

Explosion-Proof Linear Actuator with mechanical failsafe function

PSF-M-EX

Hand-wheel

1 - 10 kN
Minimum Operating speed

0,17 - 1 mm/s
Stroking speed

5 - 40 / 50 mm
Stroke

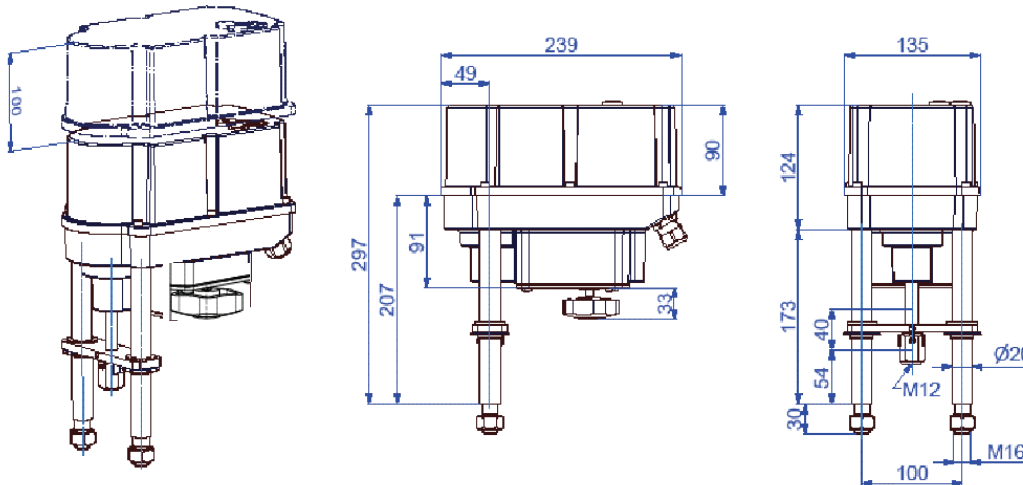
Positioner integrated

Modulating Actuator

Class C

DIN EN ISO 22153

Enclosure IP65
EN 60529



weight: approx. 6.7 kg without accessories

Stroking speed	0.5 / 0.75 / 1.0 mm/s (adjustable)		PSF-M401-EX 1 kN
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		
Voltage supply [V]	100-240 VAC 1~	24 VAC/DC	
Frequency [Hz]	50 - 60	50 - 60	
Rated Current [A]	0,08 - 0,15	0,8 / 0,4	
Maximum Current [A]	0,08 - 0,15	0,8 / 0,4	
Power Consumption) ² [W]	10	10 / 9	
Duty Cycle as per IEC 60034-1,8	S2 30 min / S4 50% ED - 1200c/h		

Stroking speed	0.5 / 0.75 / 1.0 mm/s (adjustable)		PSF-M402-EX 2 kN
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		
Voltage supply [V]	100-240 VAC 1~	24 VAC/DC	
Frequency [Hz]	50 - 60	50 - 60	
Rated Current [A]	0,1 - 0,2	1,0 / 0,5	
Maximum Current [A]	0,1 - 0,2	1,0 / 0,5	
Power Consumption) ² [W]	13	13 / 11	
Duty Cycle as per IEC 60034-1,8	S2 30 min / S4 50% ED - 1200c/h		

)¹ = Permissible average thrust over the entire travel is 50% of the max. thrust

)² = at max. thrust

Stroking speed		0.5 / 0.75 / 1.0 mm/s (adjustable)	
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	
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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	
Voltage supply	[V]	100-240 VAC 1~	24 VAC/DC
Frequency	[Hz]	50 - 60	50 - 60
Rated Current	[A]	0,22 - 0,44	1,8 / 1,1
Maximum Current	[A]	0,22 - 0,44	1,8 / 1,2
Power Consumption) ²	[W]	30	30 / 28
Duty Cycle as per IEC 60034-1,8		S2 30 min / S4 50% ED - 1200c/h	

PSF-M405-EX
5 kN

Stroking speed		0,33 / 0,25 / 0,17 mm/s (adjustable)	
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	
Voltage supply	[V]	100-240 VAC 1~	24 VAC/DC
Frequency	[Hz]	50 - 60	50 - 60
Rated Current	[A]	0,22 - 0,44	1,8 / 1,1
Maximum Current	[A]	0,22 - 0,44	1,8 / 1,2
Power Consumption) ²	[W]	30	30 / 28
Duty Cycle as per IEC 60034-1,8		S2 30 min / S4 50% ED - 1200c/h	

PSF-M410-EX
10 kN

Standard	Description
Ambient Temperature [°C]	-10°C ≤ Ta ≤ +40°C (T6) / +60°C (T4)
Motor Protection	electronic motor current monitoring with safety cut-of
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 for ON/OFF service (minimum duration of pulse 1 sec.)
Positioner	integrated, deadband 0.6% of full signal range, shut-off minimum
Automatic commissioning	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

**Standard Equip-
ment**

)¹ = Permissible average thrust over the entire travel

)² = at max. thrust

Wiring Diagram

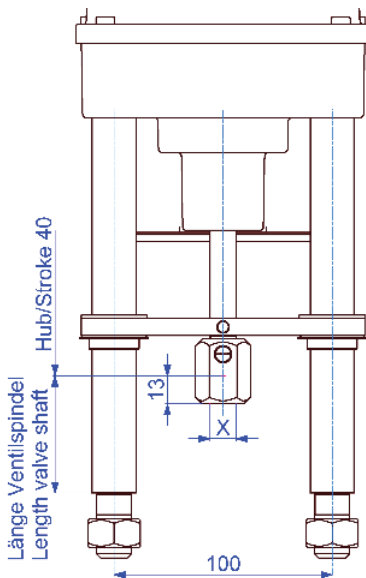
24V AC/ DC

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



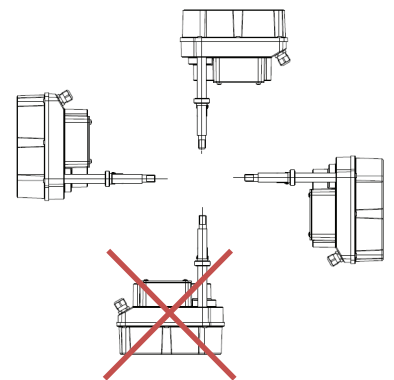
Subject to changes!

Connection Thread X

M8	Optional
M10	Optional
M12	Standard

Fine threads and other sizes on request!

Installation positions



Accessories/ Options

Increased IP 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!