

VISO Servo Control V1.01

Parameter List

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Name	Min	Max	Preset value	Unit	Description
Motor					
Maximum speed	500	3000	2500	rpm	
Minimum speed	100	300	150	rpm	
Position speed	180	1000	180	rpm	
Acc ramp	1	100	20	rpm/ms	
Dec ramp	1	100	30	rpm/ms	
Direction	0	1	0	-	Direction of rotation of motor 0 = CW 1 = CCW
Transmission ratio	1	9999	100	-	Transmission ratio = (Machine diameter/motor diameter)*100
Speed limit DB3000	180	3000	3000	rpm	
Speed limit DB3000	180	3000	1800	rpm	
Single stitch speed	180	500	180	rpm	
Manual speed	180	3000	180	rpm	
Motor brake during stop	0	1	0	-	Motor brake during normal stop 0:no brake torque 1:brake continuously active when stopped
Brake current	50	500	200	-	Brake current = (Brake torque/motor rated torque) *1000
Response pos Change	0	255	40	-	Reserved, invalid
Brake time	0	999	200	ms	Reserved, invalid
Before brake angel	20	40	20	°	
Extern pos sensor	0	1	0	-	Extern pos sensor 0:disable extern pos sensor 1:enable extern pos sensor

Name	Min	Max	Preset value	Unit	Description
Soft start					
speed	180	1000	400	rpm	Soft start speed
Stitch	1	99	1	Stitches	Number of soft start stitches
Sewing Foot Lift					
enable	0	1	1	-	
Start delay after foot ready	0	255	80	ms	
Hold foot lift delay	0	255	40	ms	
End foot lift delay	0	255	50	ms	
Time 1	0	999	200	ms	Activation time of sewing foot lift Magnet in period t1
Time 1 duty	5	100	100	%	Duty cycle in period t1
Time 2	0	60000	10000	ms	Activation time of sewing foot lift Magnet in period t2
Time 2 duty	5	100	100	%	Duty cycle in period t2
Reversal					
Enable	0	1	1	-	Enable Reverse after end of sewing
Reversal angle	10	180	45	°	
Reversal start delay	10	255	40	ms	Waiting time until reversal
Thread cut					
Speed	100	750	150	rpm	Thread cut speed
Cutter pedal pos	0	1	0	-	Reserved, invalid
Switch on angle	0	359	25	°	Cut solenoid switch on angle

Name	Min	Max	Preset value	Unit	Description
					Bottom dead center < Switch on angle < Switch off angle
Switch off angle	0	359	265	°	Cut solenoid switch off angle Switch on angle < Switch off angle < thread top dead center
Cutter time	100	1000	1000	ms	Maximum working time of cut solenoid, after cut auto off.

Thread Tension

Mode	0	3	2	-	Mode of thread tension and thread Tension reduction when sewing foot Lift is active. 0:No thread tension lift; 1:Thread tension lift in the seam; 2:Thread tension lift after thread cutting; 3:Thread tension lift in the seam And after thread cutting;
Switch on angle	0	359	255	°	thread tension switch off angle Bottom dead center < Switch on angle < Switch off angle
Switch off angle	0	359	325	°	thread tension switch off angle Switch on angle < Switch off angle < thread top dead center
Threading res Tension	0	1	0	-	Reserved, invalid
Hp add tension	0	1	1	-	Open additional thread tension During quick stroke adjustment 0:NO 1:YES
Start bartack add tension	0	1	0	-	Open additional thread tension During start bartacking 0:NO 1:YES
End bartack add tension	0	1	0	-	Open additional thread tension During end bartacking 0:NO 1:YES
Manual bartack Add tension	0	1	0	-	Open additional thread tension During manual bartacking 0:NO 1:YES

Name	Min	Max	Preset value	Unit	Description
Thread clamp add tension	0	1	0	-	Open additional thread tension For thread clamp 0:NO 1:YES
Soft start add tension	0	1	0	-	Open additional thread tension During soft start 0:NO 1:YES
Stitch short add tension	0	1	0	-	Reserved, invalid
Single stitch Add tension	0	1	0	-	Reserved, invalid
Manual add Tension	0	1	0	-	Open additional thread tension for extern key 0:NO 1:YES
Time 1	0	999	40	ms	Activation time of thread tension Magnet in period t1
Time 1 duty	5	100	100	%	Duty cycle in period t1
Time 2	0	60000	0	ms	Activation time of thread tension Magnet in period t2.(if 0,the thread tension magnet remains continuously switched on)
Time2 duty	5	100	100	%	Duty cycle in period t2
Pedal					
Num of speed level	0	64	0	-	Reserved, invalid
Speed Curve	0	7	0	-	Reserved, invalid
Debouncing of Pos 0	1	255	5	ms	When the pedal is at the 0 position for more than this time, hold will be triggered
Debouncing of Pos -1()	1	255	80	ms	When the pedal is at the -1 position for more than this time, foot lift will be triggered
Debouncing of Pos -2	1	255	100	ms	When the pedal is at the -2 position for more than this time, cutting will be triggered
Pos -2 voltage adjust	-5	5	-4	0.01V	Adjust the sensitivity of -2 position trigger(cutting), the smaller the value,

					the lower the sensitivity.
Name	Min	Max	Preset value	Unit	Description
Pedal type	0	1	0	-	0: Analog pedal 1:digital pedal
Position					
Ref pos	0	359	-	°	Don't modify
Bottom dead center	0	359	19	°	Needle in the low position (bottom dead center)
Thread top dead center	0	359	326	°	Thread lever at top dead center
Needle top dead center	0	359	245	°	Threading position (needle thread)
Cur pos	0	359	-	°	Display the current real-time angle
Calibrate Pos	-	-	-	-	Manually correct the position, Refer to the user manual for specific operations
Start bartack					
Switch on angle	-100	60	10	°	Feed-forward angle when the bartack Magnet is switched on (Switching from forward to backward during bartacking)
Switch off angle	-100	60	-75	°	Feed-forward angle when the bartack Magnet is switched off (Switching from backward to forward during bartacking)
Stop When pedal pos 0	0	1	0	-	Reserved, invalid
Mode of end bartack	0	2	0	-	0:Sewing continues after end; 1:Machine stop and must be restarted using the pedal; 2:Thread cutting after after start bartack.;
Speed hold time	0	500	0	ms	Delay time to speed release after start bartack
Manual bartack					
Mode	-	-	-	-	Reserved, invalid

Name	Min	Max	Preset value	Unit	Description
Switch on angle	-	-	-	-	Reserved, invalid
Switch off angle	-	-	-	-	Reserved, invalid
Speed Limit mode	-	-	-	-	Reserved, invalid
End bartack					
Switch on angle	-100	60	10	°	Feed-forward angle when the bartack Magnet is switched on (Switching from forward to backward during bartacking)
Switch off angle	-100	60	-75	°	Feed-forward angle when the bartack Magnet is switched off (Switching from backward to forward during bartacking)
Hold on fun	0	1	0	-	Reserved, invalid
Ornamental bartack					
Enable	0	1	1	-	0:Off 1:On
Speed	180	2500	800	rpm	Speed of ornamental-stitch bartack
Hold time	0	1000	50	ms	Ending time during ornamental-stitch bartack
Darning					
Enable	0	1	0	-	Reserved, invalid
Speed	300	3000	2800	rpm	Reserved, invalid
Speed mode	0	1	0	-	Reserved, invalid
Switch on angle	0	254	10	°	Reserved, invalid
Switch off angel	0	254	10	°	Reserved, invalid
Bartack					
Spd dec when feed dog is	0	1	1	-	Speed decrease when feed dog is repositioned

repositioned					
Name	Min	Max	Preset value	Unit	Description
Speed	180	3000	500	rpm	Level to which the speed is supposed to be reduced when the feed dog is repositioned
Time1	0	999	100	ms	Activation time of bartack magnet in period t1
Time1 duty	5	100	100	%	Duty cycle in period t1
Time2	0	60000	30000	ms	Activation time of bartack magnet in period t2.(if 0,the bartack magnet remains continuously switched on)
Time2 duty	5	100	100	%	Duty cycle in period t2
Stroke adjustment					
Enable	0	1	1	-	0:Off 1:On
Speed	180	3000	1800	rpm	Stroke adjustment entry speed
Type of potentiometer	0	9999	0	-	Reserved, invalid
Num stitches for HP auto off	0	9999	0	Stitches	Number of stitches for automatic Switch-off of quick stroke adjustment(when 0,quick stroke adjustment is deactivated)
Speed limit mode	0	1	0	-	Reserved, invalid
Spd hold time after HP off	0	6000	100	ms	Delay time to speed release after automatic Switch-off of quick stroke adjustment
Lower threshold	0	20	5	-	
Upper threshold	0	20	17	-	
Lower threshold spd	180	3000	3000	rpm	
Upper threshold spd	180	3000	1800	rpm	
Type of HP sign	0	1	0	-	0:Store signal 1:No store signal

Name	Min	Max	Preset value	Unit	Description
Cur Level	0	20	-	-	Display of current level, The greater the level, the greater the stroke of the presser foot
Limit_spd	180	3000	-	-	Maximum speed allowed by current level
Stitch length switch					
Spd limit for long stitch length	180	3000	0	rpm	Speed limit for long stitch length, (when 0,speed limit invalid)
Stitch length at bartack	0	2	0	-	0:Preset stitch length(Long/Normal) 1:Normal stitch length 2:Long stitch length
Cur Stitch length	0	1	0	-	0:Normal stitch length 1:Long stitch length
Stitch shorting at Seam begining	0	1	0	-	Reserved, invalid
Stitch shorting at Thread cutting	0	1	0	-	0:Preset stitch length(Long/Normal) 1:Short stitch length
Needle cool					
Needle cool mode	0	1	0	-	0:Normal needle cooling 1:Speed-dependent needle cooling
Switch off delay Of needle cool	0	6000	2500	ms	Switch off delay of needle cooling
Spd for switch On needle cool	180	3000	2000	rpm	Speed for switching on needle cooling
Needle cool during foot lift	0	1	0	-	0:Off 1:On
Needle cool	0	1	0	-	0:Off 1:On
Thread clamp					
Mode	-	-	-	-	Reserved, invalid
Option	-	-	-	-	Reserved, invalid
FK switch on angle	-	-	-	-	Reserved, invalid
FK switch on angle	-	-	-	-	Reserved, invalid

Name	Min	Max	Preset value	Unit	Description
FL switch on angle	-	-	-	-	Reserved, invalid
FL switch off angle	-	-	-	-	Reserved, invalid
FL switch on duty	-	-	-	-	Reserved, invalid
NSB	-	-	-	-	Reserved, invalid
Switch on angle of add clamp	-	-	-	-	Reserved, invalid
Switch off angle Of add clamp	-	-	-	-	Reserved, invalid
Switch on angle of thread advancing device	-	-	-	-	Reserved, invalid
Switch off angle of thread advancing device	-	-	-	-	Reserved, invalid
Switch on of thread tension lift	-	-	-	-	Reserved, invalid
Switch off of thread tension lift	-	-	-	-	Reserved, invalid
Time 1	-	-	-	-	Reserved, invalid
Time 1 duty	-	-	-	-	Reserved, invalid
Time 2	-	-	-	-	Reserved, invalid
Time 2 duty	-	-	-	-	Reserved, invalid
Light barrier					
Equalizing stitches for normal stitch length	0	255	0	stitches	When detecting the disappearance of the barrier signal, continue to run to Equalizing stitches and then end the sewing
Equalizing stitches for long	0	255	0	stitches	When detecting the disappearance of the barrier signal, continue to run to

Stitch length					Equalizing stitches and then end the sewing
Name	Min	Max	Preset value	Unit	Description
Num of barrier seam	0	255	1	stitches	Reserved, invalid
Equalizing stitches for knitted garment filter	0	255	0	stitches	Reserved, invalid
Spd for barrier equalizing stitches	180	3000	1000	rpm	
Barrier mode	1	3	3	-	1:Seam beginning detection 1:Seam end detection 3:Seam beginning & seam end detection
Mode for seam begining	0	1	0	-	Reserved, invalid
Knitted garment filter	0	1	0	-	Reserved, invalid
Light barrier detection	0	1	0	-	0:Bright 1:Dark
Auto	0	1	0	-	0:Off 1: Semi-automatic mode 2: Fully automatic mode
Thread Wiper					
Enable	0	1	0	-	0:Off 1:On
Switch on time	10	255	100	ms	Switch-on period for thread wiper
No foot lift time	10	255	100	ms	When thread wiper off, after No foot lift time ,the foot is allowed to lift
Thread Monitor					
Enable	0	4	0	-	Bobbin stitch counter/remaining thread monitor 0:Off 1:Bobbin stitch counter A 2:Bobbin stitch counter B 3:Bobbin stitch counter C 4:remaining thread monitor

Name	Min	Max	Preset value	Unit	Description
Bobbin stitch Counter A	1	9999	6000	stitches	Reset value of bobbin stitch counter A
Bobbin stitch Counter B	1	9999	6000	stitches	Reset value of bobbin stitch counter B
Bobbin stitch Counter C	1	9999	6000	stitches	Reset value of bobbin stitch counter C
Factor of bobbin Stitch counter	1	255	10	-	Reserved, invalid
Num of stitches for the remain Thread monitor	0	9999	0	stitches	Number of stitches for the remaining thread monitor
Motor stop when cnt reaches 0	0	1	1	-	Stop sewing motor when the counter Reaches 0 0:Off 1:On
Seam cnt enable	0	1	1	-	Counter plus one after cutting 0:Off 1:On
Needle thread monitor up	0	1	0	-	Reserved, invalid
Up monitor active spd	180	3000	180	rpm	Reserved, invalid
Up monitor Active stitches	0	255	2	stitches	Reserved, invalid
Up monitor sign filter	0	1000	3	ms	Reserved, invalid
Needle thread monitor down	0	1	0	-	Reserved, invalid
Down monitor Active spd	180	3000	180	rpm	Reserved, invalid
Down monitor active stitches	0	1000	3	ms	Reserved, invalid
Carrier roller/puller/seam middle guide					
Seam middle guide follow hp	0	1	0	-	0:On 1:Off
Sys cfg					
Brand number	-	-	-	-	Factory setting, users should not

					modify
Name	Min	Max	Preset value	Unit	Description
Sys para reset	-	-	-	-	Parameter reset to factory settings
WIFI	-	-	-	-	WIFI settings
Language	0	1	0	-	0: Chinese 1:English
System info	-	-	-	-	Display current software information
Device	0	15	0	-	Select the specified equipment, the corresponding parameters will be automatically modified
Developer, Enter after entering 3692					
Input check	-	-	-	-	Check external input signal
Output check	-	-	-	-	Check external output
Input cfg	-	-	-	-	Configure the corresponding function for the external input port
Output cfg	-	-	-	-	Configure the corresponding function for the external output port
Motor	0	10	0	-	0: VS-M00,max speed 3000N/min , max torque 7.2 N/m 1: VS-M01,max speed 3000N/min , max torque 7.2 N/m 2: VS-M02,max speed 3000N/min , max torque 9.4 N/m 3: VS-M03,max speed 2500N/min , max torque 12 N/m 4~9: Reserved