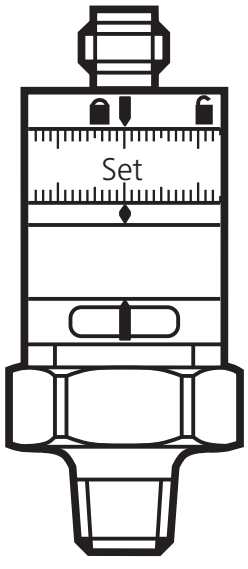
ifm electronic

Installation instructions
Electronic pressure sensor

efectorsoo®

PK57xx

UK



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1 Safety instructions

- 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 only be carried out by qualified personnel authorised by the machine operator.
- In order to guarantee the correct condition of the device for the operating time it is necessary to use the device only for media to which the wetted materials are sufficiently resistant (→ Technical data).
- The responsibility whether the measurement devices 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 devices result in a loss of the warranty claims.

2 Functions and features

The pressure sensor detects the system pressure and switches the output OUT (pin 4):

- In case of increasing pressure, OUT closes when the set Set value is reached.
- In case of falling pressure OUT opens when the Set value less the fixed hysteresis is reached.
- The hysteresis is fixed to 2 % of the final value of the measuring range.

Application

Type of pressure: relative pressure

Order number	Measuring range		Pressure resistance (max. permissible pressure)		Bursting pressure	
	bar	MPa	bar	MPa	bar	MPa
PK5722	0...100	0...10	200	20	1000	100
PK5723	0...25	0...2,5	60	6	500	50

Avoid static and dynamic overpressure exceeding the specified max. 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!

3 Installation

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

▶ Insert the unit in a R¼ process connection.

▶ Tighten firmly.

Recommended tightening torque: 25 Nm
Depends on lubrication, seal and pressure load!

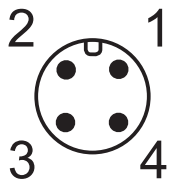
4 Electrical connection

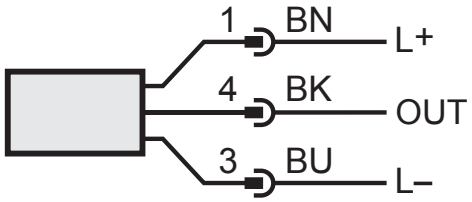
The unit must be connected by a qualified electrician.
The national and international regulations for the installation of electrical equipment must be adhered to.
Voltage supply to EN 50178, SELV, PELV.

▶ Disconnect power.

▶ Connect the unit as follows:

Core colours	
BK	black
BN	brown
BU	blue

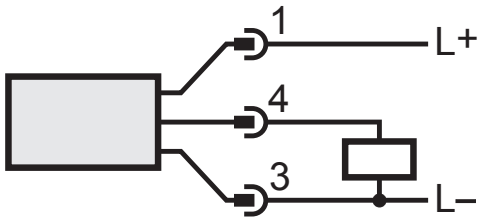




OUT: switching output
Colours to DIN EN 60947-5-2

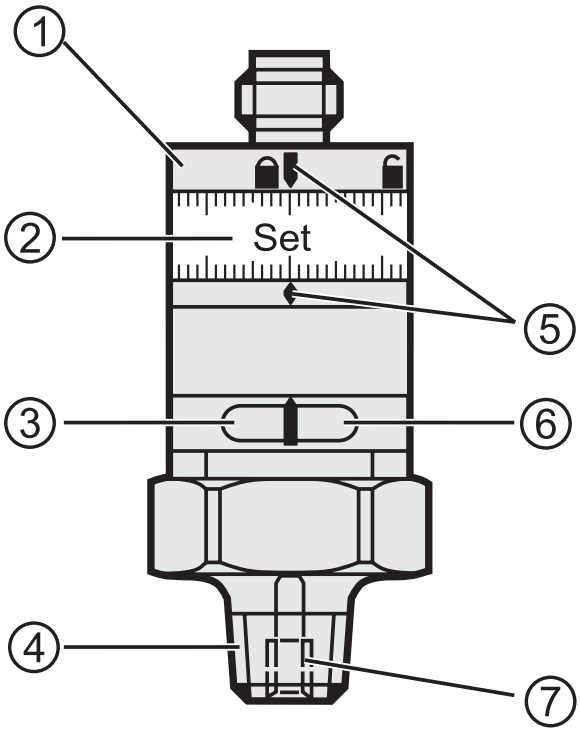
Example circuit

positive switching



4: OUT= normally open

5 Setting / operation



UK

1: locking ring
2: setting rings (manually adjustable after unlocking)
3: LED green: operating voltage ok
4: process connection R¼ male
5: setting marks
6: LED yellow: Set value reached, OUT = ON
7: internal M5 thread

- To achieve the setting accuracy:
  - ▶ First position the ring to the lower end stop value.
  - ▶ Then set the requested value.

6 Technical data

Technical data and scale drawing at www.ifm.com → New search → Enter the article number.