



**AUTOMATIC ENTRANCE SPECIALISTS**

**EXEO**  
Revolving pedestrian doors

CE



THE EXCLUSIVE  
PRESTIGIOUS  
ENTRANCE



**Automatic pedestrian doors**

# EXEO range

Human nature is often conditioned more by emotional than rational impacts; indeed appearance is an extremely effective influencing force. Building, through its own language conveyed by attractive architectural designs, is not immune from this involvement and is capable of offering subtle messages. When we look at a building we immediately perceive its importance through its imposingness, design and the beauty of its façade. Then we analyze the details, such as the entrances, windows and friezes and we are able to express an initial judgement.

These elements are not banal aesthetic messages, but highlight the precise thought of that which the property wishes to convey us in terms of the quality, importance and certainties of those who occupy it. In proposing its new EXEO range of revolving doors, DITEC once again wishes to make a winning opportunity available to those who desire to convey messages of exclusive prestige and complete aesthetic qualification. The EXEO doors not only satisfy aesthetic privileges, but above all retain the heat during the winter, coolness during the

summer, and provide a barrier against annoying outside noise, draughts, wind and dust. All of these reasons explain why the most prestigious hotels, the most famous banks, the most elegant shopping centres and the most authoritative offices have always adopted such entrance systems: the overall benefit obtained, without forgetting the important energy saving, is so much higher than the initial investment.

EXEO consists of a range of doors with a circular structure and internal revolving leaves, which can be supplied in a manual or an automatic version. The structural part of the manual version is identical to that of the automatic version. In the manual version the door leaves are moved by pushing, while in the automatic version the movement is transmitted by a geared motor located in the upper part of the structure, in line with the supporting rod of the mobile door leaves.



## SOME SECTORS OF USE

**BANKS**

**HOTELS**

**CONGRESS CENTRES**

**PRESTIGIOUS SHOPS**

**AIRPORTS**

**OFFICES**

**CAR DEALERS**

# Basic structure

The door is composed of three basic structures:

- a fixed supporting structure
- a mobile structure
- an upper part.

The **fixed supporting structure** is made from anodized aluminium section profiles belonging to the DITEC Pam 35 range, with various curvatures depending on the required diameters, inside which steel reinforcements are housed. The unbreakable curved glass panels (5+5 mm) are highly resistant, also due to the assembly process of the 0.76 mm PVB that unites the two thicknesses into a single body.

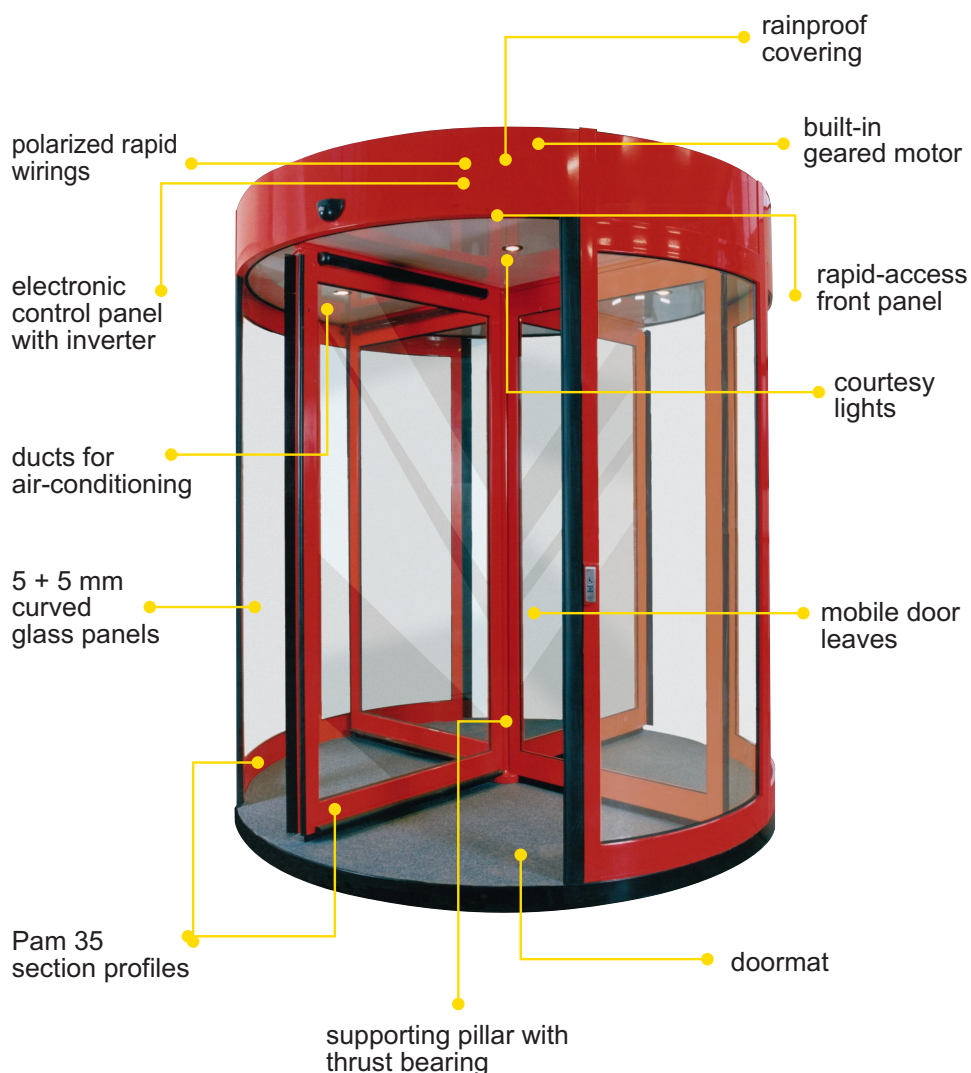
The fixed structure is anchored to the floor by the means of the special plugs supplied.

The **mobile structure** is composed of a central support unit, used as a vertical axis, which conveys the total weight of the sector onto a sturdy thrust bearing located at the base, which is securely anchored to the floor. The 3 or 4 mobile door leaves, fixed to the central support unit, are made from Pam 35 section profiles and are constructed in such a way as to enable the glass panels to be replaced extremely easily in the case of accidental break-ages.

In order to satisfy safety requirements, it is also possible to equip the door leaves themselves with a **break-away anti-panic device** that permits access by simply pushing the leaf. In the case of such event, a magnetic sensor ensures that braking is performed immediately.

Special **brushes** are contained in the external side space of the mobile door leaves and perform an effective sealing action between the leaves during movement, in order to avoid heat loss and the infiltration of dust from the outside to the inside environment. These brushes, along with the special **seals** positioned on the fixed surround, also perform an anti-shearing function.

The **upper structure** is made from sturdy steel plates securely anchored to the upper part



of the fixed structure, with the aim of achieving a very strong door; it is entirely hidden by an outer band of painted sheet metal.

In the automatic version, the upper structure houses the following components:

- the geared motor
- the inverter
- the electronic control panel
- the magnetic sensors for the control of the position of the mobile part

All the electrical connections are made using **pre-wired systems** that make assembly considerably easier.

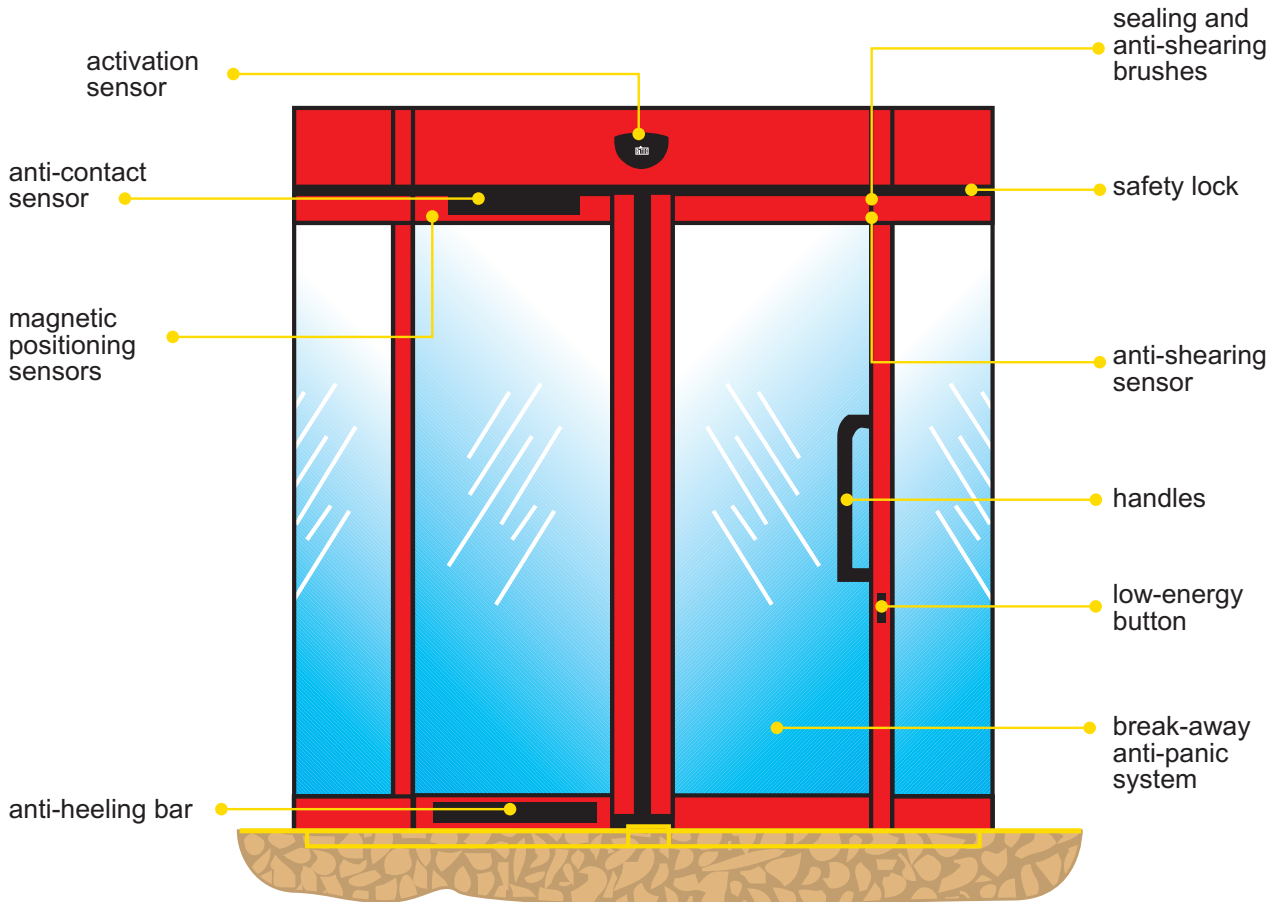
The entire system is controlled by a sophisticated control panel that regulates each movement like an "orchestra conductor", always guaranteeing operational situations in conditions of maximum safety.

All the components are positioned in a single area and are practical and easy to reach in the case of maintenance by simply removing the front panel made from sheet metal.

In case the door is positioned with an alighting side outdoors, an optional **rainproof covering** is available.

**EXEO**  
**PRESTIGE**  
**AND SAFETY**

# Activation and safety systems



## SAFETY SYSTEMS

The door features various safety systems. Indeed, it incorporates:

- anti-contact **sensors** in the upper part of the mobile leaves, which check that there are no obstacles along the stroke of the leaves. In the case in which an obstacle is detected, the door stops immediately and movement is resumed when the sensor detects that the field is clear.
- **bars** with anti-heeling function. In the case of collision with a body, movement is immediately stopped by a rubber strip positioned along the lower edge of the mobile door leaves.
- **sensors** with anti-shearing function. A sensor, positioned in the upper part of the entrance of the fixed structure, detects the presence of objects that could get wedged between the fixed and mobile parts. There is another safety device that, in the case of greater input of the

electric motor, detects the fault and arrests the entire system. In order to resolve any problems for disabled people, a pushbutton has also been positioned on the external part of the door, which – in the case of activation – reduces the speed of the door itself by 50%, restoring the initial setting after 3 revolutions.

All these safety devices are active so that the system always stops in the case of any kind of abnormal condition.

## FUNCTIONING OF THE AUTOMATIC VERSION

In the automatic version the door starts moving when the sensors located in the upper part of the passage space detect the presence of a person. The electronic control of the PLC-inverter sets the geared motor in motion with a predetermined progressive acceleration slope. After the passage of

the person, the door continues to revolve for other three turns, after which it stops in the correct standby position until the subsequent activation, and so on.

The door will nonetheless stop in the case of the intervention of any of the safety devices (sensors) during movement. Although arrest is very rapid, it is preceded by a braking action that "softens" the STOP. Also in the case of mechanical anti-panic break-away, the action is detected by a sensor that transmits a STOP signal to the door.

**EXEO**  
TECHNOLOGY,  
ELEGANCE  
AND DESIGN

# Dimensions and versions

EXEO is available in a wide range of diameters, with three or four door leaves, in both the manual and automatic versions.

The door diameters available for both versions are: 1800 mm - 2000 mm - 2200 mm - 2400 mm - 2600 mm - 2800 mm - 3000 mm (larger dimensions upon request).

The height of the passage space is fixed and is 2200 mm for all the models.

Both the basic manual and automatic versions are supplied with:

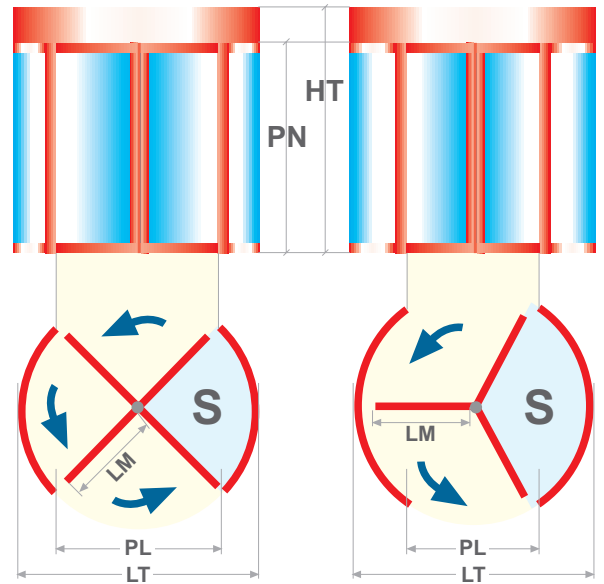
- 3 or 4 mobile door leaves
- 5+5 mm external curved glass panels
- anodized aluminium or RAL coloured finish

In addition to the features of the above-mentioned manual version, the basic automatic version is also complete with:

- 2 activation sensors
- 2 anti-shearing sensors
- 2 emergency pushbuttons
- 2 low-energy pushbuttons to help disabled users
- revolving contacts for the connection of supplementary accessories

The following supplementary accessories are also available:

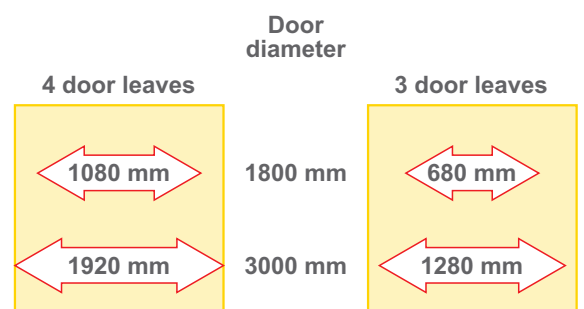
- anti-contact sensors
- anti-heeling bar
- break-away anti-panic system
- external handles
- spotlights for illuminating the revolving area
- rainproof covering
- door base



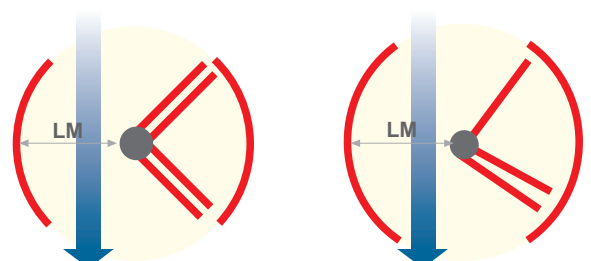
LT mm	PL mm	S m <sup>2</sup>	LM mm	PN mm	HT mm
1800	1080	0,5	800	2200	2500
2000	1220	0,7	900	2200	2500
2200	1360	0,8	1000	2200	2500
2400	1500	1	1100	2200	2500
2600	1640	1,2	1200	2200	2500
2800	1780	1,4	1300	2200	2500
3000	1920	1,6	1400	2200	2500

LT mm	PL mm	S m <sup>2</sup>	LM mm	PN mm	HT mm
1800	680	0,7	800	2200	2500
2000	780	0,9	900	2200	2500
2200	880	1,1	1000	2200	2500
2400	980	1,3	1100	2200	2500
2600	1080	1,6	1200	2200	2500
2800	1180	1,9	1300	2200	2500
3000	1280	2,1	1400	2200	2500

## WIDTHS OF THE PASSAGE SPACE ACCORDING TO THE DIAMETERS OF THE DOOR



## DOOR LEAVES IN ANTI-PANIC POSITION



### IMPORTANT

The configurations illustrated are given as an indication. On request, it is possible to design and adapt aesthetic or technical aspects according to the customer's requirements, taking the standard versions as a starting point.

# Principal technical characteristics

Mains voltage supply	230 V AC single phase
Peripheral velocity of door leaf	max. 1000mm/s
Reversible geared motor	230 V three-phase - 50/60 Hz
Power of geared motor	0,55 KW
Magnetic end-of-stroke positioning devices	√
Electronic brake controlled by inverter	√
Control logic and adjustments via PLC- Inverter	√
Electronically controlled obstacle sensitivity	√
Activation sensor	√
Anti-shearing safety sensor	√
Anti-heeling safety sensor	√
Anti-panic break-away of leaves	√
Functioning	continuous
Direction of rotation	anticlockwise
Standards of reference	PrEN 12650-1-2 Powered pedestrian doors

## SIGNIFICANT ADVANTAGES DERIVING FROM THE USE OF REVOLVING DOORS

<b>the prestige of the building is enhanced</b>	<b>the doors keep in the heat in the winter and the coolness in the summer</b>	<b>they prevent dust and exhaust fumes from entering</b>	<b>they keep out wind and draughts</b>	<b>they keep out noise</b>
<b>they guarantee great energy savings</b>	<b>they enable the environment to be pressurized, if necessary</b>	<b>they enable a continuous flow of passage</b>	<b>they avoid the collision of people entering with those leaving</b>	<b>they discourage the entry of any suspicious characters</b>

**Standards:** DITEC automatic systems possess the CE mark, and are designed and constructed in accordance with the safety requirements of the Machines Directive (98/37/CE), the Electromagnetic Compatibility Directive (89/336/EEC) and the Low Voltage Directive (73/23/EEC).

DITEC S.p.A. reserves the right to make modifications aimed at improving the products.

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