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**
PSD25-0P-0145H	Pressure switch, DC, PNP NO/NC, 7.5 to 145 psig range, 1/4" NPT male port	1	0.21	$127.00	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)
PSD25-0P-1450H	Pressure switch, DC, PNP NO/NC, 75 to 1450 psig range, 1/4" NPT male port	1	0.21	$120.00	
PSD25-0P-5800H	Pressure switch, DC, PNP NO/NC, 290 to 5800 psig range, 1/4" NPT male port	1	0.21	$127.00	
Accessory					
PSD-CV	Transparent plastic protective cap for PSD series	1	0.01	$4.25	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

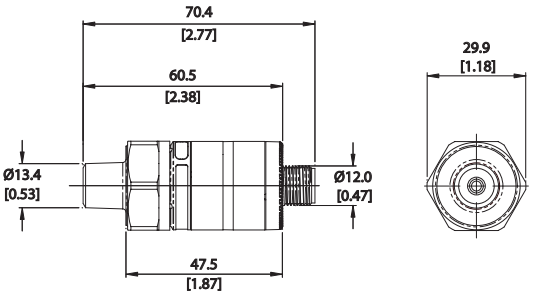
Applications (Type of Pressure: Relative Pressure, Liquids and Gases)				
Part Number	**Setpoint Scale**	**Resetpoint Scale**	**Permissible Overload Pressure**	**Bursting Pressure**
	Bar (Psig)	**Bar (Psig)**	**Bar (Psig)**	**Bar (Psig)**
PSD25-0P-5800H	20 to 400 (290 to 5800)	12 to 392(175 to 5685)	600 (8700)	1600 (23200)
PSD25-0P-1450H	5 to 100 (75 to1450)	3 to 98 (50 to 1420)	200 (2900)	1000 (14500)
PSD25-0P-0145H	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!

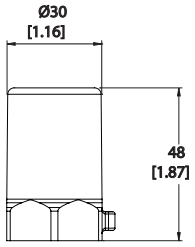
ProSense® PSD25 Series Pressure Switches

Switch Dimensions



Note: tightening torque 25 N·m (18.4 lb-ft)

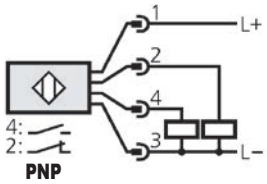
Switch Cover Dimensions



Dimensions shown mm [inches]

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

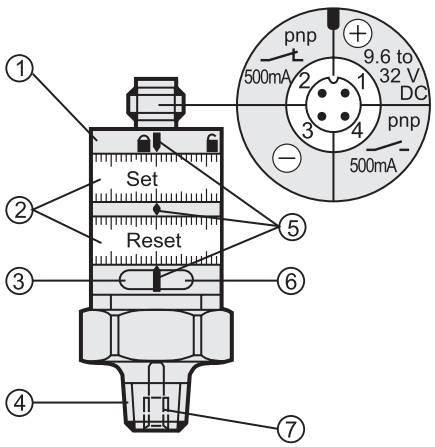
PSD25 Wiring Diagrams



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



1. locking ring
2. setting rings (manually adjustable after unlocking)
3. LED green: supply voltage O. K.
4. process connection ¼ " NPT; tightening torque 25 Nm
5. setting marks
6. LED yellow: Set value reached, OUT1 = ON / OUT2 = OFF
7. 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.