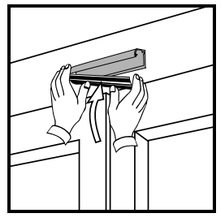
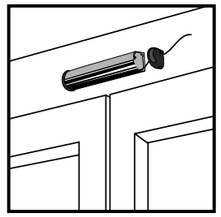
END OF INSTALLATION OF FOCUS 220/340/700/900

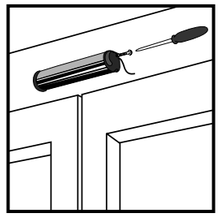


• Re-insert the front cover

1. Insert in the upper rail
2. Gradually tighten the front cover



• Run the cable through the opening in the side cap



• Screw on the second side cap

TROUBLESHOOTING

SYMPTOMS :	CORRECTIVE ACTIONS :
Green LED never lit	a) Check power supply b) Adjust the detection distance
Sensor detects erraticly	Reduce the detection distance

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HALMA GROUP COMPANY BEA S.A – LIEGE Science Park – Allée des Noisetiers, 5 B-4031 Angleur – Tel. +32 4 361 65 65 – Fax +32 4 361 28 58 – info@bea.be – www.bea.be

FOCUS 220/340/700/900 & 2 USER GUIDE

THE HIGH PERFORMANCE, MULTI-USE SENSOR

TECHNICAL SPECIFICATIONS

Technology	:	active infrared
Detection distance	:	0.6 m to 2.5 m (adjustable)
Mounting height	:	3 m max
Tilt angle of the module Focus 220/340/700/900	:	0° - 5° - 10° - 15° - 20° - 25°
Diameter of the IR spot at 1.7 m height	:	0.10 m
Detection mode	:	presence and motion
Detection signal duration (presence)	:	infinite
Response time	:	< 50 ms
Supply voltage	:	24 V AC ±10% - 24 V DC ±20%
Mains frequency	:	50 to 60 Hz
Current consumption	:	< 1 W (VA)
Output	:	relay with switch-over contact (voltage free)
• relay contact ratings (max voltage)	:	60 V DC / 125 V AC
• relay contact ratings (max current)	:	1 A (resistive)
• max switching power	:	30 W (DC) / 60 VA (AC)
Output hold time	:	100 ms
Adjustments	:	

• detection distance (per rotating came)
• tilt angle from 0° to 25° in 5° steps (Focus 220/340/700/900)

Temperature range	:	–25°C to +55°C
Immunity	:	Electromagnetic compatibility (EMC) according to EMC 2004/108/EC

FOCUS 220/340/700/900
supplied with aluminium profile for surface mounting or on ceiling

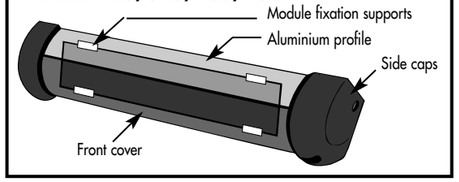
Dimensions of housing	:	220/340/700/900 mm (L) x 48 mm (H) x 48 mm (D)
Weight	:	0.2 kg
Material	:	aluminium, ABS and plexiglass
Colour of housing	:	naturally anodised or black black front sides
Cable length	:	3 m

FOCUS 2
supplied with embeddable front cover for false ceiling

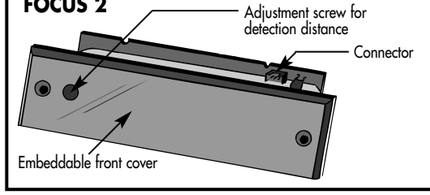
Dimensions of printed circuit	:	170mm (L) x 37mm (H) x 27mm (D)
Dimensions of front cover	:	200mm (L) x 45mm (H) x 5mm (D)
Weight	:	0.125 kg
Material of front cover	:	plexiglass
Colour of front cover	:	black
Cable length	:	3 m

DESCRIPTION OF THE SENSOR

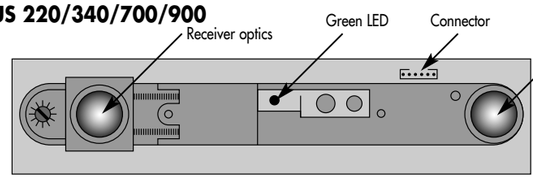
FOCUS 220/340/700/900

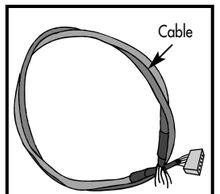


FOCUS 2

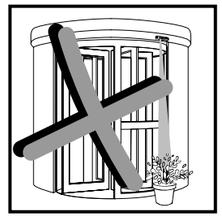


FOCUS 220/340/700/900





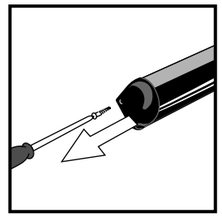
INSTALLATION TIPS



No objects shall be within the detection zone

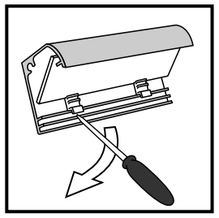
Preferably, FOCUS 220/340/700/900 should not be exposed to heavy rain

OPENING AND DISASSEMBLY OF FOCUS 220/340/700/900



• Unscrew the side caps

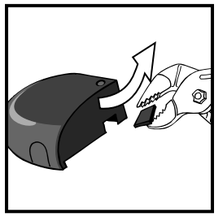
• Remove the front cover by one of its sides



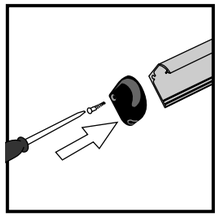
• Use a screwdriver to remove the plastic supports from the modules

FIXING THE FOCUS 220/340/700/900 PROFILE ON THE LEAF

1. INITIAL STEPS

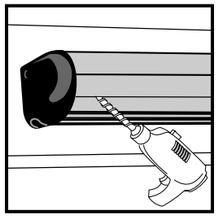


- Choose the side caps through which the cable is to be run
- Break the part of the cover through which the cable is to run

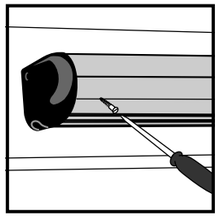


- Screw the cover onto the profile

2. APPLICATIONS FOR SURFACE MOUNTING



- Drill two holes in the back of the aluminium section and in the leaf of the door (use the groove to position the holes)



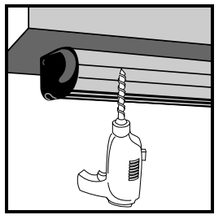
- Screw in the fixing screws

WARNING :
do not position the screws in the same place as the module fixation supports the circuit boards

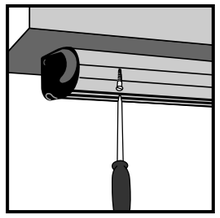
- Example of use for automatic window opening

- Example of use to detect presence for bidirectional automatic doors (to be connected to a buzzer)

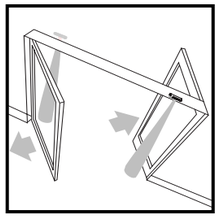
3. APPLICATIONS FOR CEILING MOUNTING



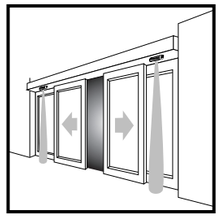
- Drill two holes in the upper part of the profile



- Tighten the screws

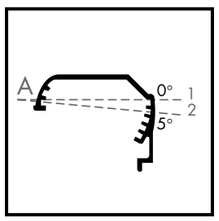


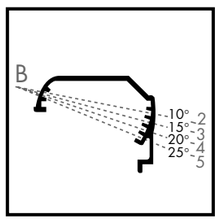
- Example of use for opening swing doors with very small detection zone



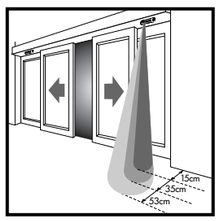
- Example of use for securing the fixed side leaves of sliding doors

ORIENTATION AND INSERTION OF THE FOCUS 220/340/700/900 MODULE

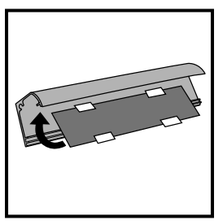


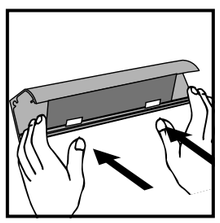


- Choose the position of modules in the housing from the available positions described above
- Recommended angle : 20°



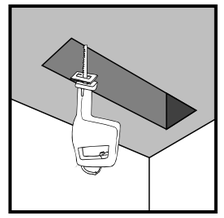
- Sketch of the detection zones corresponding to the angles at which the module is positioned for securing the fixed side leaves of sliding doors



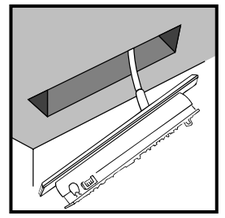


- Connect the cable to the connector
- Reinsert the module, ensuring that the connector is positioned to the side of the cap chosen for the passage of the cable

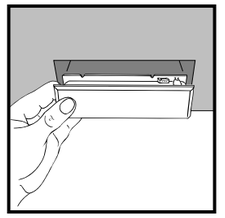
FIXING THE FOCUS 2



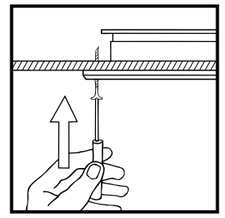
- Cut out a rectangle 170 mm long by 40 mm wide



- Connect the cable to the FOCUS 2 connector
- Run the cable through the opening

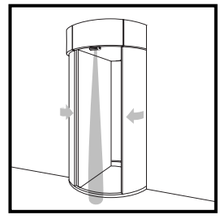


- Insert the FOCUS 2

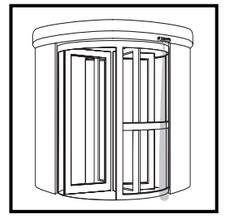


- Screw in the two fixing screws

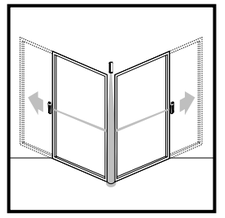
EXAMPLE APPLICATIONS



- Securing curved sliding doors

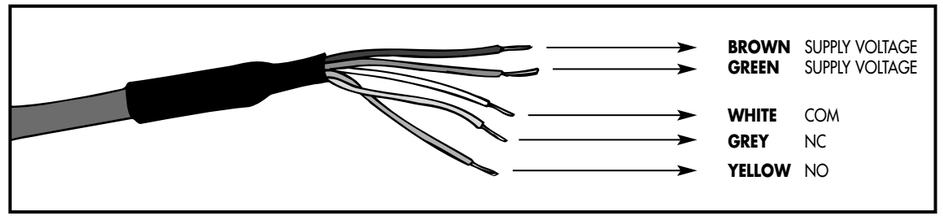


- Securing the gripping area of revolving doors



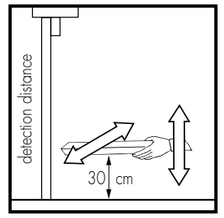
- Securing V-shaped sliding doors

CABLING THE SENSOR



- Connect the cable as shown above

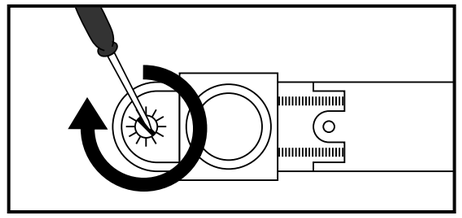
DETECTION DISTANCE ADJUSTMENT



- Take the cardboard box of the FOCUS

FOCUS 220/340/700/900

- Place the box at 30 cm from the floor and at a distance from the door determined by the tilt angle of the module
- Move the box up and down and from left to right in order to estimate the dead zone

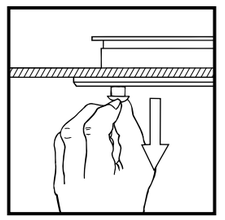


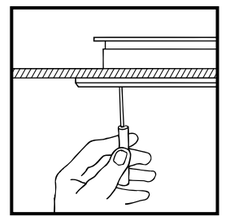
FOCUS 220/340/700/900

- Using a screwdriver, rotate the distance detection adjustment screw, in order to obtain the detection at ±30 cm
- Clockwise rotation by one notch increases the detection distance by ±10 cm (and inversely)

FOCUS 2

- Place the box at 30 cm from the floor
- Move the box up and down and from left to right in order to estimate the dead zone





FOCUS 2

- Gently remove the plug for the detection distance adjustment screw
- If detection occurs in the absence of an obstacle, rotate the screw counterclockwise

Note :
LED on : no detection
LED off : detection or no power supply