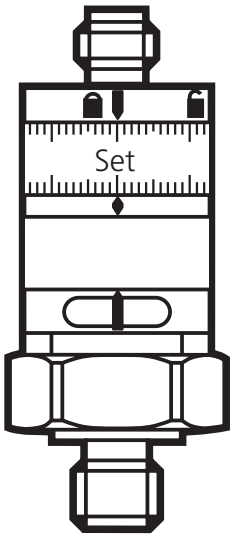
ifm electronic

Installation Instructions
Electronic pressure monitor
efectorsoo

PK55xx

UK



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1 Safety instructions

- Read the product description before installing the unit. Ensure that the product is suitable for your application without any restrictions.
- Non-adherence to the operating instructions or technical data can lead to personal injury and/or damage to property.
- In all applications check compliance of the product materials (→ 6 Technical data) with the media to be measured.

For units with cULus approval and 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).

2 Function and features

The pressure monitor detects the system pressure and generates 1 output signal.

- In case of increasing pressure the output closes when the Set1 value is reached.
- In case of decreasing pressure the output opens when the value „Set1 minus hysteresis“ is reached.

The hysteresis is fixed (2% of value of measuring range).

Applications

Type of pressure: relative pressure

Order no.	Measuring range		Permissible overload pressure		Bursting pressure	
	bar	PSI	bar	PSI	bar	PSI
PK5520	0...400	0...5 800	600	8 700	1 600	23 200
PK5521	0...250	0...3 625	400	5 800	1 000	14 500
PK5522	0...100	0...1 450	200	2 900	1 000	14 500
PK5523	0...25	0...363	60	870	500	7 253
PK5524	0...10	0...145	25	362	300	4 350

Avoid static and dynamic overpressure exceeding the given overload pressure.
Even if the bursting pressure is exceeded only for a short time the unit can be destroyed (danger of injuries)!

3 Installation

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

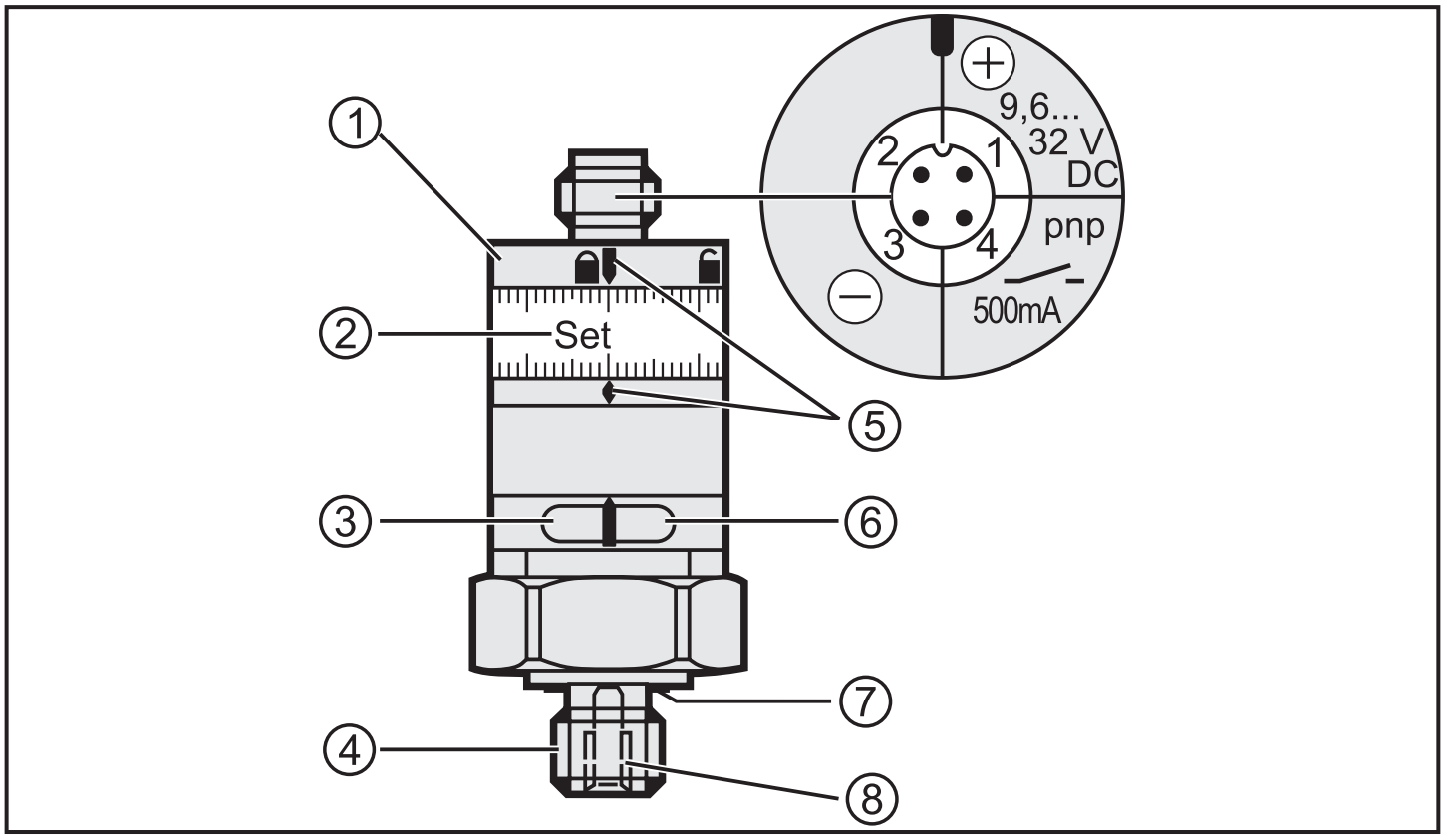
4 Electrical connection

The unit must be connected by a suitably qualified electrician.
The national and international regulations for the installation of electrical equipment must be observed.
Voltage supply to EN50178, SELV, PELV.

▶ Disconnect power before connecting the unit.

UK

5 Setting / Operation



1: locking ring
2: setting ring (manually adjustable after unlocking)
3: green LED: supply voltage O.K.
4: process connection G¼ A; tightening torque 25 Nm
5: setting marks
6: yellow LED: Set1 value reached, output = ON
7: sealing FPM / DIN 3869-14
8: internal thread M5

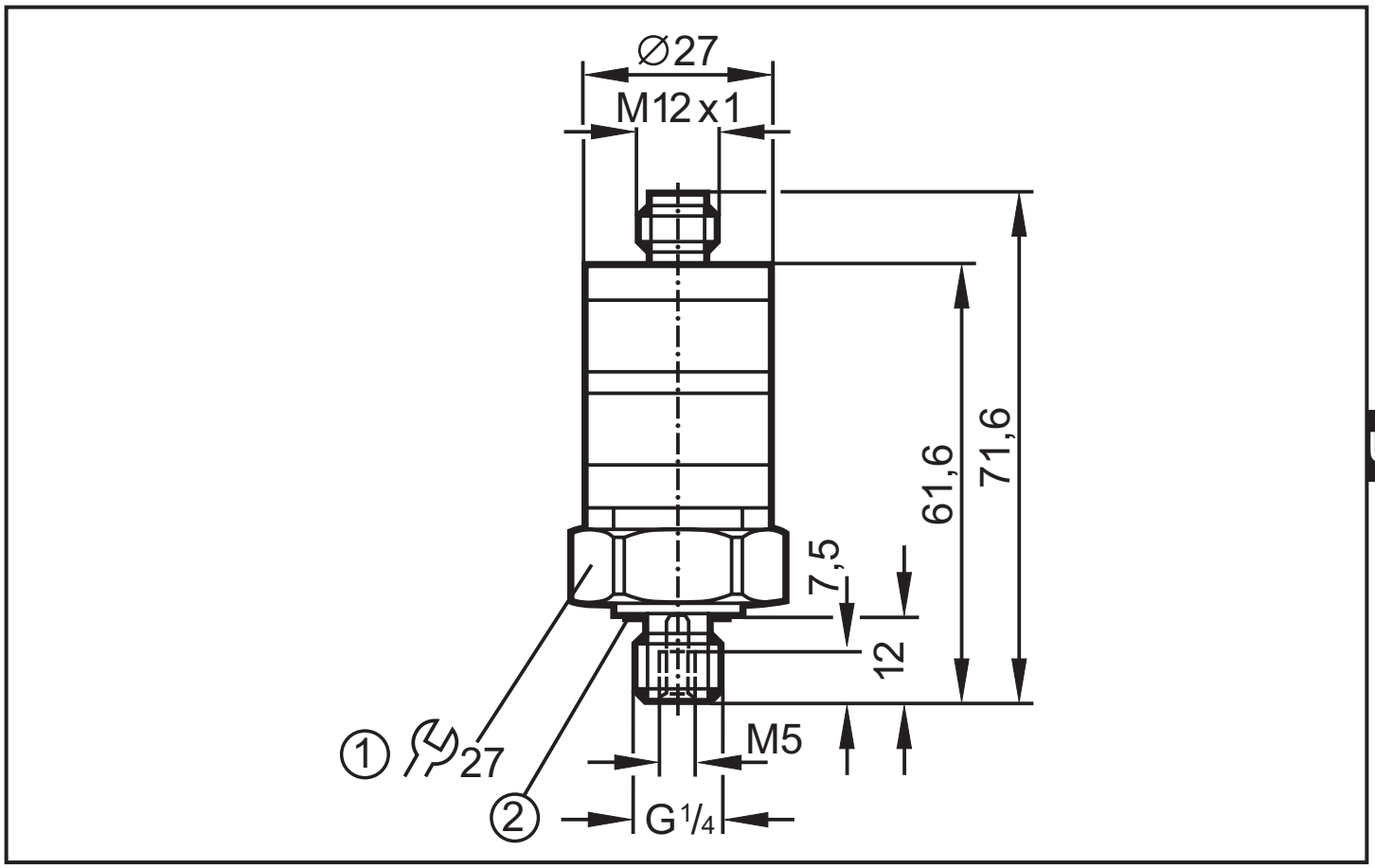
- To obtain the setting accuracy: Set the ring to the minimum value, then set the requested value.

6 Technical data

Operating voltage [V]	9.6...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
Characteristics deviation [% of the end value of the measuring range]	< ± 1.5 (BFSL) / < ± 2.5 (LS)
Repeatability [% of the end value of the measuring range]	< ± 0.5
Temperature drift [% of the end value of the measuring range/10 K]	< ± 0.5
in the temperature range [°C]	0...80
Operating temperatur [°C]	-25...80
Medium temperature [°C]	-25...80
Protection	IP 67 / 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)
Housing material	Pocan; PC (Macrolon); FPM (Viton); stainless steel (316S12)
Materials (wetted parts)	stainless steel (316S12); seal: FPM (Viton)
EMC EN 61000-4-2 ESD:	4 / 8 KV
EN 61000-4-3 HF radiated:	10 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

7 Scale drawing



Dimensions are in millimeters (25.4 mm = 1 inch)
1: tightening torque 25 Nm
2: sealing FPM / DIN 3869-14