



## "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

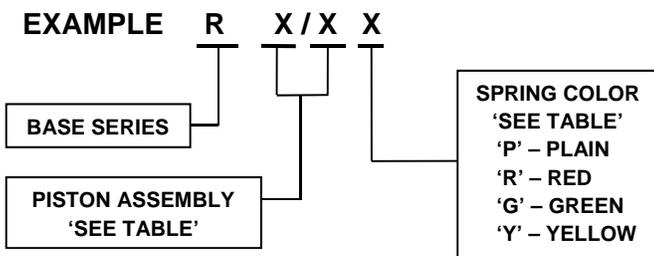
Temperature Range: -20 to 250° F (-29 to 121° C)

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

### WEIGHTS

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

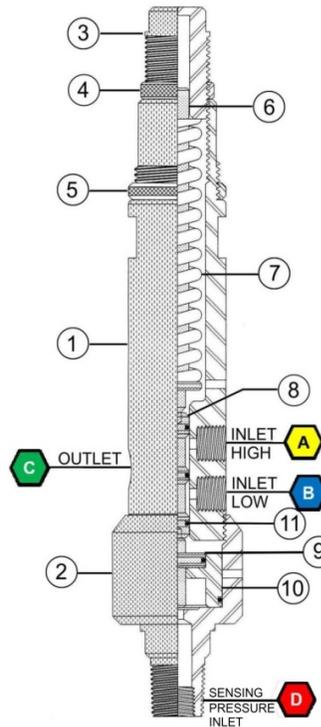
### PANEL MOUNT

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
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.		<b>DIMENSIONS</b> 
<b>1/2 PISTON ASSEMBLY</b>		
1/2 PISTON & SLEEVE	2/1 PISTON & SLEEVE	
<b>2/3 PISTON ASSEMBLY</b>		
2/3 PISTON & SLEEVE	3/2 PISTON & SLEEVE	
<b>4/5 PISTON ASSEMBLY</b>		
4/5 PISTON & SLEEVE	5/4 PISTON & SLEEVE	