



"R" PILOT "PNEUMATIC or HYDRAULIC"

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 assembly & spring combination (See Pressure Chart), and either loosening or tightening the adjustment bolt, the sensor may be set between **3 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 (Port **D**) from the component which it is monitoring and supply pressure (Port **A** or **B**) from the safety system which it will shutdown.

FEATURES

316 STAINLESS STEEL MATERIALS

1/4" FNPT CONTROL PORTS

DEAD BAND +/- 5% OF SET PRESSURE (Dead Band may be effected in hydraulic applications.)

SET POINT REPEATABILITY +/- 1% OF SET PRESSURE

SERVICE CLASSIFICATION

Standard service: Viton O-rings

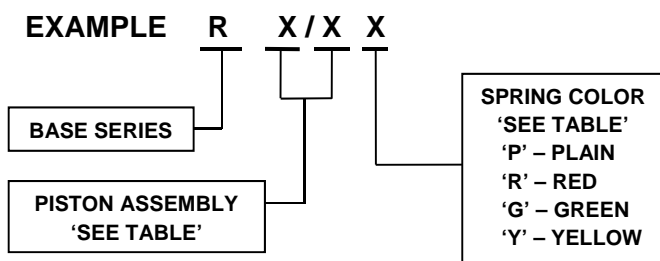
Temperature Range: -20 to 250° F (-29 to 121° C)

Special service: O Ring compounds and materials to Customer Requirements

BWB Controls 'R' Pilots can be configured to meet the needs of the customer by changing the Sensing Sleeves, Sensing Pistons and Springs. Please review the charts below to determine your configuration.



ORDERING INFORMATION



PART #	PISTON - SPRING	ADJUSTABLE RANGE	
RLP	LP PLAIN	3 - 10 PSI	.21 – .69 bar
R1/2P	#1/2 - PLAIN	5 - 15 PSI	.34 – 1.02 bar
R1/2R	#1/2 RED	15 - 50 PSI	1.02 – 3.45 bar
R1/2G	#1/2 - GREEN	50 - 200 PSI	3.45 – 13 bar
R1/2Y	#1/2 - YELLOW	150 - 325 PSI	10 – 22 bar
R2/1G	#2/1 - GREEN	150 - 500 PSI	10 – 34 bar
R2/1Y	#2/1 - YELLOW	300 - 900 PSI	20 – 62 bar
R2/3G	#2/3 - GREEN	150 - 500 PSI	10 – 34 bar
R2/3Y	#2/3 - YELLOW	300 - 900 PSI	20 – 62 bar
R3/2G	#3/2 - GREEN	500-1500 PSI	34 – 103 bar
R3/2Y	#3/2 - YELLOW	750 - 2000 PSI	52 – 138 bar
R4/5G	#4/5 - GREEN	1000 - 3000 PSI	69 – 207 bar
R4/5Y	#4/5 - YELLOW	1500 - 4000 PSI	103 – 275 bar
R5/4G	#5/4 - GREEN	2000 - 6000 PSI	138 – 413 bar
R5/4Y	#5/4 - YELLOW	3500 - 10000 PSI	241 – 689 bar

WEIGHTS

R	4.25 POUNDS	R (PSHL)	11.00 POUNDS
RLP	4.25 POUNDS	RDIF	7.00 POUNDS

PANEL MOUNT

1 - 3/8" Diameter Hole (35 mm)
Maximum Panel Thickness, 0.25 Inches (6 mm)
Panel Nut Thickness; 0.25 inches (6 mm)



INSTALLATION



PORT 'A'

PSH – Supply Inlet (N.O.)
PSL – Exhaust (N.C.)
30 to 150 PSI (2.06 to 10.3 bar)
1/4" FNPT - Orifice - .125" (3.17 mm)



PORT 'B'

PSL – Supply Inlet (N.C.)
PSH – Exhaust (N.O.)
30 to 150 PSI (2.06 to 10.3 bar)
1/4" FNPT - Orifice - .125" (3.17 mm)



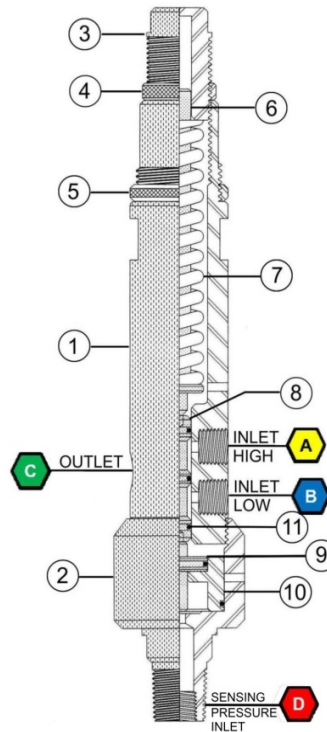
PORT 'C'

Supply Pressure Outlet
1/4" FNPT
Orifice Size - .062" (1.57 mm)



PORT 'D'

Sensing Pressure Inlet
3 to 10000 PSI (0.21 to 689.48 bar)
1/4" FNPT and 1/2" MNPT
Orifice Size - .187 (4.75 mm)



ITEM DESCRIPTION

- | ITEM | DESCRIPTION |
|------|--------------------|
| 1 | BODY |
| 2 | BASE |
| 3 | ADJUSTMENT BOLT |
| 4 | LOCK RING |
| 5 | PANEL LOCK RING |
| 6 | SPRING GUIDE |
| 7 | SPRING |
| 8 | INNER PISTON |
| 9 | SENSING PISTON *** |
| 10 | SENSING SLEEVE *** |
| 11 | O RING |

*** SENSING PISTON AND SLEEVE DATA IS FOUND ON THE ABOVE PAGE

REPAIR KIT(S):

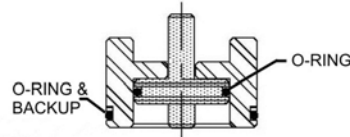
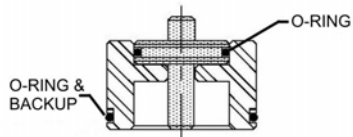
CONTAINS ALL SEALS

Please see the diagrams below of the Sleeve and Piston configurations.

1/2 PISTON ASSEMBLY

1/2 PISTON & SLEEVE

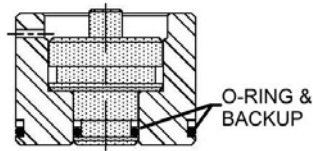
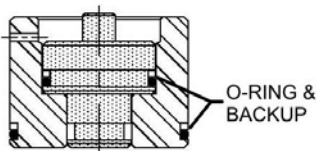
2/1 PISTON & SLEEVE



2/3 PISTON ASSEMBLY

2/3 PISTON & SLEEVE

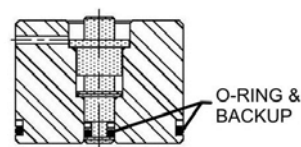
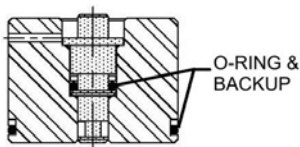
3/2 PISTON & SLEEVE



4/5 PISTON ASSEMBLY

4/5 PISTON & SLEEVE

5/4 PISTON & SLEEVE



DIMENSIONS

