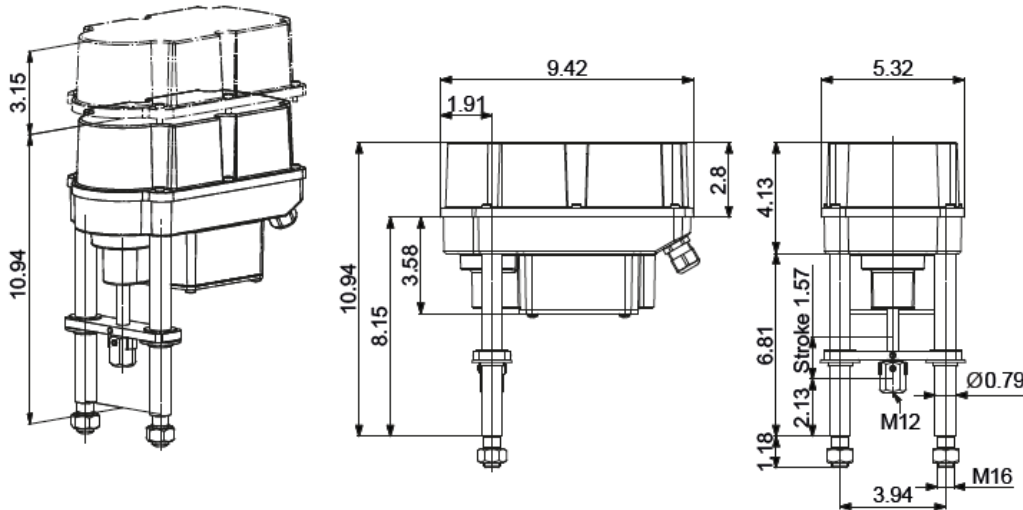


# Linear Actuator with Fail-Safe Function

PSF

Spring-Fail Model



**449 lbf**  
Max. Thrust )<sup>1</sup>

**12.7 Secs/In.**  
Stroke Speed

**0.19 - 1.575 In.**  
Stroke

**Positioner  
integrated**

Modulating Actuator

**Class C**

acc. EN ISO 22153

**Enclosure IP65**

EN 60529

*Approx. weight: 12.35 lb without accessories*

| Stroke Speed                         | 12.7 Secs/In. (motor operation or failsafe operation) <sup>3</sup> |           | PSF402.2<br>449 lbf |
|--------------------------------------|--|-----------|---------------------|
| Power Supply [V]                     | 100-240 VAC 1~   | 24 VAC/DC |                     |
| Frequency [Hz]                       | 50 - 60  | 50 - 60   |                     |
| Nominal Current [A]                  | 0.18 - 0.36  | 1.8 / 1.1 |                     |
| Maximum Current [A]                  | 0.18 - 0.36  | 1.8 / 1.1 |                     |
| Power Consumption ) <sup>2</sup> [W] | 25   | 25        |                     |
| Duty Cycle IEC 60034-1,8             | S2 30 min / S4 50% ED - 1200c/h                                    |           |                     |

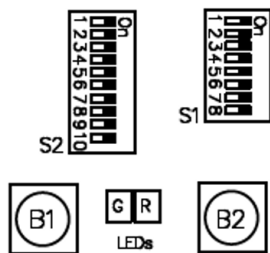
| Standard                      | Description  | Standard Equipment |
|-------------------------------|--|--------------------|
| Ambient Temperature [°C]      | 14°F to 140°F  |                    |
| Motor Protection              | electronic motor current monitoring with safety cut-off  |                    |
| 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     | thrust, control signal, temperature, power supply  |                    |
| Cable Glands                  | 2 pcs. M 20 x 1.5 / 1 pc. M 16 x 1.5   |                    |
| Fail-Safe Operating Direction | Spring Extend (SE) - Spring extends actuator stem <b>or</b><br>Spring Retract (SR) - Spring retracts actuator stem |                    |

)<sup>1</sup> = permissible average force over the entire travel is 50% of the max. thrust

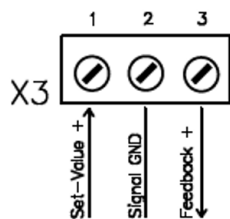
)<sup>2</sup> = at max. thrust

)<sup>3</sup> = stroke speed +/- 10%

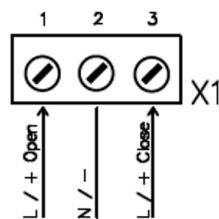
Wiring Diagram



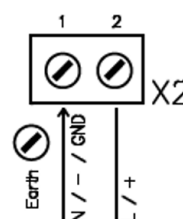
DIP Switches / Local Control Buttons



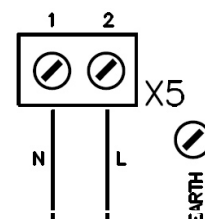
Analog Input / Output  
Galvanic isolated



Binary input signals  
Galvanic isolated  
24 - 230VAC & 24 VDC

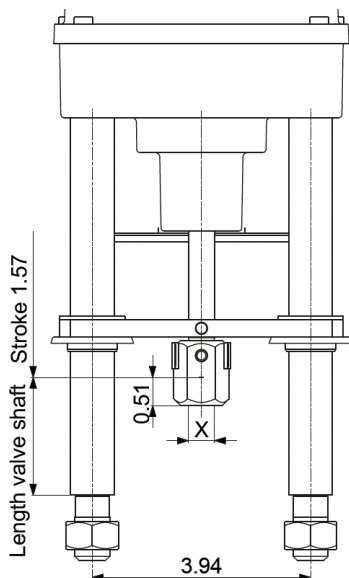


24VAC / DC Supply Power



100-240 VAC Supply Power  
Wide Range Power Supply  
converter

Valve Connection

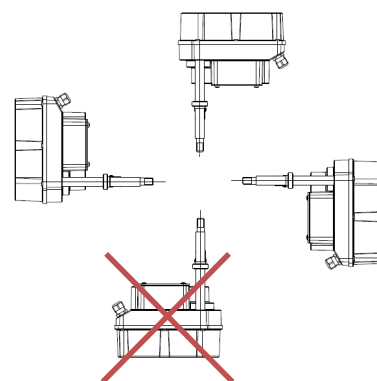


Connection Thread X

|     |          |
|-----|----------|
| M8  | Optional |
| M10 | Optional |
| M12 | Standard |

*Fine threads and other sizes on request!*

Mounting Position



|                         |                                     |          |   |
|-------------------------|-------------------------------------|----------|---|
| Accessories/<br>Options | Add'l Position Switches, mechanical | 2WE      | 2 potential-free position switches, mechanical, with silver changeover contacts (0.1 A - 5 A switching current)   |
|                         | Add'l Position Switches Gold        | 2WE Gold | 2 potential-free position switches, mechanical, with gold changeover contacts (0.1 mA - 100 mA switching current)   |
|                         | Position Signal Relays              |          | 2 position signal relays with changeover contacts, calibrated automatically to valve stroke<br>24 V to 230 V AC/DC @ 0.1 A - 1 A<br>Switching point adjustable 0-100 % of the stroke using potentiometers |
|                         | Heating Resistor                    | HR       | Heating resistor to prevent condensation  |
|                         | Wide Range Power Supply             |          | 100 - 240 VAC 1~  |
|                         | Increased Enclosure                 | IP       | Increase of enclosure to IP67   |

For more information and accessories, please visit our website [www.ps-automation.com](http://www.ps-automation.com)!