ifm electronic

CE
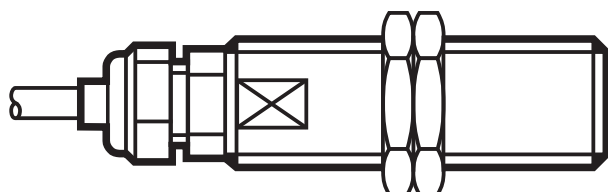
Installation Instructions
Magnetic sensor / Cylinder sensor

efector120   UK

MGTxxx

1 Preliminary note

1.1 Symbols used

▶   Instruction

→   Cross-reference

⚠   Important note
          Non-compliance can result in malfunction or interference.

ℹ   Information
          Supplementary note.

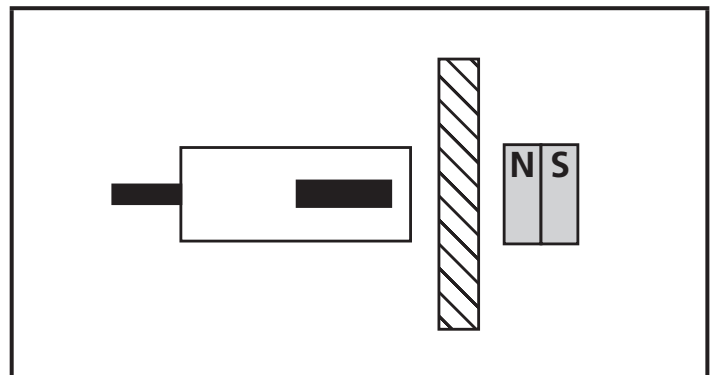# 2 Function and features

2.1 as magnetic sensor

The sensor reacts to magnetic fields. It detects a magnet without contact and signals its presence by means of an output signal.

The nominal sensing range (Sn) can be seen in the type designation on the type label on the unit (the value applies to a damping magnet M 4.0).

MGK2**030**-AKOA
            └── = nominal sensing range in mm

The sensor detects magnets through all non-magnetizable materials (e.g. non-ferrous metals, stainless steel, plastic, wood).
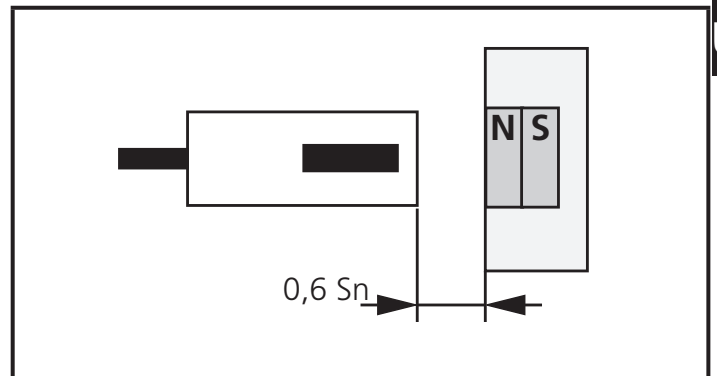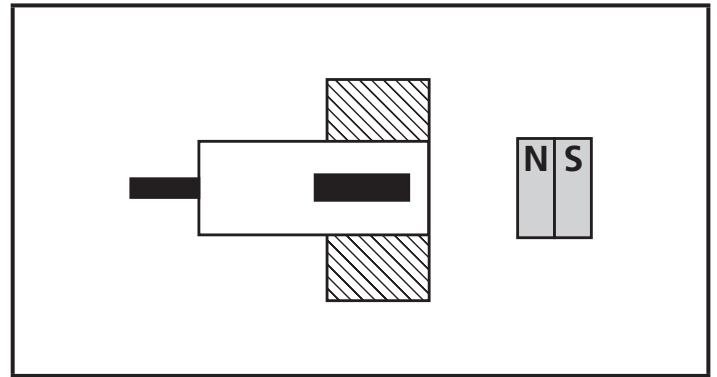
2.1.1 Installation

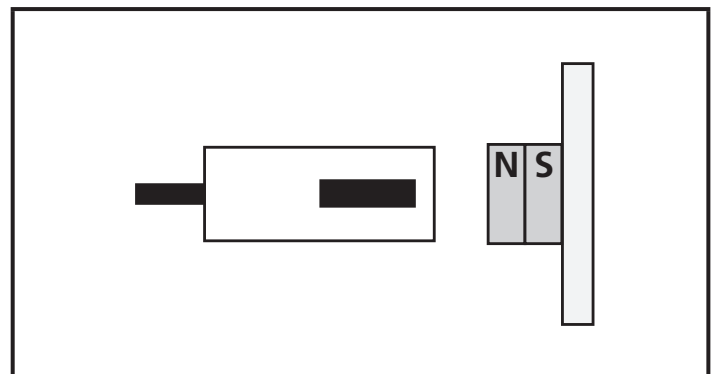▶ Mount the sensor by means of amounting bracket or a mounting device.

Flush mountable in all non-magnetizable materials.

If the damping magnet is mounted flush in magnetizable material, the sensing range decreases to approx. 60 % of Sn.

0,6 Sn

If the damping magnet is mounted on magnetizable material, the sensing range may increase to 1.1 to 1.2 times the value.
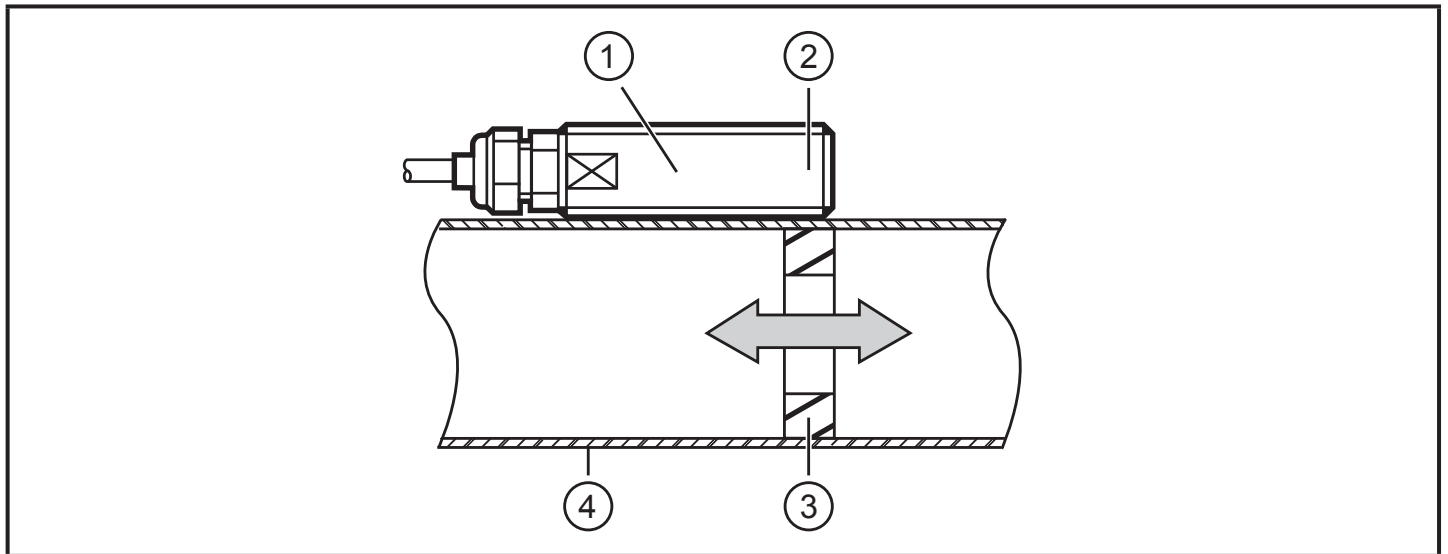
2.2 as cylinder sensor

The cylinder sensor signals the position of the piston in a cylinder. It detects a ring magnet in the piston of the cylinder when it passes the sensor and signals this by means of an output signal.

• Can be used on all commercial cylinders made of nonmagnetizable material.

2.2.1 Installation

1: Cylinder sensor
2: Sensing face
3: Cylinder piston with ring magnet
4: Cylinder wall

▶ Bring the cylinder piston into the detection position.

▶ Align the sensor precisely (position the active zone where the piston position is to be detected).

▶ Secure the sensor on the cylinder.

You can find a selection of mounting adapters at www.ifm.com/accessory.

> **i** If the cylinder is mounted in the immediate vicinity of magnetisable components, the switching characteristics of the sensor may change.

3 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 according to the indications on the type label.

Core colours of ifm cable units:

BN = brown, BU = blue, BK = black, WH = white.

Technical data and further information at www.ifm.com