

PSL-AMS

PS Automation 
Gesellschaft für Antriebstechnik

We care for actuation.

The intelligent linear actuator up to 25 kN

Speed-controlled actuation

The output is generated by a 24 VDC motor, which is controlled by the electronics via pulse width modulation (PWM), i.e. it is operated at variable speed. Absolute-coded feedback is done with a precision potentiometer. AMS standard equipment comprises positioner and active feedback function, automatic commissioning as well as comprehensive diagnostics functions.

Parameterisation via software

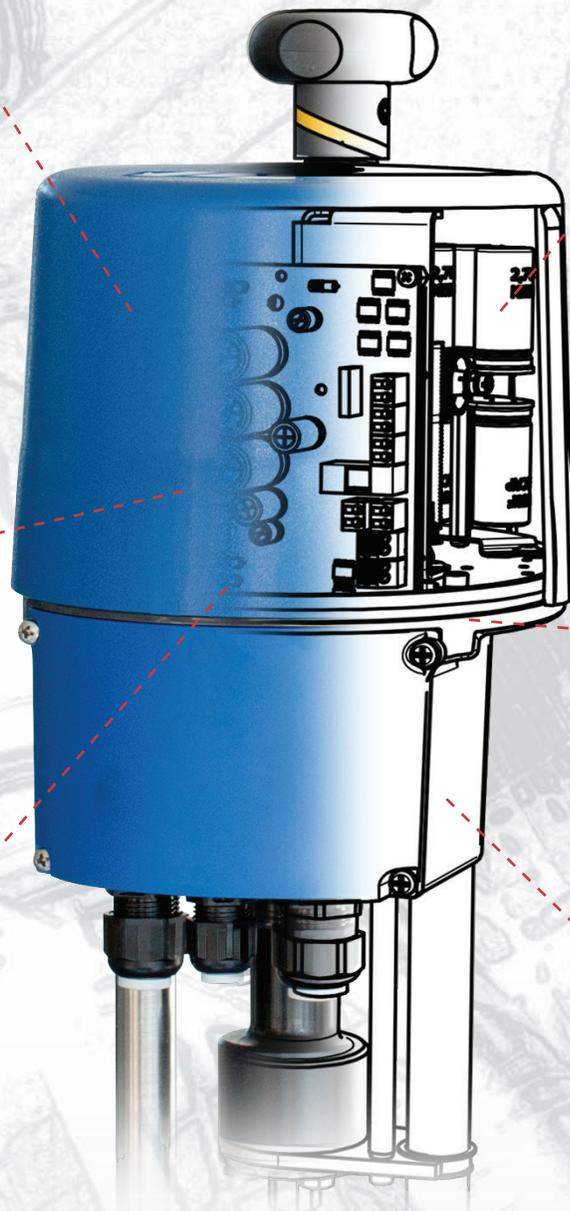
Via the communication software PSCS it is possible to adjust valve-specific details, actuation thrust/torque and speed, to configure alerts, and to do a freely programmable valve curve correction.

Automatic commissioning

The automated one-key commissioning is a standard function.

Diagnostics function

The diagnostics function of the communication software PSCS allows to retrieve counting values (such as operating hours, number of start-ups and running time of motor) and sets of running parameters (such as the analogue set value input actual position value, currently required motor torque and inside temperature of the actuator). The actual values can be graphically displayed and analysed using the monitor function. Thus the AMS concept allows pro-active maintenance and as a result an increase in process safety.



Power failure backup

Integrated emergency supply on the basis of super-capacitors. Enables the actuator to perform an emergency operation in case of power failure to a freely adjustable safety position.

Mechanical design

The mechanical part of the PS-AMS actuator consists of the components of PS Automation's standard actuators with their well-proven components, namely a robust spur gear with trapezoidal thread in PSL-AMS. All AMS actuators are lubricated for life and therefore are maintenance-free.

Electrical connection

The electrical wiring of PSL-AMS is done directly to the terminal blocks in the integrated terminal box.

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Technical Data

		PSL202 AMS11	PSL204 AMS11 AMS12	PSL208 AMS11	PSL210 AMS11 AMS12	PSL214 AMS12	PSL320 PSL325 AMS13	
Thrust	kN	2,3	4,5	8	10	14	25	
Stroke	mm	50	50	50 opt. 65	50 opt. 65	65	95	
Pillar distance	mm	100	100	100	100	100	155	
Manual override		Handwheel					Handwheel	
Handwheel dia.	mm	59	59	59	59	59	100	
Weight approx.	kg	7	7	10/12	10/12	12	20	
Operating speed	mm/s	0.45 - 0.9	0.45 - 0.9	0.3 - 0.7	0.2 - 0.35	0.65 - 1.3	0.2 - 0.4	
		1,0 - 2,0	2.25 - 4.5		0.85 - 1.7			
Power supply		24 V, 115 V, 230 V, 320...575 V AC 50/60Hz, 24 V DC						
Motor protection		electronic motor current monitoring with safety cut-off						
Duty cycle as per IEC 60034-		S2 30 min S4 50% ED at 25°C						
Permitted ambient tempera-		-20 to +60°C						
Mounting position		any position, except cover pointing downwards						
Cable glands M20x1,5		2 pcs.					3 pcs.	
Possible control		Analogue signal, split range, 24 V to 230 V binary, fieldbus						
Input and output signals		0 (4) - 20 mA, 0 (2) - 10 V						
Enclosure acc. to EN 60529		IP65, opt. IP67				IP67		IP65, opt.
Cover material		Polycarbonate, cast aluminium for stroke 65 mm or IP67 version					Deep drawn steel	
Gear case material		high quality aluminium die casting						
Pillar and feedback rod materi-		stainless steel DIN 1.4104						

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	18	19	20	21	22	23	L1	L2	L3	PE
↑	↑	↑	↑	↑	↓	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
+0(-) - 10 V	+0(-) - 20 mA	+0(-) - 10 V	+0(-) - 10 V	+0(-) - 20 mA	GND	max. Last / max. Load 100 mA bei / at 24 VDC	24 V AC/DC - 230 VAC	24 V AC/DC - 230 VAC	24 V AC/DC - 230 VAC	24 V AC/DC - 230 VAC	24 V AC/DC - 230 VAC	24 V AC/DC - 230 VAC	24 V AC/DC - 230 VAC	24 V AC/DC - 230 VAC	24 V AC/DC - 230 VAC	24 V AC/DC - 230 VAC	24 V AC/DC - 230 VAC	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	Wegschalter potentialfreier	Kontakt	Position switch potential-free	contact	Versorgungs- spannung	Fieldbus- Anschluss	PC Kommu- nikation	Inbetrieb- nahme	Versorgungs- spannung	Schaltnetzteil								
Set value input	Active position feedback	Monitor relay potential-free	Binary input signals	Fail safe signal	Supply	Actual value	Position switch potential-free contact	Power supply voltage	Fieldbus interface	PC commu- nication	Com- mis- sion- ing	Power supply voltage														

PSL-AMS linear actuators from PS Automation are mature and proven, robust and completely maintenance free.

With a PSL-AMS from PS Automation, the specialist for valve actuation, the only cost to consider are acquisition and operating costs. There are no maintenance costs.

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