Intelligent Quarter-Turn Actuator

PSQ503
AMS12

Positioner integrated

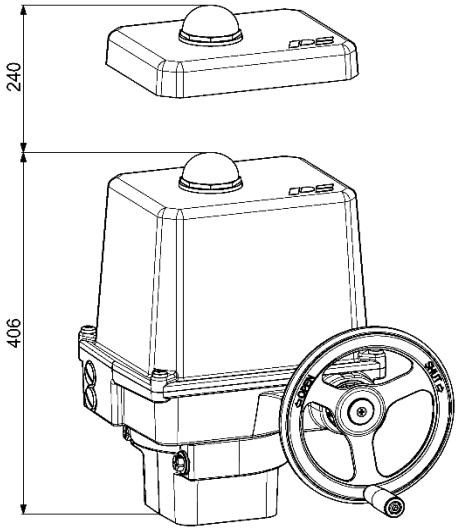
250 - 500 Nm
Switching torque
Modulating torque max. 250 Nm)[1]

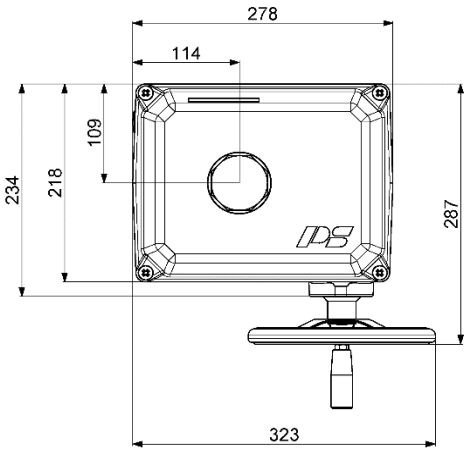
36 s - 72 s
Operating Time/90°

Flange
F10 / F12

Modulating Actuator
Class C
acc. EN 15714-2

Enclosure IP67
nach EN 60529





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	360...460 VAC 3~
Nominal 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(AC) / 5(DC)	0.59)[3]
Power Consumption)[5] [W]	126	126	118(AC) / 92(DC)	120)[3]

PSQ503 AMS12

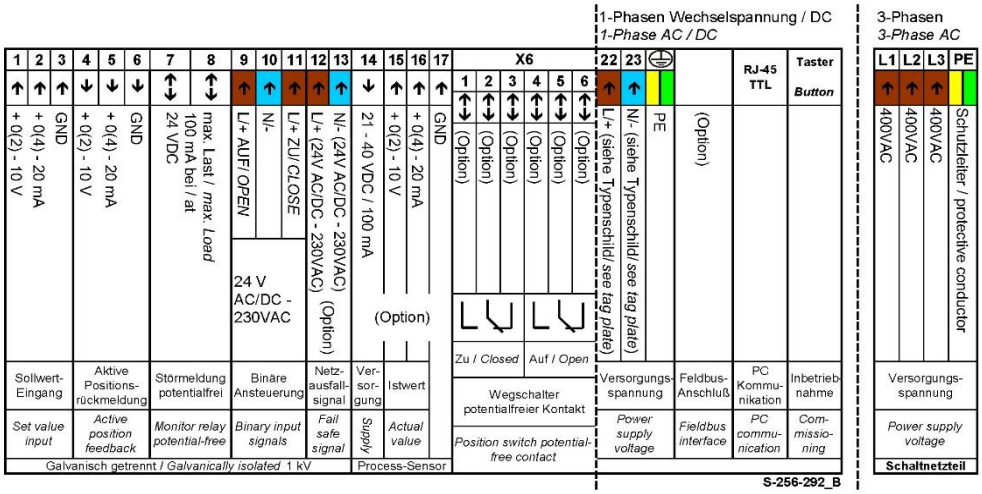
Standard	Description
Ambient Temperature [°C]	-20 to +60 °C
Motor Protection	electronic motor current monitoring with safety cut-off
Overvoltage category	II
Break away force	adjustable up to +50% nominal force
Duty Cycle IEC 60034-1,8	S2 30 min S4 50% ED @ 25°C
Set value and Feedback	current 0 (4)... 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)

Standard Equipment

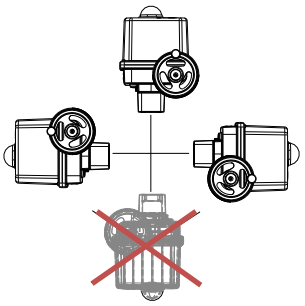
)[1] = Permissible average torque for a travel of 90°
)[2] = at nominal force
)[3] = at 400 V 3 phases and 50 Hz
)[4] = Data can change depending on accessories
)[5] = at switching torque, data can change depending on accessories

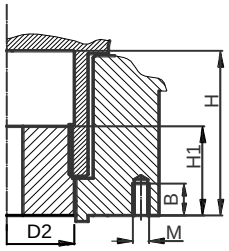
PSQ503 AMS12 Technical Data

Electrical Connection Plan

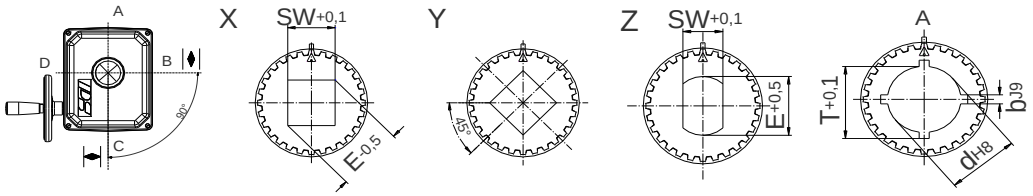


Mounting Position





Available Drive Bushes



Square X or Y (45 ° turned) **Double D** **Keyway**

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

	F10	F12
D2	66	66
H	80	80
H1	48	48
M	M10	M12
B	18	18

F10 without centering ring!

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)
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!

Subject to changes!