

# 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

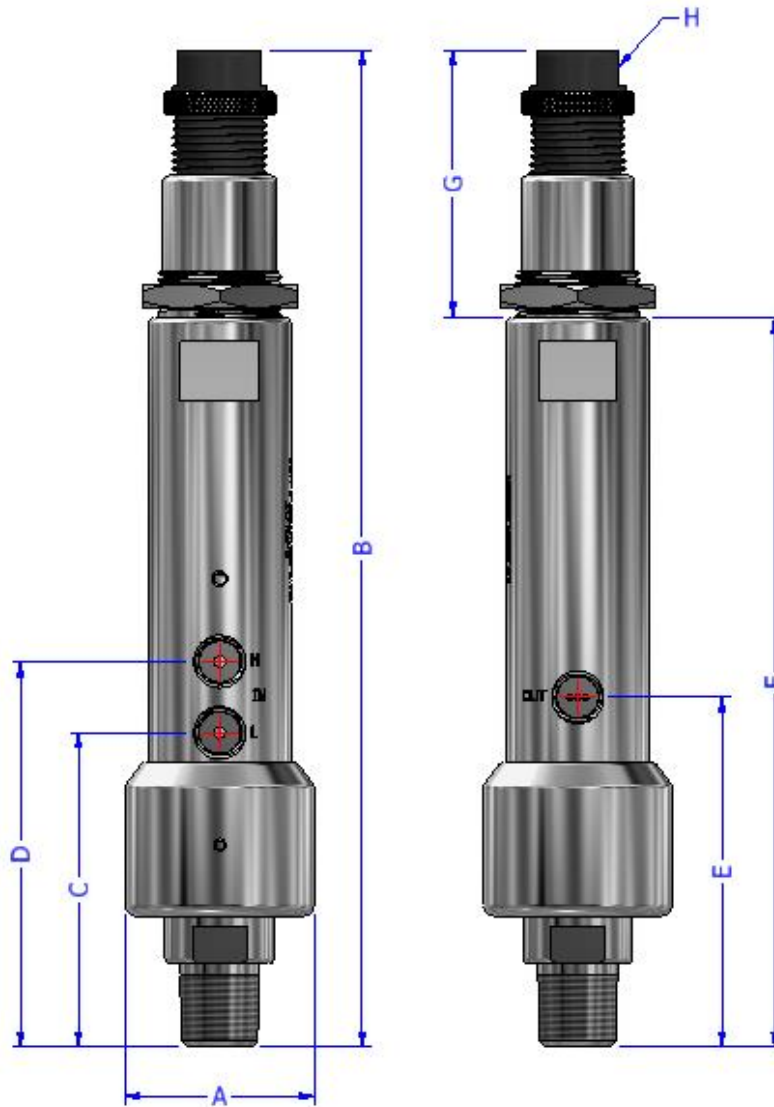
The BWB "R Pilot" is a 3-way, normally closed or normally open, automatic, pressure sensing device. By choosing the appropriate inlet, the sensor can detect pressure above (**PSH**) or below (**PSL**) any desired pressure setting. By selecting the correct piston & spring combination (see pressure chart), 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	

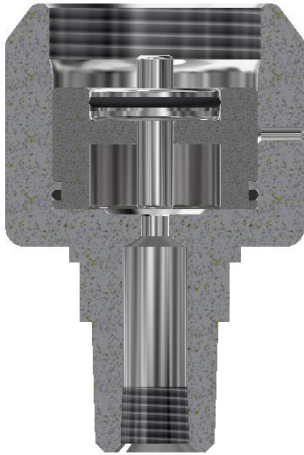
# R PRESSURE SENSOR



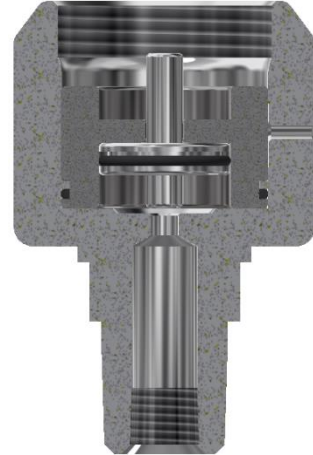
DIMENSION	R	RLP
A	2.00" (50.80 mm)	2.25" (57.15 mm)
B	10.86" (275.84 mm)	10.86" (275.84 mm)
C	3.31" (84.07 mm)	3.31" (84.07 mm)
D	4.06" (103.12 mm)	4.06" (103.12 mm)
E	3.69" (93.73 mm)	3.69" (93.73 mm)
F	7.69" (195.33 mm)	7.69" (195.33 mm)
G	2.88" (73.15 mm)	2.88" (73.15 mm)
H	.88" Wrench Flat (22.35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

# R PRESSURE SENSOR

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



#2/1 7/8" SENSING UNIT

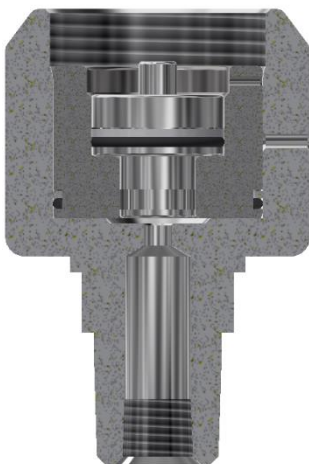


## PRESSURE RANGES

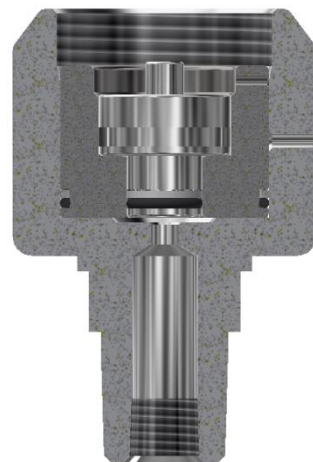
Piston Configuration #1/2		
Spring	Range (PSI)	Range (Bar)
Plain	5-15 PSI	.4 - 1
Red	15 - 50 PSI	1 - 3.5
Green	50 - 200 PSI	3.5 - 13.8
Yellow	150 - 325	10.3 - 22.4

Piston Configuration #2/1		
Spring	Range (PSI)	Range (Bar)
Green	150 - 500 PSI	10.3 - 34.5
Yellow	300 - 900 PSI	20.7 - 62.1

#2/3 7/8" SENSING UNIT



#3/2 1/2" SENSING UNIT



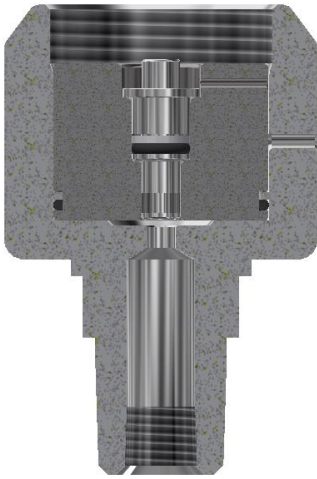
## PRESSURE RANGES

Piston Configuration #2/3		
Spring	Range (PSI)	Range (Bar)
Green	150 - 500 PSI	10.3 - 34.5
Yellow	300 - 900 PSI	20.7 - 62.1

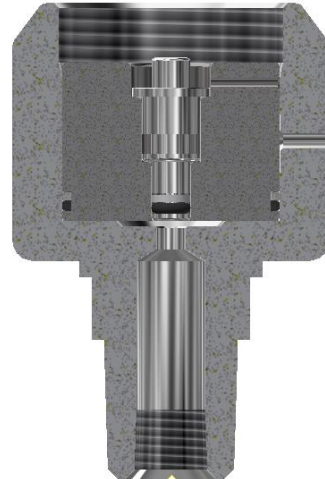
Piston Configuration #3/2		
Spring	Range (PSI)	Range (Bar)
Green	500 - 1,500 PSI	34.5 - 103.4
Yellow	750 - 2,000 PSI	51.7 - 137.9

# R PRESSURE SENSOR

**#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