

ifm electronic



Installation Instructions
Electronic pressure sensor

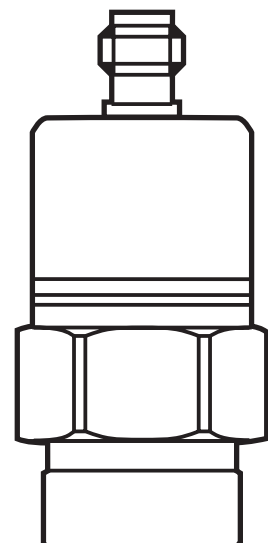
efector500[®]

PX9020

PX9060

UK

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1 Safety instructions

- Please read the product description prior to installing 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 may occur.
- Please check for all applications that the product materials (see Technical data) are compatible with the media to be measured.
- For gaseous media the application is limited to max. 25 bar.

2 Function and features

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

- 0.5...4.5 V

2.1 Applications

- Type of pressure: relative pressure

Order no.	Measuring range	Permissible overload pressure	Bursting pressure
	bar	bar	bar
PX9020	0...400	600	1000
PX9060	0...600	800	1200



Static and dynamic overpressures exceeding the indicated overload pressure are to be avoided 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 can be destroyed.

NOTE: Risk of injury!

3 Installation



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

- ▶ Insert the unit in a G $\frac{1}{4}$ process connection.
- ▶ Tighten firmly.

4 Electrical connection

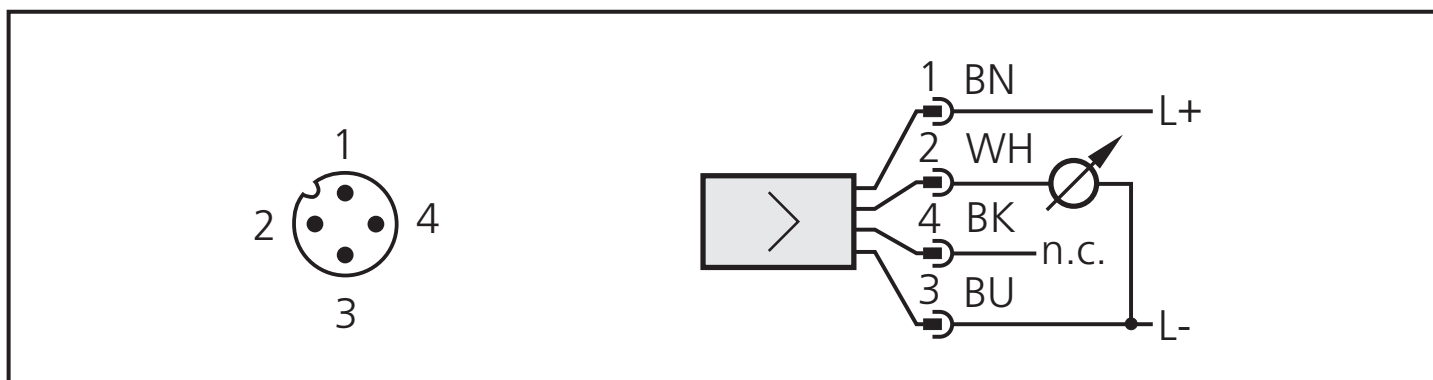


The unit must only be connected by an electrician.

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

Voltage supply to EN50178, SELV, PELV.

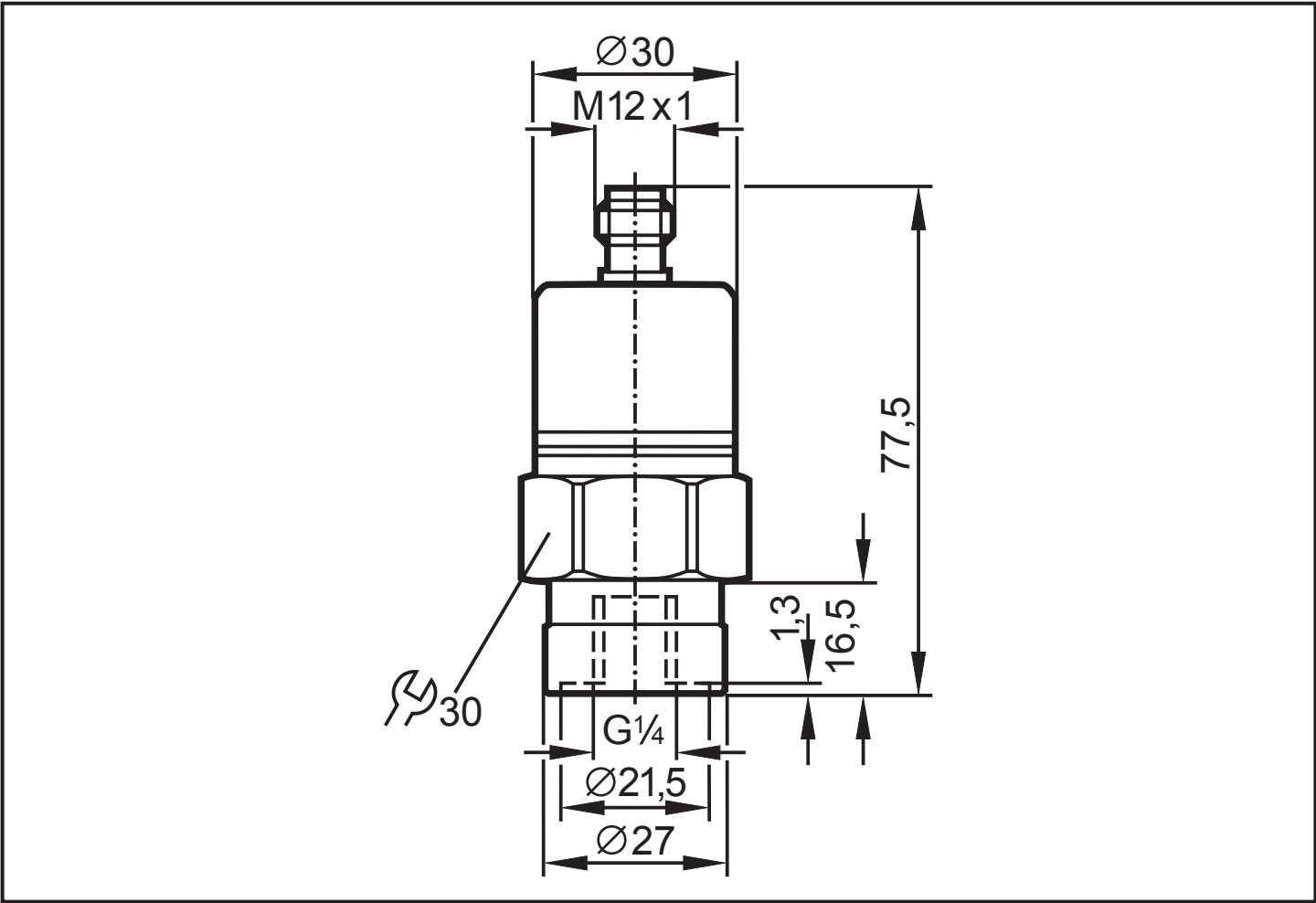
- ▶ Disconnect power.
- ▶ Connect the unit as follows:



Core colours of ifm sockets:

1 = BN (brown), 2 = WH (white), 3 = BU (blue), 4 = BK (black),
n.c. = not connected.

5 Scale drawing



Dimensions are in millimeters

6 Technical data

Operating voltage [V].....	10 ... 30 DC
Current consumption [mA].....	< 18
Analogue output	0.5...4.5 V
Load [Ω].....	min. 2000
Step response time analogue output [ms].....	3
Characteristics deviation [%]	< ± 0.25 (BFSL) / < ± 0.5 (LS)
Repeatability [%].....	< 0.1
Long-term stability [% of value of measuring range / 6 months].....	< ± 0.05
Temperature coefficients (TEMPCO) in the compensated temperature range 0 ... 80°C (in% of the span/10K)	
- greatest TEMPCO of the zero point	0.4
- greatest TEMPCO of the span	0.4
Housing material.....	stainless steel (316S12); FPM (Viton); PA; EPDM/X (Santoprene)
Materials (wetted parts).....	stainless steel (303S22); ceramics; sealing: FPM (Viton); according to DIN 3869-14
Operating temperature [°C]	-25 ... +80
Medium temperature [°C]	-25 ... +90
Storage temperature [°C].....	-40 ... +100
Protection	IP 68 IP 69K
Protection class	III
Insulation resistance [$M\Omega$]	> 100 (500 V DC)
Shock resistance [g]	50 (DIN / IEC 68-2-27, 11 ms)
Vibration resistance [g]	20 (DIN / IEC 68-2-6, 10 - 2000 Hz)
EMC	
EN 61000-4-2 ESD:.....	4 kV CD / 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 / LS = Limit Value Setting

UK