

Installation Instructions Electronic pressure sensor

### efectorsod PA30xx / PA90xx

CE



# 1 Symbols used

Instruction



Important note

Non-compliance can result in malfunction or interference.



Information

Supplementary note.

# 2 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.
- Use in gases at pressures > 25 bar only after contacting the manufacturer ifm.

# **3** Function and features

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

• 4 ... 20 mA (PA30xx) / 0 ... 10 V (PA90xx)

#### 3.1 Applications

• Type of pressure: relative pressure

Order no.	Measuring range		Permissible overload pressure		Bursting pressure	
	bar	PSI	bar	PSI	bar	PSI
PAxx20	0400	05 800	600	8 700	1 000	14 500
PAxx21*	0250	03 625	400	5 800	850	12 300
PAxx22	0100	01 450	300	4 350	650	9 400
PAxx23	025	0363	150	2 175	350	5 075
PAxx24	010	0145	75	1 087	150	2 175
PAxx26	02.5	036.3	20	290	50	725

 $MPa = bar \div 10 / kPa = bar \times 100$ 

Permissible overload pressure = 600 bar; bursting pressure = 1000 bar.

Order no.	Measuring range		Permissible overload pressure		Bursting pressure	
PAxx27	01	014.5	10	145	30	450
PAxx28	00.25	03.63	10	145	30	450
PAxx29	-10	-14.50	10	145	30	450
PAxx60	0600	08 700	800	11 600	1 200	17 400

MPa = bar ÷ 10 / kPa = bar × 100

\*Values for PA3221:

Permissible overload pressure = 600 bar; bursting pressure = 1000 bar.



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!

Use in gases at pressures > 25 bar only after contacting the manufacturer ifm.



The versions 250 bar and 400 bar are supplied with a pressure relief mechanism and an integrated damping device to avoid any risk of injury in case of bursting when the bursting pressure is exceeded.

### 4 Installation

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

- ▶ Insert the unit in a G¼ process connection.
- ► Tighten firmly.



If the damping device must be removed ensure that it is not damaged. Do not reuse a damaged damping device. If you have any questions, please contact ifm electronic's sales specialists.

### **5 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:

### PA30xx (4 ... 20 mA analogue)



Core colours of ifm sockets:

1 = BN (brown), 2 = WH (white), 3 = BU (blue), 4 = BK (black),

n.c. = not connected.

#### PA90xx (0 ... 10 V analogue)



Core colours of ifm sockets:

1 = BN (brown), 2 = WH (white), 3 = BU (blue), 4 = BK (black),

n.c. = not connected.

More information at www.ifm.com

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