

Intelligent Quarter-Turn Actuator

**PSQ1003
AMS13**

**Positioner
integrated**

500 - 1000 Nm
Switching torque)¹

70 s - 140 s
Op. Time/90°

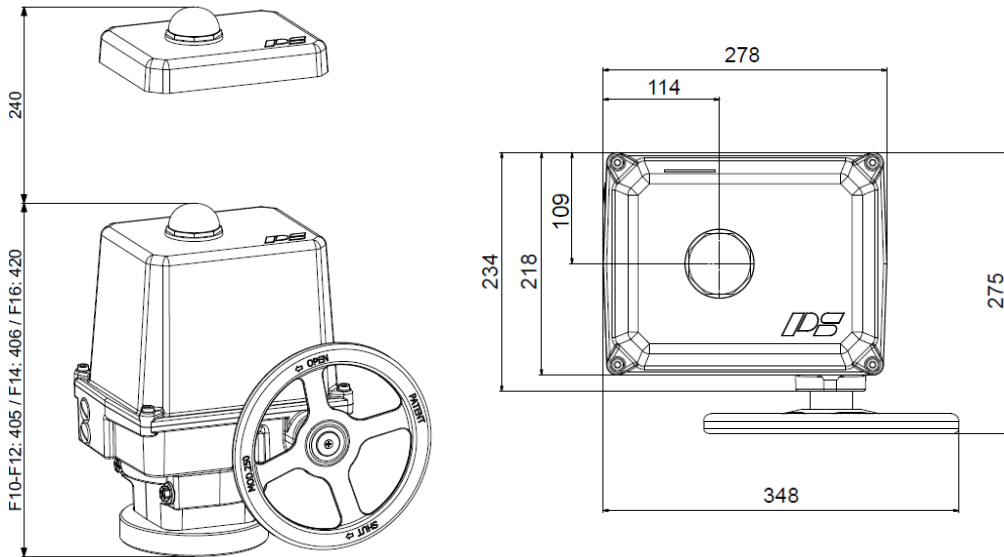
**Flange
F10/F12/F14/F16**

Modulating Actuator

Class C

acc. EN ISO 22153

Enclosure IP67
EN 60529



Approx. weight: 27 kg without accessories

Operating Time/90°	70 - 140 s (adjustable)				PSQ1003 AMS13
Power Supply [V]	230 VAC 1~	115 VAC 1~	24 VAC/DC	360...575 VAC 3~) ²	
Normal Current) ⁴ [A]	0.64	1.3	6.2(AC) / 3.9(DC)	0.45) ³	
Maximum Current) ⁴ [A]	0.84	1.7	8.0(AC) / 5.0(DC)	0.59) ³	
Power Consumption) ⁵ [W]	126	126	118(AC) / 92(DC)	120) ³	

Standard	Description	Standard Equipment
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)	

)¹ = Permissible average thrust over the entire travel is 50% of the max. thrust

)² = at nominal force

)³ = at 400 V 3 phases and 50 Hz

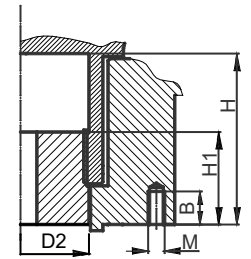
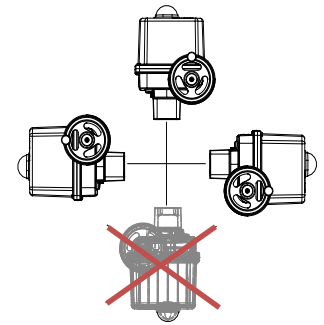
)⁴ = Data can change depending on accessories

)⁵ = at switching torque, data can change depending on accessories

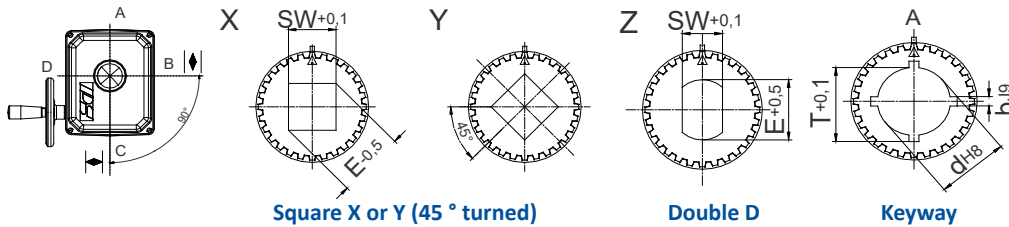
Electrical Connection Plan

Mounting Position

1-Phasen Wechselfspannung / DC 1-Phase AC / DC																	3-Phasen 3-Phase AC																				
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		L1	L2	L3	PE					
↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	1	2	3	4	5	6	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔					
+0(4) - 20 mA	+0(4) - 20 mA	+0(2) - 10 V	+0(4) - 20 mA	+0(2) - 10 V	GND	max. Last / max. Load 100 mA bei / at 24 VDC	max. Last / max. Load 100 mA bei / at 24 VDC	L+ AU/F/ OPEN	N/-	L+ ZU/ CLOSE	L+ (24V AC/DC - 230VAC)	N- (24V AC/DC - 230VAC)	21 - 40 VDC / 100 mA	+0(2) - 10 V	+0(4) - 20 mA	GND	(Option)	(Option)	(Option)	(Option)	(Option)	(Option)	(Option)	(Option)	(Option)	(Option)	(Option)	(Option)	(Option)	(Option)	(Option)	(Option)	(Option)	400VAC	400VAC	400VAC	Schutzleiter / protective conductor
Sollwert-Eingang	Aktive Positions-rückmeldung	Störmeldung	Binäre Ansteuerung	Netz-ausfall-signal	Ver-sor-gung	Istwert		Zu / Closed	Auf / Open	Wegschalter	potentially-free contact	Versorgungs-spannung	Feldbus-Anschluß	PC Kommu-nikation	Inbetrieb-nahme	Versorgungs-spannung	Power supply voltage	Feldbus interface	PC commu-nication	Com-missio-ning	Schalnetzteil																
Galvanisch getrennt / Galvanically isolated 1 kV																	Process-Sensor																				



Available Drive Bushes



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

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 Gold	2WE Gold	Potential-free additional position switches with gold contacts (0.1 mA - 100 mA switching current)
	Integrated process	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)
	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
	IP68		Increased enclosure IP68) ⁶ incl. corrosion protection K2 and heating resistor
Heating Resistor	HR	Heating resistor to prevent condensation	
Terminal Box*		Plug and socket in an IP68 box	

*not retrofittable ⁶ = IP68, no ingress of dust and suitable for continuous immersion in water up to 6 m and 96 h

For more information and accessories, please visit our website www.ps-automation.com!

Subject to changes!