



Operating instructions
ProcessLine module
AC2900

GB

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1 Preliminary note

You will find instructions, technical data, approvals, accessories and further information using the QR code on the unit / packaging or at www.ifm.com.

1.1 Symbols used

- ✓ Requirement
- ▶ Instructions
- ▷ Reaction, result
- [...] Designation of keys, buttons or indications
- Cross-reference
-  Important note
Non-compliance may result in malfunction or interference.
-  Information
Supplementary note




1.2 Safety symbol on the device



Safety symbol on the device:

- ▶ Adhere to the operating instructions for the safe operation of the unit.

1.3 Warnings used

	<p>ATTENTION</p> <p>Warning of damage to property</p>
	<p>CAUTION</p> <p>Warning of personal injury</p> <p>▷ Slight reversible injuries may result.</p>
	<p>WARNING</p> <p>Warning of serious personal injury</p> <p>▷ Death or serious irreversible injuries may result.</p>

2 Safety instructions

- The unit described is a subcomponent for integration into a system.
 - The system architect is responsible for the safety of the system.
 - The system architect 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 architect 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 (→ Intended use).
- 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, operation and maintenance of the product must be carried out by qualified personnel authorised by the machine operator.
- Protect units and cables against damage.
- Observe applicable documents.

3 Intended use

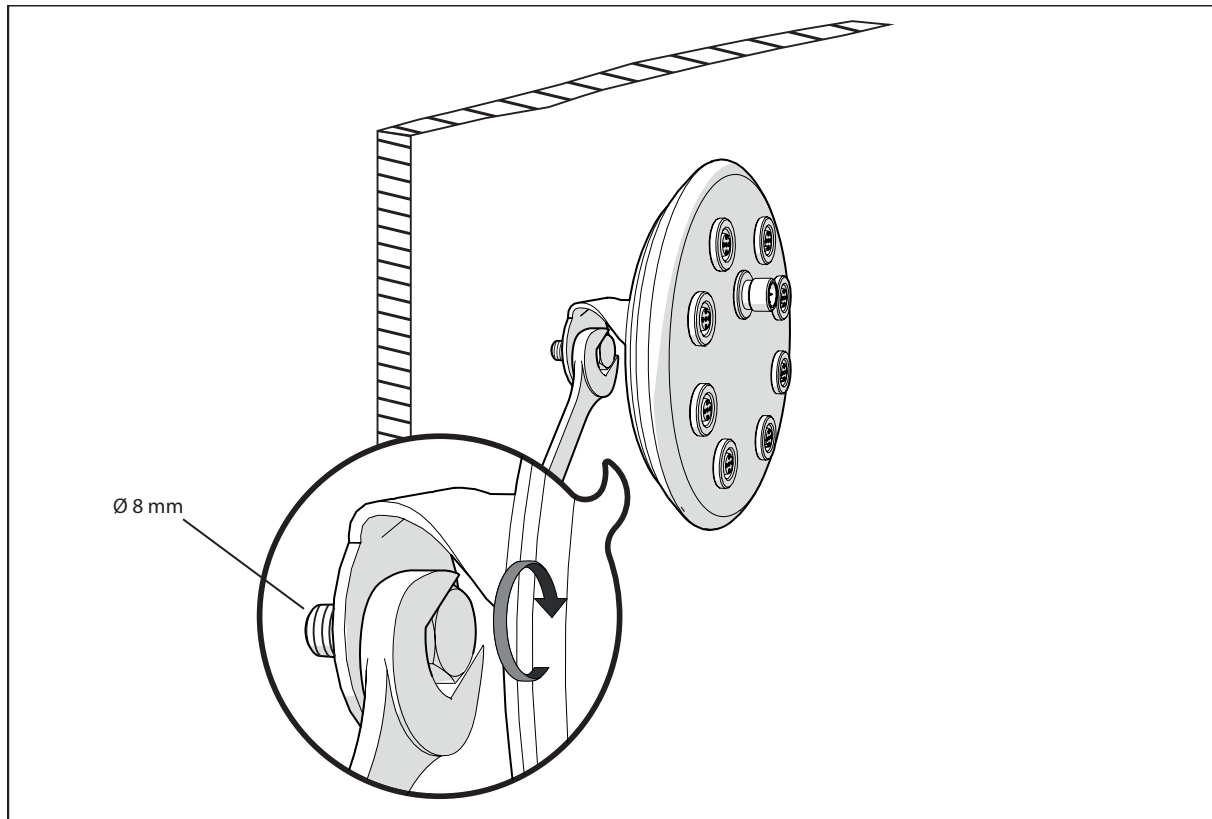
The passive ProcessLine module serves as splitter box for the connection of intelligent sensors / actuators.

Application area taking into account the technical data:

- Industrial environments
- Food industry (considering the materials used → Technical data)
- Indoor use without control cabinet
- Wet environments

4 Installation

- ▶ Disconnect power before installation.
- ▶ Select a flat mounting surface with sufficient stability.
- ▶ Fasten the lower part on the mounting surface using the mounting device.
- ▶ Select screw ($\varnothing 8$ mm) / tightening torque suitable for mounting surface and mounting device.



Alternative fixing

Weld the lower part to the tabs on a suitable mounting surface.

This is the responsibility of the system manufacturer. (Observe the material characteristics, limit the heat input into the device during the welding process, protect the device and the seals from damage caused by the welding process).

4.1 General notes on wiring

The threaded connections in the device correspond to the M12 standard. To ensure compliance with the specified protection rating, only cables that comply with this standard may be used. In the case of self-assembled cables, the system manufacturer is responsible for the protection rating.

- ▶ Use connectors with gold-plated contacts.
- ▶ During installation, place the connectors vertically so that the coupling nut will not damage the thread.
- ▶ Observe the coding of the connectors during installation.

If connector in the device:

- ▶ Tighten the cable sockets according to the torque specifications indicated by the cable manufacturer. Maximum permissible tightening torque: 1.8 Nm

If sockets in the device:

- ▶ Tighten the cable plug using 1.3 ± 0.1 Nm.
- ▶ Cover unused connections with protective covers. Tightening torque: 1.3 ± 0.1 Nm

- ▶ Provide all outgoing cables with suitable strain relief after a maximum of 500 mm. Observe the minimum bending radius of the cables (→ information from the cable manufacturer).

The IP rating of the overall system depends on the protection ratings of the individual devices, the applied connection elements and the corresponding protective caps.

ATTENTION

No protection rating / no protection of the contacts without mounted connectors / protective caps.

- ▷ Inadmissible soiling / moisture possible.
 - ▷ Disconnection of circuits / safety possibly impaired.
 - ▷ Before installation / when replacing the device, maintain pollution degree 2.
 - ▶ Disconnection / safety guaranteed.
-

4.2 Removing the connector with vibration protection

- ▶ Press the connector against the unit and simultaneously loosen the coupling nut.

5 Electrical connection



The unit must be connected by a qualified electrician.

- ▶ Observe the national and international regulations for the installation of electrical equipment.

The AS-i (U_S) / AUX (U_A) circuits are insulated from each other and from device surfaces that could be touched with basic insulation according to IEC 61010-1 (secondary circuit with max. 32 V DC, supplied from the mains circuit up to 300 V of overvoltage category II).

5.1 Wiring

1: AS-i +	
2: 0 V	
3: AS-i -	
4: + 24 V	
5: Functional earth FE	



The round cable connected to AS-i / AUX should not be longer than 2 m.

5.2 Voltage supply / fuse

Observe the maximum current rating of the M12 connections (→ tech. data)

ATTENTION

No current limitation within the unit.

- ▷ If the M12 connectors are overloaded (overcurrent), damage to the unit or fire is possible.
- ▷ Each supply connection AS-i + / AUX + (AS-i operation) or + 24 V DC (US) / + 24 V DC (UA) (IO-Link operation) must be limited to the values of the technical data (current consumption) by external measures.
- ▶ Device protected.

6 Maintenance, repair and disposal

The unit is maintenance-free.

- ▶ Carry out cleaning considering the technical data (protection rating) and the connection technology used.
- ▶ Cleaning agents must be checked by the system manufacturer / operator for their suitability for the device materials (→ Technical data) and the connection technology used.
- ▶ The cleaning agents must not damage the device materials.
- ▶ It is not possible to repair the unit.
- ▶ After use, dispose of the unit in an environmentally friendly way in accordance with the applicable national regulations.