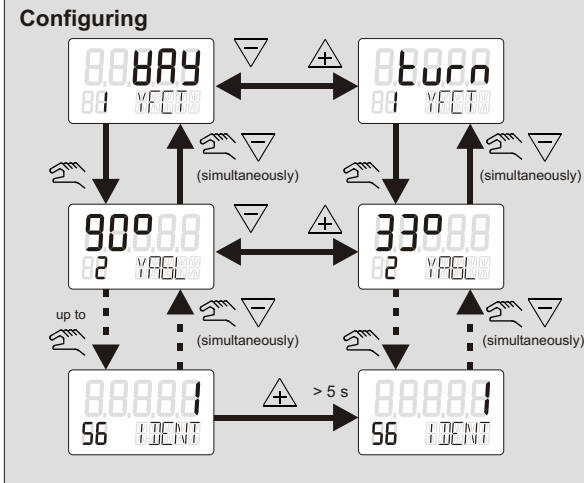
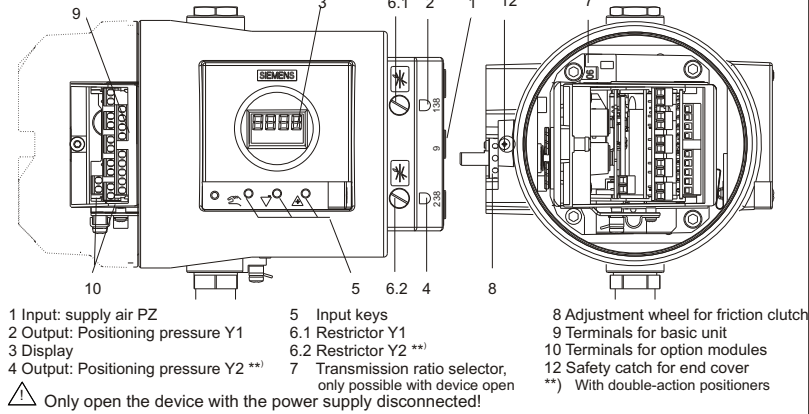


View of device (open cover)



Changing the input level

Mode	Display
P-manual mode Change position using ∇/Δ	Potentiometer setting [%] Not initialized (can be reached using preset)
Configure Change parameter name using ∇/Δ Change value using ∇/Δ	Parameter value Parameter number Parameter name
Manual mode Change position using ∇/Δ	Position [%] Error code Mode and Setpoint [%]
Automatic	Position [%] Error code Mode and Setpoint [%]
Diagnosis	Diagnosis value Diagnosis number Diagnosis name

Automatic initial start-up (starting with factory setting)

Step	Meaning
1.) Part-turn actuator Linear actuator	 ⚠ Press for > 5 s Remaining steps carried out automatically
2.)	 ⚠ Press for > 5 s
3.)	 Direction of action is determined
4.)	 Checking of travel and adjustment of zero and stroke (from stop to stop)
5.)	 Determination and Display of positioning time down (dxx.x), up (uxx.x) Stop with ∇ Pressing the Δ key initiates leakage measurement
6.)	 Determination of minimum increment length
7.)	 Optimization of transient response
8.)	 Initialization terminated successfully (travel in mm for linear actuators) (angle of rotation for part-turn actuators) Continue using: ∇/Δ

(The gray values in the top display line are examples)

Possible messages		
Display	Meaning	Measures
 	Actuator does not move	Acknowledge message using ∇/Δ Check restrictor (6) and open if necessary Drive actuator to working range using ∇/Δ Restart initialization
	Down tolerance band violated	Change gearing (7) Continue using Δ or adjust sliding clutch up to display Continue using Δ or ∇ with "WAY"
	Once the slipping clutch has been adjusted	Linear actuator: Set pick-up lever into vertical position using ∇/Δ Continue using ∇/Δ
	Up tolerance band violated	Acknowledge message using ∇/Δ Set the next highest travel value on the lever Restart initialization Additionally possible with rotary actuators: Adjust using ∇/Δ up to display: Continue using ∇/Δ
	Up/down span violated	Acknowledge message using ∇/Δ Set the next lowest travel value on the lever Restart initialization
 	Actuator does not move Positioning time is possible to adjust	Adjust positioning time using restrictor(s) Continue using Δ or ∇
See Manual for further messages		

Parameter name	Function	Parameter values (Bold = factory setting)	Unit
1.YFCT	Type of actuator	turn (part-turn actuator) WAY (linear actuator) LWAY (linear actuator without sine correction) ncSt (part-turn actuator with NCS) -ncSt (ditto, inv. direction of action) ncSL (linear actuator with NCS) ncSLL (ditto, and lever)	
2.YAGL 1)	Rated angle of rotation of feedback Set transmission ratio selector (7) appropriately (see view of device)	33° 90°	Degrees
3.YWAY 2)	Stroke range (optional setting) If used, the value must correspond with the set of the leverage ratio on the actuator Driver pin must be set to the value of the actuator travel or, if this value is not scaled, to the next larger scale value.	OFF 5 10 15 20 (short lever 33°) 25 30 35 (short lever 90°) 40 50 60 70 90 110 130 (long lever 90°)	mm
4.INITA	Initialization (automatically)	noini no / ### # Strt	
5.INITM	Initialization (manually)	noini no / ### # Strt	
6.SCUR	Current range of setpoint	0 to 20 mA 4 to 20 mA 0 MA 4 MA	
7.SDIR	Setpoint direction	rising falling riSE FALL	
8.SPRA	Setpoint for start of split range	0.0 ... 100.0	%
9.SPRE	Setpoint for end of split range	0.0 ... 100.0	%
10.TSUP	Setpoint ramp up	Auto / 0 ... 400	s
11.TSDO	Setpoint ramp down	0 ... 400	s
12.SFCT	Setpoint function	Linear Equal-percentage 1:25, 1:33, 1:50 Inverse equal-percentage 1:25, 1:33, 1:50 Freely adjustable Lin 1- 25 1- 33 1- 50 n1- 25 n1- 33 n1- 50 FrEE	
13.SL0 3) 14.SL1 etc. up to 32.SL19 33.SL20	Setpoint turning point at 0% 5% to 95% 100%	0.0 ... 100.0	%
34.DEBA	Dead band of controller	Auto / 0.1 ... 10.0	%
35.YA	Start of manipulated variable limiting	0.0 ... 100.0	%
36.YE	End of manipulated variable limiting	0.0 ... 100.0	%
37.YNRM	Standardization of manipulated variable	To mech. travel To flow MPOS FLOW	
38.YDIR	Direction of manipulated variable for display and feedback	Rising Falling riSE FALL	
39.YCLS	Tight closing with manipulated variable	Without Top only Bottom only Top and bottom no uP do uP do	
40.YCDO	Value for tight closing, bottom	0.0 .. 0.5 .. 100.0	%
41.YCUP	Value for tight closing, top	0.0 .. 99.5 .. 100.0	%
42.BIN1 4)	Function of BI 1 None Only message Block configuring Block configuring and manual Drive valve to position YE Drive valve to position YA Block movement Partial-Stroke-Test	OFF on bLoc1 bLoc2 uP doWn StoP PST -on -uP -doWn -StoP -PST NO contact NC contact	
43.BIN2 4)	Function of BI 2 None Only message Drive valve to position YE Drive valve to position YA Block movement Partial-Stroke-Test	OFF on uP doWn StoP PST -on -uP -doWn -StoP -PST NO contact NC contact	
44.AFCT 5)	Alarm function Without A1=min, A2=max A1=min, A2=min A1=max, A2=max	OFF normal Π, ΠΠ Π, ΠΠ ΠΠ ΠΠ inverted ¬, ¬Π ¬, ¬Π ¬Π ¬Π	
45.A1	Response threshold of alarm 1	0.0 .. 10.0 .. 100.0	%
46.A2	Response threshold of alarm 2	0.0 .. 90.0 .. 100.0	%
47.YFCT 5)	on fault Fault + not automatic Fault + not automatic + BI ("+" means logical OR operation)	normal L LnΠ LnΠb inverted -L -LnΠ -LnΠb	
48.YTIM	Monitoring time for fault message "control deviation"	Auto / 0 ... 100	s
49.YLIM	Response threshold for fault message "control deviation"	Auto / 0 ... 100	%
50.PRST	Preset (factory setting) "no" nothing activated "Strt" start of factory setting after pressing key for 5s "oCAY" display following successful factory setting CAUTION: preset results in "NO INI"	no Strt oCAY	
51.XDIAG	Activating for extended diagnostics off single-stage alarm two-stage alarm three-stage alarm	OFF On1 On2 On3	

Parameter name	Function	Parameter values (Bold = factory setting)	Unit
A. L PST 6)	Partial-Stroke-Test with the following parameters: A1. STPOS Start position A2. STTOL Start tolerance A3. STEP Step height A4. STEPD Step direction A5. INTRV Test interval A6. PSTIN Partial-Stroke-Test reference step time A7. FACT1 Factor 1 A8. FACT2 Factor 2 A9. FACT3 Factor 3	0.0 ... 100.0 0.1 .. 2.0 .. 10.0 0.1 .. 10.0 .. 100.0 uP / do / uP do OFF / 1 ... 365 noini / (C) ## / # / dInI / rEAL 0.1 .. 1.5 .. 100.0 0.1 .. 3.0 .. 100.0 0.1 .. 5.0 .. 100.0	% % % days s
b. L DEV 6)	Generally fault of valve with the following parameters: b1. TIM Time constant b2. LIMIT Limit b3. FACT1 Factor 1 b4. FACT2 Factor 2 b5. FACT3 Factor 3	Auto / 1 ... 400 0.0 .. 1.0 .. 100.0 0.1 .. 5.0 .. 100.0 0.1 .. 10.0 .. 100.0 0.1 .. 15.0 .. 100.0	s %
C. L LEAK 6)	Pneumatic leakage with the following parameters: C1. LIMIT Limit C2. FACT1 Factor 1 C3. FACT2 Factor 2 C4. FACT3 Factor 3	0.0 .. 30.0 .. 100.0 0.1 .. 1.0 .. 100.0 0.1 .. 1.5 .. 100.0 0.1 .. 2.0 .. 100.0	%
d. L STIC 6)	Stiction (Slip stick effect) with the following parameters: d1. LIMIT Limit d2. FACT1 Factor 1 d3. FACT2 Factor 2 d4. FACT3 Factor 3	0.1 .. 1.0 .. 100.0 0.1 .. 2.0 .. 100.0 0.1 .. 5.0 .. 100.0 0.1 .. 10.0 .. 100.0	%
E. L DEBA 6)	Monitoring for dead band with the following parameter: E1. LEVEL3 Threshold	0.0 .. 2.0 .. 10.0	%
F. L ZERO 6)	Zero shift with the following parameters: F1. LEVEL1 Threshold 1 F2. LEVEL2 Threshold 2 F3. LEVEL3 Threshold 3	0.1 .. 1.0 .. 10.0 0.1 .. 2.0 .. 10.0 0.1 .. 4.0 .. 10.0	% % %
G. L OPEN 6)	Shift of upper end stop with the following parameters: G1. LEVEL1 Threshold 1 G2. LEVEL2 Threshold 2 G3. LEVEL3 Threshold 3	0.1 .. 1.0 .. 10.0 0.1 .. 2.0 .. 10.0 0.1 .. 4.0 .. 10.0	% % %
H. L TMIN 6)	Monitoring for lower temperature limit with the following parameters: H1. TUNIT Temperature unit H2. LEVEL1 Threshold 1 H3. LEVEL2 Threshold 2 H4. LEVEL3 Threshold 3	°C / °F -40 ... 90 / -40 ... 194 -40 ... 90 / -40 ... 194 -40 ... 90 / -40 ... 194	
J. L TMAX 6)	Monitoring for upper temperature limit with the following parameters: J1. TUNIT Temperature unit J2. LEVEL1 Threshold 1 J3. LEVEL2 Threshold 2 J4. LEVEL3 Threshold 3	°C / °F -40 ... 90 / -40 ... 194 -40 ... 90 / -40 ... 194 -40 ... 90 / -40 ... 194	
L. L STRK 6)	Monitoring for stroke integral with the following parameters: L1. LIMIT Limit of strokes L2. FACT1 Factor 1 L3. FACT2 Factor 2 L4. FACT3 Factor 3	1 ... 1 000 000 0.1 .. 1.0 .. 40.0 0.1 .. 2.0 .. 40.0 0.1 .. 5.0 .. 40.0	
O. L DCHG 6)	Monitoring for direction change with the following parameters: O1. LIMIT Limit of direction changes O2. FACT1 Factor 1 O3. FACT2 Factor 2 O4. FACT3 Factor 3	1 ... 1 000 000 0.1 .. 1.0 .. 40.0 0.1 .. 2.0 .. 40.0 0.1 .. 5.0 .. 40.0	
P. L PAVG 6)	Calculation for average value of position with the following parameters: P1. TBASE Time basis for average value P2. STATE Condition of calculation P3. LEVEL1 Threshold 1 P4. LEVEL2 Threshold 2 P5. LEVEL3 Threshold 3	0.5h / 8h / 5d / 60d / 2.5y ldLE / rEF / ### # / Strt 0.1 .. 2.0 .. 100.0 0.1 .. 5.0 .. 100.0 0.1 .. 10.0 .. 100.0	% % %

HINTS:

- Parameter appears only if "turn" or "WAY" is selected; at "turn", you cannot select 33°
- Parameter does not appear if "turn", "LWAY" or "ncS_" has been selected with YFCT
- Turning points only appear with selection SFCT = "FrEE"
- NC contact means: action with opened switch or Low level
NO contact means: action with closed switch or High level
- Normal means: High level without fault
Inverted means: Low level without fault
- Parameters A up to P appears only if the extended diagnostics with On1, On2 or On3 is activated. The contents of the parameters A up to P appears also only if the selected parameter is activated with On.