



# 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><b>PSD25-0P-0145H</b></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<br>CD12L-0B-020-C0<br>CD12M-0B-070-A1<br>CD12M-0B-070-C1<br>(order separately - see Proximity<br>Sensor section for cable specs) |
| <u><b>PSD25-0P-1450H</b></u> | Pressure switch, DC, PNP NO/NC, 75 to 1450 psig range, 1/4" NPT male port  | 1       | 0.21   | \$107.00 |                                                                                                                                                  |
| <u><b>PSD25-0P-5800H</b></u> | Pressure switch, DC, PNP NO/NC, 290 to 5800 psig range, 1/4" NPT male port | 1       | 0.21   | \$114.00 |                                                                                                                                                  |
| Accessory                    |                                                                            |         |        |          |                                                                                                                                                  |
| <u><b>PSD-CV</b></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

|                                          |                                                                    |
|------------------------------------------|--------------------------------------------------------------------|
| <b>Operating Voltage</b>                 | 9.6 to 32 VDC                                                      |
| <b>Connection Pin Material</b>           | Gold-plated                                                        |
| <b>Output Maximum Load Current</b>       | 500 mA - See Setting and Operation Guide on following page.        |
| <b>Current Consumption</b>               | < 25 mA                                                            |
| <b>Switching Frequency</b>               | 100 Hz                                                             |
| <b>Setting Accuracy of Switch Points</b> | < ± 2.5% of full range (limit point calibration)                   |
| <b>Repeatability</b>                     | < ± 0.5% of full range                                             |
| <b>Temperature Drift</b>                 | < ± 0.5%, of full temperature range/10 K; 32 to 176°F (0 to 80°C). |
| <b>Housing Material</b>                  | PBT (Pocan); PC (Makrolon); FPM (Viton); stainless steel (316S12)  |
| <b>Materials (wetted parts)</b>          | Stainless steel (316S12)                                           |
| <b>Operating Temperature</b>             | -13 to 176°F (-25 to 80°C)                                         |
| <b>Medium Temperature</b>                | -13 to 176°F (-25 to 80°C)                                         |
| <b>Storage Temperature</b>               | -40 to 212°F (-40 to 100°C)                                        |
| <b>Protection</b>                        | IP 67                                                              |
| <b>Protection Class</b>                  | Class III ⚡                                                        |
| <b>Insulation Resistance</b>             | > 100 MΩ (500 VDC)                                                 |
| <b>Shock Resistance</b>                  | 50g (DIN / IEC 68-2-27, 11ms)                                      |
| <b>Vibration Resistance</b>              | 20g (DIN / IEC 68-2-6, 10 - 2000 Hz)                               |
| <b>EMC</b>                               |                                                                    |
| <b>EN 61000-4-2 ESD</b>                  | 4 kV/8 kV AD                                                       |
| <b>EN 61000-4-3 HF Radiated</b>          | 10 V/m                                                             |
| <b>EN 61000-4-4 Burst</b>                | 2 kV                                                               |
| <b>EN 61000-4-6 HF Conducted</b>         | 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)        |
| <b>PSD25-0P-5800H</b> | 20 to 400 (290 to 5800) | 12 to 392 (175 to 5685) | 600 (8700)                    | 1600 (23200)      |
| <b>PSD25-0P-1450H</b> | 5 to 100 (75 to 1450)   | 3 to 98 (50 to 1420)    | 200 (2900)                    | 1000 (14500)      |
| <b>PSD25-0P-0145H</b> | 0.5 to 10 (7.5 to 145)  | 0.3 to 9.8 (5 to 142)   | 25 (362)                      | 300 (4350)        |

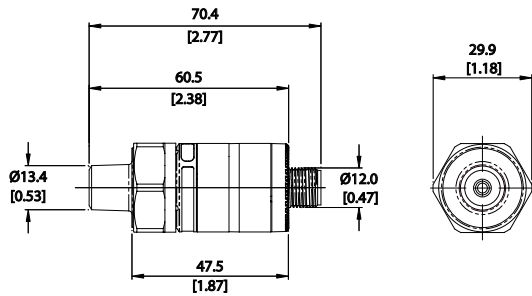
Note: Full vacuum permissible



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!

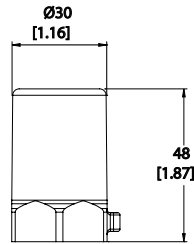
# prosense® PSD25 Series Pressure Switches

## Switch Dimensions



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

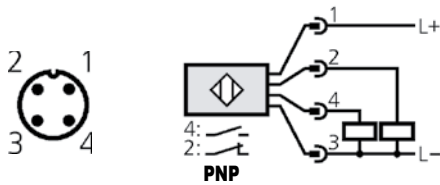
## Switch Cover Dimensions



Dimensions shown mm [inches]

See our website [www.AutomationDirect.com](http://www.AutomationDirect.com) for complete Engineering drawings.

## PSD25 Wiring Diagrams

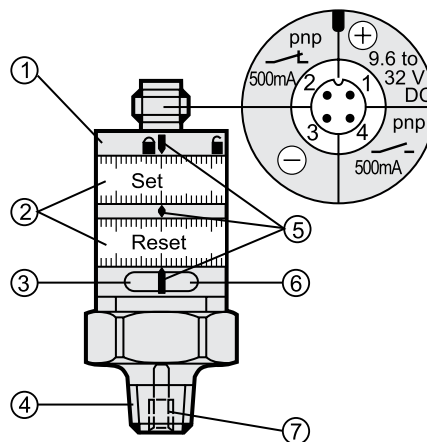


### Cable Assembly Wiring Colors:

- 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 1/4" 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.