



EN

## **BEA Pedestrian**

Sensor solutions for swinging doors

# Introduction

BEA s.a. has been active in the area of detection since 1965 and was one of the first companies to launch a Doppler-effect radar sensor on the market specially adapted for automatic doors.

Since then, several solutions have been developed.

Our current range includes solutions specially for **swinging doors**.

These products are divided into 2 categories:

- Solutions for **opening** doors using microwave technology
- **Safety** solutions for doors using active infrared or laser technology.

# Complete your catalogue

Further information and instruction sheets are available upon request:

- Sensor solutions for sliding doors
- Sensor solutions for revolving doors



# Contact us

## BEA sa

LIÈGE Science Park  
Allée des Noisetiers 5  
4031 Angleur  
Belgium

T +32 4 361 65 65

F +32 4 361 28 58

info@bea.be

www.bea.be

# Summary

## OPENING SENSORS

EAGLE ONE **P4**

SEAGLE ONE **P6**

MAGIC SWITCH **P8**

## SAFETY SENSORS

4SAFE **P10**

# Icons



Microwave technology



Infrared technology



Dual technology  
(microwave & infrared)



Laser technology



Sliding door



Swinging door



Revolving door



Recommended mounting  
height



BEA remote control  
for adjusting the settings

# Sensors solutions for **swinging** doors



EAGLE ONE



SEAGLE ONE



MAGIC SWITCH



4SAFE



MAGIC SWITCH  
P. 8

SEAGLE ONE  
P. 6

EAGLE ONE  
P. 4

4SAFE  
P. 10

# EAGLE ONE



## UNIDIRECTIONAL OPENING SENSOR

Thanks to the BEA planar antenna and its unidirectional detection mode, the **EAGLE ONE** offers an high level of stability and reliability. It is the solution for all types of automatic doors, irrespective of the surroundings.

### FEATURES

Improvement of the energy efficiency of buildings thanks to the unidirectional radar, which detects approaching movements and filters out movements moving away: the door closes earlier and reduces heat losses.

Appealing design for swing doors thanks to positioning the sensor above the pivot.

Possibility to mount the sensor in the ground.

High level of stability and reliability of the detection area thanks to the planar antenna developed by BEA.



MICROWAVE  
TECHNOLOGY



Swinging door



Revolving door



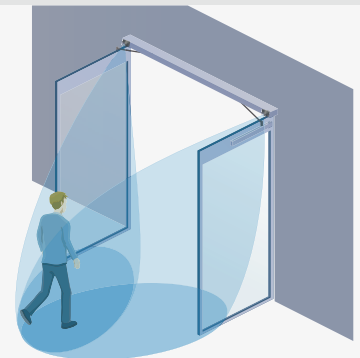
Remote control



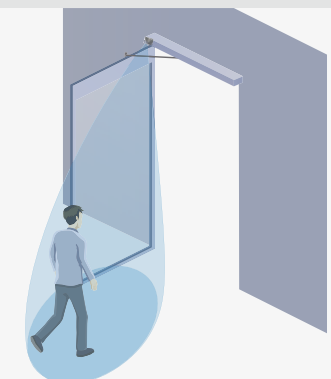
2 m 20



## APPLICATIONS



*Double leaf swinging door*



*Single leaf swinging door*





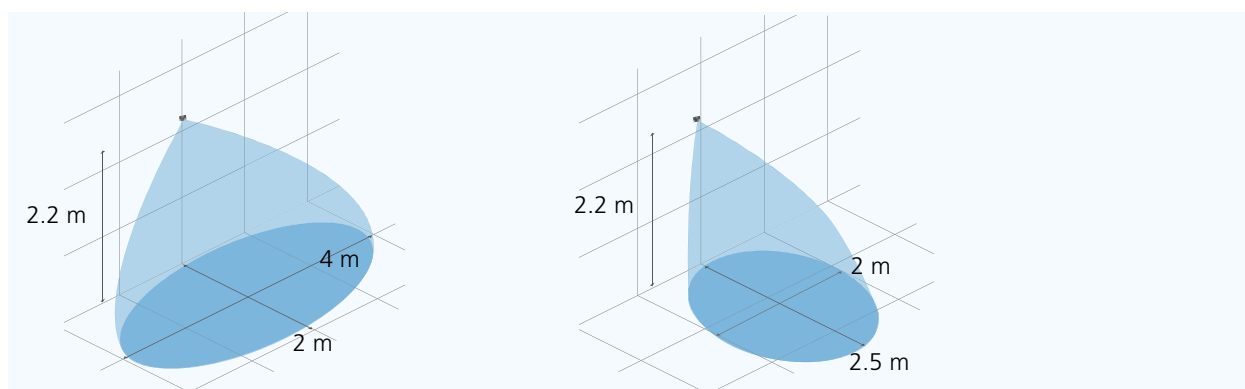
## TECHNICAL SPECIFICATIONS

<b>Technology</b>	<b>MOTION</b> Microwave doppler radar
<b>Mounting height</b>	from 1.8 m to 4 m
<b>Dimensions</b>	120 mm (L) × 80 mm (H) × 50 mm (W)
<b>Norms</b>	R&TTE 1999/5/CE EMC 2004/108/CE

## EASE OF INSTALLATION

- Adjustment of basic functions with push buttons.
- Fine tuning with the universal BEA coded infrared remote control.

## DETECTION RANGE



Radar area (wide) 4 m × 2 m @ 2.2 m

Radar area (narrow) 2 m × 2.5 m @ 2.2 m

# SEAGLE ONE



## UNIDIRECTIONAL OPENING SENSOR

The **SEAGLE ONE** is a microwave sensor controlled by microprocessor.

Digital motion sensor : the most economical all-round solution for opening all types of automatic doors (sliding, swinging, revolving, curved...). The sensor adapts to every application without any additional accessories.

### FEATURES

Compact size

Planar antenna in K-band that ensures a high precision of the detection area dimensions.

Very wide detection area for greater user comfort and very good side detection due to the oval sensing field shape

As an option, 6 element-antenna for narrow sensing field

3D antenna adjustment : the Seagle One antenna can be oriented along two axis :

Frontal adjustments from 0° to 90° : this means you can place the sensor back on the ceiling without any further accessory

Lateral adjustments from 30° left to 30° right : the sensor can be placed on the side of the door with the option of centering the detection area in front of the door



MICROWAVE  
TECHNOLOGY



Swinging door



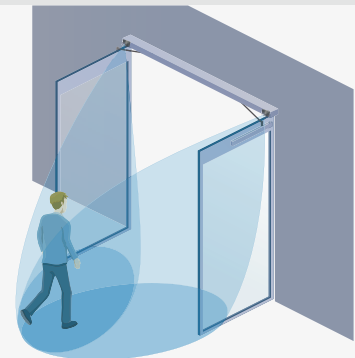
Revolving door



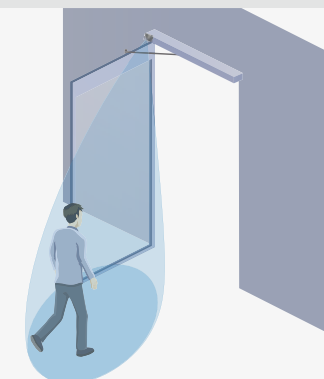
2 m 20



## APPLICATIONS



*Double leaf swinging door*



*Single leaf swinging door*



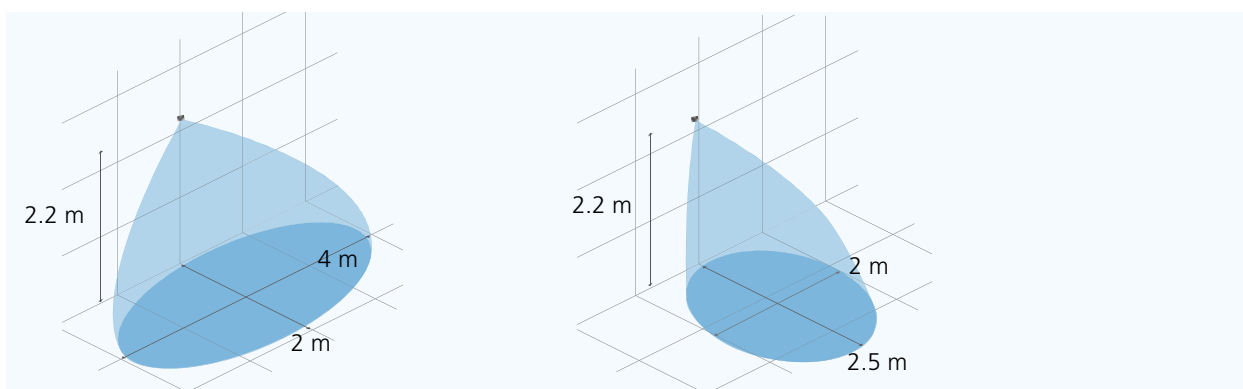
## TECHNICAL SPECIFICATIONS

<b>Technology</b>	<b>MOTION</b> Microwave doppler radar
<b>Mounting height</b>	from 1.8 m to 3 m
<b>Dimensions</b>	120 mm (L) × 80 mm (H) × 50 mm (W)
<b>Norms</b>	R&TTE: 1999/5/EC EMC: 2004/108/EC

## EASE OF INSTALLATION

- Adjustment of the sensing field with potentiometers.

## DETECTION RANGE



Radar area (wide) 4 m × 2 m @ 2.2 m

Radar area (narrow) 2 m × 2.5 m @ 2.2 m

# MAGIC SWITCH



## CONTACTLESS INTENTIONAL SENSOR

The **MAGIC SWITCH** is an intentional contactless microwave sensor. Its main use are hygienic applications where the lack of contact with the sensor is required and also comfort reasons in hospital environments, hotels, restaurants, in the retail and pharmaceutical industries and in logistics.

### FEATURES

Concealed installation and homogeneous detection thanks to the radar technology.

Detection area adjustable between 10 and 50 cm.

Possibility of keeping the door open with the switch mode.

Easy opening solution for low energy doors used by people with disabilities.



MICROWAVE  
TECHNOLOGY



Sliding door



Swinging door



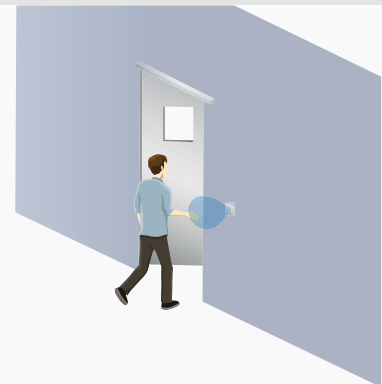
Revolving door



1 m 20



## APPLICATIONS



*Hygienic opening*





## TECHNICAL SPECIFICATIONS

### Technology

#### MOTION

Microwave doppler radar

### Dimensions

Without front face :

40 mm (L) × 50 mm (H) × 32 mm (W)

With front face :

84 mm (L) × 84 mm (H) × 45 mm (W)

### Norms

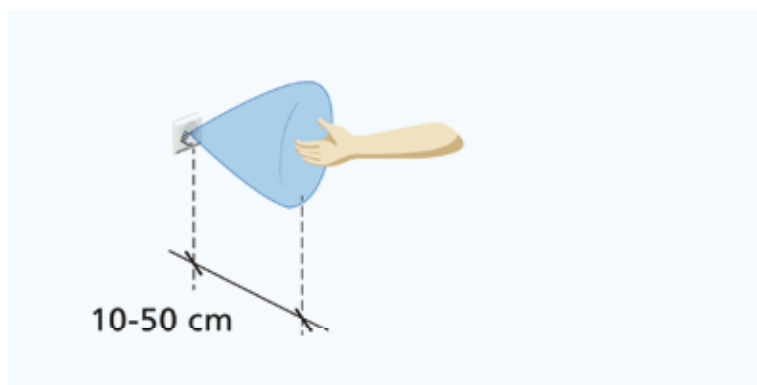
R&TTE 1999/5/EC

EMC: 2004/108/EC

## EASE OF INSTALLATION

- Adjustment of detection area with potentiometer.
- Switch or pulse mode with DIP-switches.
- Visible housing in option.

## DETECTION RANGE



Detection area of 10 cm to 50 cm

# 4SAFE

EN 16005

DIN 18650



## SAFETY SENSOR

The **4SAFE** is a failsafe active infrared sensor which operates by distance measuring.

On board of swing and revolving door leaves, it brings safety to the users by avoiding contacts with the doors in motion.

The three-dimensional area of the 4SAFE makes it particularly suitable for protecting people with disabilities.

### FEATURES

High user safety thanks to a detection area of 40 cm in front of the leaf at 2 m high with 4 groups of 2 active infrared spots.

Easy mounting with daisy-chain up to 6 modules, to cover the whole door width.

Easy wiring for swing doors thanks to the special design of the 4SAFE : every module has two selectable outputs for safety at opening or closing, with just one cable.

Adaptation to all floor types, even the most contrasted one (stainless steel plate, grids, water puddles, snow-covered ground...).

Easier logistics: each module recognises its status automatically and selects it in the daisy-chain.



INFRARED  
TECHNOLOGY



Swinging door



Revolving door



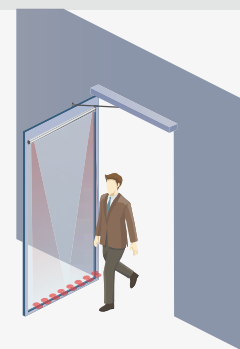
2 m 20



## APPLICATIONS



Double leaf swinging door



Single leaf swinging door



## TECHNICAL SPECIFICATIONS

**Technology** PRESENCE  
Active Infrared with background suppression

**Mounting height** 1.1 m to 3.5 m

**Dimensions** Sensor module : 300 mm  
L\* × 43,5 mm (H) × 47,5 mm (D)

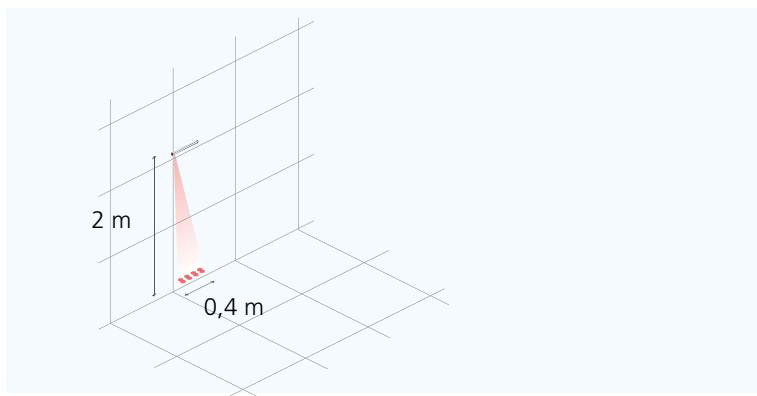
**Norms** EMC 2004/108/EC; MD 2006/42/EC  
DIN 18650-1:2012 ch. 5.7.4;  
BS 7036-2:1996\*;  
EN 16005:2012 ch. 4.6.8;  
EN 12978:2003 + A1:2009;  
EN 61508:2010; IEC 61496-2:2006; BGR 232;  
EN ISO 13849-1:2008 Performance Level «c» CAT.  
2 (under the condition that the door control system monitors the sensor at least once per door cycle)  
\* max. mounting height for BS 7036-conformity: 3.25 m

\* Length of profile according to packaging (see options)

## EASE OF INSTALLATION

- Pressing the push button once is enough to adjust the sensor for the usual installation heights.
- Fine tuning with 4 DIP-switches.

## DETECTION RANGE



Infrared dectection area 400 mm × 70 mm @ 2 m

FOR FURTHER INFORMATION ABOUT  
THE BEA RANGE OF PRODUCTS

---

[www.bea.be](http://www.bea.be)



[www.bea-pedestrian.be](http://www.bea-pedestrian.be)

SENSOR SOLUTIONS FOR SWINGING DOORS

44-0301 V1/12.12

**BEA**  
**PEDESTRIAN DOOR DIVISION**

**BEA sa**  
LIEGE Science Park  
Allée des Noisetiers 5  
B-4031 Angleur  
Belgium  
**T** +32 4 361 65 65  
**F** +32 4 361 28 58  
**E** [info@bea.be](mailto:info@bea.be)

A HALMA COMPANY



OPEN UP NEW HORIZONS