2

Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6041 00 10 _h

Sub-index	02 _h
Description	2nd application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6501 01 20 _h

6.2.1.6 Mapping parameter of mapping 6**OBJECT DESCRIPTION**

Index	1A0x _h
Name	TPDO(x+1)
Object code	RECORD
Data type	PDO mapping parameter

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of mapped application objects
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	0 to 64, 255
Default value	2

Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6041 00 10 _h

Sub-index	02 _h
Description	2nd application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6581 01 20 _h

6.2.1.7 Mapping parameter of mapping 7**OBJECT DESCRIPTION**

Index	1A0x _h
Name	TPDO(x+1)
Object code	RECORD
Data type	PDO mapping parameter

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of mapped application objects
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	0 to 64, 255
Default value	2

Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6041 00 10 _h

Sub-index	02 _h
Description	2nd application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6601 01 20 _h

6.2.2 Receive PDO mapping

The assignment of the mappings to corresponding RPDO objects can be defined manufacturer specific. If the mappings are supported, the mapping parameters defined below should be used.

- Mapping 1 is valid for drives and valves.
- Mapping 2 is valid only for valves supporting *control mode valve position control open loop* and *valve position control closed loop* (device control mode = 1 or device control mode = 2 – see /VDMAPROP/, chapter 6.2).
- Mapping 3 is valid only for valves supporting *control mode valve pressure control open loop* and *valve pressure control closed loop* (device control mode = 3 or device control mode = 4 – see /VDMAPROP/, chapter 6.2).
- Mapping 4 is valid only for valves supporting *control mode valve p/Q control* (device control mode = 5 – see /VDMAPROP/, chapter 6.2).
- Mapping 5 is valid only for drives supporting *control mode drive open loop movement* (device control mode = 6 – see /VDMAPROP/, chapter 6.2).
- Mapping 6 is valid only for drives supporting *control mode drive speed control* (device control mode = 7 – see /VDMAPROP/, chapter 6.2).
- Mapping 7 is valid only for drives supporting *control mode drive force/pressure control* (device control mode = 8 – see /VDMAPROP/, chapter 6.2).

- Mapping 8 is valid only for drives supporting *control mode drive position control closed loop* and *positional dependent deceleration* (device control mode = 9 or device control mode = 10 – see /VDMAPROP/, chapter 6.2).

	Object 1	Object 2	Object 3	Transmission type
Mapping 1	6040 _h / 00 _h	-	-	255
Mapping 2	6040 _h / 00 _h	6300 _h / 01 _h	-	255
Mapping 3	6040 _h / 00 _h	6380 _h / 01 _h	-	255
Mapping 4	6040 _h / 00 _h	6300 _h / 01 _h	6380 _h / 01 _h	255
Mapping 5	6040 _h / 00 _h	6480 _h / 01 _h	-	255
Mapping 6	6040 _h / 00 _h	6500 _h / 01 _h	-	255
Mapping 7	6040 _h / 00 _h	6580 _h / 01 _h	-	255
Mapping 8	6040 _h / 00 _h	6600 _h / 01 _h	-	255

6.2.2.1 Mapping parameter of mapping 1

OBJECT DESCRIPTION

Index	160x _h
Name	RPDO(x+1)
Object code	RECORD
Data type	PDO mapping parameter

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of mapped application objects
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	0 to 64, 255
Default value	1

Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6040 00 10 _h

6.2.2.2 Mapping parameter of mapping 2**OBJECT DESCRIPTION**

Index	160x _h
Name	RPDO(x+1)
Object code	RECORD
Data type	PDO mapping parameter

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of mapped application objects
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	0 to 64, 255
Default value	2

Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6040 00 10 _h

Sub-index	02 _h
Description	2nd application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6300 01 10 _h

6.2.2.3 Mapping parameter of mapping 3**OBJECT DESCRIPTION**

Index	160x _h
Name	RPDO(x+1)
Object code	RECORD
Data type	PDO mapping parameter

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of mapped application objects
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	0 to 64, 255
Default value	2

Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6040 00 10 _h

Sub-index	02 _h
Description	2nd application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6380 01 10 _h

6.2.2.4 Mapping parameter of mapping 4**OBJECT DESCRIPTION**

Index	160x _h
Name	RPDO(x+1)6
Object code	RECORD
Data type	PDO mapping parameter

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of mapped application objects
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	0 to 64, 255
Default value	3

Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default vValue	6040 00 10 _h

Sub-index	02 _h
Description	2nd application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6300 01 10 _h

Sub-index	03 _h
Description	3rd application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6380 01 10 _h

6.2.2.5 Mapping parameter of mapping 5

OBJECT DESCRIPTION

Index	160x _h
Name	RPDO(x+1)
Object code	RECORD
Data type	PDO mapping parameter

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of mapped application objects
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	0 to 64, 255
Default value	2

Sub-index	01 _h
Description	1st application object
Entry Category	Mandatory
Access	rw
PDO Mapping	No
Value Range	UNSIGNED32
Default Value	6040 00 10 _h

Sub-index	02 _h
Description	2nd application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6480 01 20 _h

6.2.2.6 Mapping parameter of mapping 6

OBJECT DESCRIPTION

Index	160x _h
Name	RPDO(x+1)
Object code	RECORD
Data type	PDO mapping parameter

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of mapped application objects
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	0 to 64, 255
Default value	2

Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6040 00 10 _h

Sub-index	02 _h
Description	2nd application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6500 01 20 _h

6.2.2.7 Mapping parameter of mapping 7

OBJECT DESCRIPTION

Index	160x _h
Name	RPDO(x+1)
Object code	RECORD
Data type	PDO mapping parameter

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of mapped application objects
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	0 to 64, 255
Default value	2

Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6040 00 10 _h

Sub-index	02 _h
Description	2nd application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6580 01 20 _h

6.2.2.8 Mapping parameter of mapping 8**OBJECT DESCRIPTION**

Index	160x _h
Name	RPDO(x+1)
Object code	RECORD
Data type	PDO mapping parameter

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of mapped application objects
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	0 to 64, 255
Default value	2

Sub-index	01 _h
Description	1st application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6040 00 10 _h

Sub-index	02 _h
Description	2nd application object
Entry category	Mandatory
Access	rw
PDO mapping	No
Value range	UNSIGNED32
Default value	6600 01 20 _h

7 Object dictionary

7.1 Data types and encoding rules

7.1.1 Complex data type definitions

7.1.1.1 Value parameter record Unsigned8 (0080_h)

Table 1: Value parameter record Unsigned8

Index	Sub-index	Description	Data type
0080 _h	00 _h	Number of entries	Unsigned8
	01 _h	Value	Unsigned8
	02 _h	SI unit	Unsigned8
	03 _h	Prefix	Integer8

7.1.1.2 Value parameter record Unsigned16 (0081_h)

Table 2: Value parameter record Unsigned16

Index	Sub-index	Description	Data type
0081 _h	00 _h	Number of entries	Unsigned8
	01 _h	Value	Unsigned16
	02 _h	SI unit	Unsigned8
	03 _h	Prefix	Integer8

7.1.1.3 Value parameter record Unsigned32 (0082_h)

Table 3: Value parameter record Unsigned32

Index	Sub-index	Description	Data type
0082 _h	00 _h	Number of entries	Unsigned8
	01 _h	Value	Unsigned32
	02 _h	SI unit	Unsigned8
	03 _h	Prefix	Integer8

7.1.1.4 Value parameter record Integer8 (0083_h)

Table 4: Value parameter record Integer8

Index	Sub-index	Description	Data type
0083 _h	00 _h	Number of entries	Unsigned8
	01 _h	Value	Integer8
	02 _h	SI unit	Unsigned8
	03 _h	Prefix	Integer8

7.1.1.5 Value parameter record Integer16 (0084_h)**Table 5: Value parameter record Integer16**

Index	Sub-index	Description	Data type
0084 _h	00 _h	Number of entries	Unsigned8
	01 _h	Value	Integer16
	02 _h	SI unit	Unsigned8
	03 _h	Prefix	Integer8

7.1.1.6 Value parameter record Integer32 (0085_h)**Table 6: Value parameter record Integer32**

Index	Sub-index	Description	Data type
0085 _h	00 _h	Number of entries	Unsigned8
	01 _h	Value	Integer32
	02 _h	SI unit	Unsigned8
	03 _h	Prefix	Integer8

7.1.1.7 Value parameter record Float32 (0086_h)**Table 7: Value parameter record Unsigned8**

Index	Sub-index	Description	Data type
0086 _h	00 _h	Number of entries	Unsigned8
	01 _h	Value	Float32
	02 _h	SI unit	Unsigned8
	03 _h	Prefix	Integer8

7.1.1.8 Value parameter record Float64 (0087_h)**Table 8: Value parameter record Unsigned8**

Index	Sub-index	Description	Data type
0087 _h	00 _h	Number of entries	Unsigned8
	01 _h	Value	Float64
	02 _h	SI unit	Unsigned8
	03 _h	Prefix	Integer8

7.2 Application object definitions**7.2.1 Overview**

Index	Object	Name	Data type	Acc.	M/O/C
6040 _h	VAR	Device control word	Unsigned16	rw	M
6041 _h	VAR	Device status word	Unsigned16	ro	M
6042 _h	VAR	Device mode	Integer8	rw	O
6043 _h	VAR	Device control mode	Integer8	rw	O
604E _h	VAR	Device error code	Unsigned16	ro	O
604F _h	VAR	Device local	Integer8	rw	O
6050 _h	VAR	Device version	Visible string	ro	O
6051 _h	VAR	Device code number	Unsigned16	rw	O

Index	Object	Name	Data type	Acc.	M/O/C
6052 _h	VAR	Device serial number	Visible string	ro	O
6053 _h	VAR	Device description	Visible string	rw	O
6054 _h	VAR	Device model description	Visible string	ro	O
6055 _h	VAR	Device model URL	Visible string	ro	O
6056 _h	VAR	Device parameter set code	Unsigned8	rw	O
6057 _h	VAR	Device vendor name	Visible string	ro	O
605F _h	VAR	Device capability	Unsigned32	ro	M
6100 _h	VAR	vlv actual value conditioning max interface number	Unsigned8	ro	C
6101 _h	VAR	vlv actual value conditioning interface number	Unsigned8	rw	C
6102 _h	VAR	vlv actual value conditioning type	Integer8	rw	C
6103 _h	VAR	vlv actual value conditioning sign	Integer8	rw	O
6104 _h	RECORD	vlv actual value conditioning actual value	value record integer16	ro	O
6110 _h	RECORD	vlv actual value conditioning actual value 1	value record integer16	ro	O
6111 _h	RECORD	vlv actual value conditioning actual value 2	value record integer16	ro	O
6112 _h	RECORD	vlv actual value conditioning actual value 3	value record integer16	ro	O
6113 _h	RECORD	vlv actual value conditioning actual value 4	value record integer16	ro	O
6114 _h	RECORD	vlv actual value conditioning actual value 5	value record integer16	ro	O
6115 _h	RECORD	vlv actual value conditioning actual value 6	value record integer16	ro	O
6116 _h	RECORD	vlv actual value conditioning actual value 7	value record integer16	ro	O
6117 _h	RECORD	vlv actual value conditioning actual value 8	value record integer16	ro	O
6120 _h	RECORD	vlv actual value conditioning min pressure	value record integer16	rw	C
6121 _h	RECORD	vlv actual value conditioning max pressure	value record integer16	rw	C
6122 _h	RECORD	vlv actual value conditioning area	value record integer16	rw	C
6123 _h	RECORD	vlv actual value conditioning pressure offset	value record integer16	rw	C
6124 _h	RECORD	vlv actual value conditioning min transducer signal	value record integer16	rw	C
6125 _h	RECORD	vlv actual value conditioning max transducer signal	value record integer16	rw	C
6130 _h	RECORD	vlv actual value conditioning min reference	value record integer16	rw	C
6131 _h	RECORD	vlv actual value conditioning max reference	value record integer16	rw	C

Index	Object	Name	Data type	Acc.	M/O/C
6132 _h	RECORD	vlv actual value conditioning T1	value record unsigned32	rw	C
6133 _h	RECORD	vlv actual value conditioning min interface	value record integer16	rw	C
6134 _h	RECORD	vlv actual value conditioning max interface	value record integer16	rw	C
6140 _h	RECORD	vlv actual value conditioning resolution	value record integer16	rw	C
6141 _h	RECORD	vlv actual value conditioning position offset	value record integer16	rw	C
6142 _h	RECORD	vlv actual value conditioning zero shift	value record integer16	rw	C
6143 _h	VAR	vlv actual value conditioning bit size	Unsigned8	rw	O
6144 _h	RECORD	vlv actual value conditioning C	value record integer16	rw	C
6145 _h	VAR	vlv actual value conditioning start stop type	Integer8	rw	C
6200 _h	VAR	drv actual value conditioning max interface number	Unsigned8	ro	C
6201 _h	VAR	drv actual value conditioning interface number	Unsigned8	rw	C
6202 _h	VAR	drv actual value conditioning type	Integer8	rw	C
6203 _h	VAR	drv actual value conditioning sign	Integer8	rw	O
6204 _h	RECORD	drv actual value conditioning actual value	value record integer32	ro	O
6210 _h	RECORD	drv actual value conditioning actual value 1	value record integer32	ro	O
6211 _h	RECORD	drv actual value conditioning actual value 2	value record integer32	ro	O
6212 _h	RECORD	drv actual value conditioning actual value 3	value record integer132	ro	O
6213 _h	RECORD	drv actual value conditioning actual value 4	value record integer32	ro	O
6214 _h	RECORD	drv actual value conditioning actual value 5	value record integer32	ro	O
6215 _h	RECORD	drv actual value conditioning actual value 6	value record integer32	ro	O
6216 _h	RECORD	drv actual value conditioning actual value 7	value record integer32	ro	O
6217 _h	RECORD	drv actual value conditioning actual value 8	value record integer32	ro	O
6220 _h	RECORD	drv actual value conditioning min pressure	value record integer32	rw	C
6221 _h	RECORD	drv actual value conditioning max pressure	value record integer32	rw	C
6222 _h	RECORD	drv actual value conditioning area	value record integer32	rw	C
6223 _h	RECORD	drv actual value conditioning pressure offset	value record integer32	rw	C

Index	Object	Name	Data type	Acc.	M/O/C
6224 _h	RECORD	drv actual value conditioning min transducer signal	value record integer32	rw	C
6225 _h	RECORD	drv actual value conditioning max transducer signal	value record integer32	rw	C
6230 _h	RECORD	drv actual value conditioning min reference	value record integer32	rw	C
6231 _h	RECORD	drv actual value conditioning max reference	value record integer32	rw	C
6232 _h	RECORD	drv actual value conditioning T1	value record unsigned32	rw	C
6233 _h	RECORD	drv actual value conditioning min interface	value record integer32	rw	C
6234 _h	RECORD	drv actual value conditioning max interface	value record integer32	rw	C
6240 _h	RECORD	drv actual value conditioning resolution	value record integer32	rw	C
6241 _h	RECORD	drv actual value conditioning position offset	value record integer32	rw	C
6242 _h	RECORD	drv actual value conditioning zero shift	value record integer32	rw	C
6243 _h	VAR	drv actual value conditioning bit size	Unsigned8	rw	O
6244 _h	RECORD	drv actual value conditioning C	value record integer32	rw	C
6245 _h	VAR	drv actual value conditioning start stop type	Integer8	rw	C
6280 _h	RECORD	drv controller output	value record integer32	ro	O
6281 _h	RECORD	drv controller output interface min	value record integer32	rw	C
6282 _h	RECORD	drv controller output interface max	value record integer32	rw	C
6290 _h	VAR	drv controller output filter type	Integer8	rw	C
6291 _h	RECORD	drv controller output filter T1	value record unsigned32	rw	C
6292 _h	RECORD	drv controller output filter D	value record integer32	rw	C
6293 _h	RECORD	drv controller output filter f0	value record unsigned32	rw	C
62A0 _h	VAR	drv controller output directional dependent gain type	Integer8	rw	C
62A1 _h	VAR	drv controller output directional dependent gain factor	Unsigned32	rw	C
62A2 _h	VAR	drv controller output characteristic compensation type	Integer8	rw	C
62B0 _h	VAR	drv controller output dead band compensation type	Integer8	rw	C
62B1 _h	RECORD	drv controller output ded ban compensation A side	value record integer32	rw	C

Index	Object	Name	Data type	Acc.	M/O/C
62B2 _h	RECORD	drv controller output dead band compensation B side	value record integer32	rw	C
62B3 _h	RECORD	drv controller output dead band compensation threshold	value record integer32	rw	C
62C0 _h	RECORD	drv controller output zero correction offset	value record integer32	rw	C
62D0 _h	VAR	drv controller output dither type	Integer8	rw	C
62D1 _h	RECORD	drv controller output dither amplitude	value record integer32	rw	C
62D2 _h	RECORD	drv controller output dither frequency	value record unsigned32	rw	C
62E0 _h	RECORD	drv controller output upper limit	value record integer32	rw	C
62E1 _h	RECORD	drv controller output lower limit	value record integer32	rw	C
62F0 _h	VAR	drv controller output inverting sign	Integer8	rw	O
6300 _h	RECORD	vpoc set point	value record integer16	rw	C
6301 _h	RECORD	vpoc actual value	value record integer16	ro	C
6302 _h	VAR	vpoc interface reference	Unsigned8	rw	O
6310 _h	RECORD	vpoc demand value generator demand value	value record integer16	ro	O
6311 _h	RECORD	vpoc demand value generator reference value	value record integer16	rw	O
6314 _h	RECORD	vpoc demand value generator hold set point	value record integer16	rw	O
6320 _h	RECORD	vpoc demand value generator upper limit	value record integer16	rw	C
6321 _h	RECORD	vpoc demand value generator lower limit	value record integer16	rw	C
6322 _h	VAR	vpoc demand value generator scaling factor	Unsigned32	rw	C
6323 _h	RECORD	vpoc demand value generator scaling offset	value record integer16	rw	C
6324 _h	RECORD	vpoc demand value generator zero correction offset	value record integer16	rw	C
6330 _h	VAR	vpoc demand value generator ramp type	Integer8	rw	C
6331 _h	RECORD	vpoc demand value generator ramp acceleration time	value record unsigned16	rw	C
6332 _h	RECORD	vpoc demand value generator ramp acceleration time positive	value record unsigned16	rw	C
6333 _h	RECORD	vpoc demand value generator ramp acceleration time negative	value record unsigned16	rw	C
6334 _h	RECORD	vpoc demand value generator ramp deceleration time	value record unsigned16	rw	C

Index	Object	Name	Data type	Acc.	M/O/C
6335 _h	RECORD	vpoc demand value generator ramp deceleration time positive	value record unsigned16	rw	C
6336 _h	RECORD	vpoc demand value generator ramp deceleration time negative	value record unsigned16	rw	C
6340 _h	VAR	vpoc demand value generator directional dependent gain type	Integer8	rw	C
6341 _h	VAR	vpoc demand value generator directional dependent gain factor	Unsigned32	rw	C
6342 _h	VAR	vpoc demand value generator dead band compensation type	Integer8	rw	C
6343 _h	RECORD	poc demand value generator dead band compensation A side	value record integer16	rw	C
6344 _h	RECORD	vpoc demand vale generator dead band compensation B side	value record integer16	rw	C
6345 _h	RECORD	vpoc demand value generator dead band compensation threshold	value record integer16	rw	C
6346 _h	VAR	vpoc demand value generator characteristic compensation type	Integer8	rw	C
6350 _h	RECORD	vpoc control deviation	value record integer16	ro	O
6351 _h	VAR	vpoc control monitoring type	Integer8	rw	C
6352 _h	RECORD	vpoc control monitoring delay time	value record unsigned16	rw	O
6353 _h	RECORD	vpoc control monitoring threshold	value record integer16	rw	C
6354 _h	RECORD	vpoc control monitoring upper threshold	value record integer16	rw	C
6355 _h	RECORD	vpoc control monitoring lower threshold	value record integer16	rw	C
6360 _h	VAR	vpoc dither type	Integer8	rw	C
6361 _h	RECORD	vpoc dither amplitude	value record unsigned16	rw	C
6362 _h	RECORD	vpoc dither frequency	value record unsigned16	rw	C
6370 _h	VAR	vpoc target window monitoring type	Integer8	rw	C
6371 _h	RECORD	vpoc traget window monitoring switch on time	value record unsigned16	rw	O
6372 _h	RECORD	vpoc target window monitoring switch off time	value record unsigned16	rw	O
6373 _h	RECORD	vpoc target window monitoring threshold	value record integer16	rw	C
6374 _h	RECORD	vpoc target window monitoring upper threshold	value record integer16	rw	C
6375 _h	RECORD	vpoc target window monitoring lower threshold	value record integer16	rw	C

Index	Object	Name	Data type	Acc.	M/O/C
6380 _h	RECORD	vprc set point	value record integer16	rw	C
6381 _h	RECORD	vprc actual value	value record integer16	ro	C
6382 _h	VAR	vprc interface reference	Unsigned8	rw	O
6390 _h	RECORD	vprc demand value generator demand value	value record integer16	ro	O
6391 _h	RECORD	vprc demand value generator reference value	value record integer16	rw	O
6394 _h	RECORD	vprc demand value generator hold set point	value record integer16	rw	O
63A0 _h	RECORD	vprc demand value generator upper limit	value record integer16	rw	C
63A1 _h	RECORD	vprc demand value generator lower limit	value record integer16	rw	C
63A2 _h	VAR	vprc demand value generator scaling factor	Unsigned32	rw	C
63A3 _h	RECORD	vprc demand value generator scaling offset	value record integer16	rw	C
63A4 _h	RECORD	vprc demand value generator zero correction offset	value record integer16	rw	C
63B0 _h	VAR	vprc demand value generator ramp type	Integer8	rw	C
63B1 _h	RECORD	vprc demand value generator ramp acceleration time	value record unsigned16	rw	C
63B2 _h	RECORD	vprc demand value generator ramp acceleration time positive	value record unsigned16	rw	C
63B3 _h	RECORD	vprc demand value generator ramp acceleration time negative	value record unsigned16	rw	C
63B4 _h	RECORD	vprc demand value generator ramp deceleration time	value record unsigned16	rw	C
63B5 _h	RECORD	vprc demand value generator ramp deceleration time positive	value record unsigned16	rw	C
63B6 _h	RECORD	vprc demand value generator ramp deceleration time negative	value record unsigned16	rw	C
63C0 _h	VAR	vprc demand value generator dirrectional dependent gain type	Integer8	rw	C
63C1 _h	VAR	vprc demand value generator directional dependent gain factor	Unsigned32	rw	C
63C2 _h	VAR	vprc demand value generator dead band compensation type	Integer8	rw	C
63C3 _h	RECORD	vprc demand value generator dead band compensation A side	value record integer16	rw	C
63C4 _h	RECORD	vprc demand value generator dead band compensation B side	value record integer16	rw	C
63C5 _h	RECORD	vprc demand value generator dead band compensation threshold	value record integer16	rw	C

Index	Object	Name	Data type	Acc.	M/O/C
63C6 _h	VAR	vprc demand value generator characteristic compensation type	Integer8	rw	C
63D0 _h	RECORD	vprc control deviation	value record integer16	ro	O
63D1 _h	VAR	vprc control monitoring type	Integer8	rw	C
63D2 _h	RECORD	vprc control monitoring delay time	value record unsigned16	rw	O
63D3 _h	RECORD	vprc control monitoring threshold	value record integer16	rw	C
63D4 _h	RECORD	vprc control monitoring upper threshold	value record integer16	rw	C
63D5 _h	RECORD	vprc control monitoring lower threshold	value record integer16	rw	C
63E0 _h	VAR	vprc dither type	Integer8	rw	C
63E1 _h	RECORD	vprc dither amplitude	value record unsigned16	rw	C
63E2 _h	RECORD	vprc dither frequency	value record unsigned16	rw	C
63F0 _h	VAR	vprc target window monitoring type	Integer8	rw	C
63F1 _h	RECORD	vprc target window monitoring switch on time	value record unsigned16	rw	O
63F2 _h	RECORD	vprc target window monitoring switch off time	value record unsigned16	rw	O
63F3 _h	RECORD	vprc target window monitoring threshold	value record integer16	rw	C
63F4 _h	RECORD	vprc target window monitoring upper threshold	value record integer16	rw	C
63F5 _h	RECORD	vprc target window monitoring lower threshold	value record integer16	rw	C
640D _h	VAR	vpqc power limit factor	Unsigned32	rw	C
640E _h	RECORD	vpqc hydrostatic actual power	value record integer16	ro	C
6460 _h	VAR	vpqc dither type	Integer8	rw	C
6461 _h	RECORD	vpqc dither amplitude	value record unsigned16	rw	C
6462 _h	RECORD	vpqc dither frequency	value record unsigned16	rw	C
6470 _h	VAR	vpqc target window monitoring type	Integer8	rw	C
6471 _h	RECORD	vpqc target window monitoring switch on time	value record unsigned16	rw	O
6472 _h	RECORD	vpqc target window monitoring switch off time	value record unsigned16	rw	O
6473 _h	RECORD	vpqc target window monitoring threshold	value record integer16	rw	C
6474 _h	RECORD	vpqc target window monitoring upper threshold	value record integer16	rw	C

Index	Object	Name	Data type	Acc.	M/O/C
6475 _h	RECORD	vpqc target window monitoring lower threshold	value record integer16	rw	C
6480 _h	RECORD	dcol set point	value record integer32	rw	C
6490 _h	RECORD	dcol demand value generator demand value	value record integer32	ro	O
6492 _h	RECORD	dcol demand value generator reference A value	value record integer32	rw	O
6493 _h	RECORD	dcol demand value generator reference B value	value record integer32	rw	O
6494 _h	RECORD	dcol demand value generator hold set point	value record integer32	rw	O
64A0 _h	RECORD	dcol demand value generator upper limit	value record integer32	rw	C
64A1 _h	RECORD	dcol demand value generator lower limit	value record integer32	rw	C
64B0 _h	VAR	dcol demand value generator ramp type	Integer8	rw	C
64B1 _h	RECORD	dcol demand value generator ramp acceleration time	value record unsigned32	rw	C
64B2 _h	RECORD	dcol demand value generator ramp acceleration time positive	value record unsigned32	rw	C
64B3 _h	RECORD	dcol demand value generator ramp acceleration time negative	value record unsigned32	rw	C
64B4 _h	RECORD	dcol demand value generator ramp deceleration time	value record unsigned32	rw	C
64B5 _h	RECORD	dcol demand value generator ramp deceleration time positive	value record unsigned32	rw	C
64B6 _h	RECORD	dcol demand value generator ramp deceleration time negative	value record unsigned32	rw	C
6500 _h	RECORD	dsc set point	value record integer32	rw	C
6501 _h	RECORD	dsc actual value	value record integer32	ro	C
6502 _h	VAR	dsc interface reference	Unsigned8	rw	O
6503 _h	RECORD	dsc Kp	value record unsigned32	rw	C
6504 _h	RECORD	dsc Ti	value record unsigned32	rw	C
6510 _h	RECORD	dsc demand value generator demand value	value record integer32	ro	O
6512 _h	RECORD	dsc demand value generator reference A value	value record integer32	rw	O
6513 _h	RECORD	dsc demand value generator reference B value	value record integer32	rw	O
6514 _h	RECORD	dsc demand value generator hold set point	value record integer32	rw	O

Index	Object	Name	Data type	Acc.	M/O/C
6520 _h	RECORD	dsc demand value generator upper limit	value record integer32	rw	C
6521 _h	RECORD	dsc demand value generator lower limit	value record integer32	rw	C
6530 _h	VAR	dsc demand value generator ramp type	Integer8	rw	C
6531 _h	RECORD	dsc demand value generator ramp acceleration time	value record unsigned32	rw	C
6532 _h	RECORD	dsc demand value generator ramp acceleration time positive	value record unsigned32	rw	C
6533 _h	RECORD	dsc demand value generator ramp acceleration time negative	value record unsigned32	rw	C
6534 _h	RECORD	dsc demand value generator ramp deceleration time	value record unsigned32	rw	C
6535 _h	RECORD	dsc demand value generator ramp deceleration time positive	value record unsigned32	rw	C
6536 _h	RECORD	dsc demand value generator ramp deceleration time negative	value record unsigned32	rw	C
6550 _h	RECORD	dsc control deviation	value record integer32	ro	O
6551 _h	VAR	dsc control monitoring type	Integer8	rw	C
6552 _h	RECORD	dsc control monitoring delay time	value record unsigned32	rw	O
6553 _h	RECORD	dsc control monitoring threshold	value record integer32	rw	C
6554 _h	RECORD	dsc control monitoring upper threshold	value record integer32	rw	C
6555 _h	RECORD	dsc control monitoring lower threshold	value record integer32	rw	C
6556 _h	RECORD	dsc control monitoring threshold Vmax	value record integer32	rw	C
6557 _h	RECORD	dsc control monitoring upper threshold Vmax positive	value record integer32	rw	C
6558 _h	RECORD	dsc control monitoring lower threshold Vmax negative	value record integer32	rw	C
6570 _h	VAR	dsc target window monitoring type	Integer8	rw	C
6571 _h	RECORD	dsc target window monitoring switch on time	value record unsigned32	rw	O
6572 _h	RECORD	dsc target window monitoring switch off time	value record unsigned32	rw	O
6573 _h	RECORD	dsc target window monitoring threshold	value record integer32	rw	C
6574 _h	RECORD	dsc target window monitoring upper threshold	value record integer32	rw	C
6575 _h	RECORD	dsc target window monitoring lower threshold	value record integer32	rw	C

Index	Object	Name	Data type	Acc.	M/O/C
6580 _h	RECORD	dfpc set point	value record integer32	rw	C
6581 _h	RECORD	dfpc actual value	value record integer32	ro	C
6582 _h	VAR	dfpc interface reference	Unsigned8	rw	O
6583 _h	RECORD	dfpc Kp	value record unsigned32	rw	C
6584 _h	RECORD	dfpc Td	value record unsigned32	rw	C
6585 _h	RECORD	dfpc T1	value record unsigned32	rw	C
6586 _h	RECORD	dfpc Ti	value record unsigned32	rw	C
6587 _h	RECORD	dfpc pressure sample time	value record unsigned32	rw	C
6590 _h	RECORD	dfpc demand value generator demand value	value record integer32	ro	O
6592 _h	RECORD	dfpc demand value generator reference A value	value record integer32	rw	O
6593 _h	RECORD	dfpc demand value generator refernece B value	value record integer32	rw	O
6594 _h	RECORD	dfpc demand value generator hold set point	value record integer32	rw	O
65A0 _h	RECORD	dfpc demand value generator upper limit	value record integer32	rw	C
65A1 _h	RECORD	dfpc demand value generator lower limit	value record integer32	rw	C
65B0 _h	VAR	dfpc demand value generator ramp type	Integer8	rw	C
65B1 _h	RECORD	dfpc demand value generator ramp acceleration time	value record unsigned32	rw	C
65B2 _h	RECORD	dfpc demand value generator ramp acceleration time positive	value record unsigned32	rw	C
65B3 _h	RECORD	dfpc demand value generator ramp acceleration time negative	value record unsigned32	rw	C
65B4 _h	RECORD	dfpc demand value generator ramp deceleration time	value record unsigned32	rw	C
65B5 _h	RECORD	dfpc demand value generator ramp deceleration time positive	value record unsigned32	rw	C
65B6 _h	RECORD	dfpc demand value generator ramp deceleration time negative	value record unsigned32	rw	C
65D0 _h	RECORD	dfpc control deviation	value record integer32	ro	O
65D1 _h	VAR	dfpc control monitoring type	Integer8	rw	C
65D2 _h	RECORD	dfpc control monitoring delay time	value record unsigned32	rw	O

Index	Object	Name	Data type	Acc.	M/O/C
65D3 _h	RECORD	dfpc control monitoring threshold	value record integer32	rw	C
65D4 _h	RECORD	dfpc control monitoring upper threshold	value record integer32	rw	C
65D5 _h	RECORD	dfpc control monitoring lower threshold	value record integer32	rw	C
65D6 _h	RECORD	dfpc control monitoring threshold Vmax	value record integer32	rw	C
65D7 _h	RECORD	dfpc control monitoring upper threshold Vmax positive	value record integer32	rw	C
65D8 _h	RECORD	dfpc control monitoring lower threshold Vmax negative	value record integer32	rw	C
65F0 _h	VAR	dfpc target window monitoring type	Integer8	rw	C
65F1 _h	RECORD	dfpc target window monitoring switch on time	value record unsigned32	rw	O
65F2 _h	RECORD	dfpc target window monitoring switch off time	value record unsigned32	rw	O
65F3 _h	RECORD	dfpc target window monitoring threshold	value record integer32	rw	C
65F4 _h	RECORD	dfpc target window monitoring upper threshold	value record integer32	rw	C
65F5 _h	RECORD	dfpc target window monitoring lower threshold	value record integer32	rw	C
6600 _h	RECORD	dpc set point	value record integer32	rw	C
6601 _h	RECORD	dpc actual value	value record integer32	ro	C
6602 _h	VAR	dpc interface reference	Unsigned8	rw	O
6603 _h	RECORD	dpc Kp	value record unsigned32	rw	C
6604 _h	RECORD	dpc Td	value record unsigned32	rw	C
6605 _h	RECORD	dpc T1	value record unsigned32	rw	C
6608 _h	VAR	dpc switched integrator type	Integer8	rw	C
6609 _h	RECORD	dpc switched integrator Ti	value record unsigned32	rw	C
660A _h	RECORD	dpc switched integrator dX	value record unsigned32	rw	C
660C _h	RECORD	dpc condition feedback Kv	value record unsigned32	rw	C
660D _h	RECORD	dpc condition feedback Ka	value record unsigned32	rw	C
660E _h	RECORD	dpc condition feedback Kpp	value record unsigned32	rw	C

Index	Object	Name	Data type	Acc.	M/O/C
660F _h	RECORD	dpc condition feedback T1pp	value record unsigned32	rw	C
6610 _h	RECORD	dpc demand value generator demand value	value record integer32	ro	O
6612 _h	RECORD	dpc demand value generator reference A value	value record integer32	rw	O
6613 _h	RECORD	dpc demand value generator reference B value	value record integer32	rw	O
6614 _h	RECORD	dpc demand value generator hold set point	value record integer32	rw	O
6620 _h	RECORD	dpc demand value generator upper limit	value record integer32	rw	C
6621 _h	RECORD	dpc demand value generator lower limit	value record integer32	rw	C
6630 _h	VAR	dpc demand value generator ramp type	Integer8	rw	C
6631 _h	RECORD	dpc demand value generator ramp acceleration time	value record unsigned32	rw	C
6632 _h	RECORD	dpc demand value generator ramp acceleration time positive	value record unsigned32	rw	C
6633 _h	RECORD	dpc demand value generator ramp acceleration time negative	value record unsigned32	rw	C
6634 _h	RECORD	dpc demand value generator ramp deceleration time	value record unsigned32	rw	C
6635 _h	RECORD	dpc demand value generator ramp deceleration time positive	value record unsigned32	rw	C
6636 _h	RECORD	dpc demand value generator ramp deceleration time negative	value record unsigned32	rw	C
6637 _h	RECORD	dpc demand value generator ramp velocity	value record integer32	rw	C
6638 _h	RECORD	dpc demand value generator ramp acceleration	value record unsigned32	rw	C
6639 _h	RECORD	dpc demand value generator ramp deceleration	value record unsigned32	rw	C
6650 _h	RECORD	dpc control deviation	value record integer32	ro	O
6651 _h	VAR	dpc control monitoring type	Integer8	rw	C
6652 _h	RECORD	dpc control monitoring delay time	value record unsigned32	rw	O
6653 _h	RECORD	dpc control monitoring threshold	value record integer32	rw	C
6654 _h	RECORD	dpc control monitoring upper threshold	value record integer32	rw	C
6655 _h	RECORD	dpc control monitoring lower threshold	value record integer32	rw	C
6656 _h	RECORD	dpc control monitoring threshold Vmax	value record integer32	rw	C

Index	Object	Name	Data type	Acc.	M/O/C
6657 _h	RECORD	dpc control monitoring threshold Vmax positive	value record integer32	rw	C
6658 _h	RECORD	dpc control monitoring threshold Vmax negative	value record integer32	rw	C
6670 _h	VAR	dpc target window monitoring type	Integer8	rw	C
6671 _h	RECORD	dpc target window monitoring switch on time	value record unsigned32	rw	O
6672 _h	RECORD	dpc target window monitoring switch off time	value record unsigned32	rw	O
6673 _h	RECORD	dpc target window monitoring threshold	value record integer32	rw	C
6674 _h	RECORD	dpc target window monitoring upper threshold	value record integer32	rw	C
6675 _h	RECORD	dpc target window monitoring lower threshold	value record integer32	rw	C

7.2.2 Device block

7.2.2.1 Device control

These objects represent the parameters used for device control (see /VDMAPROP/, chapter 5).

7.2.2.1.1 Object 6040_h: Device control word

The control word is transmitted via the I/O-interfaces or will be generated locally. It controls the device status (see /VDMAPROP/, chapter 5.3).

VALUE DESCRIPTION

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
<i>manufacturer specific</i>	<i>reserved</i>	<i>device mode specific</i>	<i>control mode specific</i>	<i>switch parameter set</i>	<i>reserved</i>	<i>R</i>	<i>D_M</i>	<i>H</i>	<i>D</i>						
-	-	(see below)	(see below)	O	-	M	M	M	M						

MSB

LSB

D - Disabled	DM - Device mode (active enable)
H - Hold enable	R - Reset fault

Description	Device mode specific			Control mode specific
Bit	11	10	9	8
<i>Control mode</i> = 5 (p/Q control valve)	reserved	enable leakage compensation (optional)	master / slave mode (optional)	enable pressure controller (conditional)
<i>Device mode</i> = 2 (Install mode)	reserved	install mode negative (conditional)	install mode positive (conditional)	reserved
<i>Device mode</i> = 6 (Automatic single step)	reserved	reserved	single step (conditional)	reserved

OBJECT DESCRIPTION

Index	6040 _h
Name	Device control word
Object code	VAR
Data type	UNSIGNED16
Category	Mandatory

ENTRY DESCRIPTION

Access	rw
PDO mapping	Default
Value range	UNSIGNED16
Default value	No

7.2.2.1.2 Object 6041_h: Device status word

The status word is transmitted via the I/O interface and indicates the device condition (see /VDMAPROP/, chapter 5.4).

VALUE DESCRIPTION

15	14	13	12	11	10	9	8	7	6	5	4	3	2	1	0
<i>manufacturer specific</i>		<i>RT</i>		<i>control mode specific</i>				<i>reserved</i>		<i>W</i>	<i>L</i>	<i>R</i>	<i>D_M</i>	<i>H</i>	<i>D</i>
-		<i>O</i>		(see below)				-		<i>O</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>	<i>M</i>

MSB

LSB

D - Disabled	DM - Device mode (active enable)
H - Hold enable	R - Ready
W - Warning	L - Local control
RT - Actual value reached target window	

Description	Control mode specific			
Bit	11	10	9	8
<i>Control mode = 1 to 4 (valves)</i>	control error (conditional)	limit touched (conditional)	ramp running (conditional)	reserved
<i>Control mode = 5 (valves)</i>	control error (conditional)	limit touched (conditional)	ramp running (conditional)	pressure control enabled (conditional)
<i>Control mode = 6 to 9 (drives)</i>	control error (conditional)	limit touched (conditional)	reached end of program (conditional)	reserved

OBJECT DESCRIPTION

Index	6041 _h
Name	Device status word
Object code	VAR
Data type	UNSIGNED16
Category	Mandatory

ENTRY DESCRIPTION

Access	ro
PDO mapping	Default
Value range	UNSIGNED16
Default value	No

7.2.2.1.3 Object 6042_h: Device mode

With this parameter the device mode is indicated and can be chosen (see /VDMAPROP/, chapter 6.1). The access is rw, if switching between different device modes is supported, otherwise ro.

VALUE DESCRIPTION

Value	Description
0	No device mode
1	Set point input via bus
2	Set point input locally
3	Install mode (single step)
4	Reference mode
5	Automatic
6	Automatic (single step)
7 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	6042 _h
Name	Device mode
Object code	VAR
Data type	INTEGER8
Category	Optional

ENTRY DESCRIPTION

Access	rw; ro, if only one <i>device mode</i> supported
PDO mapping	Optional
Value range	INTEGER8
Default value	1

7.2.2.1.4 Object 6043_h: Device control mode

With this parameter the control mode of the device is indicated or switched (see /VDMAPROP/, chapter 6.2). The object is rw, if switching between different control modes is supported, otherwise ro. Supported control modes are indicated in object 1000_h (device type) by associated bits enabled (1).

VALUE DESCRIPTION

Value	Description
0	Control mode not defined (substitute value for valves)
1	Spool position control open loop
2	Spool position control closed loop
3	Pressure control valve open loop
4	Pressure control valve closed loop
5	p/Q-control valve
6	Open loop movement (substitute value for hydrostatic axis)
7	Velocity control axis
8	Force / pressure control axis
9	Position control axis
10	Positional dependent deceleration
11 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	6043 _h
Name	Device control mode
Object code	VAR
Data type	INTEGER8
Category	O

ENTRY DESCRIPTION

Access	rw; ro, if only one <i>control mode</i> supported
PDO mapping	optional
Value range	INTEGER8
Default value	See table

7.2.2.1.5 Object 604E_h: Device error code

In case the device goes into warning state or the fault state, the fault occurred will be indicated in the error code parameter (see /VDMAPROP/, chapter 9.12). The value of this object is defined in chapter 5.2 (error code meaning).

OBJECT DESCRIPTION

Index	604E _h
Name	Device error code
Object code	VAR
Data type	UNSIGNED16
Category	Optional

ENTRY DESCRIPTION

Access	ro
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

7.2.2.1.6 Object 604F_h: Device local

This object specifies the source for the object control word by switching between control word via CAN and local control (see /VDMAPROP/, chapter 5.1).

If local control is activated by a hardware switch, this supersedes any value transmitted from a different I/O port (CAN, RS 232). In such a case, a write operation to the object has to be rejected.

VALUE DESCRIPTION

Value	Description
0	Control word via CAN
1	Control word local
2 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	604F _h
Name	Device local
Object code	VAR
Data type	INTEGER8
Category	Optional

ENTRY DESCRIPTION

Access	rw; ro, if switching over the bus is not implemented
PDO mapping	Optional
Value range	INTEGER8
Default value	see table

7.2.2.2 Device identification

The objects defined in this chapter refer to general information on the device (see /VDMAPROP/, chapter 9.10). Most of the parameters described there have to be implemented using objects of the standard communication area (index 1000_h and above).

7.2.2.2.1 Object 6050_h: Device version**OBJECT DESCRIPTION**

Index	6050 _h
Name	Device version
Object code	VAR
Data type	VISIBLE STRING
Category	Optional

ENTRY DESCRIPTION

Access	ro
PDO mapping	No
Value range	No
Default value	No

7.2.2.2.2 Object 6051_h: Device code number**OBJECT DESCRIPTION**

Index	6051 _h
Name	Device code number
Object code	VAR
Data type	UNSIGNED16
Category	Optional

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	No

7.2.2.2.3 Object 6052_h: Device serial number**OBJECT DESCRIPTION**

Index	6052 _h
Name	Device serial number
Object code	VAR
Data type	VISIBLE STRING
Category	Optional

ENTRY DESCRIPTION

Access	ro
PDO mapping	Optional
Value range	No
Default value	No

7.2.2.2.4 Object 6053_h: Device description**OBJECT DESCRIPTION**

Index	6053 _h
Name	Device description
Object code	VAR
Data type	VISIBLE STRING
Category	Optional

ENTRY DESCRIPTION

Access	rw
PDO mapping	No
Value range	No
Default value	No

7.2.2.2.5 Object 6054_h: Device model description**OBJECT DESCRIPTION**

Index	6054 _h
Name	Device model description
Object code	VAR
Data type	VISIBLE STRING
Category	Optional

ENTRY DESCRIPTION

Access	ro
PDO mapping	No
Value range	No
Default value	No

7.2.2.2.6 Object 6055_h: Device model URL**OBJECT DESCRIPTION**

Index	6055 _h
Name	Device model URL
Object code	VAR
Data type	VISIBLE STRING
Category	Optional

ENTRY DESCRIPTION

Access	ro
PDO mapping	No
Value range	No
Default value	No

7.2.2.2.7 Object 6056_h: Device parameter set code**OBJECT DESCRIPTION**

Index	6056 _h
Name	Device parameter set code
Object code	VAR
Data type	UNSIGNED8
Category	Optional

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

7.2.2.2.8 Object 6057_h: Device vendor name

This object holds the name of the device vendor (see /VDMAPROP/ chapter 9.10).

OBJECT DESCRIPTION

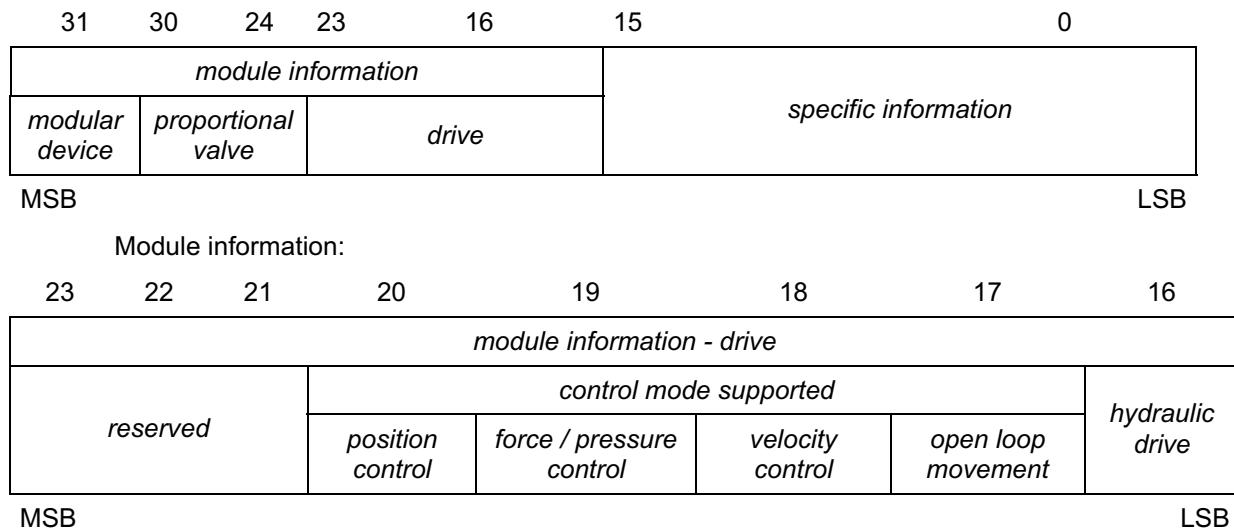
Index	6057 _h
Name	Device vendor name
Object code	VAR
Data type	VISIBLE STRING
Category	Optional

ENTRY DESCRIPTION

Access	ro
PDO mapping	No
Value range	No
Default value	No

7.2.2.2.9 Object 605F_h: Device capability

This object contains information on the capabilities of a device. In a modular device this object exists for each module and describes capabilities of the module.

VALUE DESCRIPTION

30	29	28	27	26	25	24
<i>module information – proportional valve</i>						
<i>reserved</i>	<i>control mode supported</i>					<i>hydraulic proportional valve</i>
	<i>pressure flow control closed loop</i>	<i>pressure control closed loop</i>	<i>pressure control open loop</i>	<i>spool position closed loop</i>	<i>spool position open loop</i>	
MSB						LSB

0 - disabled / not supported

1 - enabled / supported

Specific information:

Value	Description
0000 _h	n. a.
0001 _h to 7FFF _h	reserved
8000 _h to FFFF _h	manufacturer specific

OBJECT DESCRIPTION

Index	605F _h
Name	Device capability
Object code	VAR
Data type	UNSIGNED32
Category	Mandatory

ENTRY DESCRIPTION

Access	ro
PDO mapping	Optional
Value range	(see value description)
Default value	No

7.2.3 Actual value conditioning

These objects describe the parameters used to manage the actual value conditioning (see /VDMAPROP/, chapter 9.1).

The objects for drives and valves have the same meaning, but differ in data types. Depending on the device type (valve or drive), the corresponding objects have to be considered.

7.2.3.1 Actual value conditioning for valves**7.2.3.1.1 Object 6100_h: vlv actual value conditioning max interface number**

This object defines a parameter additional to /VDMAPROP/. It indicates the number of physical sensor interfaces implemented in the device.

OBJECT DESCRIPTION

Index	6100 _h
Name	vlv actual value conditioning max interface number
Object code	VAR
Data type	UNSIGNED8
Category	Conditional; Mandatory, if actual value processing implemented

ENTRY DESCRIPTION

Access	ro
PDO mapping	Optional
Value range	UNSIGNED8
Default value	1

7.2.3.1.2 Object 6101_h: vlv actual value conditioning interface number

This object selects a single interface out of up to 8 sensor interfaces for processing actual values (see /VDMAPROP/, chapter 9.1). It acts as a pointer to the interface. Operations performed on the objects of *actual value conditioning* block always refer to the interface selected by *interface number*.

OBJECT DESCRIPTION

Index	6101 _h
Name	vlv actual value conditioning interface number
Object code	VAR
Data type	UNSIGNED8
Category	Conditional; Mandatory, if actual value processing implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	UNSIGNED8
Default value	1

7.2.3.1.3 Object 6102_h: vlv actual value conditioning type

This parameter defines the type of actual value interface currently selected by *interface number*.

VALUE DESCRIPTION

Value	Description
0	No transducer function
1	Transducer spool position
2	Pressure transducer
3 to 63	reserved
64	Position transducer incremental for drives only
65	Position transducer SSI binary for drives only
66	Position transducer SSI gray code for drives only
67	Position transducer analog for drives only
68	Position transducer start-stop interface for drives only
69	Position transducer ENDAT interface for drives only
70 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	6102 _h
Name	vlv actual value conditioning type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if actual value processing implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.3.1.4 Object 6103_h: vlv actual value conditioning sign

With the sign parameter the sign of the actual value interface currently selected by *interface number* can be changed.

OBJECT DESCRIPTION

Index	6103 _h
Name	vlv actual value conditioning sign
Object code	VAR
Data type	INTEGER8
Category	Optional

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	-1 to 1
Default value	1

7.2.3.1.5 Object 6104_h: vlv actual value conditioning actual value

This object holds the actual value of the interface currently selected by *interface number*. SI unit and prefix also refer to the currently selected interface.

OBJECT DESCRIPTION

Index	6104 _h
Name	vlv actual value conditioning actual value
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.1.6 Object 6110_h: vlv actual value conditioning actual value 1

This object holds the actual value of interface 1.

OBJECT DESCRIPTION

Index	6110 _h
Name	vlv actual value conditioning actual value 1
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.1.7 Object 6111_h: vlv actual value conditioning actual value 2

This object holds the actual value of interface 2.

OBJECT DESCRIPTION

Index	6111 _h
Name	vlv actual value conditioning actual value 2
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.1.8 Object 6112_h: vlv actual value conditioning actual value 3

This object holds the actual value of interface 3.

OBJECT DESCRIPTION

Index	6112 _h
Name	vlv actual value conditioning actual value 3
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.1.9 Object 6113_h: vlv actual value conditioning actual value 4

This object holds the actual value of interface 4.

OBJECT DESCRIPTION

Index	6113 _h
Name	vlv actual value conditioning actual value 4
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.1.10 Object 6114_h: vlv actual value conditioning actual value 5

This object holds the actual value of interface 5.

OBJECT DESCRIPTION

Index	6114 _h
Name	vlv actual value conditioning actual value 5
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.1.11 Object 6115_h: vlv actual value conditioning actual value 6

This object holds the actual value of interface 6.

OBJECT DESCRIPTION

Index	6115 _h
Name	vlv actual value conditioning actual value 6
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.1.12 Object 6116_h: vlv actual value conditioning actual value 7

This object holds the actual value of interface 7.

OBJECT DESCRIPTION

Index	6116 _h
Name	vlv actual value conditioning actual value 7
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.1.13 Object 6117_h: vlv actual value conditioning actual value 8

This object holds the actual value of interface 8.

OBJECT DESCRIPTION

Index	6117 _h
Name	vlv actual value conditioning actual value 8
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.1.14 Object 6120_h: vlv actual value conditioning min pressure

This object defines the lower measurement range limit of a pressure transducer with *type* = 2 (see /VDMAPROP/, chapter 9.1.2). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6120 _h
Name	vlv actual value conditioning min pressure
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-1 (deci)

7.2.3.1.15 Object 6121_h: vlv actual value conditioning max pressure

This object defines the upper measurement range limit (nominal pressure) of a pressure transducer with *type* = 2 (see /VDMAPROP/, chapter 9.1.2). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6121 _h
Name	vlv actual value conditioning max pressure
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-1 (deci)

7.2.3.1.16 Object 6122_h: vlv actual value conditioning area

This object defines the cylinder area corresponding to the pressure transducer with *type* = 2 (see /VDMAPROP/, chapter 9.1.2). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6122 _h
Name	vlv actual value conditioning area
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A7 _h (m ²)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.3.1.17 Object 6123_h: vlv actual value conditioning pressure offset

This object defines the offset parameter for pressure transducer with *type* = 2, that can be used in force / pressure control with only one pressure transducer (pressure 2 = constant). It is added to the actual value (see /VDMAPROP/, chapter 9.1.2). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6123 _h
Name	vlv actual value conditioning pressure offset
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.3.1.18 Object 6124_h: vlv actual value conditioning min transducer signal

This object defines the transducer output at minimum pressure for transducer with *type* = 2 (see /VDMAPROP/, chapter 9.1.2). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6124 _h
Name	vlv actual value conditioning min transducer signal
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.1.19 Object 6125_h: vlv actual value conditioning max transducer signal

This object defines the transducer output at maximum pressure for transducer with *type* = 2 (see /VDMAPROP/, chapter 9.1.2). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6125 _h
Name	vlv actual value conditioning max transducer signal
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER16
Default value	10

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.1.20 Object 6130_h: vlv actual value conditioning min reference

This object defines the minimum reference for an analog position transducer *type* = 67 (see /VDMAPROP/, chapter 9.1.2.4). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6130 _h
Name	vlv actual value conditioning min reference
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 67

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.3.1.21 Object 6131_h: vlv actual value conditioning max reference

This object defines the maximum reference for an analog position transducer *type* = 67 (see /VDMAPROP/, chapter 9.1.2.4). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6131 _h
Name	vlv actual value conditioning max reference
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 67

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.3.1.22 Object 6132_h: vlv actual value conditioning T1

This object defines the time constant of the low pass filter for an analog position transducer *type* = 67 (see /VDMAPROP/, chapter 9.1.2.4). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6132 _h
Name	vlv actual value conditioning T1
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 67

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.3.1.23 Object 6133_h: vlv actual value conditioning min interface

This object defines the transducer output at minimum position for an analog position transducer *type* = 67 (see /VDMAPROP/, chapter 9.1.2.4). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6133 _h
Name	vlv actual value conditioning min interface
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 67

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	-10

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.1.24 Object 6134_h: vlv actual value conditioning max interface

This object defines the transducer output at maximum position for an analog position transducer *type* = 67 (see /VDMAPROP/, chapter 9.1.2.4). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6134 _h
Name	vlv actual value conditioning max interface
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 67

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	10

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.1.25 Object 6140_h: vlv actual value conditioning resolution

This object defines the resolution for position transducers of *type* = [64, 65, 66, 69] (see /VDMAPROP/, chapter 9.1.2.1, 9.1.2.2, 9.1.2.3, and 9.1.2.9). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6140 _h
Name	vlv actual value conditioning resolution
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = [64, 65, 66, 69]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.3.1.26 Object 6141_h: valve actual value conditioning position offset

This object defines an offset for position transducers of *type* = [65, 66, 69] (see /VDMAPROP/, chapter 9.1.2.2, 9.1.2.3, and 9.1.2.9). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6141 _h
Name	vlv actual value conditioning position offset
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = [65, 66, 69]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.3.1.27 Object 6142_h: vlv actual value conditioning zero shift

This object defines a zero shift for position transducers of *type* = 64 (see /VDMAPROP/, chapter 9.1.2.1). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6142 _h
Name	vlv actual value conditioning zero shift
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 64

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.3.1.28 Object 6143_h: vlv actual value conditioning bit size

This object defines the resolution for position transducers of *type* = [65, 66] (see /VDMAPROP/, chapter 9.1.2.2, and 9.1.2.3). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6143 _h
Name	vlv actual value conditioning bit size
Object code	VAR
Data type	UNSIGNED8
Category	Optional

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	UNSIGNED8
Default value	24

7.2.3.1.29 Object 6144_h: vlv actual value conditioning C

This object defines the speed of sound for position transducers of *type* = 68 (see /VDMAPROP/, chapter 9.1.2.5). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6144 _h
Name	vlv actual value conditioning C
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 68

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.3.1.30 Object 6145_h: vlv actual value conditioning start stop type

This object defines the type of a start-stop position transducers *type* = 68 (see /VDMAPROP/, chapter 9.1.2.5). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6145 _h
Name	vlv actual value conditioning start stop type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 68

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.2 Actual value conditioning for drives

7.2.3.2.1 Object 6200_h: drv actual value conditioning max interface number

This object defines a parameter additional to /VDMAPROP/. It indicates the number of physical sensor interfaces implemented in the device.

OBJECT DESCRIPTION

Index	6200 _h
Name	drv actual value conditioning max interface number
Object code	VAR
Data type	UNSIGNED8
Category	Conditional; Mandatory, if actual value processing implemented

ENTRY DESCRIPTION

Access	ro
PDO mapping	Optional
Value range	UNSIGNED8
Default value	1

7.2.3.2.2 Object 6201_h: drv actual value conditioning interface number

This object selects a single interface out of up to 8 sensor interfaces for processing actual values (see /VDMAPROP/, chapter 9.1). It acts as a pointer to the interface. Operations performed on the objects of *actual value conditioning* block always refer to the interface selected by *interface number*.

OBJECT DESCRIPTION

Index	6201 _h
Name	drv actual value conditioning interface number
Object code	VAR
Data type	UNSIGNED8
Category	Conditional; Mandatory, if actual value processing implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	UNSIGNED8
Default value	1

7.2.3.2.3 Object 6202_h: drv actual value conditioning type

This parameter defines the type of actual value interface currently selected by *interface number*.

VALUE DESCRIPTION

Value	Description
0	No transducer function
1	Transducer spool position
2	Pressure transducer
3 to 63	reserved
64	Position transducer incremental for drives only
65	Position transducer SSI binary for drives only
66	Position transducer SSI gray code for drives only
67	Position transducer analog for drives only
68	Position transducer start-stop interface for drives only
69	Position transducer ENDAT interface for drives only
70 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	6202 _h
Name	drv actual value conditioning type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if actual value processing implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.3.2.4 Object 6203_h: drv actual value conditioning sign

With the sign parameter the sign of the actual value interface currently selected by *interface number* can be changed.

OBJECT DESCRIPTION

Index	6203 _h
Name	drv actual value conditioning sign
Object code	VAR
Data type	INTEGER8
Category	Optional

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	-1 to 1
Default value	1

7.2.3.2.5 Object 6204_h: drv actual value conditioning actual value

This object holds the actual value of the interface currently selected by *interface number*. SI unit and prefix also refer to the currently selected interface.

OBJECT DESCRIPTION

Index	6204 _h
Name	drv actual value conditioning actual value
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.2.6 Object 6210_h: drv actual value conditioning actual value 1

This object holds the actual value of interface 1.

OBJECT DESCRIPTION

Index	6210 _h
Name	drv actual value conditioning actual value 1
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.2.7 Object 6211_h: drv actual value conditioning actual value 2

This object holds the actual value of interface 2.

OBJECT DESCRIPTION

Index	6211 _h
Name	drv actual value conditioning actual value 2
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.2.8 Object 6212_h: drv actual value conditioning actual value 3

This object holds the actual value of interface 3.

OBJECT DESCRIPTION

Index	6212 _h
Name	drv actual value conditioning actual value 3
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.2.9 Object 6213_h: drv actual value conditioning actual value 4

This object holds the actual value of interface 4.

OBJECT DESCRIPTION

Index	6213 _h
Name	drv actual value conditioning actual value 4
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.2.10 Object 6214_h: drv actual value conditioning actual value 5

This object holds the actual value of interface 5.

OBJECT DESCRIPTION

Index	6214 _h
Name	drv actual value conditioning actual value 5
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.2.11 Object 6215_h: drv actual value conditioning actual value 6

This object holds the actual value of interface 6.

OBJECT DESCRIPTION

Index	6215 _h
Name	drv actual value conditioning actual value 6
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.2.12 Object 6216_h: drv actual value conditioning actual value 7

This object holds the actual value of interface 7.

OBJECT DESCRIPTION

Index	6216 _h
Name	drv actual value conditioning actual value 7
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.2.13 Object 6217_h: drv actual value conditioning actual value 8

This object holds the actual value of interface 8.

OBJECT DESCRIPTION

Index	6217 _h
Name	drv actual value conditioning actual value 8
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.2.14 Object 6220_h: drv actual value conditioning min pressure

This object defines the lower measurement range limit of a pressure transducer with *type* = 2 (see /VDMAPROP/, chapter 9.1.2). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6220 _h
Name	drv actual value conditioning min pressure
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.3.2.15 Object 6221_h: drv actual value conditioning max pressure

This object defines the upper measurement range limit (nominal pressure) of a pressure transducer with *type* = 2 (see /VDMAPROP/, chapter 9.1.2). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6221 _h
Name	drv actual value conditioning max pressure
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.3.2.16 Object 6222_h: drv actual value conditioning area

This object defines the cylinder area corresponding to the pressure transducer with *type* = 2 (see /VDMAPROP/, chapter 9.1.2). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6222 _h
Name	drv actual value conditioning area
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A7 _h (m ²)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.3.2.17 Object 6223_h: drv actual value conditioning pressure offset

This object defines the offset parameter for pressure transducer with *type* = 2, that can be used in force / pressure control with only one pressure transducer (pressure 2 = constant). It is added to the actual value (see /VDMAPROP/, chapter 9.1.2). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6223 _h
Name	drv actual value conditioning pressure offset
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.3.2.18 Object 6224_h: drv actual value conditioning min transducer signal

This object defines the transducer output at minimum pressure for transducer with *type* = 2 (see /VDMAPROP/, chapter 9.1.2). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6224 _h
Name	drv actual value conditioning min transducer signal
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.2.19 Object 6225_h: drv actual value conditioning max transducer signal

This object defines the transducer output at maximum pressure for transducer with *type* = 2 (see /VDMAPROP/, chapter 9.1.2). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6225 _h
Name	drv actual value conditioning max transducer signal
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	10

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.2.20 Object 6230_h: drv actual value conditioning min reference

This object defines the minimum reference for an analog position transducer *type* = 67 (see /VDMAPROP/, chapter 9.1.2.4). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6230 _h
Name	drv actual value conditioning min reference
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 67

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.3.2.21 Object 6231_h: drv actual value conditioning max reference

This object defines the maximum reference for an analog position transducer *type* = 67 (see /VDMAPROP/, chapter 9.1.2.4). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6231 _h
Name	drv actual value conditioning max reference
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 67

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.3.2.22 Object 6232_h: drv actual value conditioning T1

This object defines the time constant of the low pass filter for an analog position transducer *type* = 67 (see /VDMAPROP/, chapter 9.1.2.4). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6232 _h
Name	drv actual value conditioning T1
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 67

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.3.2.23 Object 6233_h: drv actual value conditioning min interface

This object defines the transducer output at minimum position for an analog position transducer *type* = 67 (see /VDMAPROP/, chapter 9.1.2.4). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6233 _h
Name	drv actual value conditioning min interface
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 67

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	-10

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.2.24 Object 6234_h: drv actual value conditioning max interface

This object defines the transducer output at maximum position for an analog position transducer *type* = 67 (see /VDMAPROP/, chapter 9.1.2.4). For other transducer types the parameter is ignored.

Object description

Index	6234 _h
Name	drv actual value conditioning max interface
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 67

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	10

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.3.2.25 Object 6240_h: drv actual value conditioning resolution

This object defines the resolution for position transducers of *type* = [64, 65, 66, 69] (see /VDMAPROP/, chapter 9.1.2.1, 9.1.2.2, 9.1.2.3, and 9.1.2.9). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6240 _h
Name	drv actual value conditioning resolution
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = [64, 65, 66, 69]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.3.2.26 Object 6241_h: drv actual value conditioning position offset

This object defines an offset for position transducers of *type* = [65, 66, 69] (see /VDMAPROP/, chapter 9.1.2.2, 9.1.2.3, and 9.1.2.9). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6204 _h
Name	drv actual value conditioning position offset
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = [65, 66, 69]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.3.2.27 Object 6242_h: drv actual value conditioning zero shift

This object defines a zero shift for position transducers of *type* = 64 (see /VDMAPROP/, chapter 9.1.2.1). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6242 _h
Name	drv actual value conditioning zero shift
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 64

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.3.2.28 Object 6243_h: drv actual value conditioning bit size

This object defines the resolution for position transducers of *type* = [65, 66] (see /VDMAPROP/, chapter 9.1.2.2, and 9.1.2.3). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6243 _h
Name	drv actual value conditioning bit size
Object code	VAR
Data type	UNSIGNED8
Category	Optional

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	UNSIGNED8
Default value	24

7.2.3.2.29 Object 6244_h: drv actual value conditioning C

This object defines the speed of sound for position transducers of *type* = 68 (see /VDMAPROP/, chapter 9.1.2.5). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6244 _h
Name	drv actual value conditioning C
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 68

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.3.2.30 Object 6245_h: drv actual value conditioning start stop type

This object defines the type of a start-stop position transducers *type* = 68 (see /VDMAPROP/, chapter 9.1.2.5). For other transducer types the parameter is ignored.

OBJECT DESCRIPTION

Index	6245 _h
Name	drv actual value conditioning start stop type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>actual value conditioning</i> implemented and <i>sensor type</i> = 68

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.4 Controller output conditioning

The objects defined in this chapter describe parameters of the controller output conditioning block (see /VDMAPROP/, chapter 7.4).

7.2.4.1 Controller output conditioning for drives

7.2.4.1.1 Object 6280_h: drv controller output

This value is an internal value and the output of the controller.

OBJECT DESCRIPTION

Index	6228 _h
Name	drv controller output
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.4.1.2 Object 6281_h: drv controller output interface min

This object defines the output signal of the interface at *minimum controller output* (see /VDMAPROP/, chapter 7.4.3).

OBJECT DESCRIPTION

Index	6281 _h
Name	drv controller output interface min
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>controller output interface</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.4.1.3 Object 6282_h: drv controller output interface max

This object defines the output signal of the interface at *maximum controller output* (see /VDMAPROP/, chapter 7.4.3).

OBJECT DESCRIPTION

Index	6282 _h
Name	drv controller output interface max
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>controller output interface</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.4.1.4 Object 6290_h: drv controller output filter type

This object defines the type of the low pass filter (see /VDMAPROP/, chapter 7.4.1).

VALUE DESCRIPTION

Value	Description
0	No filter
1	Type 1
2	Type 2
3 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	6290 _h
Name	drv controller output filter type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>controller output filter</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.4.1.5 Object 6291_h: drv controller output filter T1

This object defines the time constant for *filter type* = 1.

OBJECT DESCRIPTION

Index	6291 _h
Name	drv controller output filter T1
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>filter type 1</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.4.1.6 Object 6292_h: drv controller output filter D

This object defines the damping constant of *filter type* = 2.

OBJECT DESCRIPTION

Index	6292 _h
Name	drv controller output filter D
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>filter type</i> 2 implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.4.1.7 Object 6293_h: drv controller output filter f0

This object defines the natural frequency for *filter type* = 2.

OBJECT DESCRIPTION

Index	6293 _h
Name	drv controller output filter f0
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>filter type</i> 2 implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	20 _h (Hz)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.4.1.8 Object 62A0_h: drv controller output directional dependent gain type

This object defines the type of the *directional dependent gain function* (see /VDMAPROP/, chapter 9.4).

VALUE DESCRIPTION

Value	Description
0	No directional dependent gain
1	Directional dependent gain type 1
2 to 127	reserved
-1 to - 128	manufacturer specific

OBJECT DESCRIPTION

Index	62A0 _h
Name	drv controller output directional dependent gain type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>directional dependent gain function</i> implemented

ENTRY DESCRIPTION

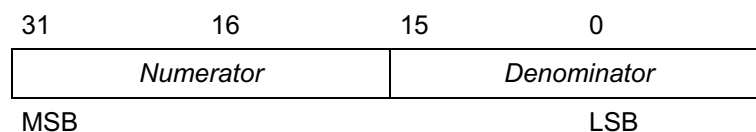
Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.4.1.9 Object 62A1_h: drv controller output directional dependent gain factor

This object defines a factor for *directional dependent gain type* = 1.

Value description

The object is composed as shown by (numerator SHL 16)+denominator. This avoids setting numerator and denominator separately.

**OBJECT DESCRIPTION**

Index	62A1 _h
Name	drv controller output directional dependent gain factor
Object code	VAR
Data type	UNSIGNED32
Category	Conditional; Mandatory, if <i>directional dependent gain type</i> = 1

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

7.2.4.1.10 Object 62A2_h: drv controller output characteristic compensation type

This object defines the type of the output characteristic *compensation function* (see /VDMAPROP/, chapter 9.5). The function is specified using vendor-specific parameters.

VALUE DESCRIPTION

Value	Description
0	No characteristic compensation
1 to 127	reserved
-1 to - 128	manufacturer specific

OBJECT DESCRIPTION

Index	62A2 _h
Name	drv controller output characteristic compensation type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>compensation function</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.4.1.11 Object 62B0_h: drv controller output dead band compensation type

This object defines the type of the dead band compensation function (see /VDMAPROP/, chapter 9.6).

VALUE DESCRIPTION

Value	Description
0	No dead band compensation
1	Type 1
2	Type 2
3 to 127	reserved
-1 to - 128	manufacturer specific

OBJECT DESCRIPTION

Index	62B0 _h
Name	drv controller output dead band compensation type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>dead band compensation function</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.4.1.12 Object 62B1_h: drv controller output dead band compensation A side

This object defines the step height of the A side.

OBJECT DESCRIPTION

Index	62B1 _h
Name	drv controller output dead band compensation A side
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>dead band compensation type</i> = [1, 2]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.4.1.13 Object 62B2_h: drv controller output dead band compensation B side

This parameter determines the step height of the B side.

OBJECT DESCRIPTION

Index	62B2 _h
Name	drv controller output dead band compensation B side
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>dead band compensation type</i> = [1, 2]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.4.1.14 Object 62B3_h: drv controller output dead band compensation threshold

This object defines the starting point of the compensation step or ramp.

OBJECT DESCRIPTION

Index	62B3 _h
Name	drv controller output dead band compensation threshold
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>dead band compensation type</i> = [1, 2]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.4.1.15 Object 62C0_h: drv controller output zero correction offset

This object defines the offset used for *zero correction function* (see /VDMAPROP/, chapter 9.7).

OBJECT DESCRIPTION

Index	62C0 _h
Name	drv controller output zero correction offset
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>zero correction function</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.4.1.16 Object 62D0_h: drv controller output dither type

This object defines the type of *dither function* (see /VDMAPROP/, chapter 9.2).

VALUE DESCRIPTION

Value	Description
0	Dither function off
1	Dither with square wave
2	Dither with triangular wave
3	Dither with sinusoidal wave (distortion factor 0.001%)
4 to 127	reserved
- 1 to - 128	manufacturer specific

OBJECT DESCRIPTION

Index	62D0 _h
Name	drv controller output dither type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>dither function</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.4.1.17 Object 62D1_h: drv controller output dither amplitude

This object defines the *amplitude* of the *dither function*.

OBJECT DESCRIPTION

Index	62D1 _h
Name	drv controller output dither amplitude
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>dither function type</i> = [1, 2, 3]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.4.1.18 Object 62D2_h: drv controller output dither frequency

This object defines the *frequency* of the *dither signal*.

OBJECT DESCRIPTION

Index	62D2 _h
Name	drv controller output dither frequency
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>dither function type</i> = [1, 2, 3]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	20 _h (Hz)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.4.1.19 Object 62E0_h: drv controller output upper limit

This object defines the *upper limit* of the *limit function* (see /VDMAPROP/, chapter 7.4.1.7).

OBJECT DESCRIPTION

Index	62E0 _h
Name	drv controller output upper limit
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>limit function</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	(control mode specific)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	(control mode specific)

7.2.4.1.20 Object 62E1_h: drv controller output lower limit

This object defines the *lower limit* of the *limit function* (see /VDMAPROP/, chapter 7.4.1.7).

OBJECT DESCRIPTION

Index	62E1 _h
Name	drv controller output lower limit
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>limit function</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	(control mode specific)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	(control mode specific)

7.2.4.1.21 Object 62F0_h: drv controller output inverting sign

With this object the sign of the output can be changed (see /VDMAPROP/, chapter 7.4.1.8).

OBJECT DESCRIPTION

Index	62F0 _h
Name	drv controller output inverting sign
Object code	VAR
Data type	INTEGER8
Category	Optional

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	-1 to 1
Default value	No

7.2.5 Proportional valves and hydrostatic pumps

7.2.5.1 Controller mode: position control

The objects defined in this chapter refer to the control modes valve position control open loop and valve position control closed loop (see /VDMAPROP/, chapter 8.1.1 and 8.1.2). They are also implemented for valve p/Q control.

7.2.5.1.1 Object 6300_h: vpoc set point

This object corresponds to the *valve position control set point* and includes the float position option (see /VDMAPROP/, chapter 8.1.1 and 8.1.2).

OBJECT DESCRIPTION

Index	6300 _h
Name	vpoc set point
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>control mode</i> = [1, 2]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.5.1.2 Object 6301_h: vpoc actual value

This object holds the actual value of the sensor interface instance used for the control algorithm (see /VDMAPROP/, chapter 8.1.2).

OBJECT DESCRIPTION

Index	6301 _h
Name	vpoc actual value
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>control mode</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.5.1.3 Object 6302_h: vpoc interface reference

This object creates a reference between the controller and the *actual value*. The parameter specifies the number of the interface, which provides the *actual value*. A write to this object with a value greater than *max interface number* has to be rejected.

OBJECT DESCRIPTION

Index	6302 _h
Name	vpoc interface reference
Object code	VAR
Data type	UNSIGNED8
Category	Optional

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

7.2.5.1.4 Object 6310_h: vpoc demand value generator demand value

This object contains the output of the demand value generator (see /VDMAPROP/, chapter 8.2).

OBJECT DESCRIPTION

Index	6310 _h
Name	vpoc demand value generator demand value
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	(control mode specific)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	(control mode specific)

7.2.5.1.5 Object 6311_h: vpoc demand value generator reference value

This object contains the reference value, a value corresponding to 100% of the set point (see /VDMAPROP/, chapter 8.2).

OBJECT DESCRIPTION

Index	6311 _h
Name	vpoc demand value generator reference value
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.5.1.6 Object 6314_h: vpoc demand value generator hold set point

This object contains the hold set point (see /VDMAPROP/, chapter 8.2).

OBJECT DESCRIPTION

Index	6314 _h
Name	vpoc demand value generator hold set point
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.5.1.7 Object 6320_h: vpoc demand value generator upper limit

This object contains the *upper limit* of the *limit function* in the demand value generator (see /VDMAPROP/, chapter 8.2.1). *Upper limit* < *lower limit* has to be rejected.

OBJECT DESCRIPTION

Index	6320 _h
Name	vpoc demand value generator upper limit
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>limit function</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.5.1.8 Object 6321_h: vpoc demand value generator lower limit

This object contains the *lower limit* of the *limit function* in the *demand value generator* (see /VDMAPROP/, chapter 8.2.1). *Lower limit > upper limit* has to be rejected.

OBJECT DESCRIPTION

Index	6321 _h
Name	vpoc demand value generator lower limit
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>limit function</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

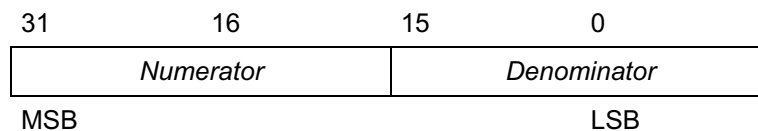
7.2.5.1.9 Object 6322_h: vpoc demand value generator scaling factor

The 'scaling' serves to change the resolution or the signal range of the set point derivation.

The factor is composed of the elements numerator and denominator. The value 0 is not allowed neither for numerator nor denominator.

Value description

The object is composed as shown by (numerator SHL 16)+denominator. This avoids setting numerator and denominator separately.



OBJECT DESCRIPTION

Index	6322 _h
Name	vpoc demand value generator scaling factor
Object code	VAR
Data type	UNSIGNED32
Category	Conditional; Mandatory, if <i>scaling function</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

7.2.5.1.10 Object 6323_h: vpoc demand value generator scaling offset

This object defines the offset used in the *scaling function*.

OBJECT DESCRIPTION

Index	6323 _h
Name	vpoc demand value generator scaling offset
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>scaling function</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.5.1.11 Object 6324_h: vpoc demand value generator zero correction offset

This object defines the offset used for *zero correction function* (see /VDMAPROP/, chapter 9.7).

OBJECT DESCRIPTION

Index	6324 _h
Name	vpoc demand value generator zero correction offset
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>zero correction function</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.5.1.12 Object 6330_h: vpoc demand value generator ramp type

This object defines the ramp type used in the *ramp function* of the *demand value generator* (see /VDMAPROP/, chapter 9.3).

VALUE DESCRIPTION

Value	Description
0	No ramp
1	Linear (same value for all quadrants)
2	Linear (2 parameters for acceleration and deceleration, pos. and neg. values equal)
3	Linear (4 parameters for all quadrants)
4	Sine square
5	Profile generator linear (drives positioning control only)
6	Profile generator sine square (drives positioning control only)
7 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	6330 _h
Name	vpoc demand value generator ramp type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>ramp function</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.5.1.13 Object 6331_h: vpoc demand value generator ramp acceleration time

The *acceleration time* parameter defines the rising speed of the output for ramps with *type* = 1, 2, 4.

OBJECT DESCRIPTION

Index	6331 _h
Name	vpoc demand value generator ramp acceleration time
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = [1, 2, 4]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.5.1.14 Object 6332_h: vpoc demand value generator ramp acceleration time positive

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	6332 _h
Name	vpoc demand value generator ramp acceleration time positive
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.6 Object 6333_h: vpoc demand value generator ramp acceleration time negative

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	6333 _h
Name	vpoc demand value generator ramp acceleration time negative
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.6.1.1 Object 6334_h: vpoc demand value generator ramp deceleration time

The acceleration time parameter defines the falling speed of the output for ramps with *type* = 2.

OBJECT DESCRIPTION

Index	6334 _h
Name	vpoc demand value generator ramp deceleration time
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.6.1.2 Object 6335_h: vpoc demand value generator ramp deceleration time positive

This object is used with *ramp type* = 3 (see *VDMAPROP*!, chapter 9.3.3).

OBJECT DESCRIPTION

Index	6335 _h
Name	vpoc demand value generator ramp deceleration time positive
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.6.1.3 Object 6336_h: vpoc demand value generator ramp deceleration time negative

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	6336 _h
Name	vpoc demand value generator ramp deceleration time negative
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.6.1.4 Object 6340_h: vpoc demand value generator directional dependent gain type

This object defines a *directional dependent influence* on the input (see /VDMAPROP/, chapter 9.4).

VALUE DESCRIPTION

Value	Description
0	No directional dependent gain
1	Directional dependent gain type 1
2 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	6340 _h
Name	vpoc demand value generator directional dependent gain type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>directional dependent gain</i> implemented

ENTRY DESCRIPTION

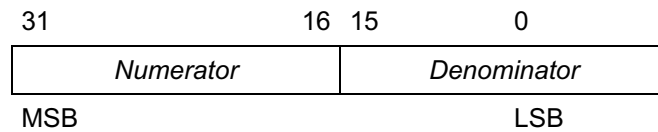
Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.1.5 Object 6341_h: vpoc demand value generator directional dependent gain factor

The factor is composed of the elements numerator and denominator.

VALUE DESCRIPTION

The object is composed as shown by (numerator SHL 16)+denominator. This avoids setting numerator and denominator separately.

**OBJECT DESCRIPTION**

Index	6341 _h
Name	vpoc demand value generator directional dependent gain factor
Object code	VAR
Data type	UNSIGNED32
Category	Conditional; Mandatory, if <i>directional dependent gain type</i> = 1

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

7.2.6.1.6 Object 6342_h: vpoc demand value generator dead band compensation type

This object defines the type of the *dead band compensation function* (see /VDMAPROP/, chapter 9.6).

VALUE DESCRIPTION

Value	Description
0	No dead band compensation
1	Type 1
2	Type 2
3 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	6342 _h
Name	vpoc demand value generator dead band compensation type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>dead band compensation</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.1.7 Object 6343_h: vpoc demand value generator dead band compensation A side

This object defines the step height of the A side.

OBJECT DESCRIPTION

Index	6343 _h
Name	vpoc demand value generator dead band compensation A side
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>dead band compensation type</i> = [1, 2]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.1.8 Object 6344_h: vpoc demand value generator dead band compensation B side

This parameter determines the step height of the B side.

OBJECT DESCRIPTION

Index	6344 _h
Name	vpoc demand value generator dead band compensation B side
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>dead band compensation type</i> = [1, 2]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.1.9 Object 6345_h: vpoc demand value generator dead band compensation threshold

This object defines the starting point of the compensation step or ramp.

OBJECT DESCRIPTION

Index	6345 _h
Name	vpoc demand value generator dead band compensation threshold
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>dead band compensation type</i> = [1, 2]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.1.10 Object 6346_h: vpoc demand value generator characteristic compensation type

This function compensates the non-linearities of a valve (see /VDMAPROP/, chapter 9.5).

VALUE DESCRIPTION

Value	Description
0	No characteristic compensation
1 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	6346 _h
Name	vpoc demand value generator characteristic compensation type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if block implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.1.11 Object 6350_h: vpoc control deviation

This object holds the difference between *demand value* and *actual value*:

control deviation = *demand value* - *actual value*.

Remark: The SI unit of the *control deviation* is the same as the input (*set point*).

OBJECT DESCRIPTION

Index	6350 _h
Name	vpoc control deviation
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	(control mode specific)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.1.12 Object 6351_h: vpoc control monitoring type

This object defines the type of the *control monitoring function* (see /VDMAPROP/, chapter 9.8).

VALUE DESCRIPTION

Value	Description
0	No control monitoring
1	Standard control monitoring (upper and lower threshold)
2	Standard control monitoring (symmetric threshold)
3	Dynamic control monitoring (upper and lower threshold)
4	Dynamic control (symmetric threshold)
5 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	6351 _h
Name	vpoc control monitoring type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>control monitoring</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.1.13 Object 6352_h: vpoc control monitoring delay time

After the delay time a control deviation will be shown as a control fault.

OBJECT DESCRIPTION

Index	6352 _h
Name	vpoc control monitoring delay time
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.6.1.14 Object 6353_h: vpoc control monitoring threshold

This parameter defines the threshold for *control monitoring type* = 2.

OBJECT DESCRIPTION

Index	6353 _h
Name	vpoc control monitoring threshold
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>control monitoring type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.1.15 Object 6354_h: vpoc control monitoring upper threshold

This parameter defines the *upper threshold* for *control monitoring type* = 1.

OBJECT DESCRIPTION

Index	6354 _h
Name	vpoc control monitoring upper threshold
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>control monitoring type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.1.16 Object 6355_h: vpoc control monitoring lower threshold

This parameter defines the *lower threshold* for *control monitoring type* = 1.

OBJECT DESCRIPTION

Index	6355 _h
Name	vpoc control monitoring lower threshold
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>control monitoring type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.1.17 Object 6360_h: vpoc dither type

This object defines the type of *dither function* (see /VDMAPROP/, chapter 9.2).

VALUE DESCRIPTION

Value	Description
0	Dither function off
1	Dither with square wave
2	Dither with triangular wave
3	Dither with sinusoidal wave (distortion factor 0.001%)
4 to 127	reserved
- 1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	6360 _h
Name	vpoc dither type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>dither function</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.1.18 Object 6361_h: vpoc dither amplitude

This object defines the amplitude of the *dither function*.

OBJECT DESCRIPTION

Index	6361 _h
Name	vpoc dither amplitude
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Conditional; Mandatory, if <i>dither function type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.1.19 Object 6362_h: vpoc dither frequency

This object defines the frequency of the *dither signal*.

OBJECT DESCRIPTION

Index	6362 _h
Name	vpoc dither frequency
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Conditional; Mandatory, if <i>dither function type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	20 _h (Hz)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.1.20 Object 6370_h: vpoc target window monitoring type

This object defines the type of *target monitoring function* (see /VDMAPROP/, chapter 9.9).

VALUE DESCRIPTION

Value	Description
0	No target window monitoring
1	Standard target window monitoring (upper and lower threshold)
2	Target window monitoring (symmetric threshold)
3 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	6370 _h
Name	vpoc target window monitoring type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>target window monitoring</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.1.21 Object 6371_h: vpoc target window monitoring switch on time

This parameter defines the time delay, if the bit of the status word is set to 1, after the control deviation reached the target window range.

OBJECT DESCRIPTION

Index	6371 _h
Name	vpoc target window monitoring switch on time
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.6.1.22 Object 6372_h: vpoc target window monitoring switch off time

This parameter defines the time delay, if the bit of the status word is set to 0, after the control deviation is outside the target window range.

OBJECT DESCRIPTION

Index	6372 _h
Name	vpoc target window monitoring switch off time
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.6.1.23 Object 6373_h: vpoc target window monitoring threshold

This parameter defines the *threshold* for *target monitoring type* = 2.

OBJECT DESCRIPTION

Index	6373 _h
Name	vpoc target window monitoring threshold
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>target window monitoring type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.1.24 Object 6374_h: vpoc target window monitoring upper threshold

This object defines the *upper threshold* for *target window monitoring type* = 1.

OBJECT DESCRIPTION

Index	6374 _h
Name	vpoc target window monitoring upper threshold
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>target window monitoring type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.1.25 Object 6375_h: vpoc target window monitoring lower threshold

This object defines the *lower threshold* for *target window monitoring type* = 1.

OBJECT DESCRIPTION

Index	6375 _h
Name	vpoc target window monitoring lower threshold
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>target window monitoring type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.2 Control mode: pressure control

The objects defined in this chapter refer to the control modes *valve pressure control open loop* and *valve pressure control closed loop* (see /VDMAPROP/, chapter 8.1.3 and 8.1.4). They are also implemented for *valve p/Q control*.

7.2.6.2.1 Object 6380_h: vprc set point

This object corresponds to the *valve pressure control set point* (see /VDMAPROP/, chapter 8.1.3 and 8.1.4).

OBJECT DESCRIPTION

Index	6380 _h
Name	vprc set point
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>control mode</i> = [3, 4]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.2.2 Object 6381_h: vprc actual value

This object holds the *actual value* of the sensor interface instance used for the control algorithm (see /VDMAPROP/, chapter 8.1.4).

OBJECT DESCRIPTION

Index	6381 _h
Name	vprc actual value
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>control mode</i> = 4

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER16
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.2.3 Object 6382_h: vprc interface reference

This object creates a reference between the controller and the *actual value*. The parameter specifies the number of the interface, which provides the *actual value*. A write to this object with a value greater than *max interface number* has to be rejected.

OBJECT DESCRIPTION

Index	6382 _h
Name	vprc interface reference
Object code	VAR
Data type	UNSIGNED8
Category	Optional

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

7.2.6.2.4 Object 6390_h: vprc demand value generator demand value

This object contains the output of the *demand value generator* (see /VDMAPROP/, chapter 8.2).

OBJECT DESCRIPTION

Index	6390 _h
Name	vprc demand value generator demand value
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.2.5 Object 6391_h: vprc demand value generator reference value

This object contains the *reference value*, a value corresponding to 100% of the *set point* (see /VDMAPROP/, chapter 8.2).

OBJECT DESCRIPTION

Index	6391 _h
Name	vprc demand value generator reference value
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.2.6 Object 6394_h: vprc demand value generator hold set point

This object contains the *hold set point* (see /VDMAPROP/, chapter 8.2).

OBJECT DESCRIPTION

Index	6394 _h
Name	vprc demand value generator hold set point
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.2.7 Object 63A0_h: vprc demand value generator upper limit

This object contains the *upper limit* of the *limit function* in the *demand value generator* (see /VDMAPROP/, chapter 8.2.1). *Upper limit* < *lower limit* has to be rejected.

OBJECT DESCRIPTION

Index	63A0 _h
Name	vprc demand value generator upper limit
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>limit function</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.2.8 Object 63A1_h: vprc demand value generator lower limit

This object contains the *lower limit* of the *limit function* in the *demand value generator* (see /VDMAPROP/, chapter 8.2.1). *Lower limit > upper limit* has to be rejected.

OBJECT DESCRIPTION

Index	63A1 _h
Name	vprc demand value generator lower limit
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>limit function</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.2.9 Object 63A2_h: vprc demand value generator scaling factor

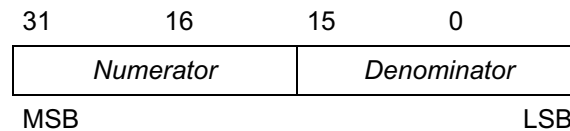
The 'scaling' serves to change the resolution or the signal range of the *set point* derivation.

VALUE DESCRIPTION

The factor is composed of the elements numerator and denominator.

$$value = (numerator \text{ SHL } 16) + denominator$$

This avoids setting numerator and denominator separately. The value 0 is not allowed neither for numerator nor denominator.



OBJECT DESCRIPTION

Index	63A2 _h
Name	vprc demand value generator scaling factor
Object code	VAR
Data type	UNSIGNED32
Category	Conditional; Mandatory, if <i>scaling function</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

7.2.6.2.10 Object 63A3_h: vprc demand value generator scaling offset

This object defines the offset used in the *scaling function*.

OBJECT DESCRIPTION

Index	63A3 _h
Name	vprc demand value generator scaling offset
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>scaling function</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.2.11 Object 63A4_h: vprc demand value generator zero correction offset

This object defines the *offset* used for *zero correction function* (see /VDMAPROP/, chapter 9.7).

OBJECT DESCRIPTION

Index	63A4 _h
Name	vprc demand value generator zero correction offset
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>zero correction</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.2.12 Object 63B0_h: vprc demand value generator ramp type

This object defines the *ramp type* used in the *ramp function* of the *demand value generator* (see /VDMAPROP/, chapter 9.3).

VALUE DESCRIPTION

Value	Description
0	No ramp
1	Linear (same value for all quadrants)
2	Linear (2 parameters for acceleration and deceleration, pos. and neg. values equal)
3	Linear (4 parameters for all quadrants)
4	Sine square
5	Profile generator linear (drives positioning control only)
6	Profile generator sine square (drives positioning control only)
7 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	63B0 _h
Name	vprc demand value generator ramp type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>ramp function</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.2.13 Object 63B1_h: vprc demand value generator ramp acceleration time

The acceleration time parameter defines the rising speed of the output for ramps with *type* = 1,2,4.

OBJECT DESCRIPTION

Index	63B1 _h
Name	vprc demand value generator ramp acceleration time
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = [1, 2, 4]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.6.2.14 Object 63B2_h: vprc demand value generator ramp acceleration time positive

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	63B2 _h
Name	vprd demand value generator acceleration time positive
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Conditional; mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.6.2.15 Object 63B3_h: vprc demand value generator ramp acceleration time negative

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	63B3 _h
Name	vprc demand value generator ramp acceleration time negative
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.6.2.16 Object 63B4_h: vprc demand value generator ramp deceleration time

The acceleration time parameter defines the falling speed of the output for ramps with *type* = 2.

OBJECT DESCRIPTION

Index	63B4 _h
Name	vprc demand value generator ramp deceleration time
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.6.2.17 Object 63B5_h: vprc demand value generator ramp deceleration time positive

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	63B5 _h
Name	vprc demand value generator ramp deceleration time positive
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.6.2.18 Object 63B6_h: vprc demand value generator ramp deceleration time negative

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	63B6 _h
Name	vprc demand value generator ramp deceleration time negative
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.6.2.19 Object 63C0_h: vprc demand value generator directional dependent gain type

This object defines a *directional dependent influence* on the input (see /VDMAPROP/, chapter 9.4).

VALUE DESCRIPTION

Value	Description
0	No directional dependent gain
1	Directional dependent gain type 1
2 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	63C0 _h
Name	vprc demand value generator directional dependent gain type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>directional dependent gain</i> implemented

ENTRY DESCRIPTION

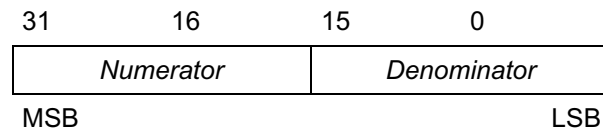
Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.2.20 Object 63C1_h: vprc demand value generator directional dependent gain factor

The factor is composed of the elements numerator and denominator.

VALUE DESCRIPTION

The object is composed as shown by (numerator SHL 16)+denominator. This avoids setting numerator and denominator separately.

**OBJECT DESCRIPTION**

Index	63C1 _h
Name	vprc demand value generator directional dependent gain factor
Object code	VAR
Data type	UNSIGNED32
Category	Conditional; Mandatory, if <i>directional dependent gain type</i> = 1 implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

7.2.6.2.21 Object 63C2_h: vprc demand value generator dead band compensation type

This object defines the type of the *dead band compensation function* (see /VDMAPROP/, chapter 9.6).

VALUE DESCRIPTION

Value	Description
0	No dead band compensation
1	Type 1
2	Type 2
3 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	63C2 _h
Name	vprc demand value generator dead band compensation type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>dead band compensation</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.2.22 Object 63C3_h: vprc demand value generator dead band compensation A side

This object defines the step height of the A side.

OBJECT DESCRIPTION

Index	63C3 _h
Name	vprc deamdn value generator dead band compensation A side
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>dead band compensation type</i> = [1, 2]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.2.23 Object 63C4_h: vprc demand value generator dead band compensation B side

This parameter determines the step height of the B side.

OBJECT DESCRIPTION

Index	63C4 _h
Name	vprc demand value generator dead band compensation B side
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>dead band compensation type</i> = [1, 2]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.2.24 Object 63C5_h: vprc demand value generator dead band compensation threshold

This object defines the starting point of the compensation step or ramp.

OBJECT DESCRIPTION

Index	63C5 _h
Name	vprc demand value generator dead band compensation threshold
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>dead band compensation type</i> = [1, 2]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.2.25 Object 63C6_h: vprc demand value generator characteristic compensation type

This function compensates the non-linearities of a valve (see /VDMAPROP/, chapter 9.5).

VALUE DESCRIPTION

Value	Description
0	No characteristic compensation
1 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	63C6 _h
Name	vprc demand value generator characteristic compensation type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if block implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.2.26 Object 63D0_h: vprc control deviation

This object holds the difference between *demand value* and *actual value*:

control deviation = *demand value* - *actual value*.

Remark: The SI unit of the *control deviation* is the same as the input (*set point*).

OBJECT DESCRIPTION

Index	63D0 _h
Name	vprc control deviation
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	(control mode specific)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.2.27 Object 63D1_h: vprc control monitoring type

This object defines the type of the *control monitoring function* (see *VDMAPROP/*, chapter 9.8).

VALUE DESCRIPTION

Value	Description
0	No control monitoring
1	Standard control monitoring (upper and lower threshold)
2	Standard control monitoring (symmetric threshold)
3	Dynamic control monitoring (upper and lower threshold)
4	Dynamic control (symmetric threshold)
5 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	63D1 _h
Name	vprc control monitoring type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>control monitoring</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.2.28 Object 63D2_h: vprc control monitoring delay time

After the delay time a *control deviation* will be shown as a *control fault*.

OBJECT DESCRIPTION

Index	63D2 _h
Name	vprc control monitoring delay time
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.6.2.29 Object 63D3_h: vprc control monitoring threshold

This parameter defines the *threshold* for *control monitoring type* = 2.

OBJECT DESCRIPTION

Index	63D3 _h
Name	vprc control monitoring threshold
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>control monitoring type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.2.30 Object 63D4_h: vprc control monitoring upper threshold

This parameter defines the *upper threshold* for *control monitoring type* = 1.

OBJECT DESCRIPTION

Index	63D4 _h
Name	vprc control monitoring upper threshold
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>control monitoring type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.2.31 Object 63D5_h: vprc control monitoring lower threshold

This parameter defines the *lower threshold* for *control monitoring type* = 1.

OBJECT DESCRIPTION

Index	63D5 _h
Name	vprc control monitoring lower threshold
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>control monitoring type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.2.32 Object 63E0_h: vprc dither type

This object defines the type of *dither function* (see /VDMAPROP/, chapter 9.2).

VALUE DESCRIPTION

Value	Description
0	Dither function off
1	Dither with square wave
2	Dither with triangular wave
3	Dither with sinusoidal wave (distortion factor 0.001%)
4 to 127	reserved
- 1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	63E0 _h
Name	vprc dither type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>dither function</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.2.33 Object 63E1_h: vprc dither amplitude

This object defines the *amplitude* of the *dither function*.

OBJECT DESCRIPTION

Index	63E1 _h
Name	vprc dither amplitude
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Conditional; Mandatory, if <i>dither function type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.2.34 Object 63E2_h: vprc dither frequency

This object defines the *frequency* of the *dither signal*.

OBJECT DESCRIPTION

Index	63E2 _h
Name	vprc dither frequency
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Conditional; Mandatory, if <i>dither function type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	20 _h (Hz)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.2.35 Object 63F0_h: vprc target window monitoring type

This object defines the type of *target monitoring function* (see /VDMAPROP/, chapter 9.9).

VALUE DESCRIPTION

Value	Description
0	No target window monitoring
1	Standard target window monitoring (upper and lower threshold)
2	Target window monitoring (symmetric threshold)
3 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	63F0 _h
Name	vprc target window monitoring type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>target window monitoring</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.2.36 Object 63F1_h: vprc target window monitoring switch on time

This parameter defines the time delay, if the bit of the status word is set to 1, after the *control deviation* reached the *target window range*.

OBJECT DESCRIPTION

Index	63F1 _h
Name	vprc target window monitoring switch on time
Object code	RECORD
Data type	value parameter record unsigned16 (0081 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.6.2.37 Object 63F2_h: vprc target window monitoring switch off time

This parameter defines the time delay, if the bit of the status word is set to 0, after the *control deviation* is outside the *target window range*.

OBJECT DESCRIPTION

Index	63F2 _h
Name	vprc target window monitoring switch off time
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.6.2.38 Object 63F3_h: vprc target window monitoring threshold

This parameter defines the *threshold* for *target monitoring type* = 2.

OBJECT DESCRIPTION

Index	63F3 _h
Name	vprc target window monitoring threshold
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory if <i>target window monitoring type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.2.39 Object 63F4_h: vprc target window monitoring upper threshold

This object defines the *upper threshold* for *target window monitoring type* = 1.

OBJECT DESCRIPTION

Index	63F4 _h
Name	vprc target window monitoring upper threshold
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>target window monitoring type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.2.40 Object 63F5_h: vprc target window monitoring lower threshold

This object defines the *lower threshold* for *target window monitoring type* = 1.

OBJECT DESCRIPTION

Index	63F5 _h
Name	vprc target window monitoring lower threshold
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>target window monitoring type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.3 Controller mode: valve p/Q control

The objects defined in this chapter refer to the *control mode valve p/Q control* (see /VDMAPROP/, chapter 8.1.5).

7.2.6.3.1 Object 640D_h: vpqc power limit factor

The *power limit factor* determines the *maximum hydrostatic power*.

VALUE DESCRIPTION

The object holds the quotient of *nominal actuation power* and *hydrostatic corner power*. The value 0 is not allowed for both numerator and denominator. The object is composed by

$value = (nominal\ actuation\ power\ SHL\ 16) + hydrostatic\ corner\ power.$

31	16	15	0
Nominal actuation power (numerator)		Hydrostatic corner power (denominator)	
MSB		LSB	

OBJECT DESCRIPTION

Index	640D _h
Name	vpqc power limit factor
Object code	VAR
Data type	UNSIGNED32
Category	Conditional; Mandatory, if <i>control mode</i> = 5

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.3.2 Object 640E_h: vpqc hydrostatic actual power

The *hydrostatic actual power* is calculated by the controller from the input physical actual values.

OBJECT DESCRIPTION

Index	640E _h
Name	vpqc hydrostatic actual power
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>control mode</i> = 5

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER16
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.3.3 Object 6460_h: vpqc dither type

This object defines the type of *dither function* (see /VDMAPROP/, chapter 9.2).

VALUE DESCRIPTION

Value	Description
0	Dither function off
1	Dither with square wave
2	Dither with triangular wave
3	Dither with sinusoidal wave (distortion factor 0.001%)
4 to 127	reserved
- 1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	6460 _h
Name	vpqc dither type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>dither function</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.3.4 Object 6461_h: vpqc dither amplitude

This object defines the *amplitude* of the *dither function*.

OBJECT DESCRIPTION

Index	6461 _h
Name	vpqc fither amplitude
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Conditional; Mandatory, if <i>dither function type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.3.5 Object 6462_h: vpqc dither frequency

This object defines the *frequency* of the *dither signal*.

OBJECT DESCRIPTION

Index	6462 _h
Name	vpqc dither frequency
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Conditional; Mandatory, if <i>dither function type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	20 _h (Hz)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.3.6 Object 6470_h: vpqc target window monitoring type

This object defines the type of *target monitoring function* (see /VDMAPROP/, chapter 9.9).

VALUE DESCRIPTION

Value	Description
0	No target window monitoring
1	Standard target window monitoring (upper and lower threshold)
2	Target window monitoring (symmetric threshold)
3 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	6470 _h
Name	vpqc target window monitoring type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>target window monitoring</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.6.3.7 Object 6471_h: vpqc target window monitoring switch on time

This parameter defines the time delay, if the bit of the status word is set to 1, after the *control deviation* reached the *target window range*.

OBJECT DESCRIPTION

Index	6471 _h
Name	vpqc target window monitoring switch on time
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.6.3.8 Object 6472_h: vpqc target window monitoring switch off time

This parameter defines the time delay, if the bit of the status word is set to 0, after the *control deviation* is outside the *target window range*.

OBJECT DESCRIPTION

Index	6472 _h
Name	vpqc target window monitoring switch off time
Object code	RECORD
Data type	value parameter record UNSIGNED16 (0081 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED16
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.6.3.9 Object 6473_h: vpqc target window monitoring threshold

This parameter defines the *threshold* for *target monitoring type* = 2.

OBJECT DESCRIPTION

Index	6473 _h
Name	vpqc target window monitoring threshold
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>target window monitoring type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.3.10 Object 6474_h: vpqc target window monitoring upper threshold

This object defines the *upper threshold* for *target window monitoring type* = 1.

OBJECT DESCRIPTION

Index	6474 _h
Name	vpqc target window monitoring upper threshold
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>target window monitoring type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.6.3.11 Object 6475_h: vpqc target window monitoring lower threshold

This object defines the *lower threshold* for *target window monitoring type* = 1.

OBJECT DESCRIPTION

Index	6475 _h
Name	vpqc target window monitoring lower threshold
Object code	RECORD
Data type	value parameter record INTEGER16 (0084 _h)
Category	Conditional; Mandatory, if <i>target window monitoring type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER16
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	ir

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	0

7.2.7 Hydrostatic transmissions (drives)

7.2.7.1 Control mode: open loop movement

The objects defined in this chapter refer to the *control mode drive open loop movement* (see /VDMAPROP/, chapter 7.1.1).

7.2.7.1.1 Object 6480_h: dcol set point

This object corresponds to the *open loop set point* (see /VDMAPROP/, chapter 7.1.1).

OBJECT DESCRIPTION

Index	6480 _h
Name	dcol set point
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control mode</i> = 6

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A1 _h (m/min)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.1.2 Object 6490_h: dcol demand value generator demand value

This object contains the output of the *demand value generator* (see /VDMAPROP/, chapter 7.2).

OBJECT DESCRIPTION

Index	6490 _h
Name	dcol demand value generator demand value
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	(control mode specific)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	(control mode specific)

7.2.7.1.3 Object 6492_h: dcol demand value generator reference A value

This object contains the *reference value* for direction A, a value corresponding to 100% of physical capabilities (see *VDMA PROP*, chapter 7.2). If only one *reference value* is used, *reference A value* is valid for both directions.

OBJECT DESCRIPTION

Index	6492 _h
Name	dcol demand value generator reference A value
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	(control mode specific)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	(control mode specific)

7.2.7.1.4 Object 6493_h: dcol demand value generator reference B value

This object contains the *reference value* for direction B, a value corresponding to 100% of physical capabilities (see /VDMAPROP/, chapter 7.2).

OBJECT DESCRIPTION

Index	6493 _h
Name	dcol demand value generator reference B value
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
CATEGORY	OPTIONAL

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	(control mode specific)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	(control mode specific)

7.2.7.1.5 Object 6494_h: dcol demand value generator hold set point

This object contains the *hold set point* (see /VDMAPROP/, chapter 7.2).

OBJECT DESCRIPTION

Index	6494 _h
Name	dcol demand value generator hold set point
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	(control mode specific)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	(control mode specific)

7.2.7.1.6 Object 64A0_h: dcol demand value generator upper limit

This object contains the *upper limit* of the *limit function* in the *demand value generator* (see /VDMAPROP/, chapter 7.2.1). *Upper limit* < *lower limit* has to be rejected.

OBJECT DESCRIPTION

Index	64A0 _h
Name	dcol demand value generator upper limit
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>limit function</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	(control mode specific)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	(control mode specific)

7.2.7.1.7 Object 64A1_h: dcol demand value generator lower limit

This object contains the *lower limit* of the *limit function* in the *demand value generator* (see /VDMAPROP/, chapter 7.2.1). *Lower limit > upper limit* has to be rejected.

OBJECT DESCRIPTION

Index	64A1 _h
Name	dcol demand value generator lower limit
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>limit function</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	(control mode specific)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	(control mode specific)

7.2.7.1.8 Object 64B0_h: dcol demand value generator ramp type

This object defines the *ramp type* used in the *ramp function* of the *demand value generator* (see /VDMAPROP/, chapter 9.3).

VALUE DESCRIPTION

Value	Description
0	No ramp
1	Linear (same value for all quadrants)
2	Linear (2 parameters for acceleration and deceleration, pos. and neg. values equal)
3	Linear (4 parameters for all quadrants)
4	Sine square
5	Profile generator linear (drives positioning control only)
6	Profile generator sine square (drives positioning control only)
7 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	64B0 _h
Name	dcol demand value generator ramp type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>ramp</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.1.9 Object 64B1_h: dcol demand value generator ramp acceleration time

The *acceleration time* parameter defines the rising speed of the output for ramps with *type* = 1, 2, 4.

OBJECT DESCRIPTION

Index	64B1 _h
Name	dcol demand value generator ramp acceleration time
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = [1, 2, 4]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.1.10 Object 64B2_h: dcol demand value generator ramp acceleration time positive

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	64B2 _h
Name	dcol demand value generator ramp acceleration time positive
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.1.11 Object 64B3_h: dcol demand value generator ramp acceleration time negative

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	64B3 _h
Name	dcol demand value generator ramp acceleration time negative
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.1.12 Object 64B4_h: dcol demand value generator ramp deceleration time

The *acceleration time* parameter defines the falling speed of the output for ramps with *type* = 2.

OBJECT DESCRIPTION

Index	64B4 _h
Name	dcol demand value generator ramp deceleration time
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.1.13 Object 64B5_h: dcol demand value generator ramp deceleration time positive

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	64B5 _h
Name	dcol demand value generator ramp deceleration time positive
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.1.14 Object 64B6_h: dcol demand value generator ramp deceleration time negative

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	64B6 _h
Name	dcol demand value generator ramp deceleration time negative
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2 Control mode: speed control

The objects defined in this chapter refer to the *control mode drive speed control* (see /VDMAPROP/, chapter 7.1.3).

7.2.7.2.1 Object 6500_h: dsc set point

This object corresponds to the *drive speed control set point* (see /VDMAPROP/, chapter 7.1.3).

OBJECT DESCRIPTION

Index	6500 _h
Name	dsc set point
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control mode</i> = 7

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A1 _h (m/min)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.2 Object 6501_h: dsc actual value

This object holds the *actual value* of the sensor interface instance used for the control algorithm (see /VDMAPROP/, chapter 7.1.3).

OBJECT DESCRIPTION

Index	6501 _h
Name	dsc actual value
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control mode</i> = 7

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A1 _h (m/min)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.3 Object 6502_h: dsc interface reference

This object creates a reference between the controller and the *actual value*. The parameter specifies the number of the interface, which provides the *actual value*. A write to this object with a value greater than *max interface number* has to be rejected.

OBJECT DESCRIPTION

Index	6502 _h
Name	dsc interface reference
Object code	VAR
Data type	UNSIGNED8
Category	Optional

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

7.2.7.2.4 Object 6503_h: dsc Kp

This object defines the proportional factor of a PI controller.

OBJECT DESCRIPTION

Index	6503 _h
Name	dsc Kp
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>control mode</i> = 7

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.2.5 Object 6504_h: dsc Ti

This object defines the integration time constant of a PI controller.

OBJECT DESCRIPTION

Index	6504 _h
Name	dsc Ti
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>control mode</i> = 7

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.2.6 Object 6510_h: dsc demand value generator demand value

This object contains the output of the *demand value generator* (see /VDMAPROP/, chapter 7.2).

OBJECT DESCRIPTION

Index	6510 _h
Name	dsc demand value generator demand value
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A1 _h (m/min)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.7 Object 6512_h: dsc demand value generator reference A value

This object contains the *reference value* for direction A, a value corresponding to 100% of physical capabilities (see *VDMA PROP*, chapter 7.2). If only one *reference value* is used, *reference A value* is valid for both directions.

OBJECT DESCRIPTION

Index	6512 _h
Name	dsc demand value generator reference A value
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A ₁ (m/min)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.8 Object 6513_h: dsc demand value generator reference B value

This object contains the *reference value* for direction B, a value corresponding to 100% of physical capabilities (see /VDMAPROP/, chapter 7.2).

OBJECT DESCRIPTION

Index	6513 _h
Name	dsc demand value generator reference B value
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A1 _h (m/min)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.9 Object 6514_h: dsc demand value generator hold set point

This object contains the *hold set point* (see /VDMAPROP/, chapter 7.2).

OBJECT DESCRIPTION

Index	6514 _h
Name	dsc demand value generator hold set point
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A1 _h (m/min)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.10 Object 6520_h: dsc demand value generator upper limit

This object contains the *upper limit* of the *limit function* in the *demand value generator* (see /VDMAPROP/, chapter 7.2.1). *Upper limit* < *lower limit* has to be rejected.

OBJECT DESCRIPTION

Index	6520 _h
Name	dsc demand value generator upper limit
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>limit function</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A1 _h (m/min)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.11 Object 6521_h: dsc demand value generator lower limit

This object contains the *lower limit* of the *limit function* in the *demand value generator* (see /VDMAPROP/, chapter 7.2.1). *Lower limit > upper limit* has to be rejected.

OBJECT DESCRIPTION

Index	6521 _h
Name	dsc demand value generator lower limit
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>limit function</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A1 _h (m/min)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.12 Object 6530_h: dsc demand value generator ramp type

This object defines the *ramp type* used in the *ramp function* of the *demand value generator* (see /VDMAPROP/, chapter 9.3).

VALUE DESCRIPTION

Value	Description
0	No ramp
1	Linear (same value for all quadrants)
2	Linear (2 parameters for acceleration and deceleration, pos. and neg. values equal)
3	Linear (4 parameters for all quadrants)
4	Sine square
5	Profile generator linear (drives positioning control only)
6	Profile generator sine square (drives positioning control only)
7 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	6530 _h
Name	dsc demand value generator ramp type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>ramp function</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.2.13 Object 6531_h: dsc demand value generator ramp acceleration time

The *acceleration time* parameter defines the rising speed of the output for ramps with *type* = 1, 2, 4.

OBJECT DESCRIPTION

Index	6531 _h
Name	dsc demand value generator ramp acceleration time
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = [1, 2, 4]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.14 Object 6532_h: dsc demand value generator ramp acceleration time positive

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	6532 _h
Name	dsc demand value generator acceleration time positive
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.15 Object 6533_h: dsc demand value generator ramp acceleration time negative

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	6533 _h
Name	dsc demand value generator ramp acceleration time negative
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.16 Object 6534_h: dsc demand value generator ramp deceleration time

The *acceleration time* parameter defines the falling speed of the output for ramps with *type* = 2.

OBJECT DESCRIPTION

Index	6534 _h
Name	dsc demand value generator ramp deceleration time
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.17 Object 6535_h: dsc demand value generator ramp deceleration time positive

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	6535 _h
Name	dsc demand value generator ramp deceleration time positive
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.18 Object 6536_h: dsc demand value generator ramp deceleration time negative

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	6536 _h
Name	dsc demand value generator ramp deceleration time negative
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.19 Object 6550_h: dsc control deviation

This object holds the difference between *demand value* and *actual value*:

$$\text{control deviation} = \text{demand value} - \text{actual value}$$

Remark: The SI unit of the *control deviation* is the same as the input (set point).

OBJECT DESCRIPTION

Index	6550 _h
Name	dsc control deviation
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A1 _h (m/min)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.20 Object 6551_h: dsc control monitoring type

This object defines the type of the *control monitoring function* (see /VDMAPROP/, chapter 9.8).

VALUE DESCRIPTION

Value	Description
0	No control monitoring
1	Standard control monitoring (upper and lower threshold)
2	Standard control monitoring (symmetric threshold)
3	Dynamic control monitoring (upper and lower threshold)
4	Dynamic control (symmetric threshold)
5 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	6551 _h
Name	dsc control monitoring type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>control monitoring</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.2.21 Object 6552_h: dsc control monitoring delay time

After the *delay time* a *control deviation* will be shown as a control fault.

OBJECT DESCRIPTION

Index	6552 _h
Name	dsc control moitoring delay time
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.22 Object 6553_h: dsc control monitoring threshold

This parameter defines the *threshold* for *control monitoring type* = 2.

OBJECT DESCRIPTION

Index	6553 _h
Name	dsc control monitoring threshold
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control monitoring type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A1 _h (m/min)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.23 Object 6554_h: dsc control monitoring upper threshold

This parameter defines the *upper threshold* for *control monitoring type* = 1.

OBJECT DESCRIPTION

Index	6554 _h
Name	dsc control monitoring upper threshold
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control monitoring type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A1 _h (m/min)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.24 Object 6555_h: dsc control monitoring lower threshold

This parameter defines the *lower threshold* for *control monitoring type* = 1.

OBJECT DESCRIPTION

Index	6555 _h
Name	dsc control monitoring lower threshold
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control monitoring type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A1 _h (m/min)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.25 Object 6556_h: dsc control monitoring threshold V_{max}

This parameter defines the *threshold* at *maximum velocity* for *symmetric dynamic monitoring* (*control monitoring type* = 4) (see /VDMAPROP/ chapter 9.8.4).

OBJECT DESCRIPTION

Index	62B1 _h
Name	dsc control monitoring threshold Vmax
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control monitoring type</i> = 4

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A1 _h (m/min)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.26 Object 6557_h: dsc control monitoring upper threshold V_{\max} positive

This parameter defines the *threshold* at *maximum velocity* for *asymmetric dynamic monitoring* (*control monitoring type* = 3) (see *IVDMAPROP*, chapter 9.8.3).

OBJECT DESCRIPTION

Index	6557 _h
Name	dsc control monitoring upper threshold Vmax positive
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control monitoring type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A1 _h (m/min)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.27 Object 6558_h: dsc control monitoring lower threshold V_{max} negative

This parameter defines the *threshold* at *maximum velocity* for *asymmetric dynamic monitoring* (*control monitoring type* = 3) (see /VDMAPROP/, chapter 9.8.3).

OBJECT DESCRIPTION

Index	6558 _h
Name	dsc control monitoring lower threshold Vmax negative
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control monitoring type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A1 _h (m/min)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.28 Object 6570_h: dsc target window monitoring type

This object defines the *type of target monitoring function* (see /VDMAPROP/, chapter 9.9).

VALUE DESCRIPTION

Value	Description
0	No target window monitoring
1	Standard target window monitoring (upper and lower threshold)
2	Standard target window monitoring (symmetric threshold)
3 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	6570 _h
Name	dsc target window monitoring type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>target window monitoring</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value rRange	INTEGER8
Default value	No

7.2.7.2.29 Object 6571_h: dsc target window monitoring switch on time

This parameter defines the time delay, if the bit of the status word is set to 1, after the *control deviation* reached the target window range.

OBJECT DESCRIPTION

Index	6571 _h
Name	dsc target window monitoring switch on time
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.30 Object 6572_h: dsc target window monitoring switch off time

This parameter defines the time delay, if the bit of the status word is reset to 0, after the *control deviation* is outside the target window range.

OBJECT DESCRIPTION

Index	6572 _h
Name	dsc target window monitoring switch off time
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.31 Object 6573_h: dsc target window monitoring threshold

This parameter defines the *threshold* for *target monitoring type* = 2.

OBJECT DESCRIPTION

Index	6573 _h
Name	dsc target window monitoring threshold
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>target monitoring type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A1 _h (m/min)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.32 Object 6574_h: dsc target window monitoring upper threshold

This object defines the *upper threshold* for *target window monitoring type* = 1.

OBJECT DESCRIPTION

Index	6574 _h
Name	dsc target window monitoring upper threshold
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>target window monitoring type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A1 _h (m/min)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.2.33 Object 6575_h: dsc target window monitoring lower threshold

This object defines the *lower threshold* for *target window monitoring type* = 1.

OBJECT DESCRIPTION

Index	6575 _h
Name	dsc target window monitoring lower threshold
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>target window monitoring type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A1 _h (m/min)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3 Control mode: drive force/pressure control

The objects defined in this chapter refer to the *control mode drive force/pressure control* (see /VDMAPROP/, chapter 7.1.4).

7.2.7.3.1 Object 6580_h: dfpc set point

This object corresponds to the *drive force/pressure control set point* (see /VDMAPROP/, chapter 7.1.4).

OBJECT DESCRIPTION

Index	6580 _h
Name	dfpc set point
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control mode</i> = 8

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.2 Object 6581_h: dfpc actual value

This object holds the *actual value* of the sensor interface instance used for the control algorithm (see /VDMAPROP/, chapter 7.1.4).

OBJECT DESCRIPTION

Index	6581 _h
Name	dfpc actual value
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control mode</i> = 8

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.3 Object 6582_h: dfpc interface reference

This object creates a reference between the controller and the *actual value*. The parameter specifies the number of the interface, which provides the *actual value*. A write to this object with a value greater than *maximum interface number* has to be rejected.

OBJECT DESCRIPTION

Index	6582 _h
Name	dfpc interface reference
Object code	VAR
Data type	UNSIGNED8
Category	Optional

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

7.2.7.3.4 Object 6583_h: dfpc K_p

This object defines the proportional factor of a PI(DT1) controller (see /VDMAPROP/, chapter 7.1.4.1).

OBJECT DESCRIPTION

Index	6583 _h
Name	dfpc K _p
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>control mode</i> = 8

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.5 Object 6584_h: dfpc T_d

This object defines the rate time DT1 of a PI(DT1) controller (see /VDMAPROP/, chapter 7.1.4.1).

OBJECT DESCRIPTION

Index	6584 _h
Name	dfpc T _d
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>control mode</i> = 8

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.3.6 Object 6585_h: dfpc T₁

This object defines the time delay DT1 of a PI(DT1) controller (see /VDMAPROP/, chapter 7.1.4.1)

OBJECT DESCRIPTION

Index	6585 _h
Name	dfpc T1
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>control mode</i> = 8

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.3.7 Object 6586_h: dfpc T_i

This object defines the integration time constant of a PI(DT1) controller (see /VDMAPROP/, chapter 7.1.4.1)

OBJECT DESCRIPTION

Index	6586 _h
Name	dfpc T _i
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>control mode</i> = 8

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.3.8 Object 6587_h: dfpc pressure sample time

The pressure sample time parameter describes the sample time of the pressure controller in ms (see /VDMAPROP/, chapter 7.1.4). Sample time zero means, the pressure / force controller is disabled.

OBJECT DESCRIPTION

Index	6587 _h
Name	dfpc pressure sample time
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>control mode</i> = 8

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.7.3.9 Object 6590_h: dfpc demand value generator demand value

This object contains the output of the *demand value generator* (see /VDMAPROP/, chapter 7.2).

OBJECT DESCRIPTION

Index	6590 _h
Name	dfpc demand value generator demand value
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.10 Object 6592_h: dfpc demand value generator reference A value

This object contains the *reference value* for direction A, a value corresponding to 100% of physical capabilities (see *VDMA PROP*, chapter 7.2). If only one *reference value* is used, *reference A value* is valid for both directions.

OBJECT DESCRIPTION

Index	6592 _h
Name	dfpc demand value generator reference A value
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.11 Object 6593_h: dfpc demand value generator reference B value

This object contains the *reference value* for direction B, a value corresponding to 100% of physical capabilities (see /VDMAPROP/, chapter 7.2).

OBJECT DESCRIPTION

Index	6593 _h
Name	dfpc demand value generator reference B value
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.12 Object 6594_h: dfpc demand value generator hold set point

This object contains the *hold set point* (see /VDMAPROP/, chapter 7.2).

OBJECT DESCRIPTION

Index	6594 _h
Name	dfpc demand value generator hold set point
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.13 Object 65A0_h: dfpc demand value generator upper limit

This object contains the *upper limit* of the *limit function* in the *demand value generator* (see /VDMAPROP/, chapter 7.2.1). *Upper limit* < *lower limit* has to be rejected.

OBJECT DESCRIPTION

Index	65A0 _h
Name	dfpc demand value generator upper limit
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>limit function</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.14 Object 65A1_h: dfpc demand value generator lower limit

This object contains the *lower limit* of the *limit function* in the *demand value generator* (see /VDMAPROP/, chapter 7.2.1). *Lower limit > upper limit* has to be rejected.

OBJECT DESCRIPTION

Index	65A1 _h
Name	dfpc demand value generator lower limit
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>limit function</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.15 Object 65B0_h: dfpc demand value generator ramp type

This object defines the *ramp type* used in the *ramp function* of the *demand value generator* (see /VDMAPROP/, chapter 9.3).

VALUE DESCRIPTION

Value	Description
0	No ramp
1	Linear (same value for all quadrants)
2	Linear (2 parameters for acceleration and deceleration, pos. and neg. values equal)
3	Linear (4 parameters for all quadrants)
4	Sine square
5	Profile generator linear (drives positioning control only)
6	Profile generator sine square (drives positioning control only)
7 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	65B0 _h
Name	dfpc demand value generator ramp type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>ramp function</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.3.16 Object 65B1_h: dfpc demand value generator ramp acceleration time

The *acceleration time* parameter defines the rising speed of the output for ramps with *type* = 1, 2, 4.

OBJECT DESCRIPTION

Index	65B1 _h
Name	dfpc demand value generator ramp acceleration time
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 1, 2, 4

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.17 Object 65B2_h: dfpc demand value generator ramp acceleration time positive

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	65B2 _h
Name	dfpc demand value generator ramp acceleration time positive
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.18 Object 65B3_h: dfpc demand value generator ramp acceleration time negative

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	65B3 _h
Name	dfpc demand value generator ramp acceleration time negative
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.19 Object 65B4_h: dfpc demand value generator ramp deceleration time

The *deceleration time* parameter defines the falling speed of the output for ramps with *type* = 2.

OBJECT DESCRIPTION

Index	65B4 _h
Name	dfpc demand value generator ramp deceleration time
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.20 Object 65B5_h: dfpc demand value generator ramp deceleration time positive

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	65B5 _h
Name	dfpc demand value generator ramp deceleration time positive
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.21 Object 65B6_h: dfpc demand value generato ramp deceleration time negative

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	65B6 _h
Name	dfpc demand value generator ramp deceleration time negative
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.22 Object 65D0_h: dfpc control deviation

This object holds the difference between *demand value* and *actual value*:

control deviation = *demand value* - *actual value*.

Remark: The SI unit of the *control deviation* is the same as the input (set point).

OBJECT DESCRIPTION

Index	65D0 _h
Name	dfpc control deviation
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.23 Object 65D1_h: dfpc control monitoring type

This object defines the type of the control monitoring function (see /VDMAPROP/, chapter 9.8).

VALUE DESCRIPTION

Value	Description
0	No control monitoring
1	Standard control monitoring (upper and lower threshold)
2	Standard control monitoring (symmetric threshold)
3	Dynamic control monitoring (upper and lower threshold)
4	Dynamic control (symmetric threshold)
5 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	63D1 _h
Name	dfpc control monitoring type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>control monitoring</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.3.24 Object 65D2_h: dfpc control monitoring delay time

After the *delay time* a *control deviation* will be shown as a control fault.

OBJECT DESCRIPTION

Index	65D2 _h
Name	dfpc control monitoring delay time
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.25 Object 65D3_h: dfpc control monitoring threshold

This parameter defines the *threshold* for *control monitoring type* = 2.

OBJECT DESCRIPTION

Index	65D3 _h
Name	dfpc control monitoring threshold
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control monitoring type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.26 Object 65D4_h: dfpc control monitoring upper threshold

This parameter defines the *upper threshold* for *control monitoring type* = 1.

OBJECT DESCRIPTION

Index	65D4 _h
Name	dfpc control monitoring upper threshold
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control monitoring type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.27 Object 65D5_h: dfpc control monitoring lower threshold

This parameter defines the *lower threshold* for *control monitoring type* = 1.

OBJECT DESCRIPTION

Index	65D5 _h
Name	dfpc control monitoring lower threshold
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control monitoring type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.28 Object 65D6_h: dfpc control monitoring threshold V_{max}

This parameter defines the *threshold* at maximum velocity for *symmetric dynamic monitoring* (*control monitoring type* = 4) (see /VDMAPROP/, chapter 9.8.4).

OBJECT DESCRIPTION

Index	65D6 _h
Name	dfpc control monitoring threshold Vmax
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control monitoring type</i> = 4

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.29 Object 65D7_h: dfpc control monitoring upper threshold V_{max} positive

This parameter defines the *threshold* at maximum velocity for *asymmetric dynamic monitoring* (*control monitoring type* = 3) (see *IVDMAPROP*/, chapter 9.8.3).

OBJECT DESCRIPTION

Index	65D7 _h
Name	dfpc control monitoring upper threshold vmax positive
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control monitoring type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.30 Object 65D8_h: dfpc control monitoring lower threshold V_{max} negative

This parameter defines the *threshold* at maximum velocity for *asymmetric dynamic monitoring* (*control monitoring type = 3*) (see /VDMAPROP/, chapter 9.8.3).

OBJECT DESCRIPTION

Index	65D8 _h
Name	dfpc control monitoring lower threshold Vmax negative
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control monitoring type = 3</i>

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.31 Object 65F0_h: dfpc target window monitoring type

This object defines the *type of target monitoring function* (see /VDMAPROP/, chapter 9.9).

VALUE DESCRIPTION

Value	Description
0	No target window monitoring
1	Standard target window monitoring (upper and lower threshold)
2	Standard target window monitoring (symmetric threshold)
3 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	65F0 _h
Name	dfpc target window monitoring type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>target window monitoring</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.3.32 Object 65F1_h: dfpc target window monitoring switch on time

This parameter defines the time delay, if the bit of the status word is set to 1, after the *control deviation* reached the *target window range*.

OBJECT DESCRIPTION

Index	62B1 _h
Name	drv controller output dead band compensation A side
Object code	RECORD
Data type	value parameter record unsi (0085 _h)
Category	Conditional; Mandatory, if <i>dead band compensation type</i> = [1, 2]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	0

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.33 Object 65F2_h: dfpc target window monitoring switch off time

This parameter defines the time delay, if the bit of the status word is reset to 0, after the *control deviation* is outside the *target window range*.

OBJECT DESCRIPTION

Index	65F2 _h
Name	dfpc target window monitoring switch off time
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.34 Object 65F3_h: dfpc target window monitoring threshold

This parameter defines the *threshold* for *target monitoring type* = 2.

OBJECT DESCRIPTION

Index	65F3 _h
Name	dfpc target window monitoring threshold
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>target monitoring type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.35 Object 65F4_h: dfpc target window monitoring upper threshold

This object defines the *upper threshold* for *target window monitoring type* = 1.

OBJECT DESCRIPTION

Index	65F4 _h
Name	dfpc target window monitoring upper threshold
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>window monitoring type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.3.36 Object 65F5_h: dfpc target window monitoring lower threshold

This object defines the *lower threshold* for *target window monitoring type* = 1.

OBJECT DESCRIPTION

Index	65F5 _h
Name	dfpc target window monitoring lower threshold
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>window monitoring type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	4E _h (bar)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.4 Control mode: position control closed loop

The objects defined in this chapter refer to the *control mode drive position control closed loop* (see /VDMAPROP/, chapter 7.1.2).

7.2.7.4.1 Object 6600_h: dpc set point

This object corresponds to the *drive position control set point* (see /VDMAPROP/, chapter 7.1.2).

OBJECT DESCRIPTION

Index	6600 _h
Name	dpc set point
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control mode</i> = 9

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.7.4.2 Object 6601_h: dpc actual value

This object holds the *actual value* of the sensor interface instance used for the control algorithm (see /VDMAPROP/, chapter 7.1.2).

OBJECT DESCRIPTION

Index	6601 _h
Name	dpc actual value
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control mode</i> = 9

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.7.4.3 Object 6602_h: dpc interface reference

This object creates a reference between the controller and the *actual value*. The parameter specifies the number of the *interface*, which provides the *actual value*. A write to this object with a value greater than *maximum interface number* has to be rejected.

OBJECT DESCRIPTION

Index	6602 _h
Name	dpc interface reference
Object code	VAR
Data type	UNSIGNED8
Category	Optional

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

7.2.7.4.4 Object 6603_h: dpc K_p

This object defines the proportional factor of a PDT1-controller (see /VDMAPROP/, chapter 7.1.2).

OBJECT DESCRIPTION

Index	6603 _h
Name	dpc K _p
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>control mode</i> = 9

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.4.5 Object 6604_h: dpc T_d

This object defines the rate time DT1 of a PDT1-controller (see /VDMAPROP/, chapter 7.1.2).

OBJECT DESCRIPTION

Index	6604 _h
Name	dpc T _d
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>control mode</i> = 9

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.4.6 Object 6605_h: dpc T₁

This object defines the time delay DT1 of a PDT1-controller (see /VDMAPROP/, chapter 7.1.2).

OBJECT DESCRIPTION

Index	6605 _h
Name	dpc T1
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>control mode</i> = 9

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.4.7 Object 6608_h: dpc switched integrator type

This object defines the *type* of the *switched integrator* (see /VDMAPROP/, chapter 7.1.2.1).

VALUE DESCRIPTION

Value	Description
0	No switched integrator or deactivated
1	Standard - switched integrator
2 to 127	reserved
-127 to -1	manufacturer specific

OBJECT DESCRIPTION

Index	6608 _h
Name	dpc switched integrator type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>switched integrator</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.4.8 Object 6609_h: dpc switched integrator T_i

This object defines the *integration time* of the switched integrator type = 1 (see /VDMAPROP/, chapter 7.1.2.1)

OBJECT DESCRIPTION

Index	62B1 _h
Name	dpc switched integrator T _i
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>switched integrator type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.4.9 Object 660A_h: dpc switched integrator dX

This object defines the *position window* of the *switched integrator type* = 1 (see /VDMAPROP/, chapter 7.1.2.1)

OBJECT DESCRIPTION

Index	660A _h
Name	dpc switched integrator dX
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>switched integrator type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.7.4.10 Object 660C_h: DrivePositionControl_ConditionFeedback_Kv

This object defines the *velocity feedback* of the *feedback function* (see /VDMAPROP/, chapter 7.1.2.2).

OBJECT DESCRIPTION

Index	660C _h
Name	dpc condition feedback Kv
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>condition feedback function</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.4.11 Object 660D_h: dpc condition feedback Ka

This object defines the *acceleration feedback* of the *feedback function* (see /VDMAPROP/, chapter 7.1.2.2).

OBJECT DESCRIPTION

Index	660D _h
Name	dpc condition feedback Ka
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>condition feedback function</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.4.12 Object 660E_h: dpc condition feedback Kpp

This object defines the *pressure gain factor* of the *feedback function* (see *IVDMAPROP*/, chapter 7.1.2.2).

OBJECT DESCRIPTION

Index	660E _h
Name	dpc condition feedback Kpp
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>condition feedback function</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	No

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.4.13 Object 660F_h: dpc condition feedback T_{1pp}

This object defines the *time constant high pass filter* (DT1) of the *feedback function* (see /VDMAPROP/, chapter 7.1.2.2).

OBJECT DESCRIPTION

Index	660F _h
Name	dpc condition feedback T _{1pp}
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>condition feedback function</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.4.14 Object 6610_h: dpc demand value generator demand value

This object contains the output of the *demand value generator* (see /VDMAPROP/, chapter 7.2).

OBJECT DESCRIPTION

Index	6610 _h
Name	dpc demand value generator demand value
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	ro
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	

7.2.7.4.15 Object 6612_h: dpc demand value generator reference A value

This object contains the *reference value* for *direction A*, a value corresponding to 100% of physical capabilities (see /VDMAPROP/, chapter 7.2). If only one reference value is used, *reference A value* is valid for both directions.

OBJECT DESCRIPTION

Index	6612 _h
Name	dpc demand value generator reference A value
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.7.4.16 Object 6613_h: dpc demand value generator reference B value

This object contains the *reference value* for *direction B*, a value corresponding to 100% of physical capabilities (see /VDMAPROP/, chapter 7.2).

OBJECT DESCRIPTION

Index	6613 _h
Name	dpc demand value generator reference B Value
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.7.4.17 Object 6614_h: dpc demand value generator hold set point

This object contains the *hold set point* (see /VDMAPROP/, chapter 7.2).

OBJECT DESCRIPTION

Index	6614 _h
Name	dpc demand value generator hold set point
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.7.4.18 Object 6620_h: dpc demand value generator upper limit

This object contains the *upper limit* of the *limit function* in the *demand value generator* (see /VDMAPROP/, chapter 7.2.1). *Upper limit* < *lower limit* has to be rejected.

OBJECT DESCRIPTION

Index	6620 _h
Name	dpc demand value generator upper limit
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>limit function</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.7.4.19 Object 6621_h: dpc demand value generator lower limit

This object contains the *lower limit* of the *limit function* in the *demand value generator* (see /VDMAPROP/, chapter 7.2.1). *Lower limit > upper limit* has to be rejected.

OBJECT DESCRIPTION

Index	6621 _h
Name	dpc demand value generator lower limit
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>limit function</i> implemented

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.7.4.20 Object 6630_h: dpc demand value generator ramp type

This object defines the *ramp type* used in the *ramp function* of the *demand value generator* (see /VDMAPROP/, chapter 9.3).

VALUE DESCRIPTION

Value	Description
0	No ramp
1	Linear (same value for all quadrants)
2	Linear (2 parameters for acceleration and deceleration, pos. and neg. values equal)
3	Linear (4 parameters for all quadrants)
4	Sine square
5	Profile generator linear
6	Profile generator sine square
7 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	6630 _h
Name	dpc demand value generator ramp type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>ramp function</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.4.21 Object 6631_h: dpc demand value generator ramp acceleration time

The *acceleration time* parameter defines the rising speed of the output for ramps with *type* = [1, 2, 4] (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	6631 _h
Name	dpc demand value generator ramp acceleration time
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = [1, 2, 4]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.4.22 Object 6632_h: dpc demand value generator ramp acceleration time positive

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	6632 _h
Name	dpc demand value generator ramp acceleration time positive
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.4.23 Object 6633_h: dpc demand value generator ramp acceleration time negative

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	6633 _h
Name	dpc demand value generator ramp acceleration time negative
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.4.24 Object 6634_h: dpc demand value generator ramp deceleration time

The *deceleration time* parameter defines the falling speed of the output for ramps with *type* = 2.

OBJECT DESCRIPTION

Index	6634 _h
Name	dpc demand value generator ramp deceleration time
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.4.25 Object 6635_h: dpc demand value generator ramp deceleration time positive

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	6635 _h
Name	dpc demand value generator ramp deceleration time positive
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0085 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.4.26 Object 6636_h: dpc demand value generator ramp deceleration time negative

This object is used with *ramp type* = 3 (see /VDMAPROP/, chapter 9.3.3).

OBJECT DESCRIPTION

Index	6636 _h
Name	dpc demand value generator ramp deceleration time negative
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.4.27 Object 6637_h: dpc demand value generator ramp velocity

The *velocity* parameter defines the velocity to generate the profile (ramp) of the demand value and is used with *ramp type* = 5, 6 (see /VDMAPROP/, chapter 9.3.5 and 9.3.6).

OBJECT DESCRIPTION

Index	6637 _h
Name	dpc demand value generator ramp velocity
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = [5, 6]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A1 _h (m/min)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.4.28 Object 6638_h: dpc demand value generator ramp acceleration

The *acceleration* parameter defines the acceleration to generate the profile (ramp) of the demand value and is used with *ramp type* = 5, 6 (see /VDMAPROP/, chapter 9.3.5 and 9.3.6).

OBJECT DESCRIPTION

Index	6638 _h
Name	dpc demand value generator ramp acceleration
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = [5, 6]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A8 _h (m/s ²)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.4.29 Object 6639_h: dpc demand value generator ramp deceleration

The deceleration parameter defines the deceleration to generate the profile (ramp) of the demand value and is used with *ramp type* = 5, 6 (see /VDMAPROP/, chapter 9.3.5 and 9.3.6).

OBJECT DESCRIPTION

Index	6639 _h
Name	dpc demand value generator ramp deceleration
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Conditional; Mandatory, if <i>ramp type</i> = [5, 6]

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	A8 _h (m/s ²)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.4.30 Object 6650_h: dpc control deviation

This object holds the difference between *demand value* and *actual value*:

$$\text{control deviation} = \text{demand value} - \text{actual value}.$$

Remark: The SI unit of the *control deviation* is the same as the input (set point).

OBJECT DESCRIPTION

Index	6650 _h
Name	dpc control deviation
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.7.4.31 Object 6651_h: dpc control monitoring type

This object defines the *type* of the *control monitoring function* (see *VDMA PROP*, chapter 9.8).

VALUE DEFINITION

Value	Description
0	No control monitoring
1	Standard control monitoring (upper and lower threshold)
2	Standard control monitoring (symmetric threshold)
3	Dynamic control monitoring (upper and lower threshold)
4	Dynamic control (symmetric threshold)
5 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	6651 _h
Name	dpc control monitoring type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>control monitoring</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.4.32 Object 6652_h: dpc control monitoring delay time

After the *delay time* a *control deviation* will be shown as a control fault.

OBJECT DESCRIPTION

Index	6652 _h
Name	dpc control monitoring delay time
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.4.33 Object 6653_h: dpc control monitoring threshold

This parameter defines the *threshold* for *control monitoring type* = 2.

OBJECT DESCRIPTION

Index	6653 _h
Name	dpc control monitoring threshold
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control monitoring type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.7.4.34 Object 6654_h: dpc control monitoring upper threshold

This parameter defines the *upper threshold* for *control monitoring type* = 1.

OBJECT DESCRIPTION

Index	6654 _h
Name	dpc control monitoring upper threshold
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control monitoring type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.7.4.35 Object 6655_h: dpc control monitoring lower threshold

This parameter defines the *lower threshold* for *control monitoring type* = 1.

OBJECT DESCRIPTION

Index	6655 _h
Name	dpc control monitoring lower threshold
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control monitoring type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.7.4.36 Object 6656_h: dpc control monitoring threshold V_{max}

This parameter defines the *threshold* at *maximum velocity* for symmetric dynamic monitoring (*control monitoring type* = 4) (see /VDMAPROP/, chapter 9.8.4).

OBJECT DESCRIPTION

Index	6656 _h
Name	dpc control monitoring threshold Vmax
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control monitoring type</i> = 4

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.7.4.37 Object 6657_h: dpc control monitoring upper threshold V_{\max} positive

This parameter defines the *threshold* at *maximum velocity* for asymmetric dynamic monitoring (*control monitoring type* = 3) (see /VDMAPROP/, chapter 9.8.3).

OBJECT DESCRIPTION

Index	6657 _h
Name	dpc control monitoring upper threshold Vmax positive
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.7.4.38 Object 6658_h: dpc conitoring monitoring lower threshold V_{max} negative

This parameter defines the *threshold* at *maximum velocity* for asymmetric dynamic monitoring (*control monitoring type* = 3) (see *VDMA PROP*, chapter 9.8.3).

OBJECT DESCRIPTION

Index	6658 _h
Name	dpc control monitoring lower threshold Vmax negative
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>control monitoring type</i> = 3

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.7.4.39 Object 6670_h: dpc target window monitoring type

This object defines the *type of target monitoring function* (see /VDMAPROP/, chapter 9.9).

VALUE DEFINITION

Value	Description
0	No target window monitoring
1	Standard target window monitoring (upper and lower threshold)
2	Standard target window monitoring (symmetric threshold)
3 to 127	reserved
-1 to -128	manufacturer specific

OBJECT DESCRIPTION

Index	6670 _h
Name	dpc target window monitoring type
Object code	VAR
Data type	INTEGER8
Category	Conditional; Mandatory, if <i>target window monitoring</i> implemented

ENTRY DESCRIPTION

Access	rw
PDO mapping	Optional
Value range	INTEGER8
Default value	No

7.2.7.4.40 Object 6671_h: dpc target window monitoring switch on time

This parameter defines the *time delay* the bit of the *status word* is set to 1, after the *control deviation* reached the *target window range*.

OBJECT DESCRIPTION

Index	6671 _h
Name	dpc target window monitoring switch on time
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.4.41 Object 6672_h: dpc target window monitoring switch off time

This parameter defines the *time delay* the bit of the *status word* is reset to 0, after the *control deviation* is outside the *target window range*.

OBJECT DESCRIPTION

Index	6672 _h
Name	dpc target window monitoring switch off time
Object code	RECORD
Data type	value parameter record UNSIGNED32 (0082 _h)
Category	Optional

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	UNSIGNED32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	03 _h (s)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-3 (milli)

7.2.7.4.42 Object 6673_h: dpc target window monitoring threshold

This parameter defines the width of the *target window range band* for *target window monitoring type* = 2.

OBJECT DESCRIPTION

Index	6673 _h
Name	dpc target window monitoring threshold
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>target window monitoring type</i> = 2

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.7.4.43 Object 6674_h: dpc target window monitoring upper threshold

This object defines the *upper threshold* for *target window monitoring type* = 1.

OBJECT DESCRIPTION

Index	6674 _h
Name	dpc target window monitoring upper threshold
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>target window monitoring type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)

7.2.7.4.44 Object 6675_h: dpc target window monitoring lower threshold

This object defines the *lower threshold* for *target window monitoring type* = 1.

OBJECT DESCRIPTION

Index	6675 _h
Name	dpc target window monitoring lower threshold
Object code	RECORD
Data type	value parameter record INTEGER32 (0085 _h)
Category	Conditional; Mandatory, if <i>target window monitoring type</i> = 1

ENTRY DESCRIPTION

Sub-index	00 _h
Description	Number of entries
Entry Category	Mandatory
Access	ro
PDO Mapping	No
Value Range	1 to 3
Default Value	No

Sub-index	01 _h
Description	Value
Entry category	Mandatory
Access	rw
PDO mapping	Optional
Value range	INTEGER32
Default value	No

Sub-index	02 _h
Description	SI unit
Entry category	Optional
Access	ro; rw, if SI unit changeable
PDO mapping	Optional
Value range	UNSIGNED8
Default value	01 _h (m)

Sub-index	03 _h
Description	Prefix
Entry category	Optional
Access	ro; rw, if prefix changeable
PDO mapping	Optional
Value range	INTEGER8
Default value	-6 (micro)