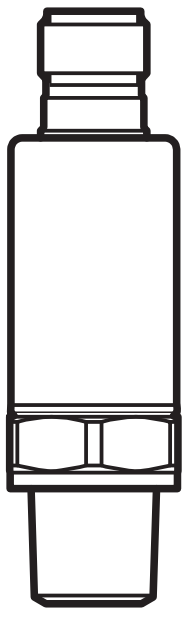
prosense®

CE

Operating instructions
Electronic pressure transmitter

SPTD25-20



by Automationdirect.com

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Contents

1 Preliminary note

Symbols used

▶ Instructions

→ Cross-reference

Important note
Non-compliance can result in malfunction or interference.

Information
Supplementary note.

2 Safety instructions

- Please read this document prior to set-up of the unit. Ensure 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 can occur.
- Improper or non-intended use may lead to malfunctions of the unit or to unwanted effects in your application. That is why installation, electrical connection, set-up, operation and maintenance of the unit must be carried out by qualified personnel authorised by the machine operator.
- In order to guarantee the correct condition of the unit for the operating time it is necessary to use the unit only for media to which the wetted materials are sufficiently resistant (→ Technical data).

- The responsibility whether the measurement units are suitable for the respective application lies with the operator. The manufacturer assumes no liability for consequences of misuse by the operator. Improper installation and use of the units result in a loss of the warranty claims.

3 Functions and features

The pressure sensor detects the system pressure and converts it into an analog output signal.

3.1 Applications

- Type of pressure: gauge pressure

Order number	Final value of the measuring range (nominal pressure)	Static proof pressure resistance (max. permissible pressure)	Bursting pressure
	psig	psig	psig
SPTD25-20-0100H	100	250	2900
SPTD25-20-0200H	200	580	6525
SPTD25-20-0300H	300	940	8700
SPTD25-20-0500H	500	1450	11600
SPTD25-20-1000H	1000	2500	13050
SPTD25-20-3000H	3000	7250	14500
SPTD25-20-5000H	5000	14500	24650

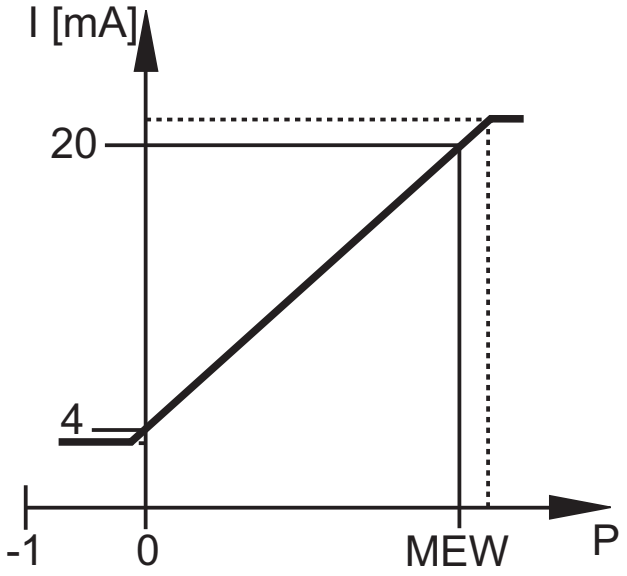
Avoid overload pressure exceeding the proof pressure (specified maximum permissible pressure) by taking appropriate measures.
The indicated bursting pressure must not be exceeded.
Even if the bursting pressure is exceeded only for a short time, the unit may be destroyed.
ATTENTION: Risk of injury!

Pressure Equipment Directive (PED):
The units comply with the Pressure Equipment Directive and are designed and manufactured for group 2 fluids (Non-Hazardous, Nonflammable, Non-Oxidizing) in accordance with the sound engineering practice.

The units are vacuum resistant (-14.5 psi).

4 Functions

Current output 4...20 mA



P = system pressure, MEW = final value of the measuring range

In the measuring range the output signal is between 4 and 20 mA.
If the system pressure is above or below the measuring range, the analog output behaves, without achieving the accuracy, as follows:

- System pressure above the measuring range: 20...25 mA.
- System pressure below the measuring range: 4...3 mA.

5 Installation

Before installing and removing the unit: make sure that no pressure is applied to the system.

▶ Insert the unit in a ¼-18 NPT process connection.

▶ Liquid or paste type thread sealer is not recommend.
If thread sealer is required use a tape type that is compatible with the media.

6 Electrical connection

The unit must be connected by a qualified electrician.
The national and international regulations for the installation of electrical equipment must be adhered to.
Voltage supply to EN 50178, SELV, PELV.

For the scope of validity cULus:

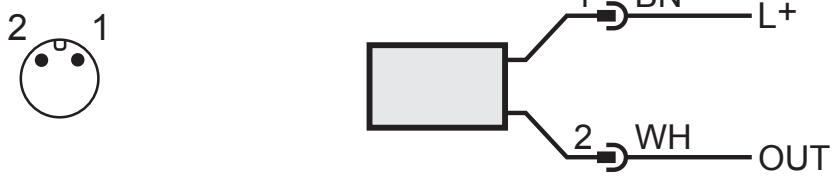
The device shall be supplied from an isolating transformer having a secondary Listed fuse rated either
a) max 5 amps for voltages 0~20 Vrms (0~28.3 Vp) or
b) 100/Vp for voltages of 20~30 Vrms (28.3~42.4 Vp).

The Sensor shall be connected only by using any R/C (CYJV2) cord, having suitable ratings.

▶ Disconnect power.

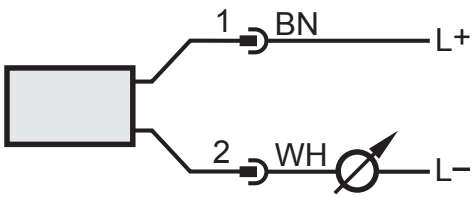
▶ Connect the unit as follows:

Wire colors	
BN	brown
WH	white



OUT: analog output 4...20 mA
Colors to DIN EN 60947-5-2

Example circuit



7 Technical data and scale drawing

Further technical data and scale drawing at www.automationdirect.com .