

R 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
- Maximum Process Pressure
10,000 PSI (689.48 BAR)



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
- Deadband +/-5% of set pressure (Deadband may be affected in hydraulic applications)
- Set point repeatability 1% of set pressure
- Process Connection
1/4"-18-FNPT & 1/2"-14-MNPT

R PRESSURE SENSOR

OPERATION

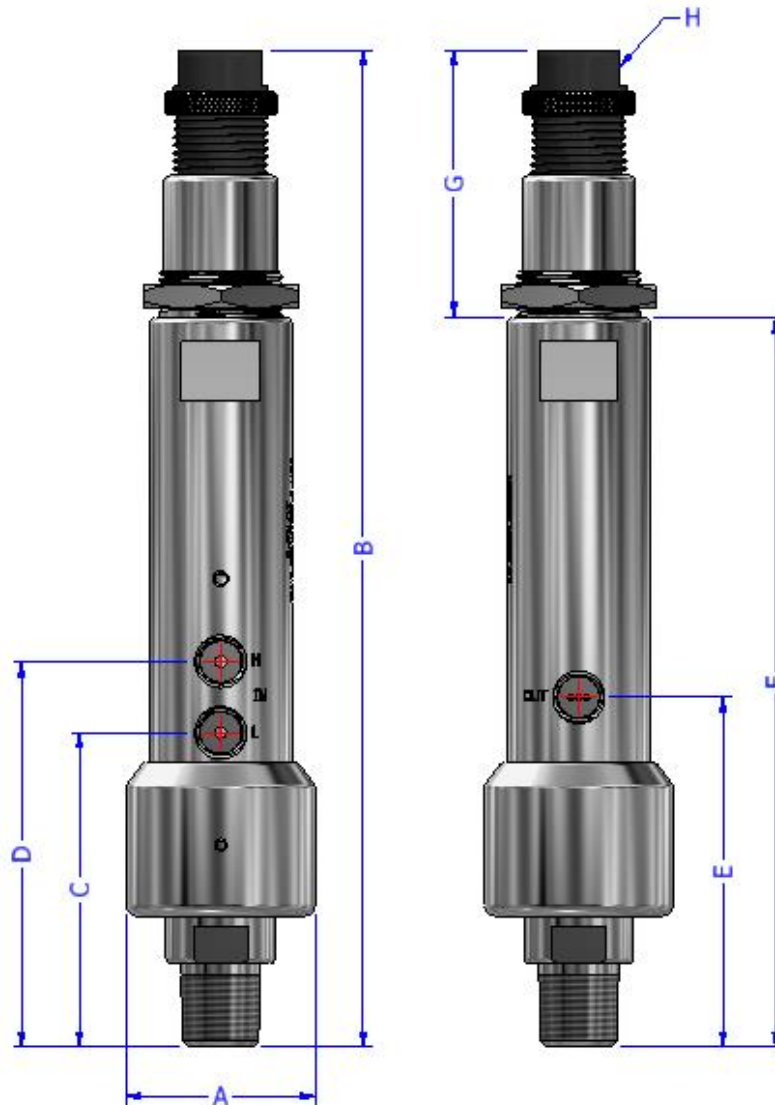
The BWB "R Pilot" is a 3-way, normally closed or normally open, automatic, pressure sensing device. By choosing the appropriate inlet, the sensor can detect pressure above (**PSH**) or below (**PSL**) any desired pressure setting. By selecting the correct piston & spring combination (see pressure chart), and either loosening or tightening the adjustment bolt, the sensor may be set between **5** 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: R3/2G (1/2" Sensing Piston, Green Spring, 500-1,500 PSI Adjustable Range)

BASE MODEL	SENSING UNIT	SPRING
R	1/2 – 1-3/8" Piston	P – Plain
	2/1 – 7/8" Piston	R – Red
	2/3 – 7/8" Piston	G – Green
	3/2 – 1/2" Piston	Y – Yellow
	4/5 – 3/8" Piston	
	5/4 – 1/4" Piston	

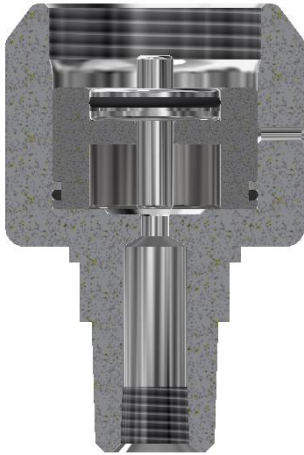
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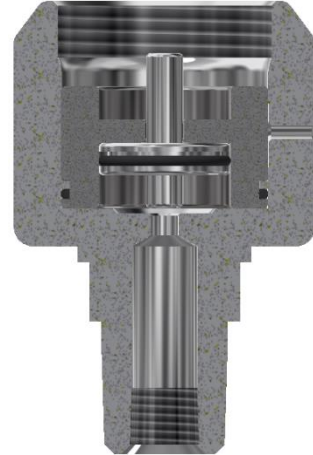
DIMENSION	R	RLP
A	2.00" (50.80 mm)	2.25" (57.15 mm)
B	10.86" (275.84 mm)	10.86" (275.84 mm)
C	3.31" (84.07 mm)	3.31" (84.07 mm)
D	4.06" (103.12 mm)	4.06" (103.12 mm)
E	3.69" (93.73 mm)	3.69" (93.73 mm)
F	7.69" (195.33 mm)	7.69" (195.33 mm)
G	2.88" (73.15 mm)	2.88" (73.15 mm)
H	.88" Wrench Flat (22.35 mm)	.88" Wrench Flat (22.35 mm)
Port Size	1/4-18-NPT	1/4-18-NPT

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#1/2 1-3/8" SENSING UNIT



#2/1 7/8" SENSING UNIT

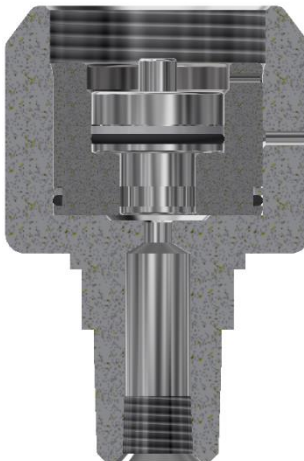


PRESSURE RANGES

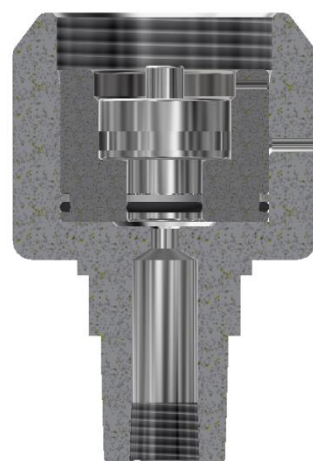
Piston Configuration #1/2		
Spring	Range (PSI)	Range (Bar)
Plain	5-15 PSI	.4 - 1
Red	15 - 50 PSI	1 - 3.5
Green	50 - 200 PSI	3.5 – 13.8
Yellow	150 - 300	10.3 – 20.7

Piston Configuration #2/1		
Spring	Range (PSI)	Range (Bar)
Green	150 - 500 PSI	10.3 – 34.5
Yellow	300 - 700 PSI	20.7 – 48.3

#2/3 7/8" SENSING UNIT



#3/2 1 1/2" SENSING UNIT



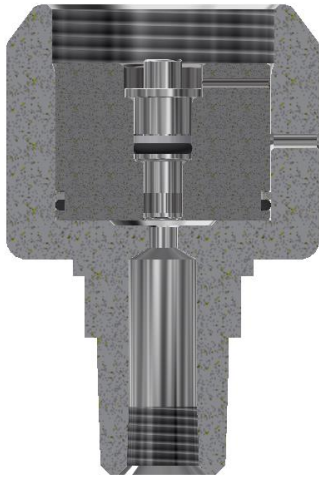
PRESSURE RANGES

Piston Configuration #2/3		
Spring	Range (PSI)	Range (Bar)
Green	150 - 500 PSI	10.3 – 34.5
Yellow	300 - 700 PSI	20.7 – 48.3

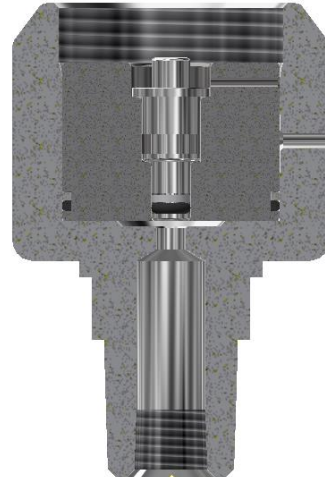
Piston Configuration #3/2		
Spring	Range (PSI)	Range (Bar)
Green	500 - 1,500 PSI	34.5 – 103.4
Yellow	750 - 2,000 PSI	51.7 – 137.9

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#4/5 3/8" SENSING UNIT



#5/4 1/4" SENSING UNIT



PRESSURE RANGES

Piston Configuration #4/5		
Spring	Range (PSI)	Range (Bar)
Green	1,000 - 3,000 PSI	69 – 206.8
Yellow	1,500 - 4,000 PSI	103.4 – 275.8

Piston Configuration #5/4		
Spring	Range (PSI)	Range (Bar)
Green	3,000 - 6,000 PSI	206.8 – 413.7
Yellow	3,500 - 10,000 PSI	241.3 – 689.5