

EXD PRESSURE SWITCH

Model PS-HP

The PS-HP is an adjustable Pressure Switch for use with BERMAD Deluge and control valves, to indicate a pre-determined pressure level. This Pressure Switch offers reliability, repeatability and durability in a compact design. It is suited for operation under the harsh conditions of Zone 1, II 2 G/D Ex d IIC T6 certified for hazardous locations and SIL 2 safety related systems. At the heart of the PS-HP is a snap action Diaphragm assembly, which transfers motion to one SPDT (Single-Pole Double-Throw) micro-switch. Suitable for use with water, air or nitrogen pressure sensing in harsh or hazardous environments as in chemical plants, refineries, gas and petroleum installations offshore and marine vessels.

Features

- Solid, Single Piece Construction
- Aluminum Epoxy Coated Enclosure
- Pre-Wired Integral Terminal Box
- Safety Vented Design
- Functional Safety Certified as per IEC 61508-2 for use in SIL 2 safety systems
- Convenient Field Adjustable Set-points Against a Reference Scale
- One SPDT (Single-Pole Double-Throw) micro-switch
- Welded Diaphragm
- IP66/NEMA 4x suitable for harsh environments

Approvals

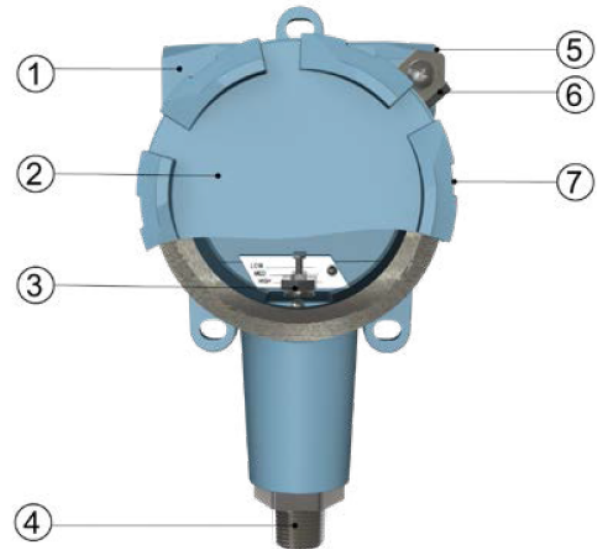
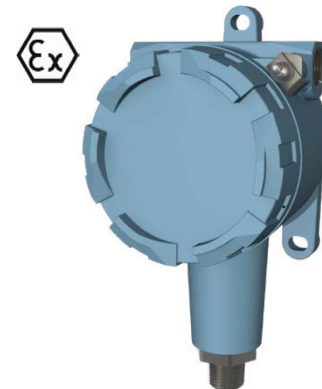
- ATEX directive 2014/34/EU II2DG Ex d IIC T6
- CE LVD- Low Voltage Directive 2014/35/EU
- Pressure Equipment Directive (PED) 97/23/EU
- IECEX Certified

Materials

- Wetted parts: Stainless Steel 316
- Housing: Aluminum Epoxy Coated
- Diaphragm: Stainless Steel 316

End Connections

- Pressure (sensor): ½" NPT (M)
- Electric Cable Entry Port: ½" NPT (F)



Part	Description
1	Body
2	Cover
3	Adjusting screw
4	Pressure sensing connection
5	Electric port entry
6	Grounding screw
7	Cover fixing screw

Pressure Setting & Range

Factory Set: 2.5 bar high, 2.2 bar low
 Adjustable range: 1.0 to 6.0 bar (15 to 85 psi)
 Dead band: 0.23 bar low (3.3 psi)
 Set point repeatability: ±1% of adjustable range
 Max. Working Pressure: 27 bar (390 psi)

Enclosures Class

ATEX ZONE 1 Classification II 2 G/D Ex d IIC T6 Certified
 IECEx FLAMEPROOF IEC60079-0/1/31
 NEMA 4x / IP66 Weatherproof

Electrical Ratings

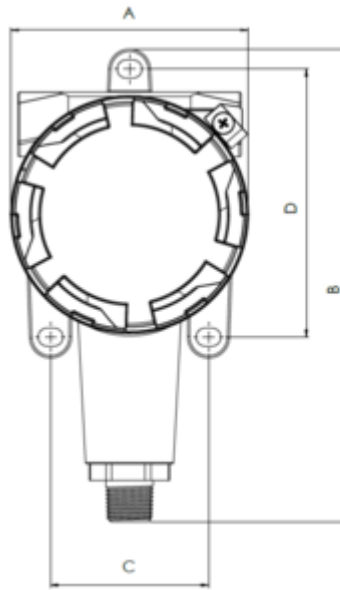
15A@125/250/480 VAC & 2A@30 VDC
 Silver contacts

Ambient Temperature

Storage and operation: -30°C to +60°C (-22°F to +140°F)

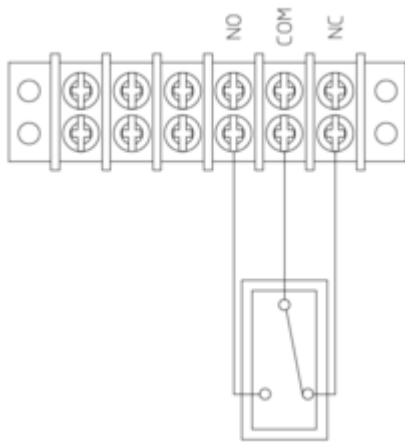
Weight

Aluminum Epoxy Coated Housing: 1.7kg / 3.7lbs



Dim	PS-HP	
	mm	inch
A	107	4.21
B	213	8.39
C	70	2.76
D	120	4.72
Depth	98	3.86

Electrical Wiring



Typical waterflow alarm
 (increasing system pressure)



Typical low pressure supervision
 (decreasing system pressure)