



Position sensors

# Safety that attracts! Magnetically-coded sensors



## Magnetic sensors



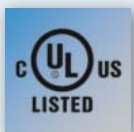
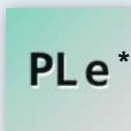
Activation from different directions aids installation

Conceal behind stainless steel for enhanced tamper prevention

Connect in series and still identify which door is open

Meets the new interface description CB24I from ZVEI

Meets highest safety level to ISO 13849-1 and SILCL 3 to IEC 62061



### Non-contact door monitoring

Magnetic sensors allow monitoring of the door status without contact.  
\* Can reach PL e to ISO 13849-1 and SILCL 3 to IEC 62061 when used with suitable evaluation units.

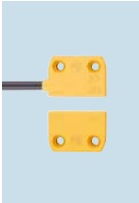

### Easy connection

Various connection versions with cable, M8 connector (4-pin) and M12 connector (4-pin) provide a standardised connection. With the UL and EAC approvals your machine can be operated worldwide without any concerns.

### Easy installation

The standard designs in a small and large version ensure various applications even if there is only little space.



Type	Dimensions [mm]	Sensing range [mm]	Connection	Contacts	Order no.
<b>Function principle: magnetically coded · actuator is supplied</b>					
	36 x 26 x 13	5	2 m, PVC	2 x NO	<b>MN200S</b>
	36 x 26 x 13	5	6 m, PVC	2 x NO	<b>MN201S</b>
	36 x 26 x 13	5	M8, 4-pin, integrated	2 x NO	<b>MN202S</b>
	36 x 26 x 13	5	0.1 m, PVC, M12 connector	2 x NO	<b>MN203S</b>
	36 x 26 x 13	5	2 m, PVC	2 x NO / 1 x NC	<b>MN204S</b>
	36 x 26 x 13	5	6 m, PVC	2 x NO / 1 x NC	<b>MN205S</b>
	88 x 25 x 13	8	2 m, PVC	2 x NO	<b>MN500S</b>
	88 x 25 x 13	8	6 m, PVC	2 x NO	<b>MN501S</b>
	88 x 25 x 13	8	M8, 4-pin, integrated	2 x NO	<b>MN502S</b>
	88 x 25 x 13	8	0.1 m, PVC, M12 connector	2 x NO	<b>MN503S</b>
	88 x 25 x 13	8	2 m, PVC	2 x NO / 1 x NC	<b>MN504S</b>
	88 x 25 x 13	8	6 m, PVC	2 x NO / 1 x NC	<b>MN505S</b>

### Safe connection

In combination with for example the G1501S relay or the AC041S monitor the sensors have a TÜV approval up to SILCL 3 and PL e.

This safety level can also be attained with the ifm SmartPLC such as AC422S.

### Which door is open?

The sensors with 3 contacts (signal contact) provide the possibility of a series connection with the information which door was opened. There are 2 contacts for the safety circuit and an additional signal for the non-safe controller.

### Better protection against tampering

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



### Robust installation

Thanks to the metal reinforcement on the mounting holes of the MN5xxS safe and robust installation of the sensor is possible.

### 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.

### Connection technology

Type	Description	Order no.
	Socket, M12, 4-pole 2 m black, PUR cable	<b>EVC001</b>
	Socket, M8, 4-pole 2 m black, PUR cable	<b>EVC150</b>

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	

### Accessories

Type	Description	Order no.
	Safety relay, Combicon connector with screw terminals	<b>G1501S</b>
	Safety relay, Combicon connector with screw terminals	<b>G1502S</b>
	AS-i safety monitor, Combicon connector with screw terminals	<b>AC041S</b>
	SafeLine SmartPLC, 2 x AS-i, EtherNet/IP device	<b>AC422S</b>
	Small actuator	<b>E1101S</b>
	Spacer for MN2 magnetic sensors	<b>E1258S</b>
	Large actuator	<b>E1104S</b>
	Spacer for MN5 magnetic sensors	<b>E12586</b>

We reserve the right to make technical alterations without prior notice. · 04.2018