

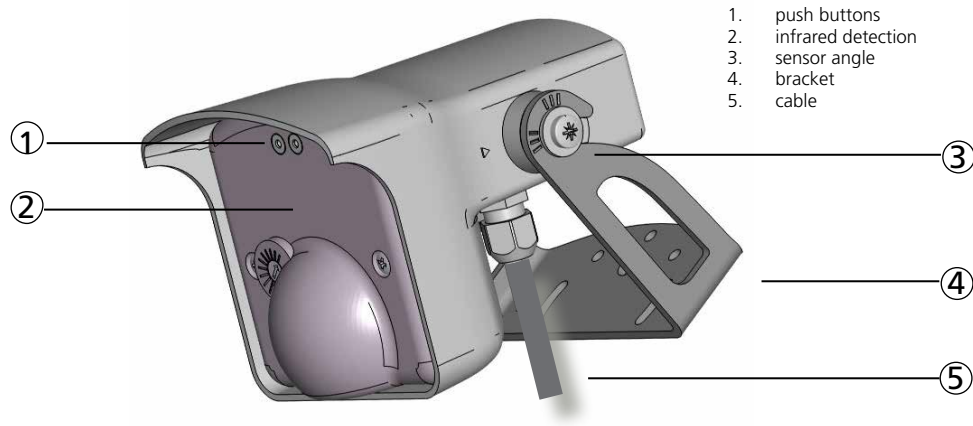
# MILAN

Other use of the device is outside the permitted purpose and can not be guaranteed by the manufacturer.  
The manufacturer cannot be held responsible for incorrect installations or inappropriate adjustments of the sensor.


## Presence sensor for automatic industrial doors

User's Guide for product version 0700 and higher  
See product label for serial number

### DESCRIPTION



### TECHNICAL SPECIFICATIONS

Supply voltage:	12V to 24V AC $\pm 10\%$ ; 12V to 24V DC +10% / -3%
Power consumption:	< 3.5 W / VA
Mains frequency:	50 to 60 Hz
Output:	2 relays (free of potential change-over contact)
Max. contact voltage:	42 V AC/DC
Max. contact current:	1 A (resistive)
Max. switching power:	30 W (DC) / 42 VA (AC)
Output holdtime:	0.5 s
Mounting height:	2.5 m - 6 m*
Temperature range:	from -30 °C to + 60 °C
Humidity:	0 - 95% non condensing
Degree of protection:	IP65
Dimensions:	127 mm (L) x 102 mm (H) x 96 mm (W)
Materials:	ABS and polycarbonate
Weight:	400 g
Cable length:	10 m
	
Technology:	active infrared
Transmitter frequency/wavelength:	875 nm
Transmitter power density:	< 250 mW/m <sup>2</sup>
Detection mode:	motion & presence
Detection field:	4 m x 4 m (emitting spots**)
Min. detection speed:	5 cm/s to activate detection
Reaction time:	250 ms
Tilt angle:	15° - 45°
Norm conformity:	EN 61000-6-2; EN 61000-6-3; EN 50581

Specifications are subject to changes without prior notice.  
Measured in specific conditions

\* depending on size and nature of target

\*\* zone detected by spotfinder, slightly bigger than actual detection field

## LED- SIGNAL



Output 1  
Value indication



LED flashes



Output 2  
Parameter indication



LED flashes quickly

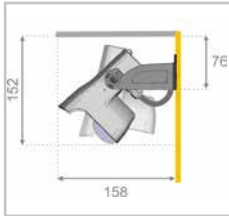


Setup

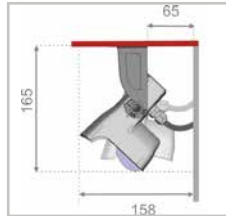


LED is off

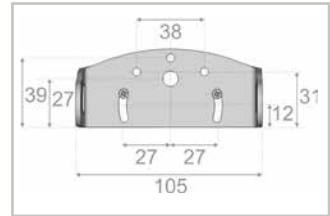
## DIMENSIONS (in mm)



Wall mounting



Ceiling mounting



Bracket dimensions

## SAFETY INSTRUCTIONS



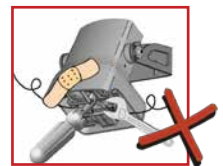
Only trained and qualified personnel may install and setup the sensor.



After installation, save an access code to lock the sensor.



Test the good functioning of the installation before leaving the premises.



The warranty is void if unauthorized repairs are made or attempted by unauthorized personnel.

The manufacturer of the door system is responsible for carrying out a risk assessment and installing the sensor and the door system in compliance with applicable national and international regulations and standards on door safety.

## MOUNTING TIPS



Do not cover the sensor.



Avoid extreme vibrations.



Avoid proximity to neon lamps or moving objects.



Avoid exposing the sensor to sudden temperature changes.

## HOW TO USE THE REMOTE CONTROL

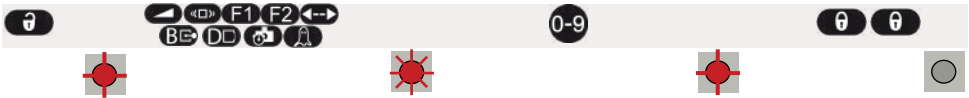


After unlocking, the red LED flashes and the sensor can be adjusted by remote control.

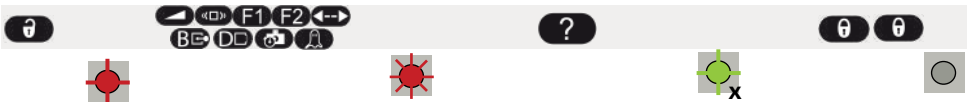


If the red LED flashes quickly after unlocking, enter an access code from 1 to 4 digits. If you do not know the access code, **cut and restore the power supply**. During 1 minute, you can access the sensor without introducing any access code.

## ADJUSTING ONE OR MORE PARAMETERS

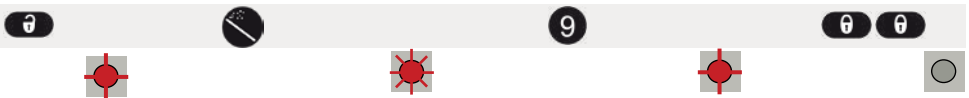


## CHECKING A VALUE



The number of flashes indicates the value of the chosen parameter.

## RESTORING TO FACTORY VALUES



## SAVING AN ACCESS CODE

The access code is recommended for sensors installed close to each other.



## DELETING AN ACCESS CODE

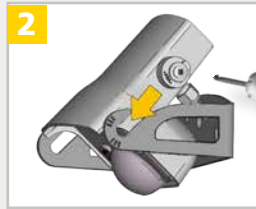


If you do not know the access code, **cut and restore the power supply**. During 1 minute, you can access the sensor without introducing any access code.

# 1 MOUNTING



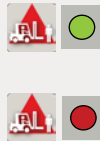
Remove the bracket from the sensor.  
Drill 2 holes accordingly.  
Fix the bracket firmly.



Position the sensor on the bracket and fasten the screws.

# 2 WIRING

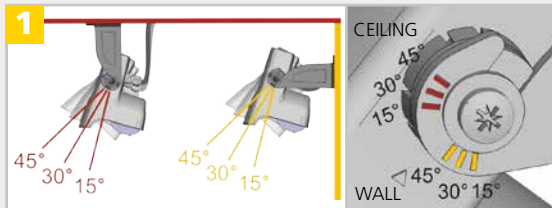
GN		12-24 V	POWER SUPPLY
BN		AC-DC	
WH		COM	IR OUTPUT 1 Presence or pulse signal
YE		NO	
GY		NC	
PK		COM	IR OUTPUT 2 Presence signal
VT		NC	
BK		NO	



Connect the wires to the door controller.  
Choose between NO and NC contact.



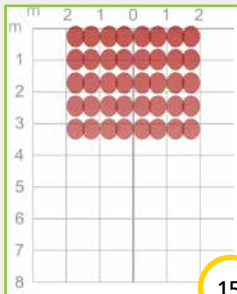
# 3 SENSOR ANGLE



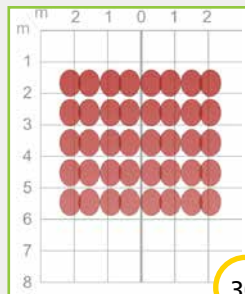
Adjust the angle of the sensor to position the detection fields.



Tighten the screws firmly.

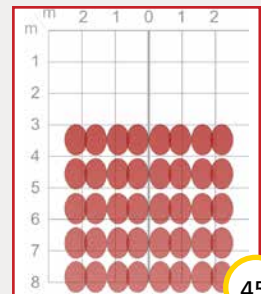


15°



30°

RECOMMENDED

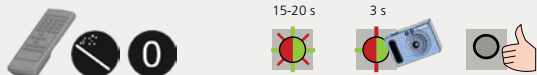


45°

NOT RECOMMENDED

4 All detection field dimensions are measured in specific conditions (mounting height: 5 m).  
Infrared field = emitting spots detectable by Spotfinder. The actual detection field is slightly smaller and influenced by external factors.

## 4 SETUP



Launch a setup to make a reference picture.  
Step out of the detection field and do not leave any tools inside the detection field.

After first power on, the sensor launches a setup and after each power cut a short setup is launched.

### POSSIBLE REMOTE CONTROL SETTINGS



OUTPUT REDIRECTION **F1**

presence	ir entry pulse	ir exit pulse	frontal ir entry pulse	frontal ir exit pulse	RELAY 1 <input checked="" type="checkbox"/>
presence	presence	presence	presence	presence	RELAY 2 <input type="checkbox"/>

FREQUENCY	<b>DE</b>	A	B									
MAX. PRESENCE DETECTION TIME		30 s	1 min	2 min	5 min	10 min	20 min	1 h	1 h 30	2 h	∞*	* not guaranteed
IR-CURTAIN IMMUNITY		low	normal	high								
MIN. SIZE OF TARGET	<b>F2</b>											The position of the target in the field is random.
IR-DETECTION FIELD	<b>BE</b>											

FACTORY VALUES











RESETTING TO FACTORY VALUES:



#### IMPORTANT:

Test the good functioning of the installation before leaving the premises.  
Always finish an adjustment session by launching a setup.

## TROUBLESHOOTING

	The door remains closed and the LED is OFF.	The sensor power is off.	<b>1</b> Check the wiring and the power supply.
	The infrared sensor does not react.	The infrared power emission is too low according to the mounting height.	<b>1</b> Launch a new setup. Step out of the detection field!
 	The door opens and closes constantly.	The sensor is disturbed by the door motion or vibrations caused by the door motion.	<b>1</b> Make sure the sensor is fixed properly. <b>2</b> Increase the sensor angle and/or radar angle. <b>3</b> Reduce the field size.
	Sporadic presence detections for no reason.	The presence detection is disturbed by rain or lamps.	<b>1</b> Set the IR-curtain immunity to value 3.
	The red LED is permanently ON after a setup.	The sensor is not installed properly.	<b>1</b> Fasten the sensor firmly.
	The red LED is permanently ON after a setup.	The sensor has failed the IR-setup.	<b>1</b> Launch a new setup. Step out of the detection field!
	The setup lasts more than 30 seconds.	The setup is disturbed.	<b>1</b> Make sure the detection field is clear and launch a new setup.
	The setup lasts more than 30 seconds.	Another sensor causes interferences.	<b>1</b> Select a different frequency for each sensor.
	The sensor does not unlock and the red LED flashes quickly.	The sensor needs an access code to unlock.	<b>1</b> Enter the right access code. <b>2</b> If you do not know the access code, cut the power supply and restore it to access the sensor and change the access code or delete it.
	The sensor does not respond to the remote control.	The remote control batteries are weak or improperly installed.	<b>1</b> Check the batteries and change them if necessary.
	The sensor does not respond to the remote control.	The remote control is badly pointed.	<b>1</b> Point the remote control towards the sensor.
	The sensor does not respond to the remote control.	The sensor is not powered.	<b>1</b> Check the power supply of the sensor.





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BEA hereby declares that the MILAN is in conformity with the basic requirements and the other relevant provisions of the directive 2014/30/EU and 2011/65/EU.

The complete declaration of conformity is available on our website.



Only for EC countries: According the European Guideline 2012/19/EU for Waste Electrical and Electronic Equipment (WEEE)