

prosense® PSD25 Series Pressure Switches

Features



- Compact pressure switch features simple setup using mechanical adjustment dials
- Extremely durable housing with 316 stainless steel process connection
- No moving parts ensure long-term stability without setpoint drift
- LEDs indicate switching and operating status
- Complementary switching outputs (N.O./N.C.), DC
- Easy set-up dials
- Vibration and shock-resistant

Agency Approvals

- cULus, File number E320431
- CE
- RoHS



ProSense Series Pressure Sensors

Part Number	Description	Pcs/Pkg	Wt(lb)	Price	Cable Assemblies
<u>PSD25-0P-0145H</u>	Pressure switch, DC, PNP NO/NC, 7.5 to 145 psig range, 1/4" NPT male port	1	0.21	\$114.00	CD12L-0B-020-A0 CD12L-0B-020-C0 CD12M-0B-070-A1 CD12M-0B-070-C1 (order separately - see Proximity Sensor section for cable specs)
<u>PSD25-0P-1450H</u>	Pressure switch, DC, PNP NO/NC, 75 to 1450 psig range, 1/4" NPT male port	1	0.21	\$107.00	
<u>PSD25-0P-5800H</u>	Pressure switch, DC, PNP NO/NC, 290 to 5800 psig range, 1/4" NPT male port	1	0.21	\$114.00	
Accessory					
<u>PSD-CV</u>	Transparent plastic protective cap for PSD series	1	0.01	\$3.75	PSD Series Sensors

Note: Check the chemical compatibility of the sensor's wetted parts with the medium to be measured.

ProSense PSD25 Series Technical Specifications

Operating Voltage	9.6 to 32 VDC
Connection Pin Material	Gold-plated
Output Maximum Load Current	500 mA - See Setting and Operation Guide on following page.
Current Consumption	< 25 mA
Switching Frequency	100 Hz
Setting Accuracy of Switch Points	< ± 2.5% of full range (limit point calibration)
Repeatability	< ± 0.5% of full range
Temperature Drift	< ± 0.5%, of full temperature range/10 K; 32 to 176°F (0 to 80°C).
Housing Material	PBT (Pocan); PC (Makrolon); FPM (Viton); stainless steel (316S12)
Materials (wetted parts)	Stainless steel (316S12)
Operating Temperature	-13 to 176°F (-25 to 80°C)
Medium Temperature	-13 to 176°F (-25 to 80°C)
Storage Temperature	-40 to 212°F (-40 to 100°C)
Protection	IP 67
Protection Class	Class III ⚡
Insulation Resistance	> 100 MΩ (500 VDC)
Shock Resistance	50g (DIN / IEC 68-2-27, 11ms)
Vibration Resistance	20g (DIN / IEC 68-2-6, 10 - 2000 Hz)
EMC	
EN 61000-4-2 ESD	4 kV/8 kV AD
EN 61000-4-3 HF Radiated	10 V/m
EN 61000-4-4 Burst	2 kV
EN 61000-4-6 HF Conducted	10 V

Applications (Type of Pressure: Relative Pressure, Liquids and Gases)

Part Number	Setpoint Scale	Resetpoint Scale	Permissible Overload Pressure	Bursting Pressure
	Bar (Psig)	Bar (Psig)	Bar (Psig)	Bar (Psig)
<u>PSD25-0P-5800H</u>	20 to 400 (290 to 5800)	12 to 392 (175 to 5685)	600 (8700)	1600 (23200)
<u>PSD25-0P-1450H</u>	5 to 100 (75 to 1450)	3 to 98 (50 to 1420)	200 (2900)	1000 (14500)
<u>PSD25-0P-0145H</u>	0.5 to 10 (7.5 to 145)	0.3 to 9.8 (5 to 142)	25 (362)	300 (4350)

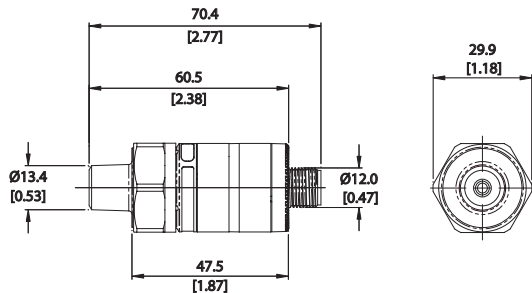
Note: Full vacuum permissible



Warning! Avoid static and dynamic overpressure exceeding the given overload pressure. Exceeding the bursting pressure for even a short time can cause destruction of the unit and possible injuries!

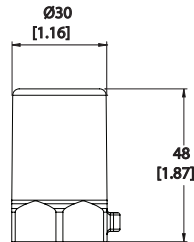
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Switch Dimensions



Note: tightening torque 25 Nm (18.4 lb-ft)

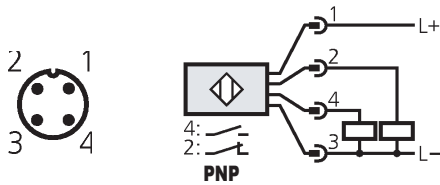
Switch Cover Dimensions



Dimensions shown mm [inches]

See our website www.AutomationDirect.com for complete Engineering drawings.

PSD25 Wiring Diagrams

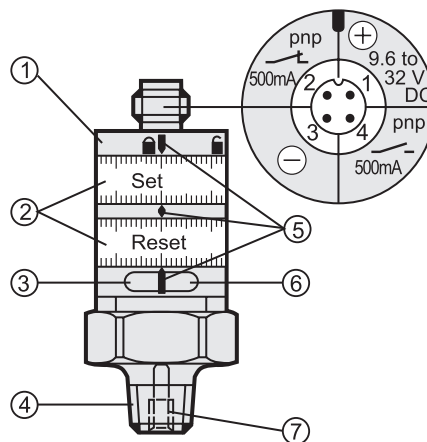


Cable Assembly Wiring Colors:

Pin 1 - Brown
Pin 2 - White
Pin 3 - Blue
Pin 4 - Black

Note: wiring colors are based on AutomationDirect CD12L and CD12M 4-pole cable assemblies.

Setting and Operation



- locking ring
 - setting rings (manually adjustable after unlocking)
 - LED green: supply voltage O. K.
 - process connection $\frac{1}{4}$ " NPT; tightening torque 25 Nm
 - setting marks
 - LED yellow: Set value reached, OUT1 = ON / OUT2 = OFF
 - internal thread M5
- Minimum distance between Set and Reset = 2% of the final value of the measuring range.
 - To obtain the setting accuracy: Set both rings to the minimum value, then set the requested values.