

Explosion-Proof Electric 90° Quarter-Turn Actuator

PSF-Q-EX

Spring Return Function

50 - 80 Nm
Switching torque)¹

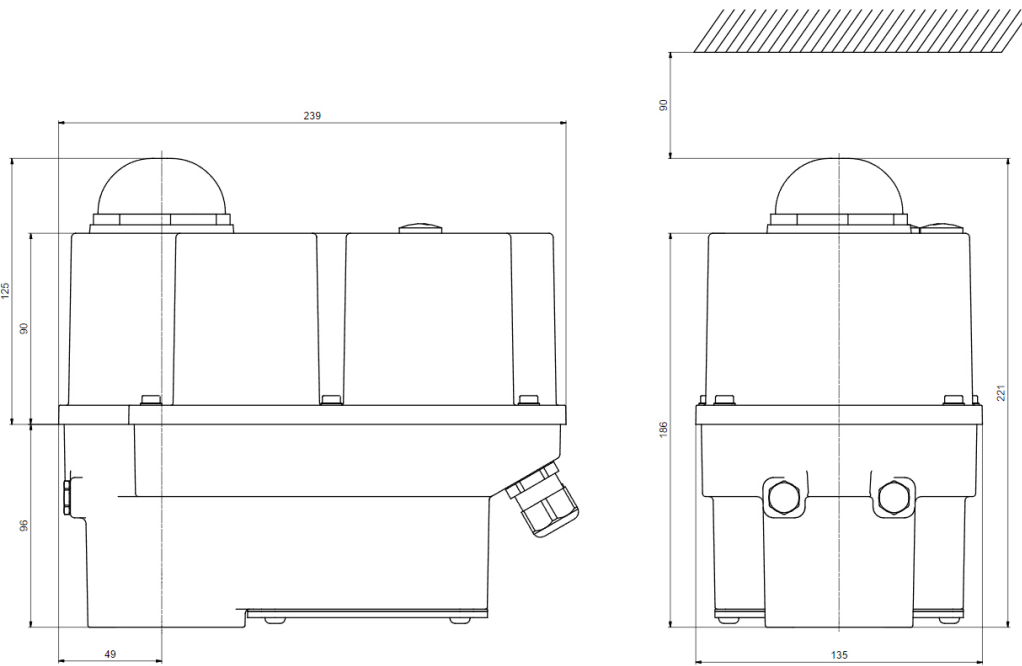
25 / 30 s
Operating Time/90°

Flange F05 + F07

Positioner integrated

Modulating Actuator
Class C
acc. EN ISO 22153

Enclosure IP67
DIN EN 60529



Approx. weight: 7,2 kg without accessories

Operating time / 90°	25 s (motor operation)) ³		PSF-Q-EX 50 Nm
Power Supply [V]	100-240 VAC 1~	24 VAC/DC	
Frequency [Hz]	50 - 60	50 - 60 / -	
Nominal Current [A]	0.16 - 0.32	1.15 / 0.8	
Maximum Current [A]	0.16 - 0.32	1.15 / 0.8	
Power Consumption) ² [W]	22	22 / 20	
Duty Cycle IEC 60034-1,8	S2 30 min / S4 50% ED - 1200c/h		

Operating time / 90°	30 s (motor operation) 25 s (failsafe operation)) ³		PSF-Q-EX 80 Nm
Power Supply [V]	100-240 VAC 1~	24 VAC/DC	
Frequency [Hz]	50 - 60	50 - 60 / -	
Nominal Current [A]	0.2 - 0.4	1.55 / 1.1	
Maximum Current [A]	0.2 - 0.4	1.55 / 1.1	
Power Consumption) ² [W]	28	28 / 27	
Duty Cycle IEC 60034-1,8	S2 30 min / S4 50% ED - 1200c/h		

)¹ = permissible average torque for a travel of 90° is 50% of the max. thrust

)² = at max. torquet

)³ = operating speed +/- 10%

Certificates		PSF-Q-EX 50 Nm & 80 Nm
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	
Protection class through housing IP67 according to DIN EN60529	Testing by an accredited test laboratory	

Standard	Description
Ambient Temperature [°C]	-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	torque, 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	Clockwise (CW) - Spring drives output valve shaft clockwise or Counter Clockwise (CCW) - Spring drives output valve shaft counterclockwise

PSF-Q-EX

Technical Data

Electrical Connection Plan

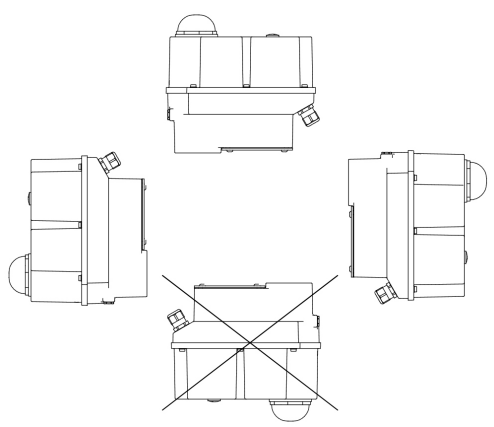
24V AC/ DC

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

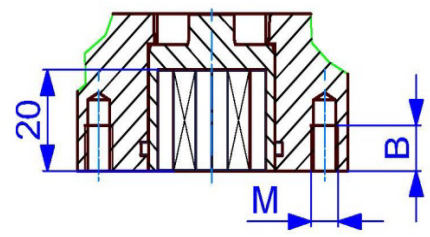
GND	Set Value	Feedback	L/+ OPEN	Com	L/+ CLOSE	100-240VAC Power Supply	
8	7	6	5	4	3	V-	V+
						2	1

Mounting Position

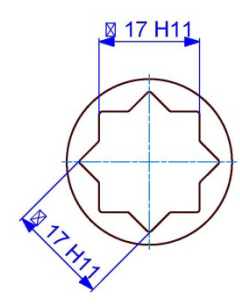


ISO Flange Dimensions

	F05	F07
M	M6	M8
B	9	12



Double Square Drive



Please check the drive bushes datasheet for the available sizes!
Other customized drive bushes on request!

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

Subject to changes!