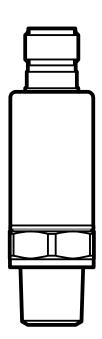


Installation instructions Electronic pressure sensor for industrial applications

PT24xx





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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 analogue output signal.

3.1 Applications

Type of pressure: relative pressure

Order number	Final value of the measuring range (nominal pressure)	Static pressure resistance (max. permissible pressure)	Bursting pressure
	psi	psi	psi
PT2415	100	250	2900
PT2424	200	580	6525
PT2434	300	940	8700
PT2443	500	1450	11600
PT2402	1000	2500	13050
PT2432	3000	7250	14500
PT2400	5000	14500	24650

Avoid overload pressure exceeding the 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!

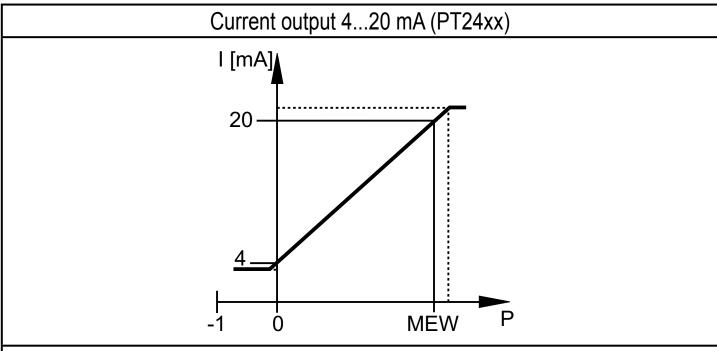
Pressure Equipment Directive (PED):

The units comply with the Pressure Equipment Directive and are designed and manufactured for group 2 fluids in accordance with the sound engineering practice.

Use of group 1 fluids on request!

The units are vacuum resistant.

4 Functions



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 analogue 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 1⁄4-18 NPT process connection.
- ➤ Tighten firmly. Recommended tightening torque: max. 50 Nm. Depends on lubrication, seal and pressure load!

6 Electrical connection

The unit must be connected by a qualified electrician.

The national and international regulations for the installant.

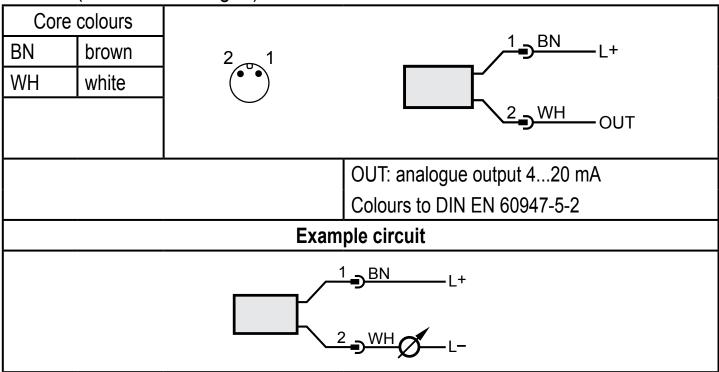
The national and international regulations for the installation of electrical equipment must be adhered to.

Voltage supply to EN 50178, SELV, PELV.

For marine applications (if approval available for the device), additional surge protection is required.

- ▶ Disconnect power.
- ► Connect the unit as follows:

PT24xx (4...20 mA analogue)



7 Technical data and scale drawing

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

More information at www.ifm.com