

# Mechanical Heavy-Duty Switch



## SERIES 400

With a stable switching point setting, the robust 400 Series Switch converts pneumatic and hydraulic pressure into switching functions, and is designed for applications requiring maximum accuracy under high loads. It is SPDT, and can be normally open (N.O.) or normally closed (N.C.) depending on the wiring. The switching point is fully adjustable by means of a simple adjustment knob within the adjustment range. It also includes a locking mechanism for switch point adjustment.

The 400 Series Switch is fitted with DIN EN 175301-803 Form A connectors for fast and easy installation. It is also available with an LED indicator on the plug for visual monitoring of the switch status, or an M12 x 1 (4-pin) electrical connection.

### FEATURES

- Excellent repeatability  $\pm 2\%$  of Full Scale
- Robust design with zinc die-cast housing
- 360° Rotatable Male connections ranges  $\geq 150/425$ psi
- Easy to adjust
- High Loadability (shock 30g, vibration 10g)
- IP65 Hirschmann Connector IP67 M 12x1, (4-pin)
- Flange connection (optional)
- LED status indicator (optional)

### APPLICATIONS

- Hydraulic systems, including mobile hydraulics
- Pneumatic systems
- Power generation
- Pumps & compressors
- Marine

### SPECIFICATIONS

<b>Maximum Working Pressure</b>	0 psig to 300 psig through 0 psig to 5,000 psig
<b>Measuring Element</b>	NBR diaphragm $\leq 230$ psig Stainless Steel piston with NBR seal $\geq 500$ psig
<b>Media</b>	Diaphragm type, compressed air or non-corrosive liquids Piston type, self-lubricating fluids such as hydraulic oil or grease
<b>Process Connection</b>	1/4" NPT and 7/16-20 SAE standard, others available on request
<b>Connection Material</b>	Zinc plated steel, stainless steel optional
<b>Case</b>	Zinc plated steel
<b>Switching Function</b>	SPDT, micro switch with silver plated self cleaning contacts
<b>Adjustment</b>	Adjustment knob from 3 psig to 4,600 psig dependent on full scale range
<b>Hysteresis</b>	Diaphragm type, 1% to 11% of adjustment range full scale Piston type, 2% to 8% of adjustment range full scale
<b>Repeatability</b>	$\pm 2\%$ of Full Scale
<b>Frequency</b>	Max. 200 cycles/min.
<b>Contact Rating</b>	Up to 28 VDC - max 4A Up to 250 VAC - max 3A
<b>Temperature Range</b>	Storage 13° F to 185° F/-25° C to 85° C Media 14° F to 176° F/-10° C to 80° C Ambient 14° F to 176° F/-10° C to 80° C
<b>Electrical Connection</b>	Hirschmann (DIN EN 175301-803 Form A), M12 x 1 (4-pin available upon request)
<b>Shock</b>	30 g's per IEC 770
<b>Vibration</b>	10 g's per IEC 770
<b>Environmental Protection</b>	NEMA 4: IP65 for Hirschmann NEMA 4X: IP67 for M12 x 1
<b>CE Certification</b>	Acc. to EU Standard 73/23/EWG
<b>Weight</b>	Approximately 0.66 lbs

ORDERING INFORMATION				
<b>SERIES</b>	<b>400</b>			
<b>SWITCH FUNCTION</b>	<b>1</b> Single Pole Double Throw (SPDT)			
<b>PROCESS CONNECTIONS</b>	<b>2</b> 1/4" NPT Male	<b>5</b> 1/4" NPT Female	<b>10</b> G 1/4 B Male	
	<b>19</b> G 1/4 B Female	<b>45</b> 7/16-20 UNF 2A Male		
<b>SWITCH ADJUSTMENT RANGE (MAXIMUM WORKING PRESSURE)</b>	3 psig to 30 psig (300 psig)	<b>3/30</b>	150 psig to 1700 psig (5000 psig)	<b>150/1700</b>
	7 psig to 115 psig (300 psig)	<b>7/115</b>	150 psig to 2300 psig (5000 psig)	<b>150/2300</b>
	15 psig to 225 psig (300 psig)	<b>15/225</b>	300 psig to 2900 psig (5000 psig)	<b>300/2900</b>
	150 psig to 425 psig (5000 psig)	<b>150/425</b>	300 psig to 3600 psig (5000 psig)	<b>300/3600</b>
	150 psig to 1150 psig (5000 psig)	<b>150/1150</b>	450 psig to 4600 psig (5000 psig)	<b>450/4600</b>
<b>ELECTRICAL CONNECTIONS</b>	<b>1</b> 36" Cable (connected to option 8)	<b>2</b> M12 x 1 (4-Pin)	<b>8</b> Hirschmann (DIN EN 175301-803 Form A)	<b>46</b> Hirschmann with LED Status Indicator

Note: Stainless steel connection available, consult factory

Please consult your local NOSHOK Distributor or NOSHOK, Inc. for availability and delivery information.

**EXAMPLE**

Series .....400  
 Switch Function .....Single Pole Double Throw  
 Process Connection .....1/4" NPT Male  
 Switch Adjustment Range .....3 psig to 30 psig  
 Electrical Connection .....Hirschmann

**400 - 1 - 2 - 3/30 - 8**

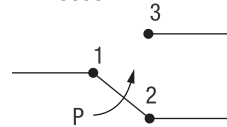
**Additional Ordering Information**  
 Switch Set Point(s) (please specify)

**Outline Dimensions**

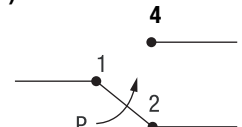


**Switching Output Schematic**

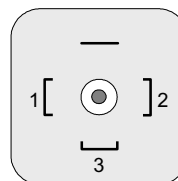
**Hirschmann DIN 43650**



**M12 x 1 (4-Pin)**



**Hirschmann DIN 43650**



**M12 x 1 (4-Pin)**

