

Pressure switch series VP

with pneumatic switch valve

Accuracy: $\pm 1\%$

Features

- Ambient temperature -20 ... 70 °C
- Suitable for hazardous area
- 5/2 way pneumatic valve
- Pneumatic operation pressure 2 ... 10 bar or 1 ... 3 bar
- Wetted parts available in several materials
- High proof pressure

Ranges

-37,5/+37,5 mbar up to 210 bar

-15/+15 in. H₂O up to 3000 psi

Applications

Chemical and petrochemical industry

Machine and apparatus construction

Food and beverage industry



Technical specification	VP series
Construction	Weatherproof
Switch functions	One setpoint, 5/2 way pneumatic valve (see schematic)
Adjustable range	From 15 % to 100 %, below 15 % consult factory
Deadband	From 0,5 % to 15 % F.S., depending on material, range and pneumatic valve
Measuring principle	Diaphragm-piston-cylinder-system
Range	25 75 150 250 375 -37,5/37,5 -75/75 1 2 4 7 14 28 42 70 140 210 -1/0 -1/1 -1/2 -1/4
Limits (pressure ranges)	mbar vacuum 1 to 4 bar 7 to 14 bar 28 to 42 bar 70 to 210 bar
Proof pressure [bar]	1,4 17 35 69 165 827
Burst pressure [bar]	2,4 28 103 207 207 1240
Pressure type	Gauge, vacuum and compound
Process connection	¼ NPT female, ½ NPT male/¼ NPT female (standard for ≥ 70 bar) ½ NPT female, G ½ B male, M20x1,5, others on request (metric connections with adapter)
Connection location	Lower
Material	
Pressure connection	Stainless steel 316 (1.4401), optional Monel For mbar ranges steel epoxy coated standard, stainless steel on request
Diaphragm	Buna N, Viton (max. 70 bar), Teflon, stainless steel 316 (1.4401) or Monel (stainless steel and Monel only from ≥ 1 bar to ≤ 70 bar)
Housing	Aluminum, epoxy coated, grey
Accuracy	1,0 % F.S.
Pneumatic specification	
Valve	Nominal size 2 mm (DN2)
Air supply	2 bar to 10 bar, nominal calibrated 3 bar, air to be dry and filtered 5 μ m, optional 1 bar to 3 bar
Pneumatic connection	Nipple DN2 for tube (brass), ¼ NPT female or ¼ NPT male, G ¼ B male or G ¼ female Located at the side of the housing
General specification	
Permissible	
Ambient temperature	-20 ... 70 °C
Medium temperature	Buna N and Teflon -18 ... 65 °C, Viton -7 ... 150 °C, stainless steel and Monel -18 ... 150 °C
Storage temperature	-40 ... 70 °C
Effect	Max. 0,4 % / 10 K ref. 20 °C
Protection according EN 60 529/IEC 529	IP65
Mounting	Standard stem, wall (BP) or 2" pipe mounting (TM)
Weight mbar/bar [kg]	1,9/1,5
Accessories, options	Diaphragm seals, valves, adapters, NACE

