



Position sensors

Safety that attracts! Magnetically-coded sensors



Magnetic sensors

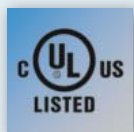
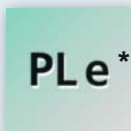


Activation from different directions aids installation

Conceal behind stainless steel for enhanced tamper prevention

Connect in series and still identify which door is open

Can reach highest safety level up to PL e to ISO 13849-1 and SILCL 3 to IEC 62061 when used with a suitable evaluation unit*



Knowing which door is opened

Magnetic sensors allow reliable monitoring of the door status without contact. In case of series connection, the current status of the magnetic sensors can be evaluated separately, e.g. by means of a controller, for sensor versions with a third contact (normally closed).

Easy connection and library for SISTEMA

Different versions with cable or M8/M12 standard connector simplify connection. Besides, versions for right-hinged and left-hinged doors are available in 36 mm design. Additionally, a VDMA66413 library for easy integration of the sensor characteristics in programs such as SISTEMA can be downloaded for free at the ifm website. This simplifies determining the safety-related reliability of the installation.



| Type | Sensing range [mm] | Connection | Cable entry | Contacts | Order no. |
|------|--------------------|------------|-------------|----------|-----------|
|------|--------------------|------------|-------------|----------|-----------|

Function principle: magnetically coded · actuator is supplied

| | | | | | |
|--|---|---------------------------|-------|-----------------|---------------|
| | 5 | 2 m, PVC | right | 2 x NO | MN200S |
| | 5 | 6 m, PVC | right | 2 x NO | MN201S |
| | 5 | M8, 4 pins, integrated | right | 2 x NO | MN202S |
| | 5 | 0.1 m, PVC, M12 connector | right | 2 x NO | MN203S |
| | 5 | 2 m, PVC | right | 2 x NO / 1 x NC | MN204S |
| | 5 | 6 m, PVC | right | 2 x NO / 1 x NC | MN205S |
| | 5 | M8, 4 pins, integrated | left | 2 x NO | MN206S |
| | 5 | 0.1 m, PVC, M12 connector | left | 2 x NO | MN207S |
| | 8 | 2 m, PVC | right | 2 x NO | MN500S |
| | 8 | 6 m, PVC | right | 2 x NO | MN501S |
| | 8 | M8, 4 pins, integrated | right | 2 x NO | MN502S |
| | 8 | 0.1 m, PVC, M12 connector | right | 2 x NO | MN503S |
| | 8 | 2 m, PVC | right | 2 x NO / 1 x NC | MN504S |
| | 8 | 6 m, PVC | right | 2 x NO / 1 x NC | MN505S |

Accessories

| Type | Description | Order no. |
|------|---|---------------|
| | Safety relay, Combicon connector with screw terminals | G1501S |
| | Safety relay, Combicon connector with screw terminals | G1502S |
| | SafeLine SmartPLC, 2 x AS-i, EtherNet/IP device | AC422S |
| | Small actuator | E1101S |
| | Spacer for MN2 magnetic sensors | E12585 |
| | Large actuator | E1104S |
| | Spacer for MN5 magnetic sensors | E12586 |
| | Non-removable screw M4 x 20, pack quantity 10 pieces | E12584 |

Connection technology

| | | |
|--|---|---------------|
| | Socket, M12, 4 poles 2 m, black, PUR cable | EVC001 |
| | Socket, M8, 4 poles 2 m, black, PUR cable | EVC150 |

Common technical data

| | | |
|---|------------------------------|------------------------------|
| Ambient temperature | [°C] | -25...80 |
| Output characteristics to CB24I Ed. 2.0 | | Interface type A |
| Potential free | | • |
| Coding level to EN14119 | | low |
| Dimensions | MN20xxS [mm] MN50xxS [mm] | 36 x 26 x 13 88 x 25 x 13 |

Safe connection*

In combination e.g. with the G1501S relay and an ifm SmartPLC, e.g. AC422S, use in safety functions up to PL e to ISO 13849 and SILCL 3 to IEC 62061 is possible.

Better protection against tampering

Since the sensors can detect the magnet through stainless steel or aluminium, hidden installation is possible thus improving protection against tampering.

High performance

Stable switching characteristics thanks to broad switch-on / switch-off graph.
The sensor can be approached with the coded actuator from different directions.

Worldwide use

Thanks to the UL approval, the sensors can be used in machines in large parts of the world.