C. SETTING THE SENSING FIELD

Guide pins

Cut-Out footprints
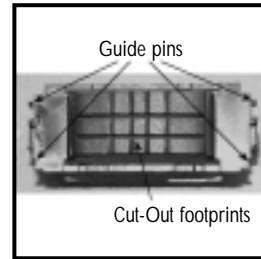
• To adjust the sensing field according to your specific needs, use the masking delivered in the sensor box:
  The minimum detection area at mounting height of 2.2 m is 0.5 m x 0.5 m

• To tailor the sensing field, cut segments
  Remarks :
  1) Be careful to cut just entire segments
  2) It is necessary to cut at least one segment to get a detection

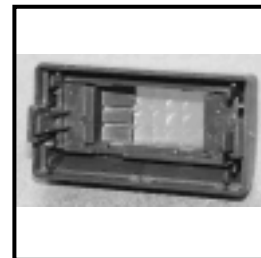**To insert the masking lens :**
• Consider the position of the guide pins when inserting both legs of the masking lens to the front cover
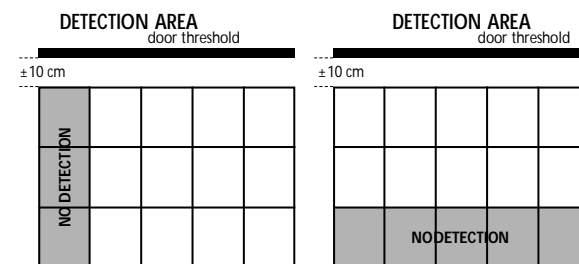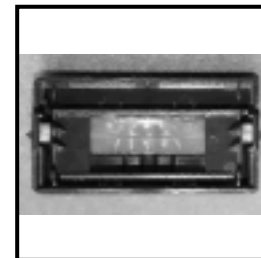• Gently push both legs of the masking lens
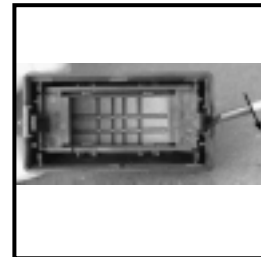
To remove the masking lens :
• Insert the screwdriver between the leg of the masking lens and the leg of the front cover
• Use it as a lever downwards

SENSING FIELD

ASYMMETRICAL SENSING FIELD   SHORTER DEPTH

DETECTION AREA
door threshold

±10 cm

NO DETECTION

DETECTION AREA
door threshold

±10 cm

NO DETECTION

TROUBLE-SHOOTINGS

SYMPTOMS	PROBABLE CAUSES	CORRECTIVE ACTIONS
The door will not open and the LED does not light up	The sensor is not properly powered	a. Check the power supply b. Check the supplied voltage
The door will not open and the LED lights up	The wiring of the relay output is not connected correctly	Check the relay wiring
The door opens when no detection occurs and closes during a detection	The mode of the relay output is not correct	Change the dip-switch #2 position
The sensing field does not correspond to your requirements	The cut of the masking lens is wrong	Cut out a new lens to meet the required sensing field size

FAAC

BFP1 USER'S GUIDE

THE MOST ADVANCED TECHNOLOGY IN PASSIVE INFRARED SENSOR RANGE

The **BFP1** is designed for use in opening of automatic doors with **small and medium sized sensing fields**

It is not recommended for automatic doors with large sensing fields (BFR1 range is recommended) or automatic doors when shopping carts or trolleys are used.

TECHNICAL SPECIFICATIONS

Technology	Passive infrared and microprocessor
Optical characteristics	P.I.R. with 4 elements, 15 Fresnel lenses with full independent masking possibilities
Mounting height	3 m max
Maximum Detection area for mounting height of 2.2m	2.5 m (W) x 1.5 m (D)
Minimum Detection area for mounting height of 2.2 m	0.5 m (W) x 0.5 m (D)
Detection mode	motion
Detection speed	0.1 to 1.5 m/s
Light indicator	1 red LED
Warm up	10 s
Hold time	0.5 s or 2 s
Response time	< 200 ms
Power supply	12 VDC –10% to 24 VDC +30% 12 to 24 V AC ±10%
Mains frequency	50/60 Hz
Power consumption	< 1 W
Connection	small plug-in 5 contacts connector
Recommended cable section	< 0.5 mm²
Length of cable	2.5 m
Temperature range	from –30°C to +55°C

Standard output relay (free potential change-over contact)
• Max contact voltage   60 V DC/ 42 V AC
• Max contact current   1A (resistive)
• Max switching power   30W (DC) / 60 VA(AC)

Manual adjustments
• shape of sensing field (masking lens)
• sensitivity (dip switch #1)
• relay configuration (dip switch #2)
• Hold time (dip switch #3)

Immunity   electromagnetic compatibility (EMC) according to 89/336/EEC and its amendments.

• **Color**   anthracite grey
• **Weight**   40g
• **Dimensions**   121mm (W) x 51mm (H) x 40mm (D)

• **Degree of protection**   IP54

DESCRIPTION

The passive infrared sensor
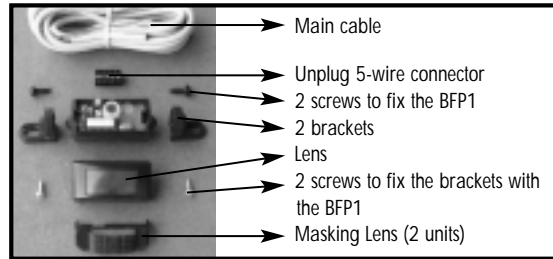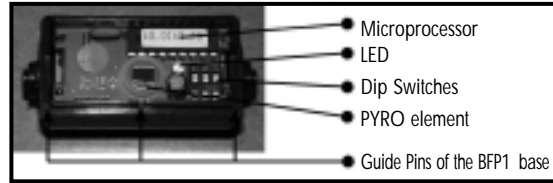
FSA Accessory for mounting on the wall

INSTALLATION TIPS

• The sensor must be firmly fastened in order to avoid any vibrations

DESCRIPTION OF THE PRODUCT AND THE SENSOR
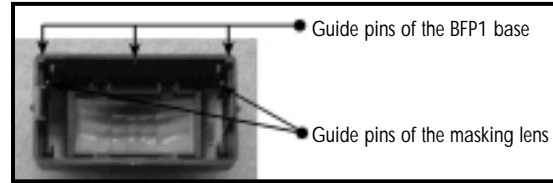

- Main cable
- Unplug 5-wire connector
- 2 screws to fix the BFP1
- 2 brackets
- Lens
- 2 screws to fix the brackets with the BFP1
- Masking Lens (2 units)

• Description of the product

1 2 3 4 5
12-24 V AC/DC   COM   NO   NC

• Wiring

- Microprocessor
- LED
- Dip Switches
- PYRO element
- Guide Pins of the BFP1 base

• Description of the sensor

- Guide pins of the BFP1 base
- Guide pins of the masking lens
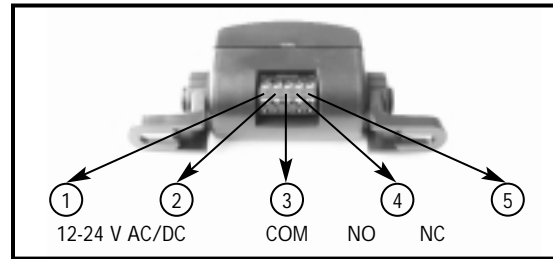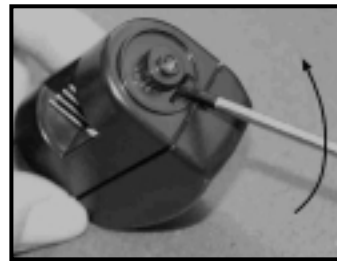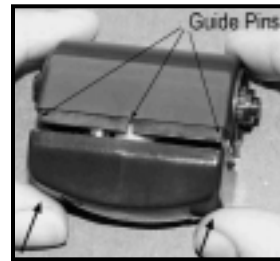
• Inner view of the sensor front cover

OPENING AND CLOSING THE SENSOR

• Use a small screwdriver to open the sensor
• Insert the screwdriver in the rectangular hole under the bracket cam
• Use it as a lever upwards

Guide Pins

• Consider the position of the guide pin when inserting both legs of the front cover to the base
• Gently push both sides of the front cover

OPENING AND CLOSING THE FSA ACCESSORY

OPENING THE FSA ACCESSORY

• Either use the screwdriver to open the FSA (left picture)
• Or pinch off both sides of the front cover (right picture)
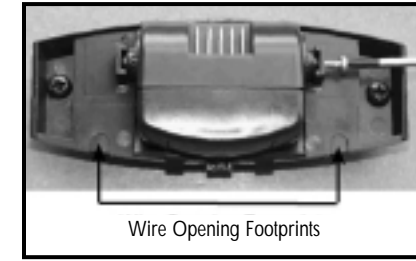• Rotate the front cover upwards
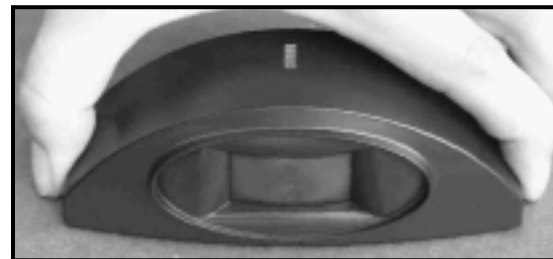
CLOSING THE FSA ACCESSORY

• Insert the bottom of the front cover to the bottom clip of the base
• Push on the top of the front cover face

MOUNTING THE SENSOR

A. MOUNTING THE BFP1

Wire Opening Footprints

• Stick the template on the wall
• Drill the 2 holes to fix the FSA and the hole for the cable
• Open the FSA (see page 2 : opening and closing the FSA Accessory)
• Cut the wire opening footprint of the base
• Fix the sensor to the FSA base with the 2 screws
• Connect the sensor to the cable
• Close the FSA (see page 2 : opening and closing the FSA Accessory)

LED SIGNAL

• The LED flashes for a few seconds when the sensor is switched on
• The LED lights up through the lens when the sensor detects motion

SETTING OF THE SENSOR

A. DIP SWITCHES SETTINGS AND RELAY CONFIGURATIONS

DIP SWITCHES	ON	OFF	FACTORY SETTING
1	Sensitivity high	Sensitivity low (recommended for mounting height < 2,2 m)	ON
2	Passive mode	Active mode	OFF
3	Hold time : 2 sec	Hold time : 0,5 sec	OFF

ON

1 2 3
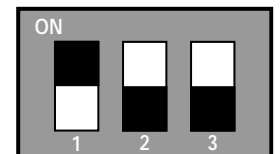
The relay configurations are :

	ACTIVE MODE	PASSIVE MODE
DETECTION	COM (3) — NO (4) · NC (5)	COM (3) — NO (4) · NC (5)
NO DETECTION	COM (3) · NO (4) — NC (5)	COM (3) · NO (4) — NC (5)

B. SENSING FIELD POSITION

PROFILE VIEW

2,2 m   3 m

50 cm 50 cm 50 cm

1,5 m depth

FRONT VIEW

2,2 m 3 m

50 cm 50 cm 50 cm 50 cm 50 cm

2,5 m

door threshold

FLAT VIEW

1,5 m

2,5 m   height 2,2 m