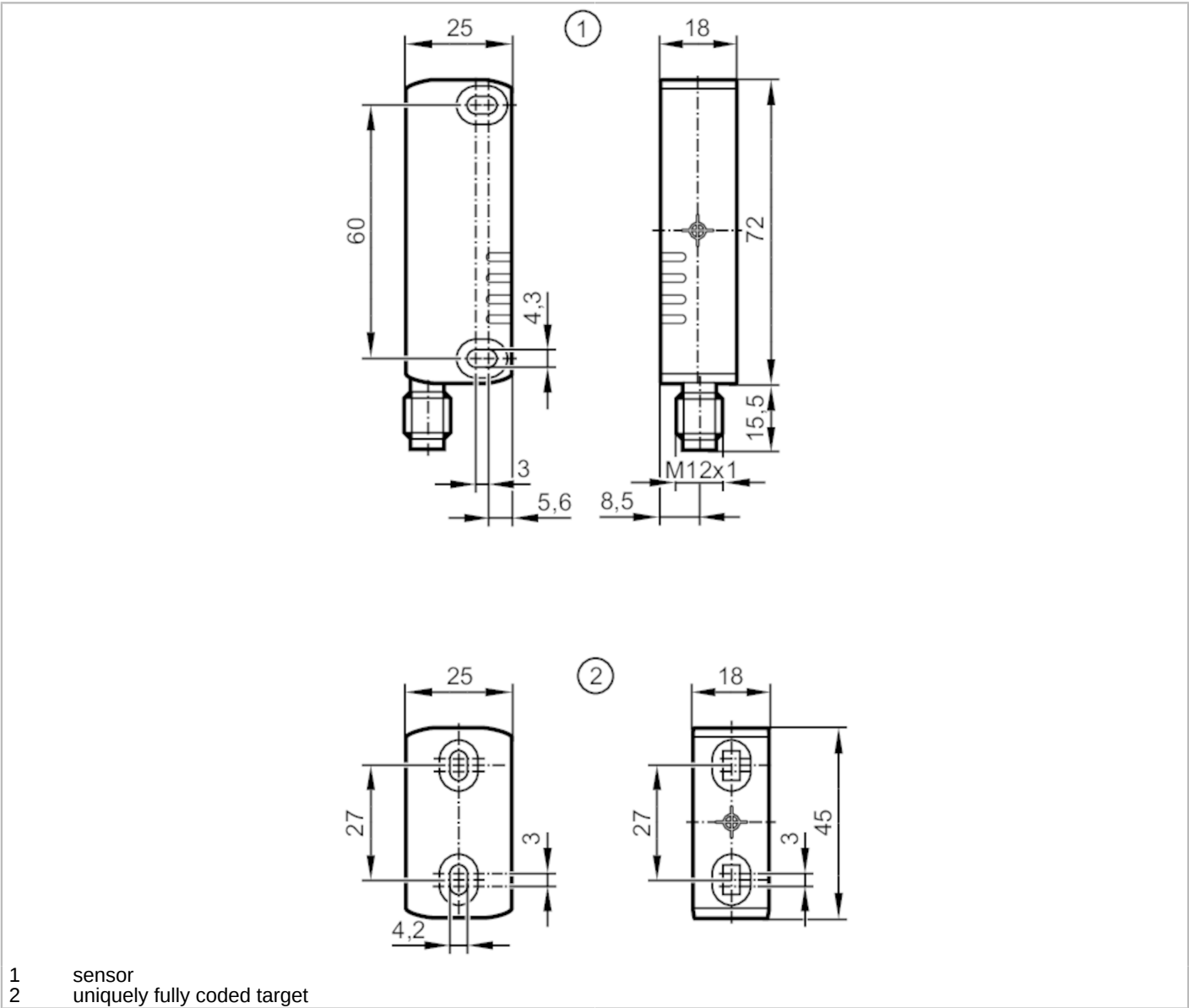


MN700S



RFID-coded safety sensor

MN35010-BPKG/CD/US



Product characteristics		
Sensing range	[mm]	12; (with defined actuator)
Housing		rectangular
Dimensions	[mm]	72 x 18 x 25
OSSD Output OS1, OS2		
Electrical design		PNP
Meldeausgang O3		
Electrical design		PNP
Application		
Design		coded target
Type of operation		permanent operation
Radio approval for		USA; Canada; Australia; EU/RED; China; Singapore



RFID-coded safety sensor

MN35010-BPKG/CD/US

Note on radio approval

The list of countries applying the European Radio Equipment Directive 2014/53/EU (RED) can be found under "Downloads".

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

RFID

Operating frequency	[MHz]	0,125
Transmission power ERP	[mW]	0.0002245

Inputs / outputs

Number of inputs and outputs	Number of digital outputs: 3
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Outputs

Number of digital outputs	3; (2 x Sicherheitsausgang; 1 x Meldeausgang)
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OSSD Output OS1, OS2

Electrical design	PNP
Max. voltage drop switching output DC	[V] 3.5
Max. leakage current	[mA] 0.5
Max. current load per output	[mA] 250; (utilisation category DC-12)
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

Meldeausgang O3

Electrical design	PNP
Max. voltage drop switching output DC	[V] 3.5
Max. leakage current	[mA] 0.5

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
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MN700S



RFID-coded safety sensor

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Response time when approaching the enable zone	[ms]	600
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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	
Protection	IP 65; IP 67	

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]	175.5
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.
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MN700S



RFID-coded safety sensor

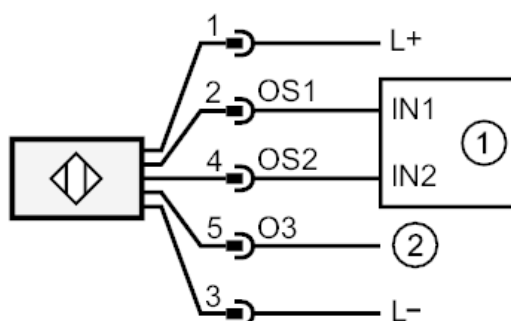
MN35010-BPKG/CD/US

Electrical connection - plug

Connector: 1 x M12; coding: A; Moulded body: stainless steel (304/1.4301)



Connection



- 1: safety-related logic unit
2: Programmable Logic Controller (PLC)