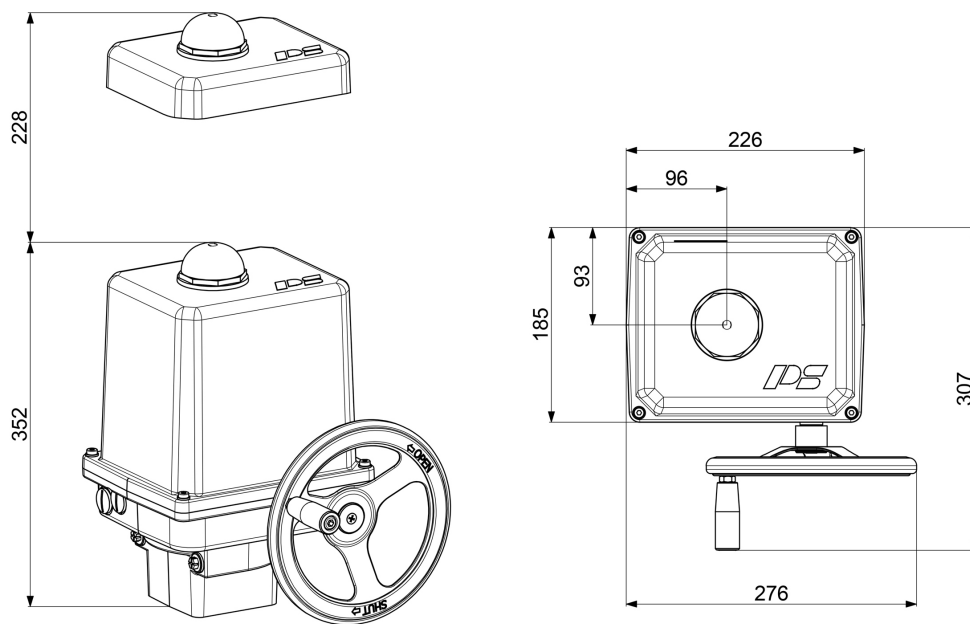


# Intelligent Quarter-Turn Actuator

PSQ203 AMS12 -40°C  
Low Temperature Version



Approx. weight: 13 kg without accessories

**Positioner  
integrated**

175 Nm  
**Switching torque)<sup>1</sup>**

**16 s - 32 s**  
Operating Time/90°

**Flange  
F05 + F07**

Modulating Actuator  
**Class C**  
acc. DIN EN ISO 22153

**Enclosure IP67**  
acc. EN 60529

Operating Time/90°	16 - 32 s (adjustable)				PSQ203 AMS12
Power Supply [V]	230 VAC 1~	115 VAC 1~	24 VAC/DC	360...575 VAC 3 ~ ) <sup>2</sup>	
Normal Current ) <sup>4</sup> [A]	0.59	1.2	5.6(AC) / 3.5(DC)	0.42 ) <sup>3</sup>	
Maximum Current) <sup>4</sup> [A]	0.76	1.5	7.3(AC) / 4.6(DC)	0.5 ) <sup>3</sup>	
Power Consumption ) <sup>5</sup> [W]	115	115	108(AC) / 84(DC)	110 ) <sup>3</sup>	

Standard	Description	Standard equipment
Ambient Temperature C°	<b>-40 to +60 °C</b>	
Motor Protection	electronic motor current monitoring with safety cut-off	
Overvoltage Category	II	
Break away force	adjustable up to +50% nominal forcet	
Duty Cycle IEC 60034-1,8	S2 - 20 min, S3/S4 25% dc @ 25°C - 1200 c/h	
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)	
Positioner	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	
Diagnostics function	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)	

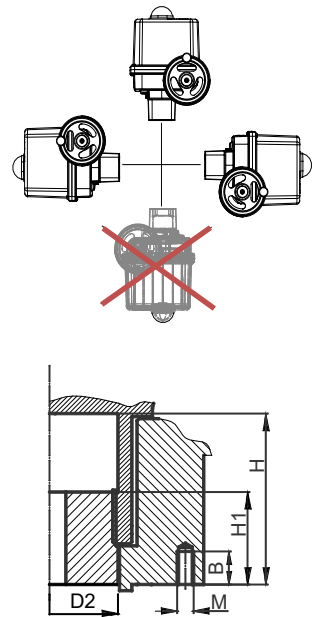
)<sup>1</sup> = Permissible average thrust over the entire travel is 90° is 50% of the max. thrust  
)<sup>2</sup> = max. input voltage range

)<sup>3</sup> = at 400 V 3 ~ and 50 Hz  
)<sup>4</sup> = data may vary depending on accessories  
)<sup>5</sup> = at switching torque, data may vary depending on accessories

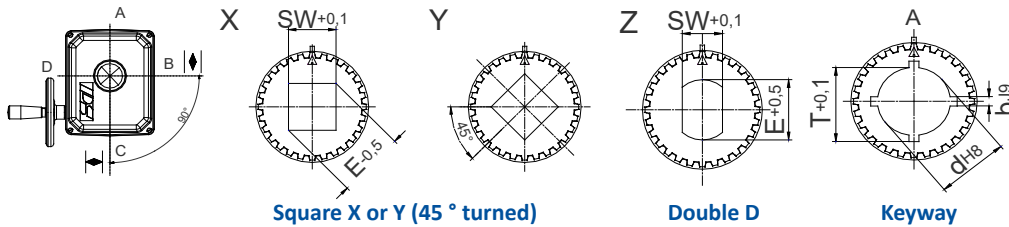
Electrical Connection Plan

Mounting Position

1-Phasen Wechselspannung / 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					L1	L2	L3	PE						
↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	↔	1	2	3	4	5	6	↔	↔	↔	↔	↔	↔										
+0(2) -10 V	+0(4) -20 mA	+0(2) -10 V	+0(4) -20 mA	GND	GND	24 VDC	max. Last / max. Load 100 mA bei / at	L+ AUF / 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)	L+ (siehe Typenschild/ see tag plate)	N- (siehe Typenschild/ see tag plate)	PE	(Option)					400VAC	400VAC	400VAC	Schutzleiter / protective conductor				
Sollwert-Eingang	Aktive Positions-rückmeldung	Störmeldung potentialfrei	Binäre Ansteuerung	Netz-ausfall-signal	Ver-sor-gung	Istwert											Zu / Closed	Auf / Open					Versorgung-spannung	Feldbus-Anschluß	PC Kommu-nikation	Inbetrieb-nahme												
Set value input	Active position feedback	Monitor relay potential-free	Binary input signals	Fail safe signal	Supply	Actual value											Wegschalter potentialfreier Kontakt						Power supply voltage	Fieldbus interface	PC communication	Commissioning												
Galvanisch getrennt / Galvanically isolated 1 kV													Process-Sensor																									



Available Drive Bushes



	F05	F07
D2	38	38
H	44	44
H1	35	35
M	M6	M8
B	12	16

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

Accessories/Options	Position Signal Switches	2WE	Potential-free additional position switches with silver contacts (0.1 A - 10 A switching current)
	Position Signal Switches Gold	2WE Gold	Potential-free additional position switches with gold contacts (0.1 mA - 100 mA switching current)
	Integrated process	PSIC	Binary input voltage of 115-230 VAC for ON/OFF control
	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) <sup>6</sup> available
Heating Resistor	HR	Heating resistor to prevent condensation	
Terminal Box*		Plug and socket in an IP68 box	

\* not retrofittable      )<sup>6</sup> = 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](http://www.ps-automation.com)!

Subject to changes!

