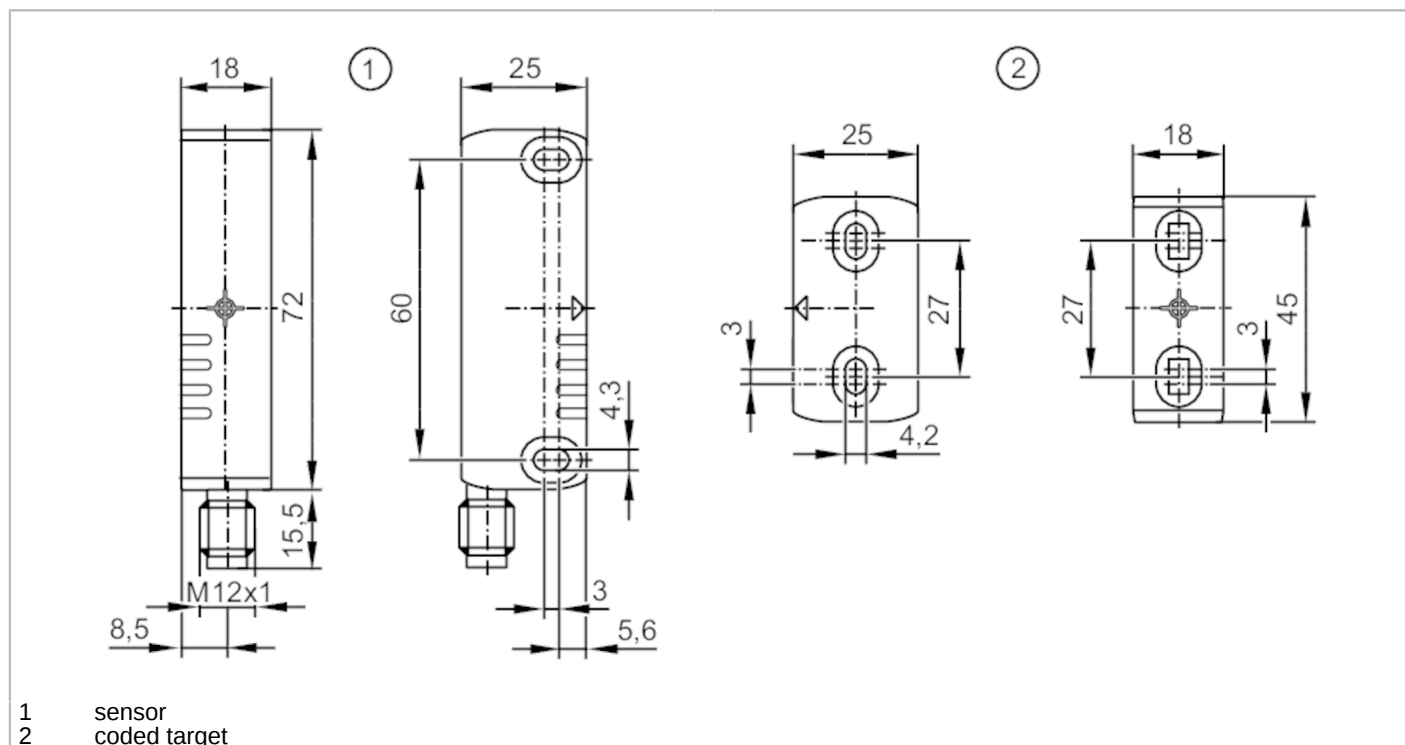


MN700S



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
Signal output O3		
Electrical design		PNP

Application

Design	coded target
Type of operation	permanent operation
Radio approval for	USA; Canada; Australia; EU/RED; China; Singapore; New Zealand
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

MN700S



RFID-coded safety sensor

MN35010-BPKG/CD/US

RFID		
Operating frequency	[MHz]	0,125
Transmission power ERP	[mW]	0.0002245
Inputs / outputs		
Number of inputs and outputs		Number of digital outputs: 3
Outputs		
Number of digital outputs		3; (2 x safety output; 1 x signal output)
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; (utilization 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
Signal output O3		
Electrical design		PNP
Max. voltage drop switching output DC	[V]	3.5
Max. leakage current	[mA]	0.5
Monitoring range		
Sensing range	[mm]	12; (with defined actuator)
Safe switching-off distance s(ar)	[mm]	16
Accuracy / deviations		
Hysteresis	[%]	20
Repeatability analog output	[%]	≤ 10; (% Sn)
Reaction times		
Response time to safety request	[ms]	160
Response time when approaching the enable zone	[ms]	600
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
Ionizing radiation		not permissible

MN700S



RFID-coded safety sensor

MN35010-BPKG/CD/US

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	
Type of mounting	door hinge on right side	
Dimensions [mm]	72 x 18 x 25	
Material	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)
	Power	1 x LED, (PWR)

Accessories

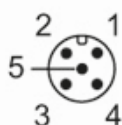
Items supplied	coded target	
	washers: 4	
	cover caps: 8	

Remarks

Pack quantity	1 pcs.
---------------	--------

Electrical connection - plug

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



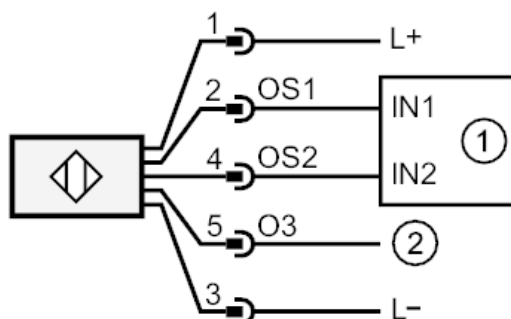
MN700S



RFID-coded safety sensor

MN35010-BPKG/CD/US

Connection



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