

Explosion-Proof Linear Actuator with mechanical failsafe function

PSF-EX

Spring Return Function

2 kN
Minimum Force ¹⁾

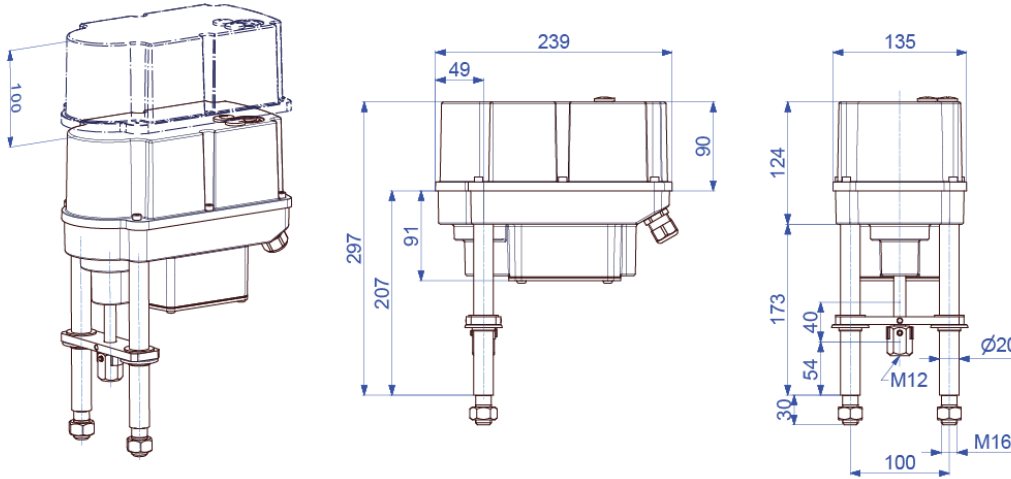
0.9 mm/s
Operating speed

5 - max. 40 mm
Stroke

Positioner integrated

Actuator
Class C
acc. EN ISO 22153

Enclosure IP65
EN 60529



Approx. weight: 7.2 kg without accessories

Operating Speed	0.9 mm/s (motor operation) 1.1 mm/s (failsafe operation) ³⁾	
Device category	II 2G II 2D	
EU Type Examination Certificate	TPS 22 ATEX 110398 0002 X	
ATEX directive gases	Ex db eb IIC T6/T4 Gb Ex h db eb IIC T6/T4 Gb	
ATEX directive dusts	Ex tb IIIC T80°C/T100°C Db Ex h tb IIIC T80°C/T100°C Db	
IECEX CoC	IECEX TPS 22.0019X	
IECEX directive gases	Ex db eb IIC T6/T4 Gb	
IECEX directive dusts	Ex tb IIIC T80°C/T100°C Db	
Power Supply [V]	100-240 VAC 1~	24 VAC/DC
Frequency [Hz]	50 - 60	50 - 60
Nominal Current [A]	0.12 - 0.24	1.2 / 0.6
Maximum Current [A]	0.12 - 0.24	1.2 / 0.6
Power Consumption ²⁾ [W]	16.5	16.5 / 14.5
Duty Cycle IEC 60034-1,8	S2 30 min / S4 50% ED - 1200c/h	

PSF-402.1-EX
2 kN

Standard	Description
Ambient Temperature [°F]	-10°C ≤ Ta ≤ +40°C (T6) / +60°C (T4)
Motor Protection	electronic motor current monitoring with safety cut-off
Overvoltage Category	II
Set Value and Feedback	0-20 mA, 4-20 mA, 0-10 V, 2-10 V selectable
Binary Control	24 - 230 VAC & 24 VDC for ON/OFF service
Valve Positioner Function	integrated, deadband 0.6% of full signal range, shut-off minimum
Automatic Start-up	Recognizing the end position(s) and autoscaling set and feedback values
Internal Fault Monitoring	force, set value, temperature, power supply
Cable Glands	2 pcs. ISO M20 x 1.5 and 1 pcs. ISO M16 x 1.5
Fail-Safe Operating Direction	Spring Extend (SE) - Spring extends actuator stem or Spring Retract (SR) - Spring retracts actuator stem

Standard Equipment

¹⁾ = permissible average force over the entire travel is 50% of the max. thrust
²⁾ = at max. force
³⁾ = operating speed +/- 10%

Electrical Connection Plan

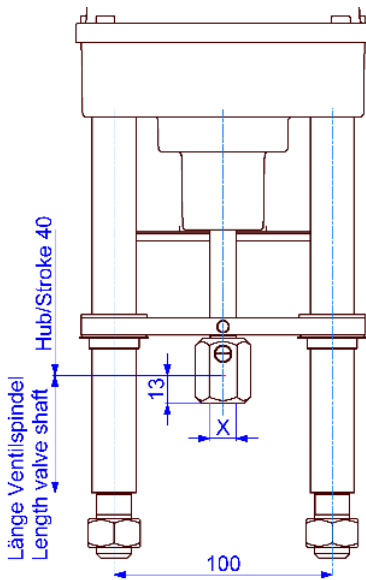
24V AC/ DC

GND	Set Value	Feedback	L/+ OPEN	Com	L/+ CLOSE	24VAC/DC Power Supply	
8	7	6	5	4	3	V-	V+
						2	1

100-240V AC

GND	Set Value	Feedback	L/+ OPEN	Com	L/+ CLOSE	100-240VAC Power Supply	
8	7	6	5	4	3	V-	V+
						2	1

Valve Connection

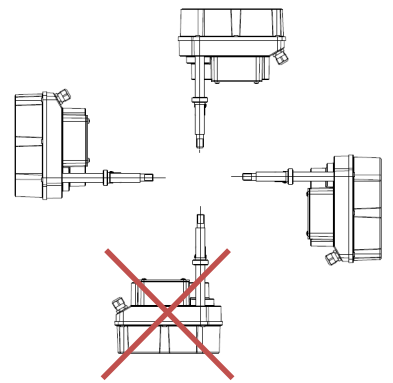


Connection Thread X

M8	Optional
M10	Optional
M12	Standard

Fine threads and other sizes on request!

Mounting Position



Accessories / Options

Higher Enclosure	IP	Higher Enclosure to IP 67
Diagnose-Kit		Diagnosis-Kit PSF including Software and USB Data Cable

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