

RPS PRESSURE SENSOR



SERVICE CLASSIFICATION

- **Pneumatic / Hydraulic Service**
- Standard Service:
Fluorocarbon O-Rings
- Temperature Range:
-15 to 250 °F (-26 to 121 °C)
- 30-150 PSI (2.07-10.34 BAR)
Instrument Pressure Rating



FEATURES

- 316/316L Stainless Steel Materials
- Electropolished finish which removes surface imperfections that can compromise the performance and longevity of the device
- Normally Open or Normally Closed
- Special Service O-Rings and material available to meet customer requirements
- Dry film lubricant applied to adjustment threads to increase the load-bearing capabilities; thus, reducing the chance of thread galling while still maintaining an extremely low coefficient of friction
- Contains O-Rings for all sensing configurations
- Deadband +/-5% of set pressure (Deadband may be affected in hydraulic applications)
- Set point repeatability 1% of set pressure

RPS PRESSURE SENSOR

OPERATION

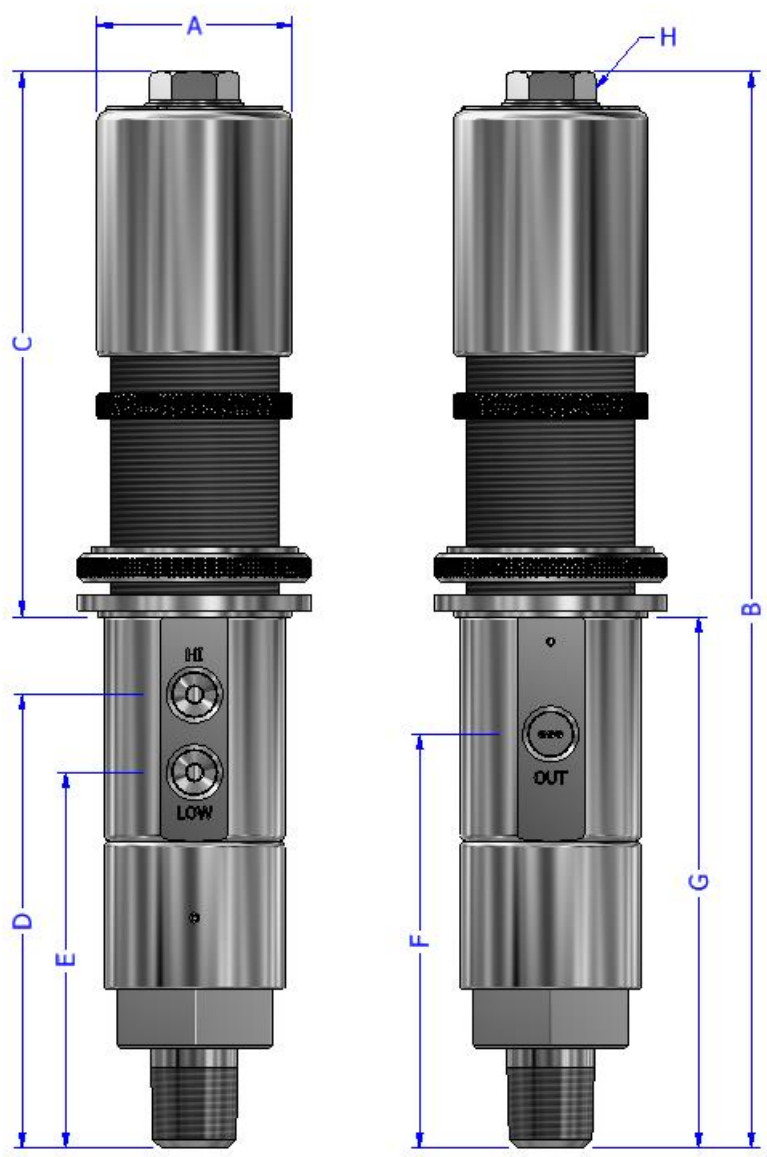
The BWB "RPS" is a 3-way, normally closed or normally open, automatic, pressure sensing device. By choosing the appropriate inlet, the sensor can detect pressure above (**PSH**) or below (**PSL**) any desired pressure setting. By selecting the correct piston & spring combination (see pressure chart), and either loosening or tightening the adjustment cap, the sensor may be set between **10** and **10,000 psi**. It is normally installed on a process vessel, process flow line, or in a control panel. The sensor receives sensing pressure from the component which it is monitoring and supply pressure from the safety system which it will shut down.

PART NUMBER SELECTOR

EXAMPLE PART NUMBER: 15516-01012 (#1 Sensing Configuration, Fluorocarbon Elastomers, Silver Spring, 316SS Adjustment Cap, Preset Panel Nut)

BASE MODEL	ELASTOMERS	SPRING	ADJUSTMENT CAP MATERIAL	PANEL NUTS
15516 (#1 Sensing Configuration)	0 – Fluorocarbon (Viton)	0 – Black	00 – Delrin	0 – None
15517 (#2 Sensing Configuration)		1 – Silver	01 – 316SS	1 – Standard Panel Nut
15518 (#3 Sensing Configuration)		2 – Green		2 – Preset Panel Nut
		3 – Black Inconel (X750)		
		4 – Silver Inconel (X750)		
		5 – Green Inconel (X750)		

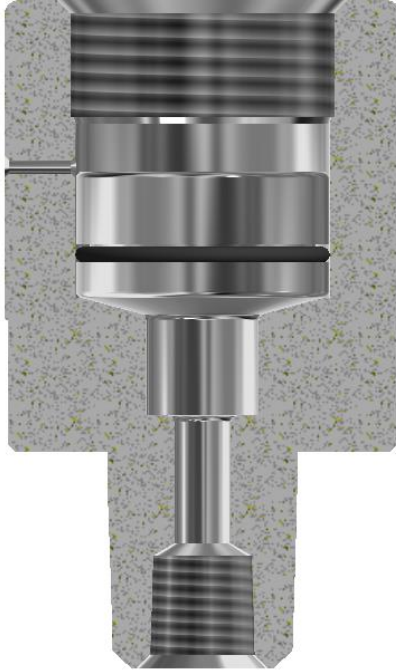
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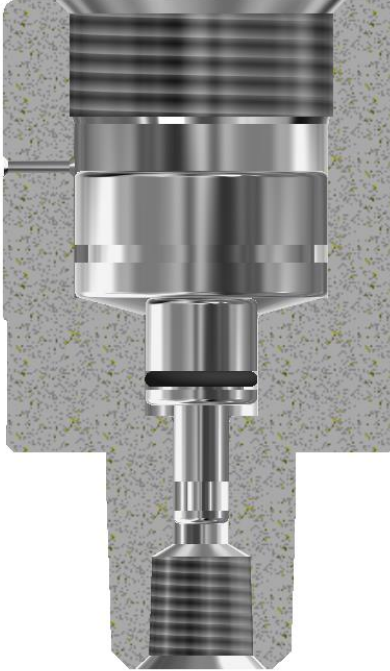
DIMENSION	RPS
A	1.88" (47.75 mm)
B	10.95" (278.13 mm)
C	7.99" (202.95 mm)
D	4.37" (111.00 mm)
E	3.62" (91.95 mm)
F	3.99" (101.35 mm)
G	5.12" (130.56 mm)
H	.75" Hex (19.05 mm)
Port Size	1/4-18-NPT

RPS PRESSURE SENSOR

#1 1-1/8" SENSING UNIT



#2 1/2" SENSING UNIT



#3 1/4" SENSING UNIT



SPECIFICATIONS

Maximum Operating Pressure
10,000 PSI (689.48 Bar)

Process Connections
1/2"-14-MNPT / 1/4"-18-FNPT

PRESSURE RANGES

Piston Configuration #1		
Spring	Range (PSI)	Range (Bar)
Black	10 - 30 PSI	0.7 - 2
Silver	30 - 250 PSI	2 - 17
Green	200 - 500 PSI	14 - 34

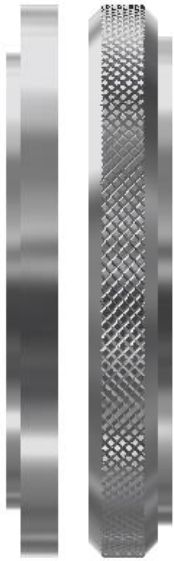
Piston Configuration #2		
Spring	Range (PSI)	Range (Bar)
Silver	250 - 1300 PSI	17 - 90
Green	400 - 2000 PSI	28 - 138

Piston Configuration #3		
Spring	Range (PSI)	Range (Bar)
Silver	2000 - 5500 PSI	138 - 379
Green	3500 - 10,000 PSI	241 - 690

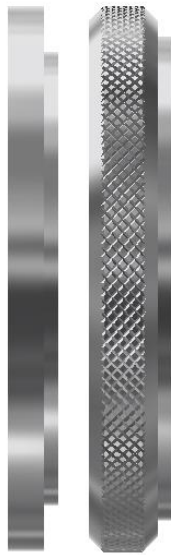
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PANEL MOUNT OPTIONS

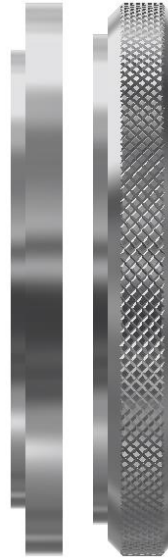
#1 1-5/8"



#2 1-7/8"



#3 2"



#4 2"



Options 1-3 orientate panel nut to desired panel hole size as shown above.

Option 4 is recommended for preset pressure sensors. Removal of the adjustment cap is not necessary to install the pressure sensor in the panel.