# Combined sensor

# MotionScan-P





Combined sensor for securing escape and emergency routes

- Radar opening impulse
- Closing edge safety mechanism with diffuse sensor
  - Safety mechanism in accordance with EN 16005
- Extra-large, adjustable protection field in front of the door
- Door learn function

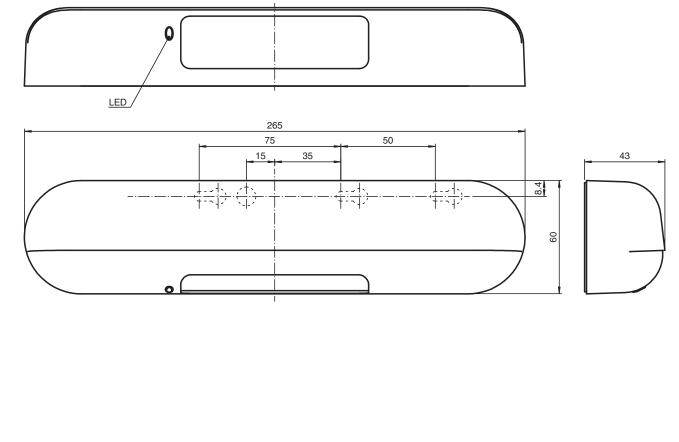
Combination sensor for opening and protection



#### **Function**

The two-in-one MotionScan sensor for opening and securing automatic sliding doors allows doors to be opened in a timely manner thanks to its large radar detection field. A large, adjustable infrared protection field ensures maximum safety. The special Door Learn function enables a protection field to be defined both in front of and behind the door. The MotionScan works reliably with a wide range of floor surfaces. It is incredibly easy to install and operate with single-button operation and multicolor LED display.

### Dimensions



Refer to "General Notes Relating to Pepperl+Fuchs Product Information"

## **Technical Data**

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General specifications		
Detection field		AIR, adjustable , total field: 2400 mm x 1000 mm (WxD) for a mounting height of 2200
Detection field		mm Radar sensor 2500 mm x 4000 mm (d x w) at installation height of 2200 mm and 45°
		angle
Detection range max.		0 3200 mm
Light source		3 Series
Light type		modulated infrared light
Marking		CE
Setting angle		-8 4 °
Operating frequency		24.15 24.25 GHz K-Band, Radar sensor
Transmitter radiated power (EIRP)		< 20 dBm
Functional safety related parameters		
Performance level (PL)		PL d
Category		Cat. 2
MTTF <sub>d</sub>		339.83 a
Diagnostic Coverage (DC)		81.52 %
Indicators/operating means		
Function indicator		LED green/blue/red/orange
Control elements		DIP-switch
Control elements		sensitivity adjustment
Parameterization indicator		LED flashes when in adjustment mode Fast orange
Electrical specifications		
Operating voltage	UB	12 24 V DC / 12 24 V AC +/- 10%, 50 - 60 Hz
No-load supply current	I <sub>0</sub>	≤ 80 mA at 24 V DC ≤ 150 mA at 12 V:
Power consumption	P <sub>0</sub>	2.5 VA
Input	0	
Activation current		at 24 V DC 6 mA
Test input		active with +U <sub>B</sub>
Output 1		
Output type		Infrared, optocoupler
Switching voltage		48 V DC
Switching current		7.5 mA resistive load
De-energized delay		0.5 s
Switching type		light/dark on selectable programmable
Response time		100 ms up to 200 ms
Output 2		
Output type		Radar
Signal output		Frequency output
Output frequency		100 Hz duty 1:1
Switching voltage		48 V DC
Switching current		50 mA resistive load
•		
De-energized delay		1.5 s
Response time		100 ms up to 200 ms
Conformity		100 40040 4
Functional safety		ISO 13849-1
Product standard		EN 12978
Approvals and certificates		
CE conformity		2014/53/EU This device can be used in all countries within the European Union. In other countries, all applicable national regulations must be observed.
FCC approval		No - Use in North America is not permitted.
CCC approval		CCC approval / marking not required for products rated ≤36 V
Ambient conditions		
Operating temperature		-20 60 °C (-4 140 °F)

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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General General

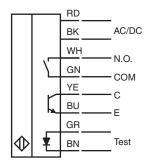
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#### MotionScan-P

-20 60 °C (-4 140 °F)
max. 80 %
max. 3200 mm
IP54 (iwhen mounted)
Male connector 8-pin, Connecting cable included with delivery
ABS
approx. 260 g
(W x H x D) 265 mm 60 mm 43 mm
Please refer to the package insert for information on how to mount and install the sensor correctly.
sensor, cable, 2 screws, Mounting aid, Instruction leaflet
MotionScan

# **Connection Assignment**



# Assembly

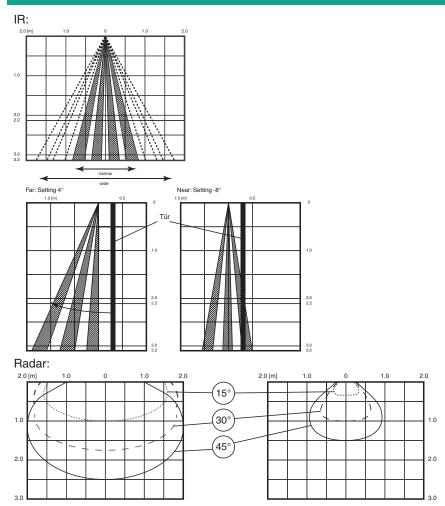
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1	Cover
2	Radar detection window
3	IR detection window
4	Indicator LED (red, green, blue)
5	IR sensitivity control
6	Radar sensitivity control
7	Range mask
8	Radar sensor unit
9	Depth adjustment screw (IR range)
10	IR sensor unit
11	DIP switch Y
12	DIP switch X
13	Connection

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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#### **Characteristic Curve**



## Accessories

MotionScan Intern. Mounting	Ceiling mount kit
MotionScan Mount. Bracket	Mounting bracket
MotionScan Weather Cap	Weather cover

Refer to "General Notes Relating to Pepperl+Fuchs Product Information".

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# Application

• Two-in-one sensor for opening and securing automatic sliding doors

Refer to "General Notes Relating to Pepperl+Fuchs Product Information"

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