Highest protection against tampering with coded RFID sensors
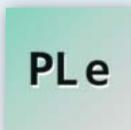
RFID sensors

Unique actuator coding prevents tampering

Connect up to 32 sensors in series with the safety integrity remaining at the same level

Flashing LEDs monitor sensing area

Programme the sensor as often as desired ensuring easy set-up

Meets the new interface description CB24I from ZVEI

Preventive maintenance

The sensors can display switch-off operation of the sensors directly using the LED display if the actuator slowly leaves the sensing range. This means that for example the door and the actuator can be ideally paired to each other and higher machine uptime is achieved. They meet the requirements ISO 13849-1 and IEC 62061. Even if 32 sensors are connected in series, the highest safety level is maintained.

Non-contact door monitoring

The non-contact RFID sensors allow reliable monitoring of the door status without any wear.

SIL 3   PL e

c UL us LISTED   IP 67 / IP 69 K

Type	Dimensions [mm]	Sensing range [mm]	Connection	Coding	Series connection possible	Order no.
Function principle: RFID-coded · actuator is supplied						
	72 x 25 x 18	12	M12 connector, 5-pole	coded	–	**MN700S**
	72 x 25 x 18	12	M12 connector, 8-pole	uniquely coded	•	**MN701S**
	72 x 25 x 18	12	M12 connector, 8-pole	codable	•	**MN702S**
	72 x 25 x 18	12	2 m, PVC cable, 5-pole	coded	–	**MN703S**
	72 x 25 x 18	12	2 m, PVC cable, 8-pole	uniquely coded	•	**MN704S**
	72 x 25 x 18	12	2 m, PVC cable, 8-pole	codable	•	**MN705S**

Safe connection

With the sensors as sub-systems it is possible to implement safety functions up to PL e to ISO 13849-1 or SILCL 3 to IEC 62061.

The safety classification of the sensors is available on the ifm website for download in a library according to VDMA standard sheet 66413 such as SISTEMA.

Preventive maintenance

The sensors allow display of an uncertain sensor state directly on site using the LED display if the actuator is no longer close enough to the sensor.

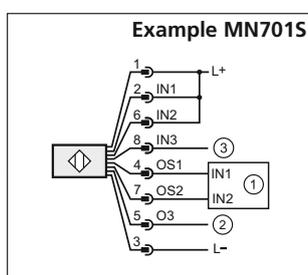| Common technical data		
Operating voltage	[V DC]	24 (± 10 %)
Sensing range	[mm]	12
Safe switch-off distance	[mm]	16
Contacts		2 x OSSD, 1 x PNP
Ambient temperature	[°C]	-25...80
Output characteristics		Interface type C, class 2
Coding level to EN14119 for MN701S, MN704S		High
Accessories		Actuator, 4 washers, 8 cover caps

Connection technology

Type	Description	Order no.
	Socket, M12, 5-pole 2 m black, PUR cable	**EVC544**
	Socket, M12, 2 m black, PUR cable, 8-pole	**E11950**

Wiring

Example MN701S

```
1  ──── L+
2  IN1
6  IN2
8  IN3      ③
4  OS1  IN1
7  OS2  IN2   ①
5  O3      ②
3  ──── L–
```

1) Safety-related logic unit
2) Programmable logic controller (PLC)
3) not used

Accessories

Type	Description	Order no.
	Safety relay, Combicon connector with screw terminals	**G1501S**
	Safety relay, Combicon connector with screw terminals	**G1502S**
	AS-i safety monitor, Combicon connector with screw terminals	**AC041S**
	SafeLine SmartPLC, 2 x AS-i, EtherNet/IP device	**AC422S**
	Actuator coded	**E1102S**
	Actuator codable	**E1103S**
	One way screw M4 x 20, pack quantity 10 pieces	**E12584**

ifm – close to you!