

Quarter-turn Actuators PS-AMS PSQ up to 3000 Nm with Power Fail-Safe Device PSCP

PSCP is the consistent further development of the proven PS concept for bypassing unforeseeable power supply breakdowns. The safety position to which the actuator is driven in an emergency is individually adjustable. The storage of electrical energy for a safe and cost-effective emergency control function is realized with the latest technology of super capacitors.

Range of application

Intelligent linear actuators PS-AMS PSL (for strokes up to 100 mm and 25 kN closing force) as well as intelligent quarter-turn actuators PS-AMS PSQ (up to 2800 Nm shut-off torque) can be optionally equipped with the power failure protection PSCP to increase operational safety.

This ensures the reliability of the valve in case of an unplanned power breakdown. Any desired safety position can be easily programmed by means of PC parameterization. The power failure protection PSCP is permanently installed or attached to the actuator and requires no further wiring.

Mode of operation

The energy storage system based on super capacitor is powerful and maintenance-free. As soon as the actuator controls detect a power loss, they automatically switch over to the power failure protection PSCP. The actuator travels to the pre-set safety position of the valve with the same positioning torque and positioning speed as in normal operation. In addition, a potential-free signal contact is available which provides the control center or the control system with the fault information.

The capacity and service life of the energy supplying unit PSCP is designed for at least 500,000 charging cycles.

Special features

- Long lifetime with at least 500,000 charging cycles
- No memory effect – Maintenance free
- Ambient temperatures from -20°C to +55°C
- Freely programmable safety position (end positions as well as intermediate positions)
- Fault indication via potential-free signal contact (option)
- Valve operation with nominal actuator force/torque in case of power loss
- Fixed mounting in/on the actuator - No additional wiring effort
- All common supply voltages available: 24VAC+DC, 115VAC, 230VAC, 400VAC



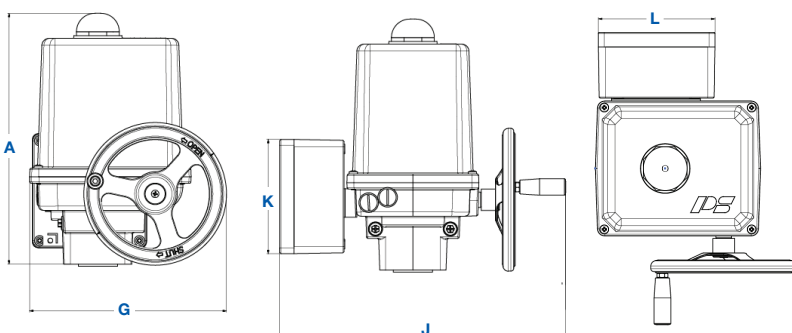
Dimensions and Technical Data

PS-AMS PSQ		PSQ103 AMS11	PSQ103 AMS12	PSQ203 AMS11	PSQ203 AMS12	PSQ503 AMS12	PSQ703 AMS13	PSQ1003 AMS13	PSQ1503 AMS13	PSQ2003 AMS12 PSQ2803 AMS13	PSQ3003 AMS13
Switching torque	Nm	65-130	65-130	125-250	125-250	250-500	350-700	500-1000	750-1500	1000-2800	1500-3000
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/F14/F16			F14/F16	F16	F16
Enclosure acc. to EN 60529		IP67, optional IP68									
Ambient temperature	°C	-20 bis +60									
Weight	kg	7	7	13	13	27	27	27	27	54	54
Operating time/90°	s	36-72	9-18	60-120	16-32	36-72	70-140	70-140	110-220	144-560	120-172
Power supply	V	230 VAC 1~, 115 VAC 1~, 360...575 VAC 3~, 24 VAC/DC									
Operating mode IEC 60034-1,8		S2 30 min, S4 50% ED - 1200 c/h									
Motor protection		Thermal monitoring and overload protection									

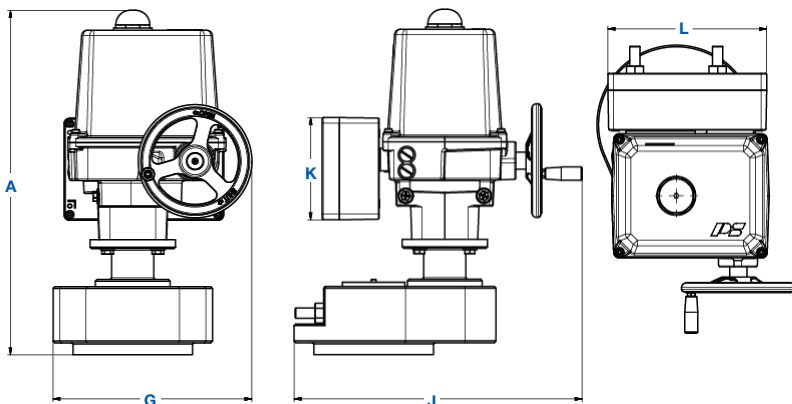
Dimensions	A	G	J	K	L
PSQ103AMS	268	216	336	160	160
PSQ203AMS	352	276	401	160	160
PSQ503/703AMS	406 / 420	323	447	160	160
PSQ1003AMS	406 / 420	348	372	160	160
PSQ1503AMS	406 / 420	355	382	160	280

Dimensions	A	G	J	K	L
PSQ2003/2803AMS	608	349	506	160	280
PSQ3003AMS	608	374	432	160	280

PSQ103AMS - PSQ1503AMS



PSQ2003AMS - PSQ3003AMS



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