



## Pressure Switch

G $\frac{1}{4}$ " or  $\frac{1}{4}$ " NPT

Rotork manufacture pressure sensing components to operate in high vibration areas with accurate repeatability giving reliable performance. For use in multiple applications.

- Ambient Temperature Range -40 to +85 °C
- Accurate, Repeatable, Durable
- Tested in accordance with EN 61373 (Category 1 Class B) shock and vibration testing
- Four Pressure ratings – compact and lightweight
- Corrosion Resistance, Salt Mist Test ISO 9227

### Ambient Temperature Range

- -40 to +85 °C (-40 to +185 °F)

### Maximum Inlet Pressure

- 24 bar

### Adjustable Working Pressure Ranges

- 0.2 to 2 bar (2.9 - 29 psi)
- 0.5 to 8 bar (7.3 - 116 psi)
- 1.0 to 10 bar (14.5 - 145 psi)
- 1.6 to 16 bar (23.2 - 232 psi)

### Life Expectancy

- $\geq 10^7$  switching cycles at 60 cycles/minute (mechanical life / no electrical load)
- $\geq 2 \times 10^5$  switching cycles at 20 cycles/minute (electrical life / 100 mA electrical load)

### Degree of Protection

- IP65 in accordance with EN 60529 (including electrical connections)

### Mounting Position

- All orientations
- 2 off  $\varnothing$  5.3 mm dia through holes

## Performance Data

### Switching Pressure Hysteresis

Maximum hysteresis between rising and falling switch pressures across complete operating conditions:

- (0.2 to 2 bar) – 0.35 bar MAX.  
(2.9 to 29.0 psi) – 5.1 psi MAX
- (0.5 to 8 bar) – 1.0 bar MAX.  
(7.3 to 116.0 psi) – 14.5 psi MAX
- (1.0 to 10 bar) – 1.2 bar MAX.  
(14.5 to 145.0 psi) – 17.4 psi MAX
- (1.6 to 16 bar) – 1.8 bar MAX.  
(23.2 to 232.1 psi) – 26.1 psi MAX

### Max Operating Cycle Rate

- 300 cycles/minute (no electrical load)

### Repeatability

Repeatability at static operating conditions (units set to midpoint switching pressure):

- (0.2 to 2 bar) –  $\pm 0.05$  bar  
(2.9 to 29.0 psi) –  $\pm 0.73$  psi
- (0.5 to 8 bar) –  $\pm 0.08$  bar  
(7.3 to 116.0 psi) –  $\pm 1.16$  psi
- (1.0 to 10 bar) –  $\pm 0.10$  bar  
(14.5 to 145.0 psi) –  $\pm 1.45$  psi
- (1.6 to 16 bar) –  $\pm 0.10$  bar  
(23.2 to 232.1 psi) –  $\pm 1.45$  psi

Repeatability across complete operating conditions:

- (0.2 to 2 bar) –  $\pm 0.10$  bar  
(2.9 to 29.0 psi) –  $\pm 1.45$  psi
- (0.5 to 8 bar) –  $\pm 0.15$  bar  
(7.3 to 116.0 psi) –  $\pm 2.18$  psi
- (1.0 to 10 bar) –  $\pm 0.25$  bar  
(14.5 to 145.0 psi) –  $\pm 3.63$  psi
- (1.6 to 16 bar) –  $\pm 0.25$  bar  
(23.2 to 232.1 psi) –  $\pm 3.63$  psi

### Electrical Ratings

- DC voltage range: 5-30 VDC
- AC voltage range: 5-250 VAC
- Applicable current range: 1 mA to 100 mA

Note: Contact protection is recommended when switches used in an inductive load circuit. Other electrical ranges available on request.

### Electrical Connection

- DIN EN 175301-803 (DIN 43650) form A connection

### Construction Materials

- Housing Body: Aluminium (anodised)
- Diaphragm: Silicone rubber
- Shaft: Stainless Steel
- Pressure Seals: EPDM, NBR
- External Seals: Silicone, EPDM
- Locking Mechanism: Stainless Steel
- Electrical Connector: PA (Polyamide Nylon)
- Microswitch contacts: Triple layer gold plated (UL & CSA approved)

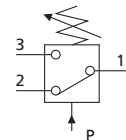


### Operating Media

- Neutral, gaseous and liquid fluids, non-combustible.  
Air supply must be dry enough to avoid ice formation at temperatures below +2 °C (+35 °F)

### Switching Function

- Terminal 1 to 3: on rising pressure contacts close
- Terminal 1 to 2: on rising pressure contacts open



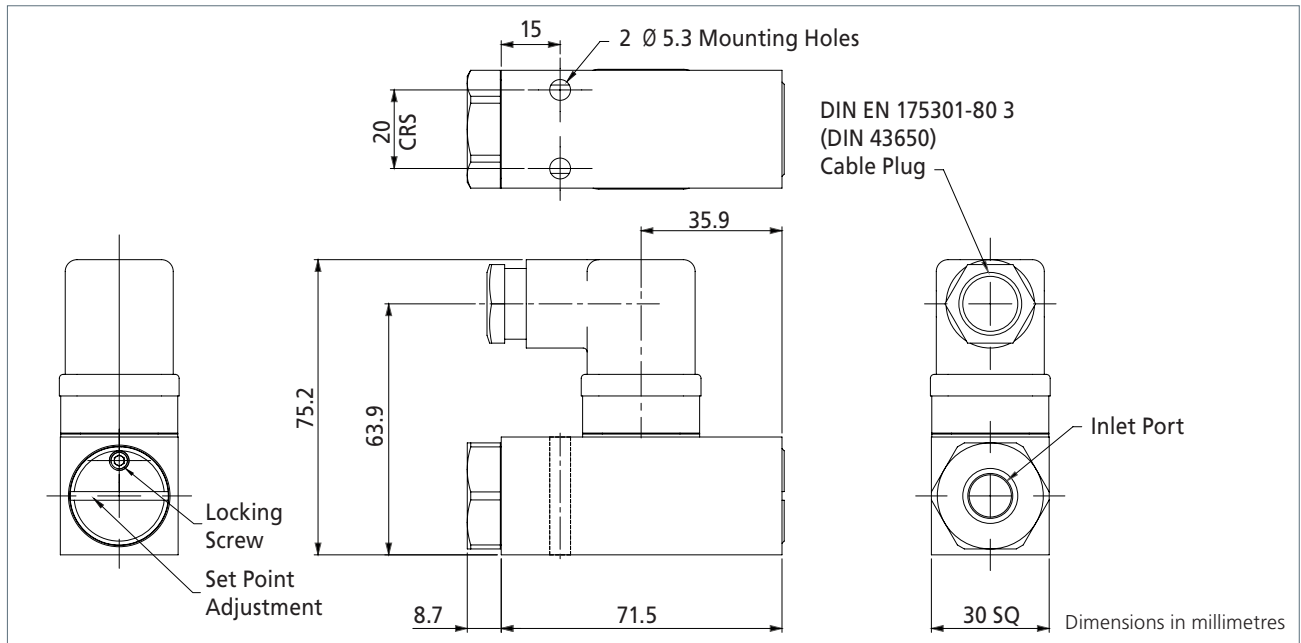
### Switch Rating

- 1 mA to 100 mA

### Weight

- 203 g (0.45 lbs)

## Dimensional Data



## Ordering Information

### Standard switch assembly

Size		Type		Material		Diaphragm /Pressure Seals		Pressure		Port Style	
2	¼"	PSE	Pressure Switch	A	Alum	F	Silicone / EPDM / NBR	02	0.2 - 2	1	BSP
								08	0.5 - 8	2	NPT
								10	1 - 10		
								16	1.6 - 16		
<b>2</b>		<b>PSE</b>		<b>A</b>		<b>F</b>		<b>••</b>		<b>•</b>	

Example part number: 2PSEAF021.

### Optional extra

Set Pressure			
XXX	Customer Specified*	R	Rising
		F	Falling
<b>•••</b>		<b>•</b>	

\* Specify Set Pressure within the range of 0.5 to 16 bar in 0.1 increments (± 0.2 bar). Use three digits to specify Set Pressure e.g. 12.5 bar = 125 and suffix standard part number (Example: 2PSEAF161 125R)

Note:  
Standard switch assemblies are un-set ex-works.

Pre-set option available, minimum order quantity applies. Please contact sales for further information

# rotork®

Keeping the World Flowing

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**MIDLAND-ACS**  
A rotork® Brand

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