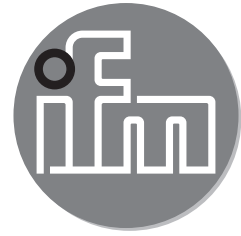


ifm electronic



Installation Instructions
Magnetic sensor

efector120[®]

UK

ME / MFS / MGS / MGT / MN / MS

MFSxxx / 00 10 / 2015

1 Preliminary note

1.1 Symbols used

► Instruction

→ Cross-reference



Important note

Non-compliance may result in malfunction or interference.

2 Function and features

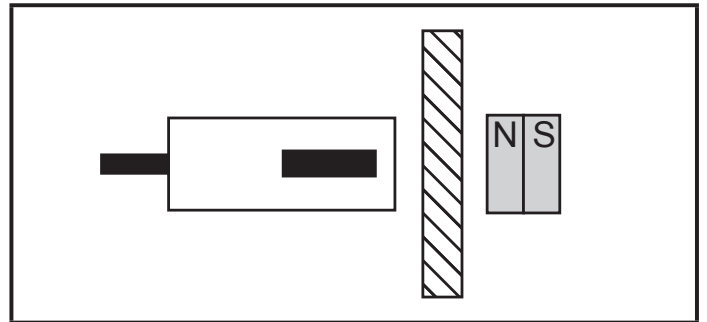
The sensor reacts to magnetic fields. It detects a magnet without contact and signals its presence by means of an output signal.

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

MEA3**060**-BPKG

 = nominal sensing range in mm

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



3 Installation

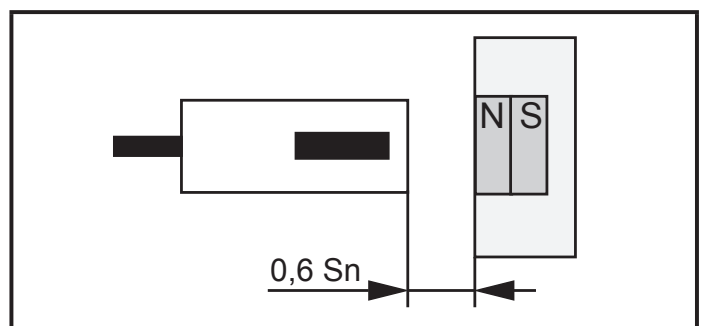
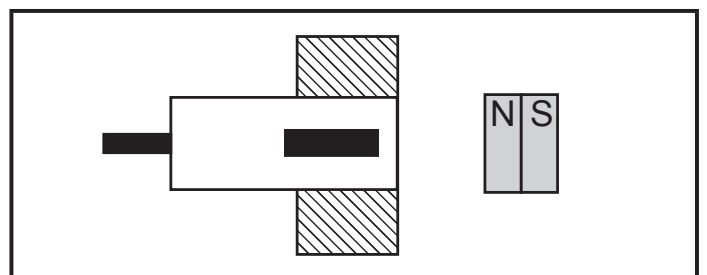
► Mount the sensor by means of amounting bracket or a mounting device.

Flush mountable in all non-magnetizable materials.

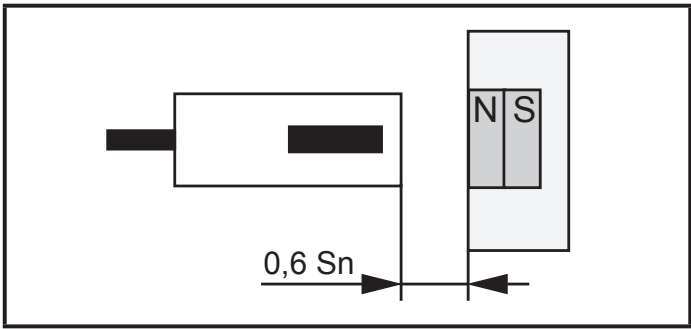
When mounted in magnetizable materials an open space must be left:

$a = 10 \text{ mm}$ (at $S_n = 60 \text{ mm}$)

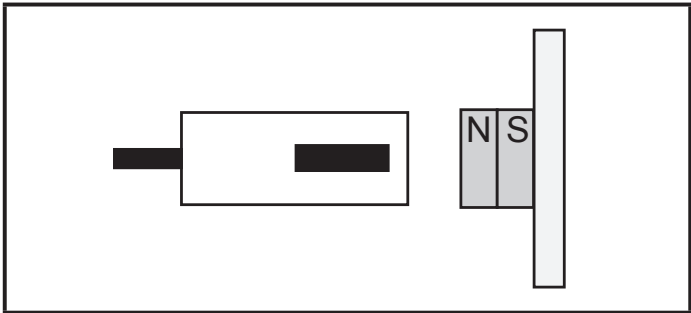
$a = 15 \text{ mm}$ (at $S_n = 70 \text{ mm}$).



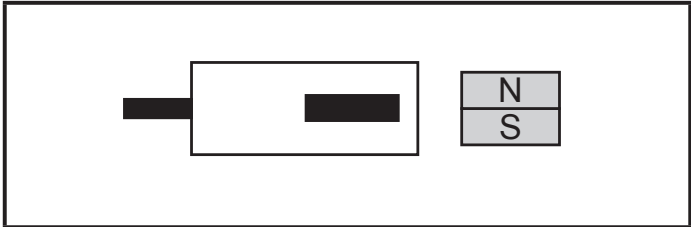
If the damping magnet is mounted flush in magnetizable material, the sensing range decreases to approx. 80 % of S_n .



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

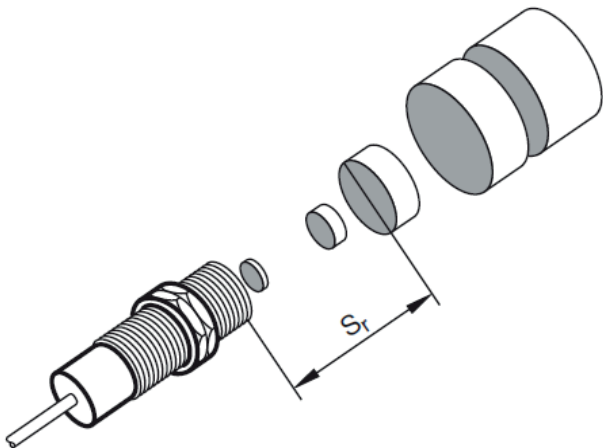


! A second switch point may occur in case of horizontal orientation of the magnet.



3.1 Sensing range (S_r in mm) referred to magnets

	E10749 M 1.0	E10750 M 2.0	E10751 M 3.0	E10752 M 4.0	E10753 M 5.0	E10754 M 5.1	E11803 M 4.1	E12291 M 3.1
ME...	24	24	34	60	68	66	59	33
MF...	24	24	34	60	68	66	59	33
MG...	27	27	38	70	77	76	69	37
MS...	24	24	34	60	68	66	59	33



4 Electrical connection



The sensor must be connected by a qualified electrician.

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

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

Core colours for units with cable connection:

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

5 Operation

- ▶ Check the safe functioning of the sensor.

The LED is lit when the output is switched.

More information at www.ifm.com