

PSQ-AMS

PS Automation 
Gesellschaft für Antriebstechnik

We care for actuation.

The smart quarter-turn actuator up to 1000 Nm

PSQ-AMS is the patented smart actuator solution up to 1000 Nm torque for modulating control valve applications. PSQ-AMS includes enhanced electronics with an embedded micro-controller with flash memory that controls and monitors the entire actuator function. Summarizing all functions on a single circuit board makes the actuator extremely compact and safe in operation. The value for money is outstanding.

The PSQ-AMS is based on a robust and efficient Wolfram gear. This gear allows manual operation at any time, without clutch or switch.

A PSQ-AMS is installed fast due to the automated one-key commissioning.

The PSQ-AMS is programmable via the optional local control or via USB interface. The control offers a series of standard features:

- All common interfaces are integrated, fieldbus is optional
- Integrated position indicators and valve positioner functionalities
- Valve control curve is adjustable
- Splitrange control is possible too

The diagnostic and monitoring function gives information about the state of the operating valve.

Due to the softstart function, a PSQ-AMS is valve friendly and therefore supports a high process demand. A starting torque of up to 30% above nominal torque may also be set.



Optional accessories

PSQ-AMS actuators from PS Automation have a modular concept. The functions can be extended with accessories.

Additional status signal

Possible by using potential-free additional limit switches/ intermediate position switches.

Integrated process controller

Enables the independent control of a process, without the need for an external controller. The specification of the process setpoint is made via fieldbus or an analogue signal (mA or V). 24 V DC sensor power supply is integrated.

Terminal box

Connection of power supply and signals via Harting plug-in an IP68 box.

Power failure backup

Integrated emergency supply on basis of supercapacitors. Enables the actuator to have an emergency operation in case of power failure in a freely adjustable safety position.

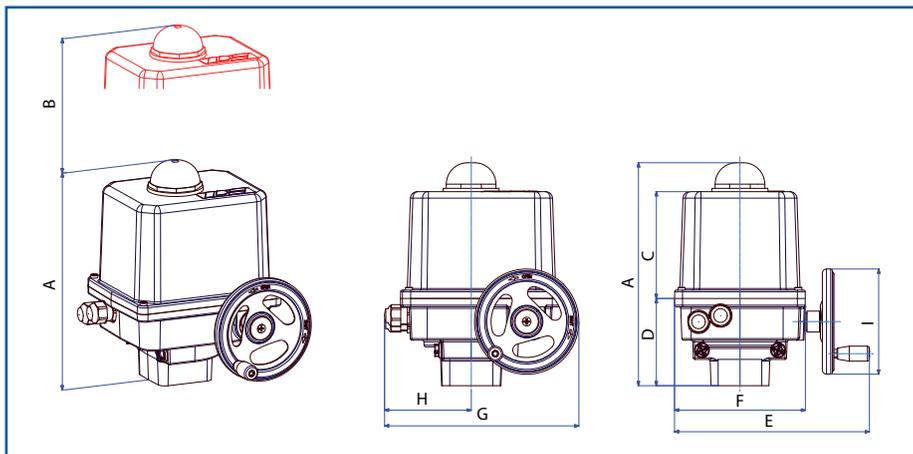
Local control

Enables manual operation and the access to parameters and diagnosis on site without needing a PC. Moreover, the valve position is shown in an illuminated display.

PSQ-AMS

Technical data

PSQ-AMS		PSQ102 AMS11	PSQ102 AMS12	PSQ202 AMS11	PSQ202 AMS12	PSQ502 AMS12	PSQ702 AMS13	PSQ1002 AMS13
Torque, adjustable	Nm	65 - 130	65 - 130	125 - 250	125 - 250	250 - 500	350 - 700	500 - 1000
Break away torque	Nm	adjustable, max. +30% above nom. torque for max. 2.5 s						
Angle of rotation	°	90° ± 5°						
Handwheel turns	/90°	18						
Valve flange acc. to ISO 5211		F05 + F07	F05 + F07	F07 / F10	F07 / F10	F10 / F12	F10 / F12	F12 / F14
Enclosure acc. to EN 60529		IP67, IP68 as an option						
Ambient temperature	°C	-20 to +60						
Weight	kg	7	7	13	13	27	27	27
Operating time for 90°	s	36 - 72	9 - 18	60 - 120	16 - 32	36 - 72	70 - 140	70 - 140
Power supply	V	230 VAC 1~, 115 VAC 1~, 320 - 575 VAC 3~, Sr24 VAC / DC						
Frequency	Hz	50 / 60						
Nominal current	230 VAC 1~	0.24	0.5	0.24	0.59	0.64	0.48	0.64
	115 VAC 1~	0.48	1	0.48	1.18	1.29	0.95	1.29
	24 VAC 1~	2.29	4.8	2.29	5.63	6.16	4.58	6.16
	24 VDC	1.4	3	1.4	3.5	3.9	2.9	3.9
Nom. power consumption (230 V)	W	41	100	41	115	126	93	126
Duty cycle IEC 60034-1,8		S2 30 min, S4 50% ED - 1200 c/h						
Motor protection		Electronic motor current monitoring with safety cut-off						



Measures with optional accessories may differ.

Dimensions	A	B	C	D	E	F	G	H	I
PSQ-AMS102	263	161	128	104.5	263	158	216	86	125
PSQ-AMS202	355	228	194	122.5	305	186	277	96	200
PSQ-AMS502/702	416	240	198	171.5	416	235	328	111	200
PSQ-AMS1002	416	240	198	171.5	416	235	353	111	250

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Engineered and Made in Germany

