Intelligent Quarter-Turn Actuator

PSQ503 AMS12

Positioner integrated

250 - 500 Nm

Switching torque)1

36 s - 72 s

Op. Time/90°

Flange F10/F12/F14/F16

Modulating Actuator

Class C

acc. EN ISO 22153

Enclosure IP67

EN 60529

278 114 114 108/F14: 406/F16: 420
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Approx. weight: 27 kg without accessories

Operating Time/90°		36 - 72 s (adjustable)			
Power Supply	[V]	230 VAC 1~	115 VAC 1~	24 VAC/DC	360575 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
Ambient Temperature [ˈ	-20 to +60 °C
Motor Protection	electronic motor current monitoring with safety cut-off
Overvoltage category	II 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 F	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

^{)&}lt;sup>3</sup> = at 400 V 3 phases and 50 Hz)⁵ = at switching torque, data can change depending on accessories

^{)2 =} at nominal force

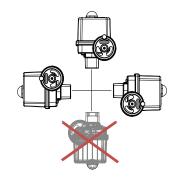
^{)&}lt;sup>4</sup> = Data can change depending on accessories

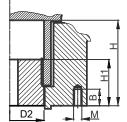
Technical Data

Electrical Connection Plan

11-Phasen Wechselspannung / DC 1-Phase AC / DC 3-Phasen 3-Phase AC 9 10 11 12 13 14 15 16 17 22 23 🥞 L1 L2 L3 PE Taste RJ-45 TTL **‡** ¥ Ψ Ψ 1 1 Button 100 mA bei / at 24 VDC 1111 **←**→ + 0(4) - 20 mA + 0(2) - 10 V + 0(4) - 20 mA + 0(2) - 10 V N/- (24V AC/DC - 230VAC) 1 /+ (24V AC/DC - 230VAC) + 0(2) - 10 V + 0(4) - 20 mA PE 400VAC 21 - 40 VDC / 100 mA 400VAC 100VAC Schutzleiter Typenschild/see tag plate) / protective conductor . Load 24 V AC/DC -(Option) ersorgung spannung Inbetriel nahme Störmeldun Binäre Positions-ickmeldun Com-Power supply voltage Monitor rela Actua Fieldbu: Schaltnetzteil

Mounting Position



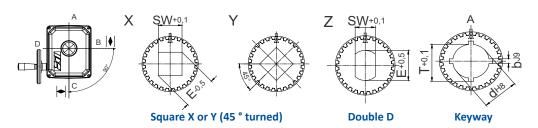


	当
D2	M

	F10	F12
D2	66	66
Н	80	80
H1	48	48
М	M10	M12
В	18	18

F10 without centering ring!

Available Drive Bushes



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

	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)
S	Integrated process	PSIC	Enables the autonomous control of a process so that an external controller is not required
ion	Fail-Safe*	PSCP	Emergency power supply based on supercapacitors, safety position OPEN, CLOSED or free defined position
/Opt	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
Accessories/Options	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
58	Remote Local Control		mounting separately from the actuator (incl. 10 m connection cable)
cce	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

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

 $^{^{16}}$ = IP68, no ingress of dust and suitable for continuous immersion in water up to 6 m and 96 h