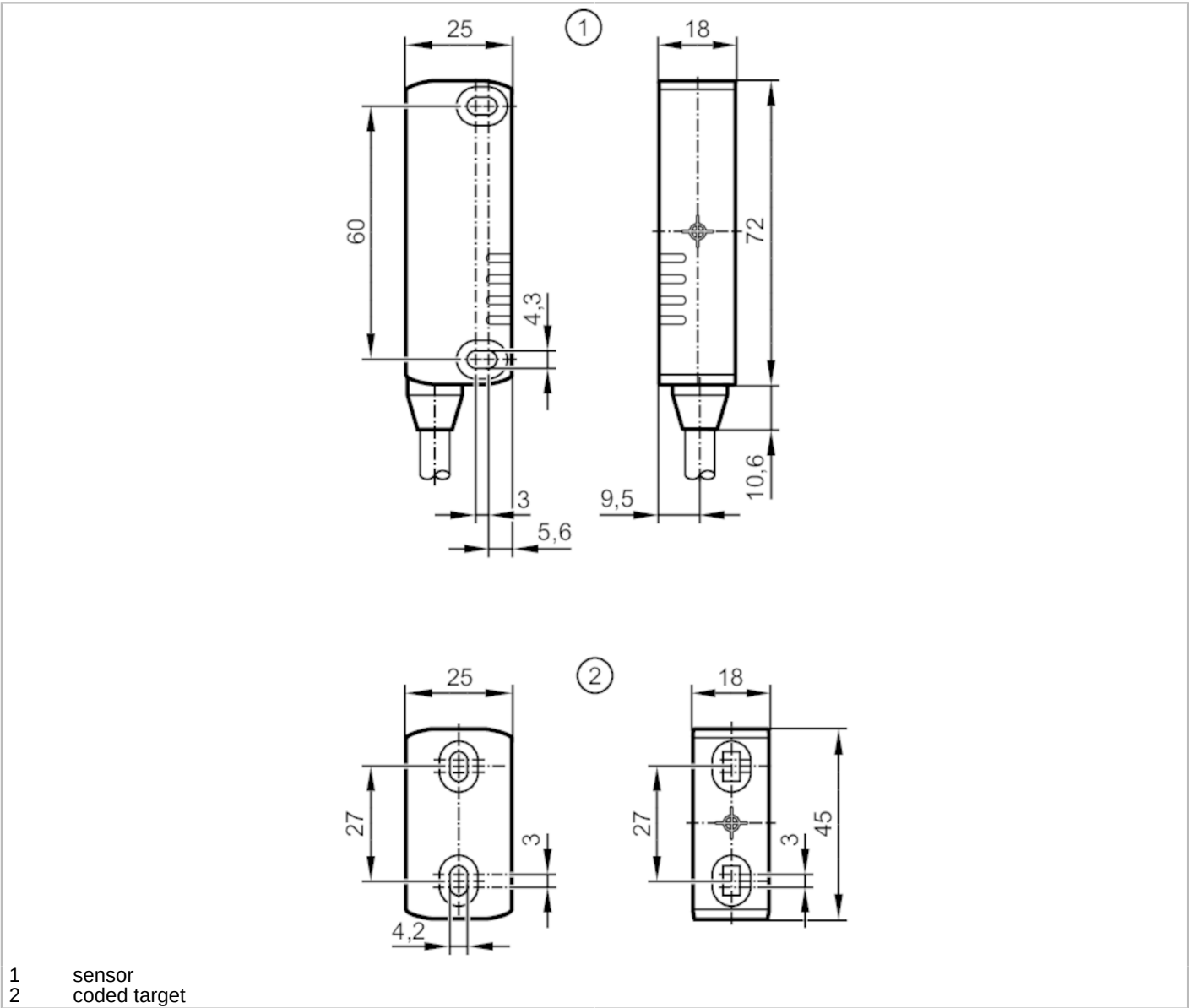


MN703S



RFID-coded safety sensor

MN35010-BPKG/CD/-H



- 1 sensor
- 2 coded target



| Product characteristics |                                                                                                                        |
|-------------------------|------------------------------------------------------------------------------------------------------------------------|
| Electrical design       | PNP                                                                                                                    |
| Output function         | 2 x OSSD, 1 x PNP                                                                                                      |
| Sensing range [mm]      | 12; (with defined actuator)                                                                                            |
| Housing                 | rectangular                                                                                                            |
| Dimensions [mm]         | 72 x 18 x 25                                                                                                           |
| Application             |                                                                                                                        |
| Design                  | coded target                                                                                                           |
| Type of operation       | permanent operation                                                                                                    |
| Radio approval for      | USA; Canada; Australia; EU/RED; China; Singapore                                                                       |
| Note on radio approval  | The list of countries applying the European Radio Equipment Directive 2014/53/EU (RED) can be found under "Downloads". |



## RFID-coded safety sensor

MN35010-BPKG/CD/-H

| Electrical data                                     |       |                                                |
|-----------------------------------------------------|-------|------------------------------------------------|
| Operating voltage                                   | [V]   | 20.4...26.4 DC                                 |
| Rated insulation voltage                            | [V]   | 32                                             |
| Operating current                                   | [mA]  | 40...700                                       |
| No-load current                                     | [mA]  | 30                                             |
| Current consumption                                 | [mA]  | < 50                                           |
| Protection class                                    |       | III                                            |
| Reverse polarity protection                         |       | yes                                            |
| Max. power-on delay time                            | [ms]  | 1500                                           |
| Outputs                                             |       |                                                |
| Electrical design                                   |       | PNP                                            |
| Output function                                     |       | 2 x OSSD, 1 x PNP                              |
| Max. leakage current                                | [mA]  | 0.5                                            |
| Permanent current rating of switching output DC     | [mA]  | 50                                             |
| Switching frequency DC                              | [Hz]  | 1                                              |
| Output data                                         |       | interface type C class 2                       |
| Short-circuit protection                            |       | yes                                            |
| Overload protection                                 |       | yes                                            |
| Max. capacitive load CL_max                         | [nF]  | 200                                            |
| Detection zone                                      |       |                                                |
| Sensing range                                       | [mm]  | 12; (with defined actuator)                    |
| Safe switching-off distance s(ar)                   | [mm]  | 16                                             |
| Accuracy / deviations                               |       |                                                |
| Hysteresis                                          | [%]   | 20                                             |
| Repeatability analogue output                       | [%]   | ≤ 10; (% Sn)                                   |
| Response times                                      |       |                                                |
| Response time to safety request                     | [ms]  | 160                                            |
| Response time when approaching the enable zone      | [ms]  | 600                                            |
| Risk time (response time for safety-related faults) | [ms]  | 10                                             |
| Operating conditions                                |       |                                                |
| Applications                                        |       | class C to EN 60654-1 weatherproof application |
| Ambient temperature                                 | [°C]  | -25...70                                       |
| Note on ambient temperature                         |       | operational life ≤ 87600 h                     |
| Ambient temperature                                 | [°C]  | 10...40                                        |
| Note on ambient temperature                         |       | operational life ≤ 175200 h                    |
| Max. relative air humidity                          | [%]   | briefly: 5...95 %; permanent: 5...70 %         |
| Air pressure                                        | [kPa] | 80...106                                       |
| Max. height above sea level                         | [m]   | 2000                                           |
| Ionising radiation                                  |       | not permissible                                |
| Salt spray                                          |       | no                                             |

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## RFID-coded safety sensor

MN35010-BPKG/CD/-H

|                                         |                                         |                   |
|-----------------------------------------|-----------------------------------------|-------------------|
| Protection                              | IP 67; IP 69K; (protected cable laying) |                   |
| Tests / approvals                       |                                         |                   |
| EMC                                     | IEC 60947-5-3                           |                   |
| Shock resistance                        | EN 60068-2-27                           | 30 g (11 ms)      |
| Vibration resistance                    | IEC 60068-2-6                           | 10 g (10...55 Hz) |
| Safety classification                   |                                         |                   |
| Complies with the requirements          | ISO 13849-1: 2015 category 4, PL e      |                   |
|                                         | IEC 62061 SIL 3                         |                   |
| Mission time TM [h]                     | ≤ 175200                                |                   |
| Mission time TM (additional indication) | 20 years                                |                   |
| PFH [1/h]                               | 1,5E-09                                 |                   |
| Mechanical data                         |                                         |                   |
| Weight [g]                              | 334.5                                   |                   |
| Housing                                 | rectangular                             |                   |
| Mounting                                | non-flush mountable                     |                   |
| Dimensions [mm]                         | 72 x 18 x 25                            |                   |
| Materials                               | PA                                      |                   |
| Tightening torque [Nm]                  | 0.8...2                                 |                   |
| Displays / operating elements           |                                         |                   |
| Display                                 | function                                | 1 x LED, (ACT)    |
|                                         | input                                   | 1 x LED, (IN)     |
|                                         | Output                                  | 1 x LED, (OUT)    |
|                                         | operation                               | 1 x LED, (PWR)    |
| Accessories                             |                                         |                   |
| Items supplied                          | coded target                            |                   |
|                                         | washers: 4                              |                   |
|                                         | cover caps: 8                           |                   |
| Remarks                                 |                                         |                   |
| Pack quantity                           | 1 pcs.                                  |                   |

# MN703S



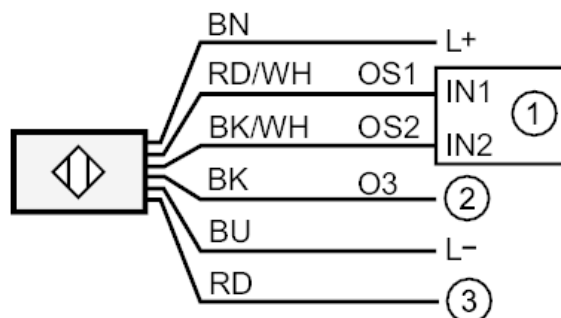
## RFID-coded safety sensor

MN35010-BPKG/CD/-H

### Electrical connection

Cable: 2 m, PVC; 6 x 0.5 mm<sup>2</sup>

### Connection



- 1: safety-related logic unit  
2: Programmable Logic Controller (PLC)  
Core colours :  
BK = black  
BN = brown  
BU = blue  
RD = red  
RD/BK = red/black  
RD/WH = red/white