

# Explosion-Proof Electric 90° Quarter-Turn Actuator with Manual Override

**PSF-Q-M-EX**

**Manual Override**

50 - 80 Nm  
**Switching torque)<sup>1</sup>**

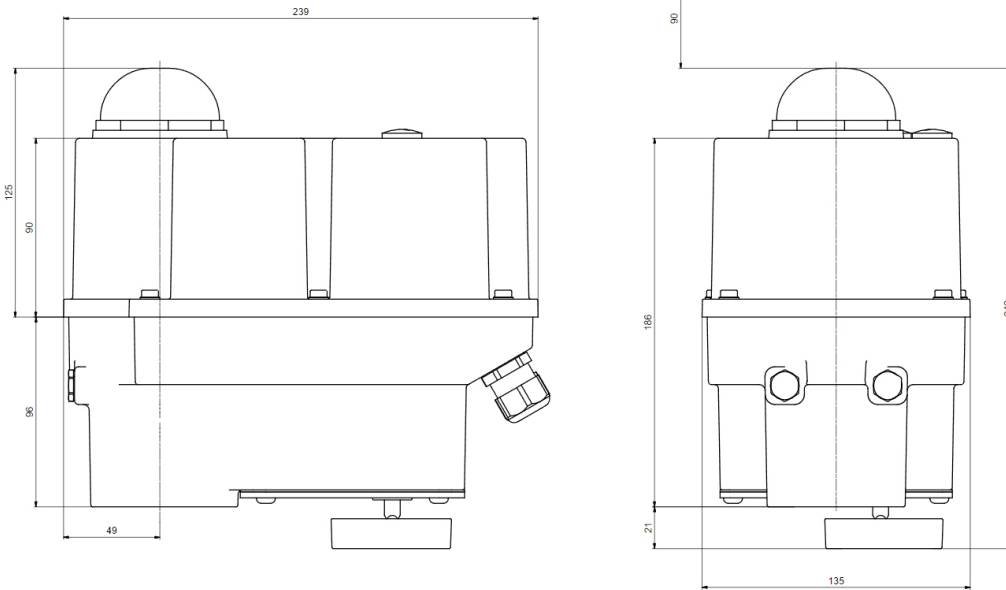
**16 / 20 / 30 s**  
Operating Time/90°

**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°	16 / 20 / 30 s (adjustable)		PSF-Q-M-EX 50 Nm
Power Supply [V]	100-240 VAC 1~	24 VAC/DC	
Frequency [Hz]	50 - 60	50 - 60 / -	
Nominal Current [A]	0.1 - 0.2	0.8 / 0.5	
Maximum Current [A]	0.1 - 0.2	0.8 / 0.5	
Power Consumption ) <sup>2</sup> [W]	15	15 / 12	
Duty Cycle IEC 60034-1,8	S2 30 min / S4 50% ED - 1200c/h		

Operating time / 90°	16 / 20 / 30 s (adjustable)		PSF-Q-M-EX 80 Nm
Power Supply [V]	100-240 VAC 1~	24 VAC/DC	
Frequency [Hz]	50 - 60	50 - 60 / -	
Nominal Current [A]	0.15 - 0.3	1.3 / 0.8	
Maximum Current [A]	0.15 - 0.3	1.3 / 0.8	
Power Consumption ) <sup>2</sup> [W]	23	23 / 18	
Duty Cycle IEC 60034-1,8	S2 30 min / S4 50% ED - 1200c/h		

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

)<sup>2</sup> = at max. torquet

Certificates	PSF-Q-M-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

**Standard  
Equipment**

## PSF-Q-M-EX

## Technical Data

### Electrical Connection Plan

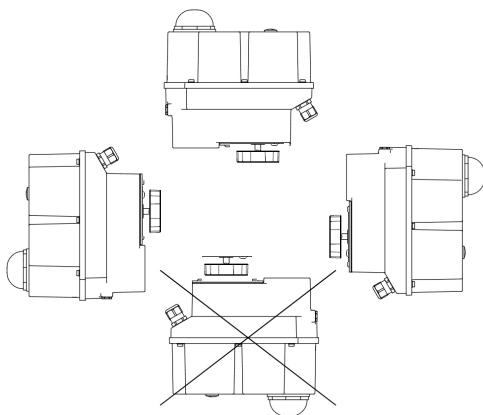
#### 24V AC/ DC

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

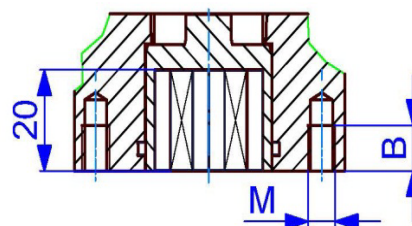
GND	Set Value	Feedback	L/+ OPEN	Com	L/+ CLOSE	100-240VAC Power Supply	
8	7	6	5	4	3	V-	V+
						2	1

### Mounting Position

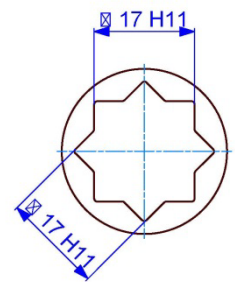


### ISO Flange Dimensions

	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](http://www.ps-automation.com)!

Subject to changes!