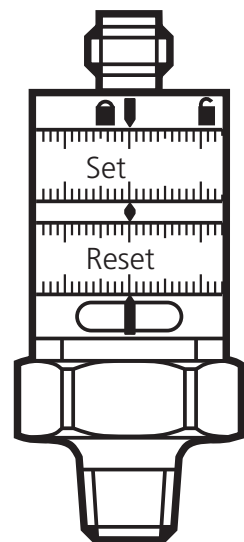




Installation Instructions
Electronic pressure sensor

PSD25-0P-xxxxH

704444 / 00 02 / 2009



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Safety instructions

Please read the product description prior to installing the unit. Please check that the product is suitable for your application without any restrictions.

If the operating instructions or the technical data are not adhered to, personal injury and/or damage to property may occur.

Please check in all applications that the product materials (see Technical data) are compatible with the media to be measured.

Function and features

The pressure monitor detects the system pressure and switches the two complementary outputs OUT1 (pin 4) / OUT2 (pin 2):

- In case of increasing pressure OUT1 closes / OUT2 opens when the set Set value is reached.
- In case of decreasing pressure OUT1 opens / OUT2 closes when the set Reset value is reached.

Applications (type of pressure: relative pressure)

Order no.	Setpoint Scale		Resetpoint Scale		Permissible overload pressure		Bursting pressure	
	bar	PSI	bar	PSI	bar	PSI	bar	PSI
PSD25-0P-5800H	20 to 4000	290 to 5800	12 to 392	175 to 5685	600	8700	1600	23200
PSD25-0P-1450H	5 to 100	75 to 1450	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



Avoid static and dynamic overpressure exceeding the given over-load pressure.

Even if the bursting pressure is exceeded only for a short time the unit can be destroyed (danger of injuries)!

Installation



Before mounting and removing the sensor, make sure that no pressure is applied to the system.

Mount the pressure sensor on a suitable process connection (see type label “Port Size”). Tightening torque 25 Nm.

Electrical connection



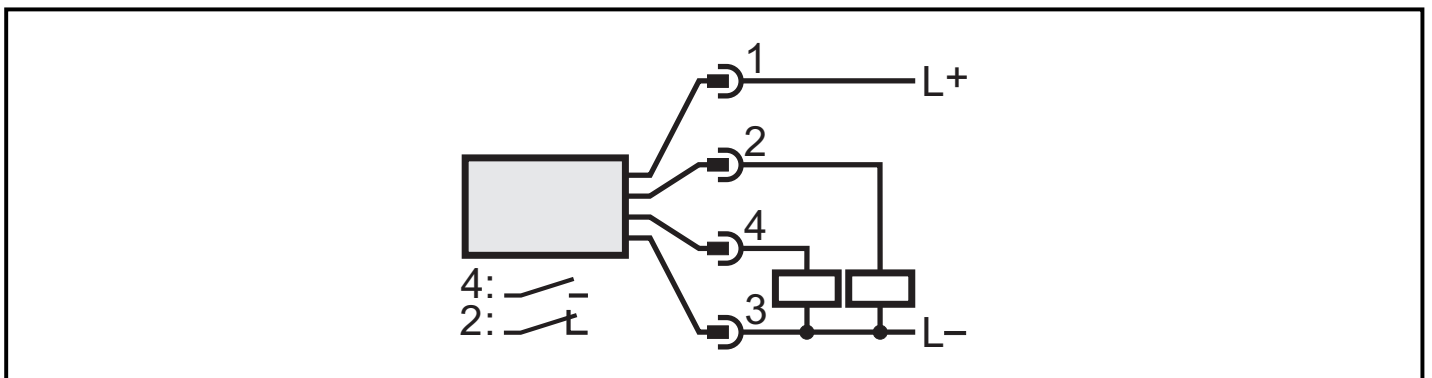
The unit must only be connected by an electrician.

The national and international regulations for the installation of electrical equipment must be observed.

Voltage supply to EN50178, SELV, PELV.

The device shall be supplied from an isolating source and protected by an overcurrent device in accordance with UL 248 such that the limited voltage/current circuit requirements in accordance with UL 508 are met.

Disconnect power before connecting the unit as follows:



Cable Assembly Wiring Colors:

Pin 1 - Brown

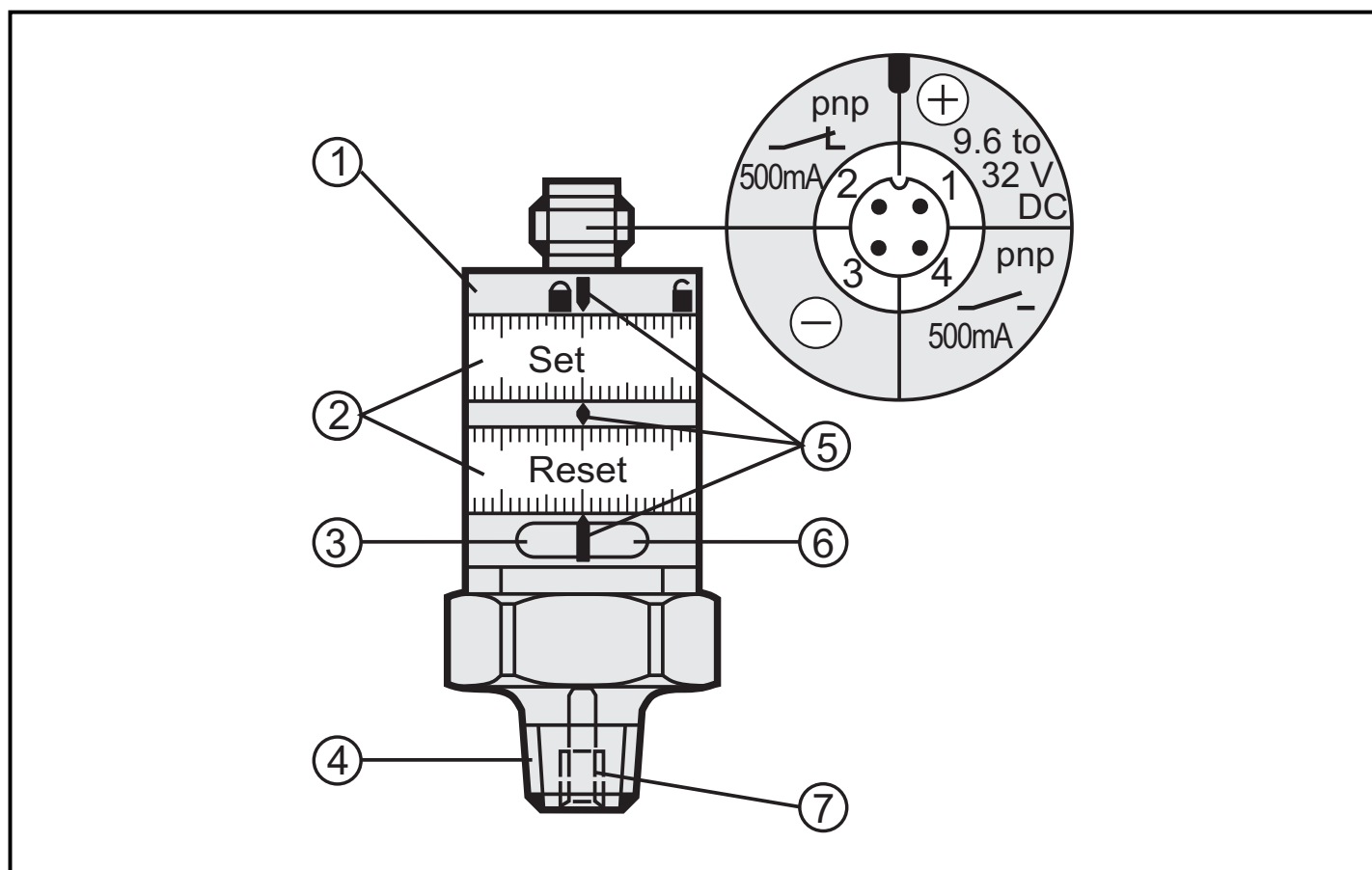
Pin 2 - White

Pin 3 - Blue

Pin 4 - Black

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

Setting / Operation



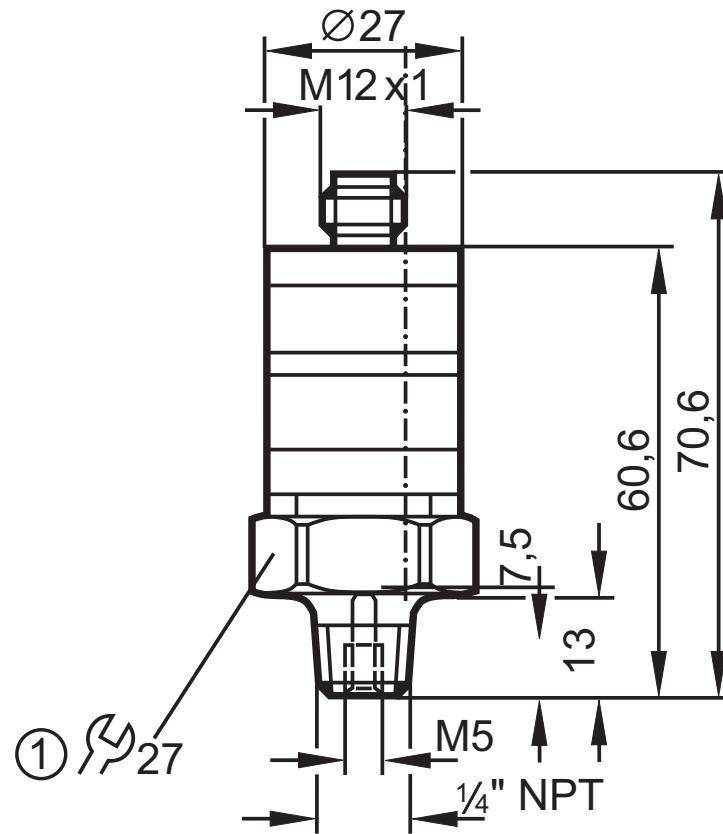
1. locking ring
 2. setting rings (manually adjustable after unlocking)
 3. LED green: supply voltage O. K.
 4. process connection $\frac{1}{4}$ " NPT; tightening torque 25 Nm
 5. setting marks
 6. LED yellow: Set value reached, OUT1 = ON / OUT2 = OFF
 7. internal thread M5
- Minimum distance between 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.

Technical data

Operating voltage [V].....	9.6 to 32 DC
Current rating [mA].....	500
Current consumption [mA].....	< 25
Switching frequency [Hz].....	100
Setting accuracy [% of the end value of the measuring range].....	< ± 2.5 / BFSL: 1.5
Repeatability [% of the end value of the measuring range].....	< ± 0.5
Temperature drift [% of the end value of the measuring range/10 °C].....	< ± 0.5
in the temperature range [°C].....	0 to +80
Housing material.....	PBT (Pocan); PC (Makrolon); FPM (Viton); stainless steel (316S12)
Materials (wetted parts).....	stainless steel (316S12)
Operating temperature [°C].....	-25 to +80
Medium temperature [°C].....	-25 to +80
Storage temperature [°C].....	-40 to +100
Protection.....	IP 67
Protection class.....	III
Insulation resistance [MΩ].....	> 100 (500 V DC)
Shock resistance [g].....	50 (DIN / IEC 68-2-27, 11ms)
Vibration resistance [g].....	20 (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:.....	30 V/m
EN 61000-4-4 Burst:.....	2 KV
EN 61000-4-6 HF conducted:.....	10 V

BFSL = Best Fit Straight Line

Scale drawing



Dimensions are in millimeters (25.4 mm= 1 inch)

1: process connection 1/4 NPT, tightening torque 25 Nm

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