



Pressure Sensor Hydraulic & Pneumatic



High/Low Pressure Sensor

General Description

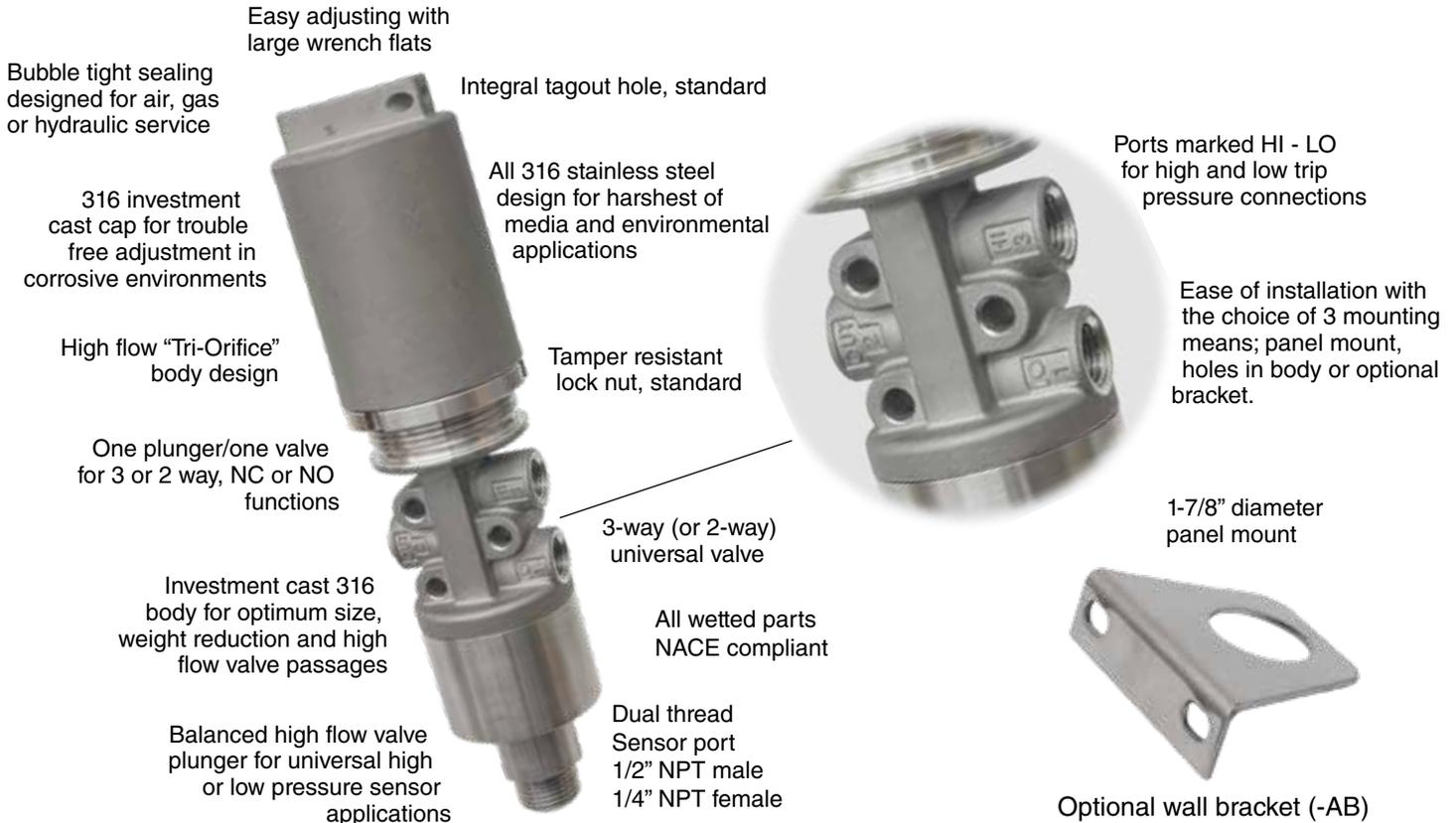
The Versa pneumatic/hydraulic pressure sensor is a 3-way block and bleed or a 2-way bleed, 2 position valve that is operated by pressure acting on a piston opposing an adjustable spring force. It functions as either a normally closed or normally open valve, depending on which of the two "IN" ports the instrument pressure is supplied. These ports are marked as HI or LO on the valve body.

The output port, marked 'OUT', is the same for either mode of operation. Pressure changes at the sensor

port, outside the set point range, will cause the valve to operate or shift.

The use of two pilot sensors mounted on a common manifold allows for a high/low pressure sensor system. One sensor functions as a low pressure cut off and the other as high pressure limit, protecting your system from pressure extremes in a complete, easy to mount package.

These sensors are also known as Stick Pilots.



Valve	
Function:	3-way Universal
Media:	Pneumatic and Hydraulic
Pressure:	10 - 150 psi (0.7 - 10.3 bar)
Cv:	0.12
Port Size:	1/4" NPT F
Temperature Range:	5 to 250°F (-15°C to 121°C) -31°F to 149°F (-35°C to 65°C) (-44) -67°F to 194°F (-55°C to 90°C) (-T40)

Materials	
Body:	316 Stainless steel
Spring:	17 - 7 Stainless steel
Seals:	FKM
Lock Nut:	316 Stainless steel
Adjusting Cap:	316 Stainless steel
Internal Parts:	316 Stainless steel

Sensor	
Pressure:	20 to 10,000 psi (1.4 to 690 bar) Consult factory for 20,000 psi (1379 bar)
Media:	Pneumatic and Hydraulic
Dead Band:	< 5% of full range
Repeatability:	1% of pressure setting
Port Size:	1/2" NPT M & 1/4" NPT F
Mounting:	Bracket, body mounting holes (3) or panel mount for 1-7/8" diameter hole
Adjustment means:	Rotating spring cap. Features a wrench flat and hole for "tagout"

Suffix	Description
-44	Seals, low temperature Buna
-T40	Seals, low temperature Fluorosilicone
-43E	Panel mounting nut
-AB	Mounting bracket supplied with additional nut

Single Unit Pressure Sensor

BAA - 8 3 0 2 - 91 2 - 44



BAA: B-316 Series

Function:
2 = 2-way (valve plugged at factory)
8 = 3-way NC and NO (universal flow)

Size: 3 = 1/4" Size

Body: 0 = Side ported

Plunger:
1 = NC function (for 2-way only)
2 = 3-way NC or NO, 2-way NO

Suffix: None = No options
-44 = Low temperature
-T40 = Low temp seals
-43E = Panel mounting nut
-AB = Mounting bracket

Sensor Pressure:
1 = 20-150 psi (1.4 - 10.3 bar)
2 = 50 - 260 psi (3.4 - 18.0 bar)
3 = 200 - 1500 psi (13.8 - 103.4 bar)
4 = 1000 - 5000 psi (69.0 - 345 bar)
5 = 2500 - 10000 psi (172.3 - 690 bar)

Actuator:
91 = Pilot Action, adjustable spring return

Single Unit Pressure Sensor
BAA-8302-914
Shown

High/Low Pressure Sensor 2 Valve Assembly

BA 3 - 8 2 1 2 - 8 2 1 2 - 44

BA: = B-316 Series, Hi/low
2 valve assembly

Manifold:
3 = 1/4" NPT Unit

Valve 1

Valve 2

Suffix: None = No options
-44 = Low temperature
-T40 = Low temperature
-43E = Panel mounting nut
-AB = Mounting bracket

8

Function:
2 = 2-way (valve plugged at factory)
8 = 3-way NC and NO (universal flow)

8

2

Plunger:
1 = NC function (for 2-way only)
2 = 3-way NC or NO, 2-way NO

2

1

Suffix:
1 = Stainless Spring, Stainless Adjusting Cap

1

2

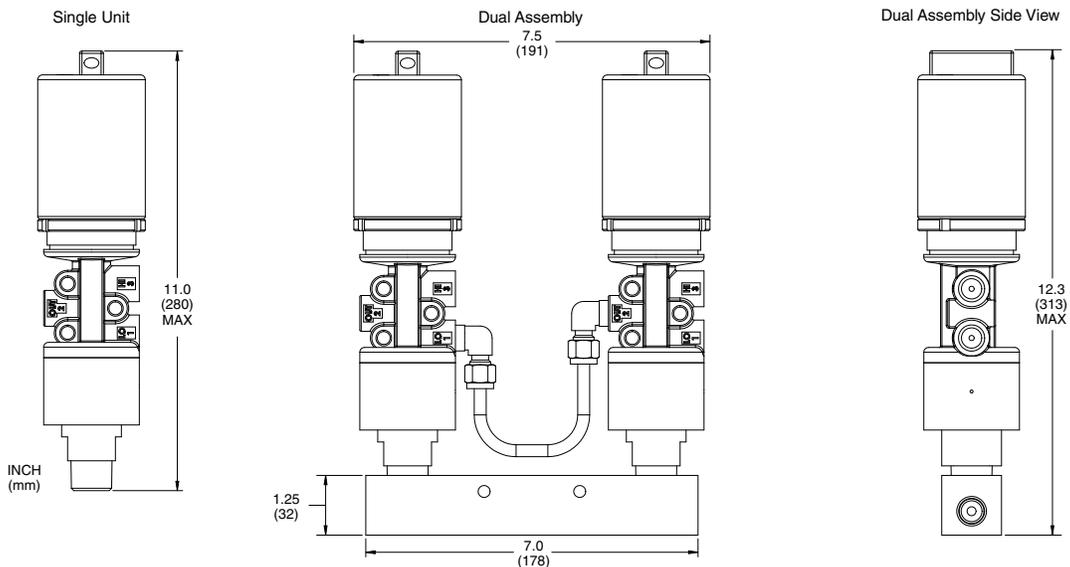
Sensor Pressure:
2 = 50 - 260 psi (3.4 - 18.0 bar)
3 = 200 - 1500 psi (13.8 - 103.4 bar)
4 = 1000 - 5000 psi (69.0 - 344.7 bar)
5 = 2500 - 10000 psi (172.3 - 690 bar)

2



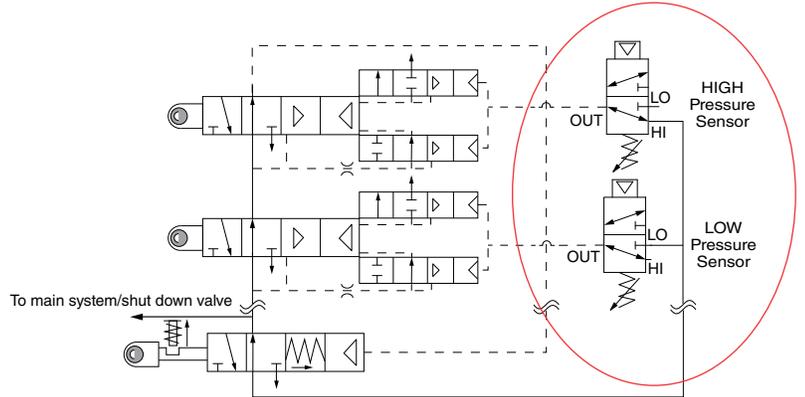
High/Low Pressure Sensor
2 Valve Assembly
BA3-8213-8214 Shown

Dimensions

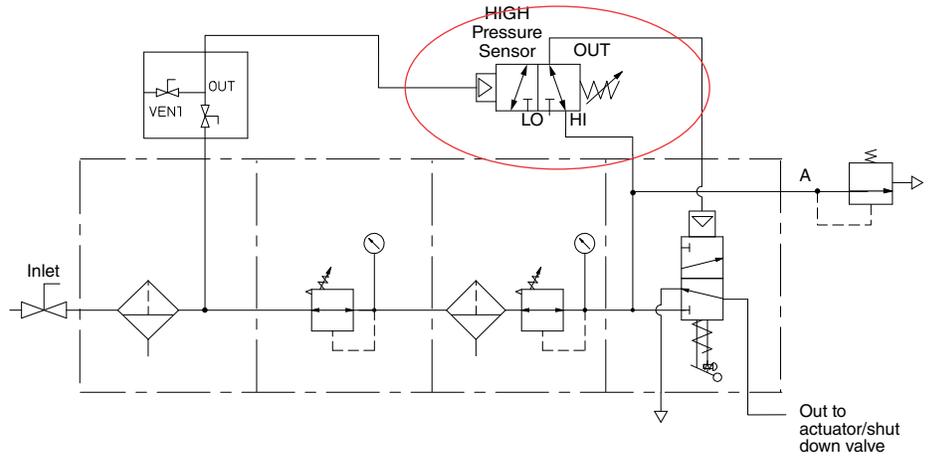


Applications

Well Head Control Typical First Out Indicator



Pipeline Control Over Pressure Protection



High-Low Trip System Manifold Assembly

