



Operating instructions
Hydraulic cylinder sensor

GB

**MFH
M9H**

1 Preliminary note

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

1.1 Symbols used

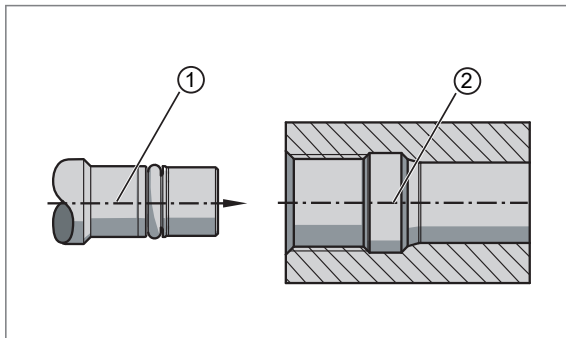
- ✓ Requirement
- Instructions
- ▷ Reaction, result
- [...] Designation of keys, buttons or indications
- Cross-reference
-  Important note
Non-compliance may result in malfunction or interference.
-  Information
Supplementary note

2 Intended use

The unit detects ferromagnetic metals (FE metals) without contact and indicates their presence by a switching signal.

3 Mounting

3.1 Installation of devices without end stop (MFH)



- 1: Sensor
- 2: Welding bush

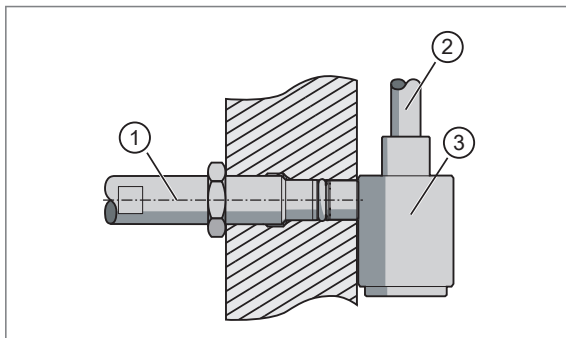
The device can be adjusted to the piston rod via the insertion depth.

ATTENTION

During set-up, do not screw in the device too deeply to avoid mechanical damage to the device, piston rod and cylinder.



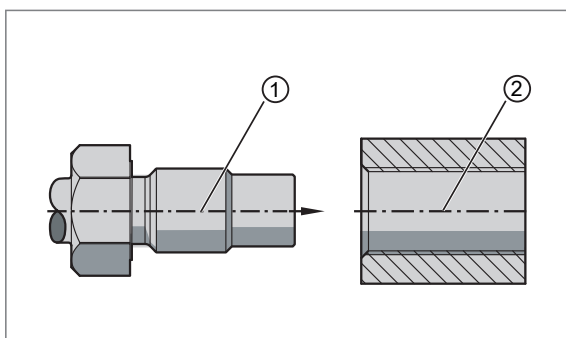
For mounting with a fixed end stop, use devices from the M9H series.



- 1: Sensor
- 2: Piston rod
- 3: Piston with switching cam

- Make sure that the piston rod is in the end position to be detected.
- Screw the device up to the end stop.
- Unscrew the device half a turn (~ 0.5 mm) to avoid mechanical damage.
- Tighten the fixing nut (tightening torque $\rightarrow$ data sheet).

3.2 Installation of devices with end stop (M9H)

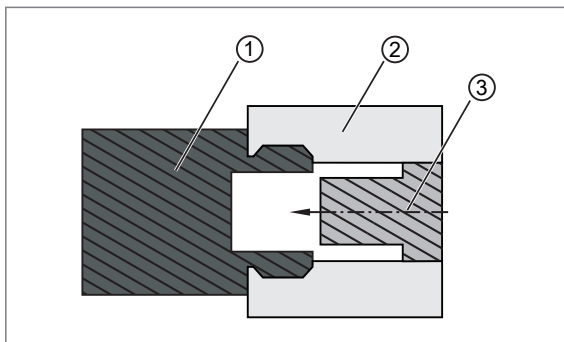


- 1: Sensor
- 2: Welding bush

- Screw the device into the M thread.

- Tightening torque → data sheet.

3.3 Installation of devices for plunger detection



- 1: Sensor
- 2: Screw-on block
- 3: Plunger

- Screw the device into the M thread.
- Tightening torque → data sheet.

4 Electrical connection



The unit must be connected by a qualified electrician.

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

- ▶ Disconnect power.
- ▶ Connect the unit as specified in the data sheet / type label.

5 Maintenance, repair and disposal

The operation of the unit is maintenance-free.

Only the manufacturer is allowed to repair the unit.

- After use dispose of the device in an environmentally friendly way in accordance with the applicable national regulations.