



"RPS" PILOT "PNEUMATIC or HYDRAULIC"

OPERATION

The BWB "RPS" 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 Piston Configuration Charts below), 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 (Port **P**) from the component which it is monitoring and supply pressure (Port **A** or **B**) from the safety system which it will shut down.



FEATURES

- CONTAINS O-RINGS FOR ALL PISTON CONFIGURATIONS
- 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
- WEIGHT : 4LBS
- EXOTIC MATERIALS ARE AVAILABLE UPON REQUEST
- STAINLESS STEEL ADJUSTMENT CAPS AVAILABLE UPON REQUEST
- TEMPERATURES ARE AVAILABLE UPON REQUEST, (200 °F AND ABOVE STAINLESS STEEL ADJUSTMENT CAPS ARE RECOMMENDED)
- OTHER ELASTOMER COMPOUNDS AVAILABLE UPON REQUEST

BWB Controls 'RPS' Pilots can be configured to meet the needs of the customer by changing which groove is o-ringed on the sensing pistons and springs. Please review the charts below to determine your configuration. **NOTE: Never install more than one O-ring on the sensing pistons at one time.**

PISTON CONFIGURATION # 1

SENSING PISTON/SPRING RANGE CAPABILITY		
SPRING	RANGE (PSI)	RANGE (BAR)
BLACK	10 – 30	0.7 – 2
SILVER	30 – 250	2 – 17
GREEN	200 – 500	13 – 34

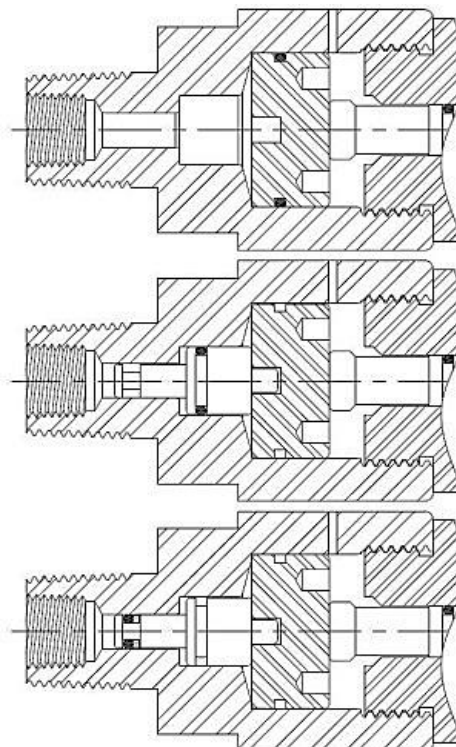
PISTON CONFIGURATION # 2

SENSING PISTON/SPRING RANGE CAPABILITY		
SPRING	RANGE (PSI)	RANGE (BAR)
SILVER	250 – 1,300	17 – 103
GREEN	400 – 2,000	27 – 137

PISTON CONFIGURATION # 3

SENSING PISTON/SPRING RANGE CAPABILITY		
SPRING	RANGE (PSI)	RANGE (BAR)
SILVER	2,000 – 5,500	103 – 379
GREEN	3,500 – 10,000	241 – 689

Note: Install O-ring and Teflon back-up as shown in Configuration 3.





INSTALLATION

PORT "A"

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

PORT "B"

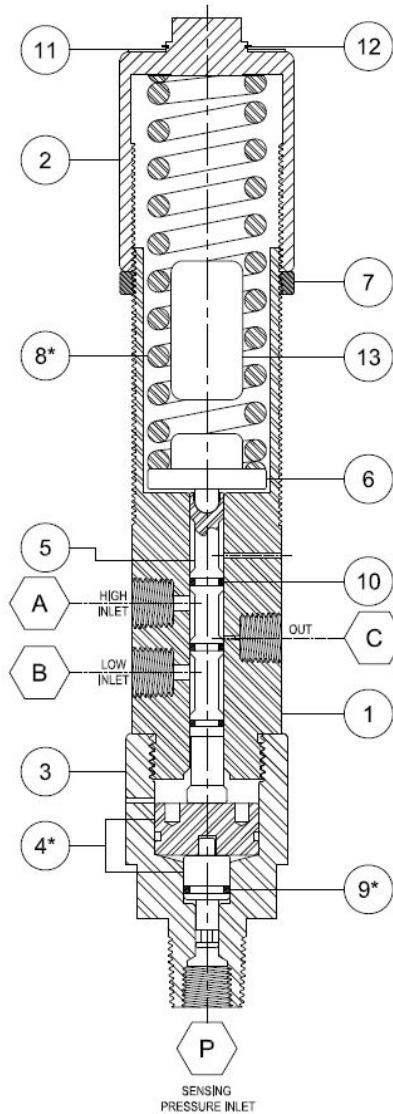
PSL – Supply Inlet (N.C.)
 PSH – Exhaust
 30 to 150 PSI (2.06 to 10.3 bar)
 1/4" FNPT - Orifice - .125" (3.17 mm)

PORT "C"

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

PORT "P"

Sensing Pressure Inlet
 10 to 10000 PSI (0.7 to 689.48 bar)
 1/4" FNPT and 1/2" MNPT
 Orifice Size - .250 (6.35 mm)



ITEM	DESCRIPTION
1	BODY
2	CAP
3	BASE
4	PISTONS
5	SPOOL
6	SPRING GUIDE
7	LOCK RING
8	SPRING
9	O RING
10	O RING
11	INFO TAG
12	RETAINER RING
13	O-RING CAPSULE

***NOTE: SEE PISTON/ SPRING CHART ON PAGE 1 FOR SPECIFIC PISTON CONFIGURATIONS**

REPAIR KIT(S):
 CONTAINS ALL SEALS

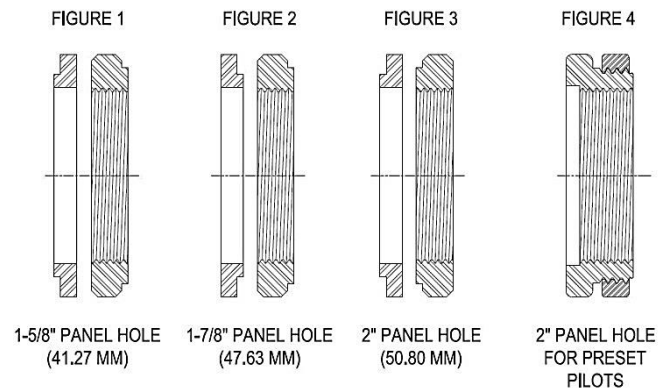
PANEL MOUNT OPTIONS

Standard Panel Hole: 1-5/8" (41.28 mm)

Maximum Panel Thickness: 0.25 Inches (6 mm)

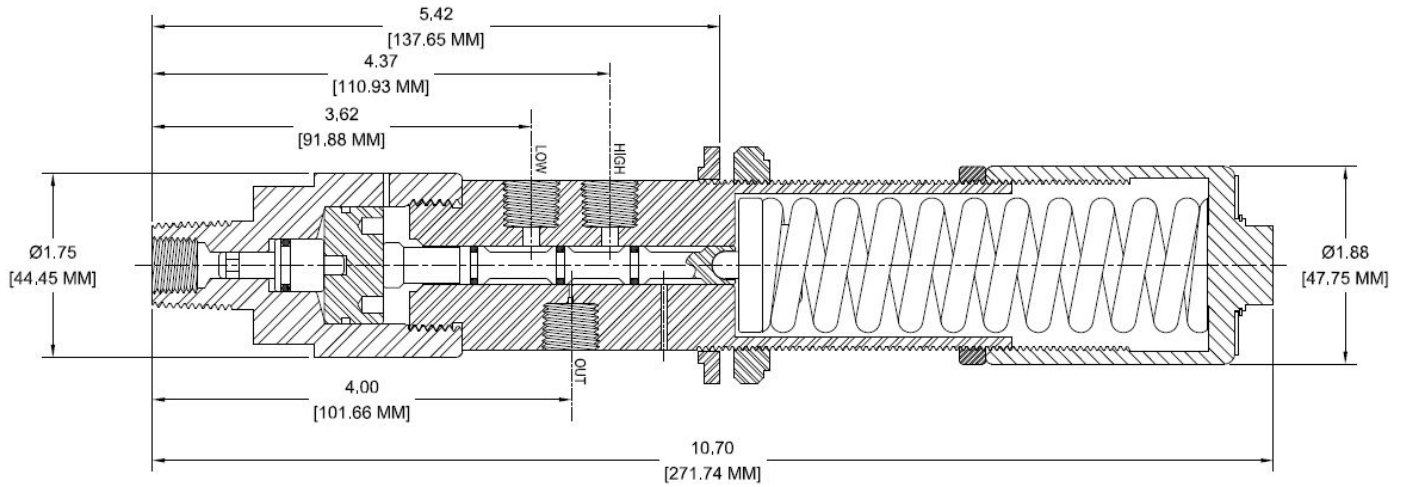
**Figures 1, 2, and 3 shows the different size panel holes that are achieved by the RPS' standard panel nut option.

** Figure 4 is recommended for preset panel mounted pilots





DIMENSIONS



ORDERING INFORMATION

PART NUMBER BREAKDOWN:

1551X-X X X X X

BASE PART NUMBER

15516 = PISTON CONFIGURATION # 1
 15517 = PISTON CONFIGURATION # 2
 15518 = PISTON CONFIGURATION # 3

ELASTOMERS

0= VITON

PANEL NUT OPTIONS

0= WITHOUT PANEL NUTS
 1= WITH PANEL NUTS
 2= PANEL NUT FOR PRESET PILOTS

MATERIAL

00= 316 SS CONSTRUCTION w/ DELRIN CAP
 01= ALL 316 SS CONSTRUCTION

SPRING

0= BLACK SPRING
 1= SILVER SPRING
 2= GREEN SPRING
 3= BLACK INCONEL X750 SPRING
 4= SILVER INCONEL X750 SPRING
 5= GREEN INCONEL X750 SPRING