Model Number

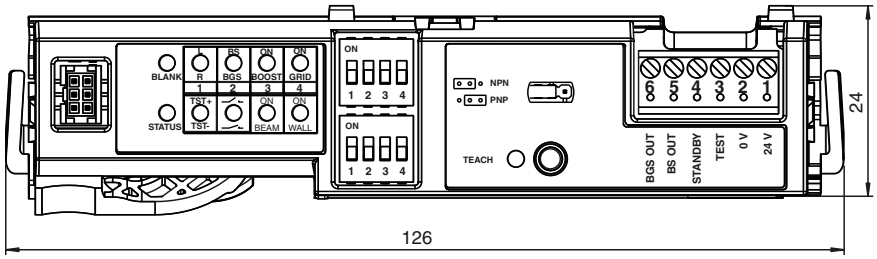
DoorScan Interface Set

Sensor module, interface

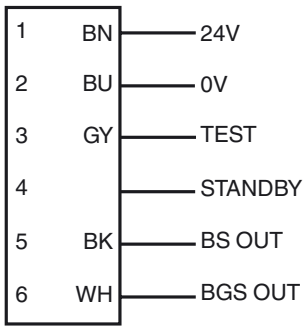
Features

- Sensor module for configurable DoorScan® presence sensor
- Multi-function interface with full operation
- Complete system supply for the entire system for one door
- Can also be used to supply the emitter and receiver modules with power
- Single button commissioning with automatic Teach-in function
- SIL 2, certified in accordance with DIN 18650/EN 16005
- Tool-free module mounting using snap-in mechanism
- Door transition cable to connect the sensor to the controller

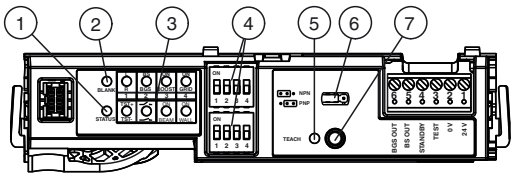
Dimensions



Electrical connection



Indicators/operating means



1 STATUS LED ret
2 BLANK LED green
3 DIP LEDs green
4 DIP switches - rows 1 and 2
5 TEACH LED yellow
6 Jumper
7 TEACH button

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Technical data

General specifications		
Operating mode		Background evaluation
Functional safety related parameters		
Safety Integrity Level (SIL)		SIL 2
Performance level (PL)		PL d
Category		Cat. 2
$MTTF_d$		2716 a
Mission Time (T_M)		20 a
Diagnostic Coverage (DC)		90 %
Indicators/operating means		
Function indicator		Interface: Red LED: detection, excess gain, fault code Yellow LED: teach status Green LED: blank status Green LED: DIP switch status
Electrical specifications		
Operating voltage	U_B	24 V DC +/- 20 %
No-load supply current	I_0	30 mA
Input		
Test input		High active at U = 15 V DC to 30 V DC Low active at U = < 2 V DC
Control input		Standby active at U = 11 V DC at 30 V DC
Output		
Switching type		Hinge edge light on Leading edge light on/dark on, switchable
Signal output		NPN , short-circuit protected
Switching voltage		max. 30 V DC
Switching current		max. 100 mA
Response time		≤ 52 ms ≤ 200 ms in boost operating mode
Conformity		
Functional safety		ISO 13849-1 ; EN 61508 part1-4
Product standard		EN 12978
Ambient conditions		
Ambient temperature		-30 ... 60 °C (-22 ... 140 °F)
Mechanical specifications		
Mounting height		max. 3500 mm
Degree of protection		IP54 (iwhen mounted)
Connection		plug strip , 6-pin Cable: screw terminal , 6-pin
Material		Cable sheathing: polyamide PA 6, black , Wall bracket: ABS
Cable		PUR, gray, 6-wire
Sheath diameter		approx. 4.8 mm
Bending radius		min. 48 mm
Length	L	5000 mm
Mass		approx. 140 g
General information		
Scope of delivery		Sensor module, interface , Wall bracket , Screw kit , cord grip , cable , Cable sheathing , Hollow rivet
Suitable series		
Series		DoorScan®
Approvals and certificates		
CCC approval		CCC approval / marking not required for products rated ≤36 V

Accessories

DoorScan Cable BS/BGS
Connecting cable for transition from hinge side to leading edge side

DoorScan Connection Cable 5p
Connecting cable with 5 plug-in connections for DoorScan®-I/-T/-R modules

Other suitable accessories can be found at www.pepperl-fuchs.com

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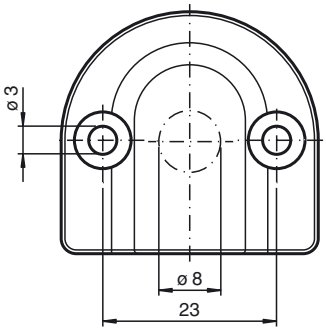
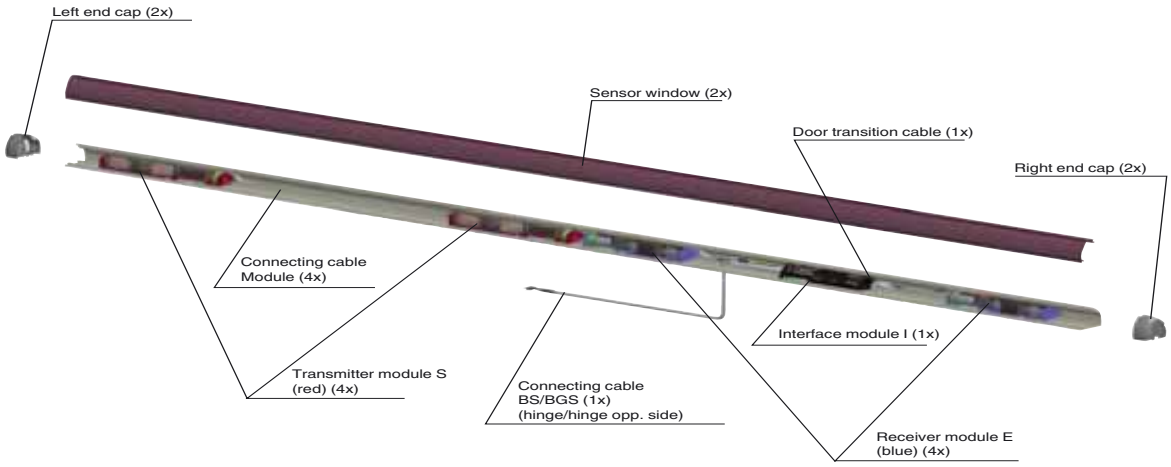
Wall mount bracket



Additional Information

Layout of the sensor system for a door (hinge/leading edge side)



Standby

When the supply voltage is applied, the sensor is put into standby — the energy consumption is reduced to less than 80% in this state. Once the signal is deactivated, the sensor is immediately ready for operation and enables the signal outputs within 52 ms and/or 200 ms (in boost operating

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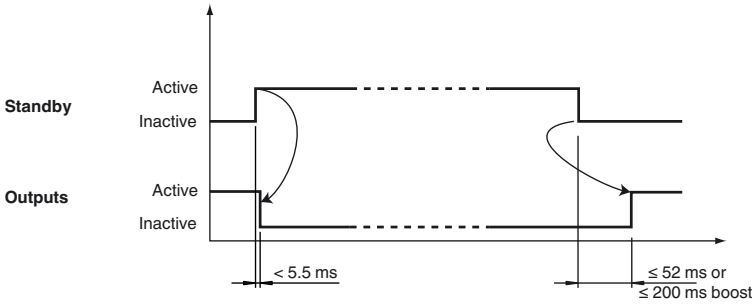
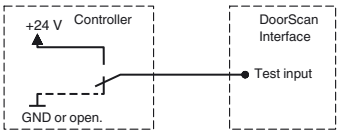
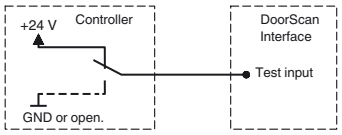
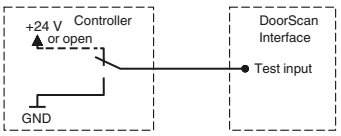
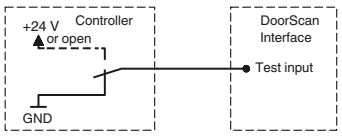
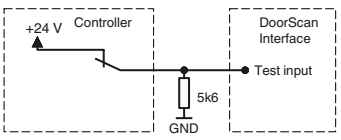
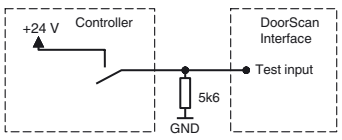
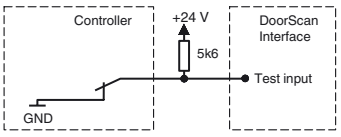
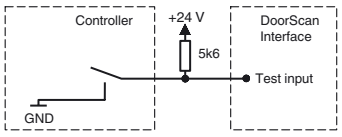
mode) if the detection field is free.

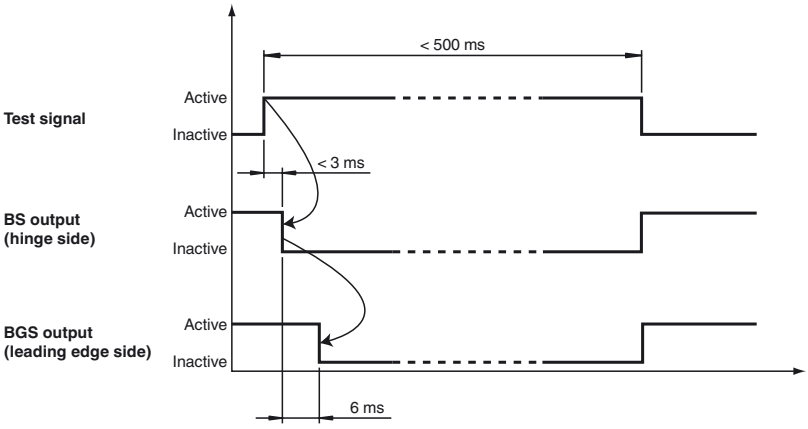


Test input circuit

Test Function	Test inactive	Test active	Interface DIP switch 1, bottom row
High active			ON Test at +24 V
Low active			OFF Test at 0 V
High inactive			OFF Test at 0 V
Low inactive			ON Test at +24 V

Test signal

The signal outputs enable short circuit detection. In order to do so, the outputs carry out a delayed shutoff from each other (see signal curve).



Note!
The test signal must be in contact with the test input for at least 9 ms!
The duration of the test signal must not exceed 0.5 s, otherwise this will deactivate the sensor.

Operating Modes

Boost operating mode

Activation with dark floors, even at high installation heights (increased sensitivity). In these cases, the response time of the sensor is increased from 50 ms to 200 ms. If necessary, the speed of the door must be adjusted to the response time.

Grid operating mode

Activation in the event of faults due to grating on the ground. Used where grating and shafts are present in the detection field.

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