

Hydraulic Pressure Switch Valve

These valves are operated by pressure applied to the sense port, which acts on a piston against an adjustable spring force. Available in 2-way and 3-way configurations, they function as normally closed or normally open valves depending on the port to which instrument pressure is supplied.



ADDITIONAL IMAGES



Product Overview

High-Performance Pressure Switch Valves

These versatile pressure switch valves are designed for both hydraulic and pneumatic systems, utilizing a piston-based mechanism that opposes an adjustable spring force. Available in 2-way and 3-way configurations, they provide precise pressure monitoring with a repeatability of $\pm 1\%$. Constructed from 316 stainless steel, these valves ensure long-term durability and resistance even in challenging industrial environments.

Technical Specifications

MAX. Valve Pressure	150 psig (10.3 bar) for 3 way valves	Valve Part Wetted Material	316 & Buna N
MAX. Valve Pressure	6000 psig (414 bar) for 2 way valves	Sense Part Wetted Material	316, Buna N standard
Sense Pressure	10-10000psig (0.7-689bar)	Cv Factor (2-way valves)	0.12
Work Temperature	-40-250 °F(-40-120°C standard)	Cv Factor (3-way valves)	0.09

Dimensions in.(mm)

A 2(50.8)	D 7(177.8)	S 1.25(31.8)	Valve Sense Port	1/4 FNPT & 1/2 MNPT
B 4.31(109.5)	E 3.86(98)	H 11.5(292.1)MAX.	Assembly Sense Port	1/2 FNPT
C 3.86(98)	F 0.91(23)	P 1.78(45.2)	Valve Port	1/4 FNPT

Sense Pressure Ranges

Spring Code (Colour)	Piston Code & (Size)		
	1 (0.22 in. 5.6mm)	2(0.56 in. 14.3mm)	3(1.25in. 31.7mm)
Y(Yellow)	10000-6000psig(689-414 bar)	1500-750psig(103-51.7 bar)	x
R(Red)	6000-3000psig(414-207 bar)	900-400psig(62-27.8 bar)	200-80psig(13.8-5.5 bar)
G(Green)	3000-1500psig(207-103 bar)	450-200psig(27.6-13.8 bar)	100-30psig(6.9-2 bar)
P(Purple)	x	x	45-10psig(3.1- 0.7 bar)

Technical diagram detailing dimensions and pressure ratings.

Key Performance Metrics

1 %

Repeatability

5 %

Dead Band

250 °F

Max Temperature

Valve Pressure Ratings

Valve Type	Max Pressure (psig)	Max Pressure (bar)
3-way Valve	150	10.3
2-way Valve	6000	414

Flow Coefficients (Cv)

- 2-way Valve: 0.12
- 3-way Valve: 0.09

Materials

316 Stainless Steel, Buna N, NACE MR-0175 Compatible

Connection Details

Port Configuration

Port Type	Connection Size/Standard
Valve Sense Port	1/4 FNPT & 1/2 MNPT
Assembly Sense Port	1/2 FNPT
Valve Port	1/4 FNPT