



Installation instructions
Electronic pressure sensor
PC90xx

UK

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1 Preliminary note

1.1 Symbols used

▶ Instruction

> Reaction, result

[...] Designation of keys, buttons or indications

→ Cross-reference



Important note

Non-compliance may result in malfunction or interference



Information

Supplementary note

2 Safety instructions

- The device described is a subcomponent for integration into a system.
 - The manufacturer is responsible for the safety of the system.
 - The system manufacturer undertakes to perform a risk assessment and to create documentation in accordance with legal and normative requirements to be provided to the operator and user of the system. This documentation must contain all necessary information and safety instructions for the operator, the user and, if applicable, for any service personnel authorised by the manufacturer of the system.

- Read this document before setting up the product and keep it during the entire service life.
- The product must be suitable for the corresponding applications and environmental conditions without any restrictions.
- Only use the product for its intended purpose (→ Functions and features).
- Only use the product for permissible media (→ Technical data).
- If the operating instructions or the technical data are not adhered to, personal injury and/or damage to property may occur.
- The manufacturer assumes no liability or warranty for any consequences caused by tampering with the product or incorrect use by the operator.
- Installation, electrical connection, set-up, programming, configuration, operation and maintenance of the product must be carried out by personnel qualified and authorised for the respective activity.
- Protect units and cables against damage.

3 Functions and features

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

4 Einsatzbereich

Type of pressure: relative pressure

Order no.	Measuring range		Permissible overload pressure ^{*)}		Bursting pressure	
	bar	PSI	bar	PSI	bar	PSI
PC9050	0...400	0...5800	600	8700	1600	23200
PC9010	0...345	0...5000	600	8700	1600	23200
PC9023	0...44,8	0...650	200	2900	1000	1450
PC9014	0...20,7	0...300	60	870	600	8702

^{*)} With static overload pressure or max. 100 million pressure cycles.

MPa = (measured value in bar) ÷ 10

kPa = (measured value in bar) x 100



Avoid static and dynamic overpressure exceeding the specified overload 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. NOTE: 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!

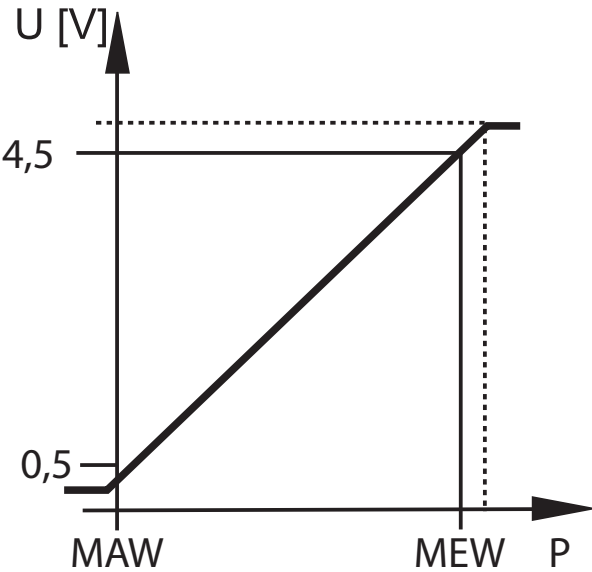
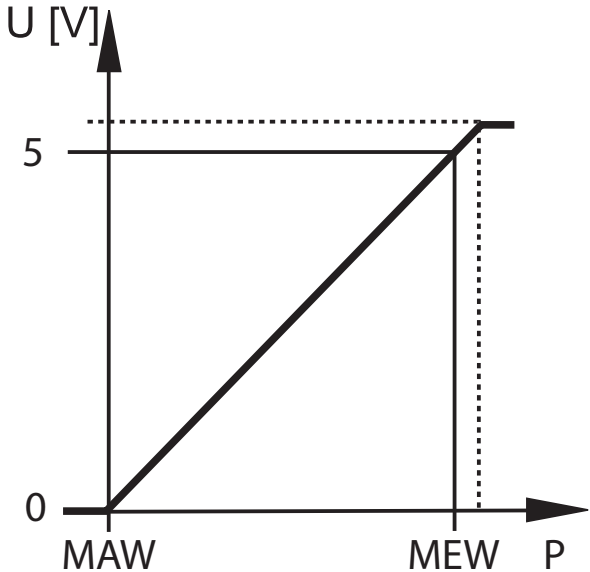


If the cable length exceeds 30 m or if used outside buildings, there is a risk of overvoltage pulses from external sources. We recommend to use the unit in protected operating environments and to limit overvoltage pulses to max. 500 V.



The units are vacuum resistant.

5 Function

Voltage output 0.5...4.5 V	Voltage output 0...5 V
	
<p>P = system pressure</p>	
<p>MAW = initial value of the measuring range</p>	
<p>MEW = final value of the measuring range</p>	
<p>In the measuring range the output signal is between 0.5 and 4.5 V (PC9010 = 0 and 5V).</p>	

6 Installation



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

- ▶ Insert the unit in a process connection.
- ▶ Tighten firmly. Recommended tightening torque: 25 Nm.
Depends on the sealing type, the pressure load and the lubrication!

7 Electrical connection



The device must be connected by a qualified electrician.

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

Voltage supply according to EN 50178, SELV, PELV.

- ▶ Disconnect power.

Connect the device as follows:

Core colours			
BN	black		
WH	white		
BU	blue		
			OUT: analogue output 0.5...4.5 V (PC9010 = 0...5V)
			Colours to DIN EN 60947-5-2
Example circuits			

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More information at www.ifm.com