

# Intelligent Quarter-Turn Actuator

PSQ1003

AMS13

**Positioner  
integrated**

500 - 1000 Nm

**Switching torque**

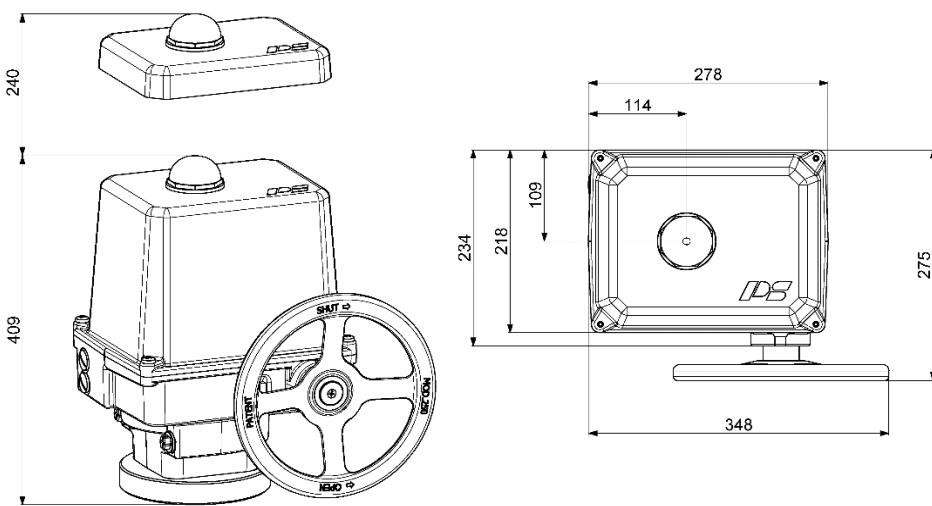
Modulating torque max. 500 Nm )<sup>1</sup>

**70 s - 140 s**  
**Operating Time/90°**

**Flange**  
**F12 / F14**

**Modulating Actuator**  
**Class C**  
acc. EN 15714-2

**Enclosure IP67**  
nach EN 60529



Approx. weight: 27 kg without accessories

Operating Time/90°	70 - 140 s (adjustable)			
Power Supply [V]	230 VAC 1~	115 VAC 1~	24 VAC/DC	360...460 VAC 3~
Nominal Current [A]	0,64	1,3	6,2(AC) / 3,9(DC)	0,45 ) <sup>3</sup>
max. Current [A]	0,84	1,7	8(AC) / 5(DC)	0,59 ) <sup>3</sup>
Power Consumption ) <sup>2</sup> [W]	126	126	118(AC) / 92(DC)	120 ) <sup>3</sup>

Standard	Description
Ambient Temperature [°C]	-20 to +60 °C
Motor Protection	electronic motor current monitoring with safety cut-off
Overvoltage category	II
Break away force	adjustable up to +50% nominal force
Duty Cycle IEC 60034-1,8	S2 30 min S4 50% ED @ 25°C
Set value and Feedback	current 0 (4)... 20 mA, voltage 0 (2)... 10 V adjustable, split-range operation possible
Binary control	24 V - 230 V for ON/OFF control (min. duration of pulse 1s)
Valve Positioner Function	deadband adjustable from 0.5 .. 5%, shut-off minimum at torque switching
Automatic Start-up	Recognizing the end position(s) and autoscaling set and feedback values
Internal Fault Monitoring	Torque, set value, temperature, power supply, deviation of end positions, adjustable actions and signalisation
Fault Indication Relay FIR	potential-free opening contact provides a freely definable collective fault signal
Diagnostics Function	Stores number of motor starts, motor and total running time. Rolling data storage of set value, feedback value, torque, temperature and status
Communication Interface	for parametrisation and diagnosis with USB data cable and software PSCS
Cable Glands	2 threaded holes ISO M20 x 1,5 (cable glands are not included)

)<sup>1</sup> = Permissible average torque for a travel of 90°

)<sup>2</sup> = at nominal force

)<sup>3</sup> = at 400 V 3 phases and 50 Hz

)<sup>4</sup> = Data can change depending on accessories

)<sup>5</sup> = at switching torque, data can change depending on accessories

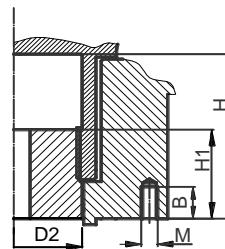
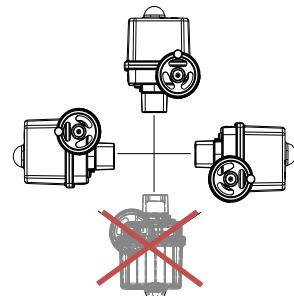
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Standard Equipment

## Electrical Connection Plan

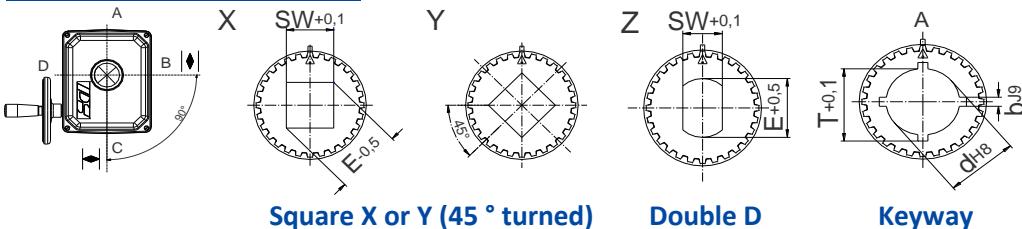
1-Phasen Wechselspannung / DC 1-Phase AC / DC																					
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	X6	22	23	RJ-45 TTL	Taster Button
↑ ↓	↑ ↓	↑ ↓	↑ ↓	↑ ↓	↑ ↓	↑ ↓	↑ ↓	↑ ↓	↑ ↓	↑ ↓	↑ ↓	↑ ↓	↓ ↑	↑ ↓	↑ ↓	GND	1 2 3 4 5 6	(Option)			
+ + 0(2) - 10 V	GND	+ 0(4) - 20 mA	+ 0(2) - 10 V	max. 1 last / max. Load	24 VDC	L+ AUF/OPEN	L- N-	N- (24V AC/DC - 230VAC)	L+ (24V AC/DC - 230VAC)	L+ ZU/CLOSE	L- (24V AC/DC - 230VAC)	L- (24V AC/DC - 230VAC)	21 - 40 VDC / 100 mA	+ 0(4) - 20 mA	+ 0(2) - 10 V	(Option)	22 23	(Option)			
Sollwert- Eingang	Aktive Position- rückmeldung	Stormeldung potentialfrei	Binäre Ansteuerung	Netz- ausfall- signal	Versor- gungs- signal	Istwert								Zu / Closed	Auf / Open						
Set value input	Active position feedback	Monitor relay potential-free	Binary input signals	Fall safe signal	Supply Supply	Actual value								Wegschalter potentialfreier Kontakt	Versorgungs- spannung	Fieldbus- Anschluß	PC Kommunikation	Inbetrieb- nahme			
														Position switch potential- free contact	Power supply voltage	Fieldbus interface	PC commu- nication	Com- mission- ing			
Galvanisch getrennt / Galvanically isolated 1 kV																	S-256-292_B				

## Mounting Position



	F12	F14
D2	66	66
H	80	80
H1	48	48
M	M12	M16
B	18	24

## Available Drive Bushes



Please check the drive bushes datasheet for the available sizes!  
Other customized drive bushes on request!

## Accessories/Options

Add'l Position Switches	2WE	Potential-free additional position switches with silver contacts (0.1 A - 10 A switching current)
Add'l Position Switches	2WE Gold	Potential-free additional position switches with gold contacts (0.1 mA - 100 mA switching current)
Integrated process controller	PSIC	Enables the autonomous control of a process so that an external controller is not required
Fail-Safe*	PSCP	Emergency power supply based on supercapacitors, safety position OPEN, CLOSED or free defined position
Fieldbus Interface*		Digital transmission of nominal and actual value per mill or percent, report of monitoring and diagnostic data using Profibus DP (PSPDP) or CANOpen (PSCA) interfaces, additional interfaces available on request
Local Control*	PSC.2	Illuminated display to show the actuator status and lockable selector to switch between modes: automatic, manual process ON/OFF, STOP and parameter menu. Control buttons for manual movement, menu operation and adjustment of parameters, display of diagnostic information
Remote Local Control		mounting separately from the actuator (incl. 10 m connection cable)
Software/Data Cable PSCS-USB		USB data cable enables the communication between the actuator and a PC by using the software PSCS
Fail-Safe Port*	FSP	Signal port to drive to a "safety position", selectable fail-safe position, standard 24 - 230 V
Corrosion Protection	K2	Increased corrosion protection incl. heating resistor
IP68		Increased enclosure IP68
Heating Resistor	HR	Heating resistor to prevent condensation
Terminal Box*		Plug and socket in an IP68 box

\*not retrofittable

For more information and accessories, please visit our website [www.ps-automation.com](http://www.ps-automation.com)!

Subject to changes!