FAAC
Simply automatic.

FHE HERMETIC ENTRANCES

Hermetically sealed for hospitals and sterile environments.

FHE, ENTRANCES FOR HOSPITALS AND STERILE ENVIRONMENTS

FAAC technology is improving quality of life like never before.
For over 50 years, FAAC has been inventing the best automation solutions for residential, commercial, industrial and urban environments. Now its expertise is being used to provide solutions for those environments that require impeccable hygiene such as hospitals, clinics and laboratories.

Wherever FAAC is, quality improves.

AIRTIGHT SLIDING DOOR WITH GLASS LEAF

GUARANTEED HYGIENE

COMFORT AND SAFETY

AIRTIGHT AND SOUNDPROOFED

EN16005

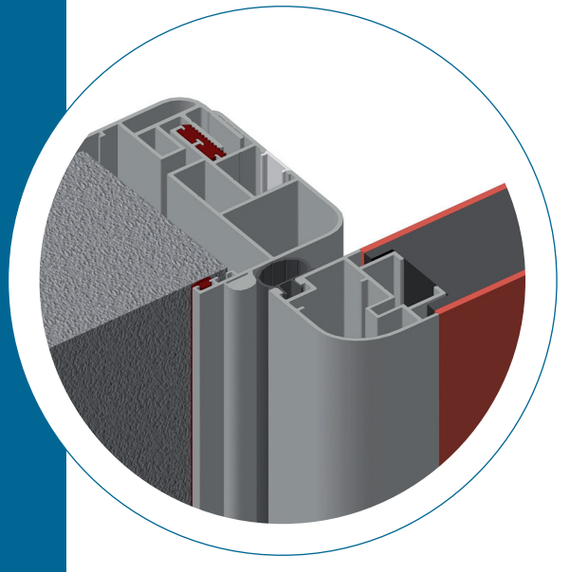
SLIDING DOORS

WE OFFER A TURNKEY SERVICE

The automatic/manual opening, single/double leaf sliding doors are ideal for bacterial contamination controlled environments.

They can be easily installed on prefabricated systems and on any other type of wall. There are two versions available, an airtight version or a hermetically sealed version.

The sliding doors can be operated either automatically - using electromechanical components (with control, regulation and monitoring systems suitable for the application requirements) - or operated manually using handles.



AIRTIGHT SLIDING DOOR FHE-SSA/SSM

The leaf of this type of door moves in a horizontal direction only.
It is sealed vertically by seals installed on the leaf that rest against vertical profiles mounted on the door frame, whilst the upper and lower seals on the two horizontal edges of the leaf slide next to the horizontal profile of the door frame and the surface of the floor.

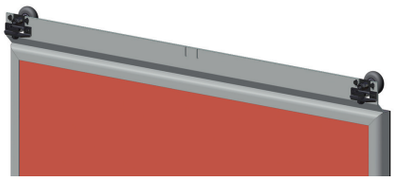
FIG.1

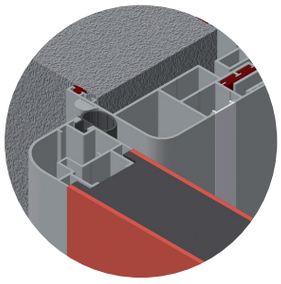
HERMETICALLY SEALED SLIDING DOOR FHE-SHA/SHM

The sliding leaf of the door becomes hermetically sealed against the edge profile of the door opening during the final closing stage by a combined sliding, vertical and inward movement. The leaf approaches the frame and the floor surface with a stroke of up to 20 mm and an inclination of 45°. The special design of the support and trolley guide enables the vertical and inward movements to be performed without the need for additional actuators. The hermetic seal, both on the door frame and the floor, is achieved by the compression of special seals installed on the perimeter of the leaf profile.
At the bottom of the leaf, the specially shaped profile slides on two guide points (see fig. 1) that help to improve the hermetic seal.

HERMETICALLY SEALED SLIDING DOOR WITH CLASS 4 AIR PERMEABILITY CERTIFICATION IN ACCORDANCE WITH EN12207

TECHNICAL CHARACTERISTICS





DOOR FRAME

The door frame, which is adjustable on three sides, consists of a frame profile and a subframe profile made of extruded aluminium and/or wide circular shaped stainless steel.

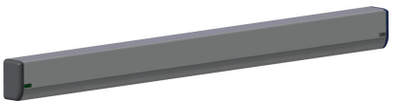
Inside the frame profile there are special grooves designed for fastening it and to house the friction seal that joins it to the subframe profile. The groove is closed by a joint seal that is flush with the frame profile.

By using special extruded aluminium extension elements, the door frame can be used on walls of various thickness.

LEAF

The leaf is fitted with shaped extruded aluminium profiles with wide radius corners.

The top profile of the leaf is specially shaped to allow the carriage unit to be installed directly, without having to use an adapter profile. A special extruded non-toxic silicone seal is installed on the vertical profiles and the upper profile of the leaf. A special two-component seal with a lip facing the frame profile side is fitted into a special groove on the bottom profile of the leaf.



COVER

Protective housing and cover for the sliding mechanism in shaped extruded aluminium with wide radius corners and free from sharp edges and protrusions for easy cleaning. The housing profile contains a groove designed to receive the seal that completely closes its lower side in correspondence with the top profile of the leaf.

The ends of the housing profile are closed with end caps having the same curvature as the profile. The housing profile allows easy maintenance that can be carried out by just one person.

FINISHING PANELS

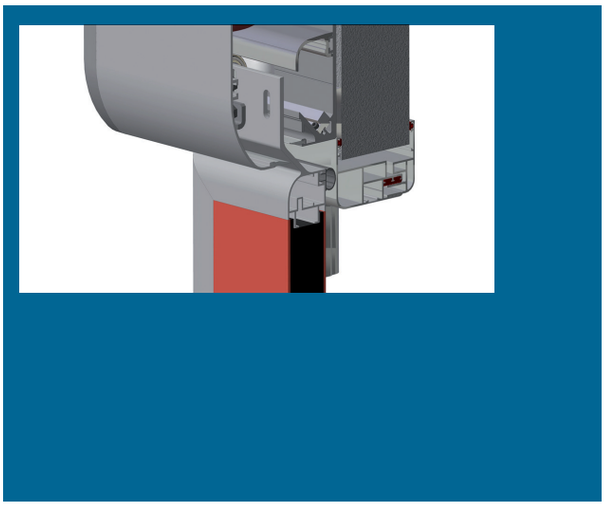
- SMS® (SOLID MINERAL SURFACE®) panel
- STAINLESS STEEL panel
- PAINTED STAINLESS STEEL panel
- HPL LAMINATE panel
- STRATIFIED HPL LAMINATE panel
- GLASS panel made of laminated safety glass 3 + 3 mm.

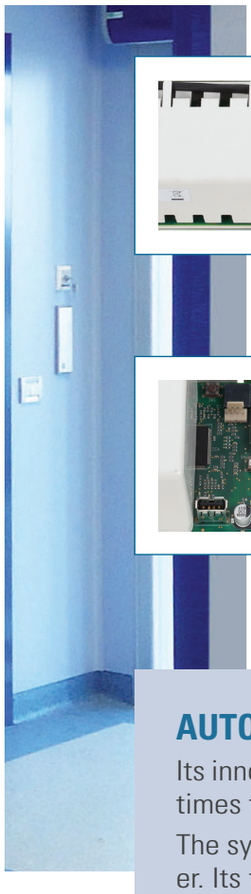
TARGETED SOLUTIONS

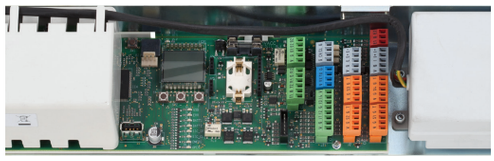
SLIDING MECHANISM

The leaf slides horizontally and vertically by means of a beam profile made of heavy gauge extruded anodised aluminium designed to be fastened to masonry walls or self-supporting prefabricated systems. The beam profile can house two carriages per leaf, each having a single nylon wheel mounted on ball bearings. The two wheel carriages ensure silent operation and distribute the weight of the door evenly over the full length of the beam. The wheel carriages make it possible to adjust the leaf both horizontally and vertically in order to compensate for any unevenness of the floor.

The beam profile can also house the anti-derailment profile made of extruded aluminium. The limit switches are made of a special extruded aluminium profile fitted with rubber buffers and a special floor guide made of Teflon coated steel.







Control unit with
switching power supply

USB port for updating
and exchanging configuration data

CONTROLS AND SAFETY DEVICES

The door can be equipped with large elbow push-buttons, monitored sensors in accordance with EN16005, a back-up battery unit for opening the door in an emergency in the case of a power failure and a program selector.

The FHE door is compliant with the following EC directives:

- Machinery Directive: 2006/42/EC
- Electromagnetic Compatibility Directive: 2014/30/EU
- RoHS Directive 2011/65/EU

AUTOMATION SYSTEM

Its innovative “Energy Saving” device identifies the direction of transit and optimises opening / closing times to avoid unnecessary air dispersion.

The system is customisable and can be assembled to meet the technical requirements of the customer. Its two aluminium covers, the exclusive leaf attachment systems and the various leaf profiles that are available make it is possible to achieve the best possible technical solution.

It is a personalised, ecological, reliable, safe, technologically advanced and durable system that is designed to operate at its best in any conditions and in any environment.

Power supply	220/240 V~ -50/60 Hz
Max power	140 W
Frequency of use	100%
Max leaf thickness	65 mm
Electric motor	36V motor ⎓ with encoder
Auxiliary motor	36V motor ⎓
Max. accessories load	1A - 24 V DC
Drive type	Electro-conductive toothed belt
Opening speed adjustment	10 75 cm/s (1 leaf) - 20 150 cm/s (2 leaves)
Closing speed adjustment	10 75 cm/s (1 leaf) - 20 150 cm/s (2 leaves)
Partial opening adjustment	5 95% of total opening
Pause time	0 30 s or Energy Saving function
Night pause time	0 240 s
Encoder	standard
Safety sensor monitoring (EN 16005)	standard (may be excluded)
Low Energy movement (EN 16005)	standard (may be excluded)
Operating temperature	-20°C + 55°C
Protection class	IP 23 (for indoor use only)
Compliance with standards	EN 16005; EN 13489-1 PI “c” CAT.2; EN 13489-2; EN 60335-1; EN 60335 -2; EN ISO 12100; EN 61000-6-2; EN 61000-6-3

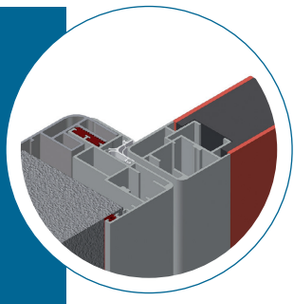
SWING DOORS

The FHE automatic/manual/semi-automatic single/double leaf swing doors are ideal for bacterial contamination controlled environments.

They can be easily installed on prefabricated systems and on any other type of wall. Standard, airtight or hermetically sealed versions are available.

The FHE swing doors can be operated either manually or automatically - using electromechanical components with control, regulation and monitoring systems suitable for the application requirements.

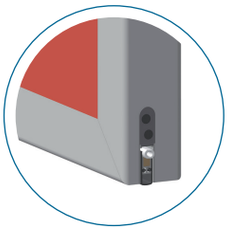
DESIGN SOLUTIONS



SWING DOORS FHE-HA/HM

With seals between the vertical profiles and the upper horizontal profile of the frame and the leaf.

AIRTIGHT SWING DOORS FHE-HSA/HSM

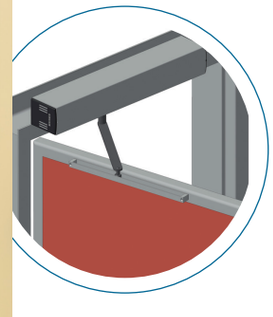


With seals between the vertical sides and the upper horizontal edge of the frame and the leaf, integrated with a retractable drop-down floor sealing system.

HERMETIC SWING DOORS FHE-HHA

Made in the same way as the airtight swing doors, but fitted with a special mechanical closing device that ensures a class 1 air permeability certification in accordance with EN14351.

CLOSING SYSTEM

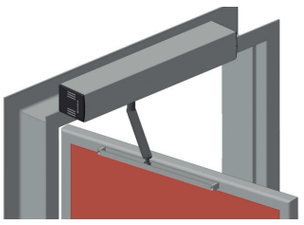


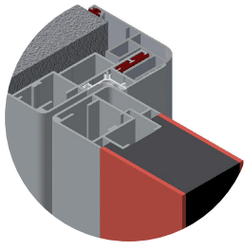
The FHE swing doors can be operated automatically, using electromechanical components with control, regulation and monitoring systems suitable for the application requirements, or they can be semi-automatically operated by a hydraulic system that enables them to be closed automatically.

HINGES

The FHE swing doors are fitted with concealed hinges that can be adjusted in all three dimensions to allow the leaf to adapt to all installation requirements. The FHE X-ray shielding swing doors are fitted with special hinges that can support the considerable weight of the leaf and enable it to be moved.

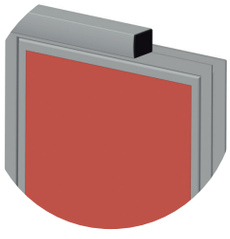
TECHNICAL CHARACTERISTICS





DOOR FRAME

The door frame, which is adjustable on three sides, consists of two elements, the frame profile and the subframe profile made of extruded aluminium and/or wide rounded shaped stainless steel. Inside the frame profile there are special grooves designed to house the friction seal that joins it to the subframe profile. The frame profile has also been designed with a special internal groove used for fastening it. The groove is closed by a joint seal that is flush with the frame profile. By using different extension elements made of extruded aluminium, the door frame can be used on walls of various thickness.



LEAF

The leaf is fitted with shaped extruded aluminium profiles with wide rounded corners.
The leaf profiles have been designed to accommodate special locks. The lower part of the leaf has been specifically designed to hold a draft excluder profile.
In the FHE doors, the leaf profiles overlap the panel. In special cases, we can provide panels that are flush with the leaf.

VISION PANELS

The FHE doors can be supplied with a solid leaf or with a vision panel that is either flush with the door panel or surrounded by a frame (X-ray shielding applications).

FINISHING PANELS

- SMS® (SOLID MINERAL SURFACE®) panel
- ENAMEL STEEL, Asepsi Ceramicsteel® panel
- STAINLESS STEEL panel
- PAINTED STAINLESS STEEL panel
- HPL LAMINATE panel
- STRATIFIED HPL LAMINATE panel
- GLASS panel made of laminated safety glass 3 + 3 mm.

THE FHE SWING DOORS HAVE BEEN TESTED FOR SOUND REDUCTION OF 32dB ACCORDING TO UNI EN ISO 10140-1, UNI EN ISO 10140-2, UNI EN ISO 717-1

CONTROLS AND SAFETY DEVICES

The door is equipped with two large elbow push-buttons as standard; an active infra-red safety sensor for the leaf rotation area when closing; an active infra-red safety sensor with a wide operating range for the leaf-rotation area.

when opening; a back-up battery for emergency operation, a key operated program function selector.

The FHE door is compliant with the following EC directives:

- Machinery Directive: 2006/42/EC
- Electromagnetic Compatibility Directive: 2014/30/EU
- RoHS Directive: 2011/65/EU

AUTOMATION SYSTEM

The 950N automation system with integrated spring allows the door to open and close in absolute silence.
The innovatively designed housing cover can be supplied in anodised extruded aluminium or moulded ABS.
The 950N automation system can also be used to automate double-leaf entrances by setting up two units in a master / slave configuration allowing the double leaf to be moved as if by a single system.
The automation system is equipped with two electronic boards: 950MPS (control board) and 950 I/O (input/output board). A microprocessor controls all door activity in real time and an encoder continuously detects its angular position. The operating logic (automatic, manual, night, open) can also be selected via an integrated selector.
The system is manufactured in conformity with the new European safety standards. The speed and force are programmed according to the dimensions of the door. If an obstacle is detected, the door re-opens immediately and as it closes, it checks, at reduced speed, that the obstacle is no longer present.
Carefully selected mechanical and electrical components means that our 950N automation system is able to move leaves weighing over 300 kg in continuous use, whilst always maintaining absolute operational safety.

Power supply	230 Vac (+6% -10%) 50 (60) Hz
Absorbed power	100 W
Frequency of use	100%
Max leaf thickness	65 mm
Drive unit	24 Vdc motor with encoder
Activation	Electromechanical with return spring
Anti-crushing safety device	standard
Dimensions	530 x 100 x 104 mm (lxhxD)
Weight	10 kg
Protection class	IP 23
Opening angle	70° - 95°
Opening speed	adjustable from 30% to 100%
Closing speed	adjustable from 30% to 100%
Pause time	adjustable from 1 to 30 sec.
Standard operating functions	automatic-manual-open
Activation arms in stainless steel	articulated to push with short sliding block, with standard sliding block
Housing cover	ABS or aluminium

ACCESSORIES

SAFETY SENSOR

RECESSED MOUNTING ACCESSORIES

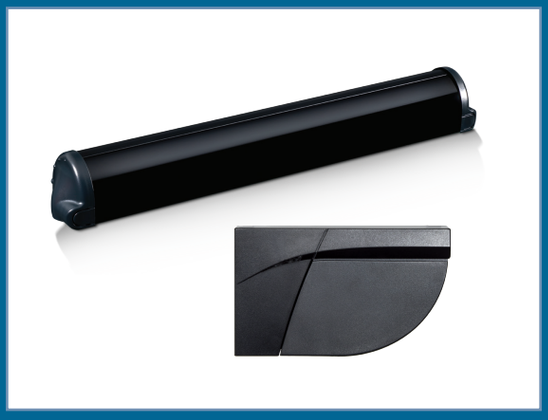
TOUCH BUTTON

ELBOW SWITCH

HANDLE

HANDLE

SWING LEAF SENSORS



FUNCTION SELECTOR

PROGRAMMER

PANIC BAR

VISION PANEL WITH VENETIAN BLIND

GUARD RAIL

CHOICE OF PROFILE COLOURS

STANDARD ANODISED ALUMINIUM

RAL 1013
semigloss

RAL 1013
matt

RAL 1021

RAL 2002

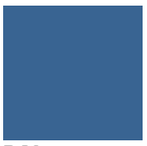
RAL 3000

RAL 3002

RAL 3003

RAL 3005

RAL 5003



RAL 5007

RAL 5010

RAL 5015

RAL 6002

RAL 6003

RAL 6005
matt

RAL 6005
gloss

RAL 6011

RAL 6012

RAL 7001

RAL 7005

RAL 7016

RAL 7016
gloss

RAL 7035

RAL 7042

RAL 8003

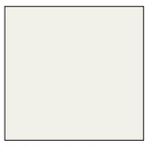
RAL 8011

RAL 8014

RAL 8016

RAL 8017

RAL 8019



RAL 9010

RAL 9001
gloss

RAL 9001
matt

RAL 9002

RAL 9004

RAL 9005

RAL 9006

RAL 9007

317-c
green

2707-c
light blue

Brushed Aluminium

Similar to Scotch Brite

CHOICE OF PANEL COLOURS

STANDARD HPL LAMINATE

ABET 406


ABET 414


ABET 431


ABET 435


ABET 475


ABET 478

ABET 810


ABET 845


ABET 856


ABET 858


ABET 859


ABET 860


ABET 879

Other colours on the Abet® colour chart are available on request

STANDARD SMS® (SOLID MINERAL SURFACE®)

2707-c
light blue

317-c
green

ON REQUEST
STAINLESS STEEL WITH SCOTCH BRITE FINISH
PAINTED STAINLESS STEEL
ENAMEL STEEL, ASEPSI CERAMICSTEEL®


OT 30
OT 30/1


151811787

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