

Spiral Door

Quick and insulated!



Helix

The superfast and space-saving Spiral-door

Properties

- max. W x H = 5,000 x 5,000 mm, max. surface area (WxH) = 25 m²
- U-value at 5,000 x 5,000 mm ISO panels: 1.77 W/m²K
- high opening speed up to 1.1 m/s
- wind load resistance class 2- 3 according to EN 12424, or up to 10 - 12 Beaufort (89 - 133 km/h)
- low maintenance springless system
- quick and simple installation because of pre-assembled track and drive-system
- EN 13241 compliant



Helix

The Helix, Spiral-Door opens 6 x faster than similar sectional doors and is therefore extremely suitable in an environment where you have intensive logistic movements. This door opens fast and - depending on the door size up to 1.1 M per second - real savings on the energy cost can be achieved. A revolutionary spiral system with specially designed rollers has an uninterrupted chain-/steel-cable system with direct drive. This patented system also contributes to the sleek design of the Alpha Helix. The powerful electric drive has a frequency converter. There is a choice of finishes and controls.

Dimensions	
max. width (W)	5,000 mm
max. height (H)	5,000 mm
max. surface area	25 m ² (350 kg)
opening speed (max.)	1.1 m/s
closing speed (according to the norm)	0.5 m/s
section thickness	40 mm
section joint	Finger-pinch-protection
ALU-sections possible	yes
μ value at 5,000 x 5,000 mm	1.77 W/m ² K (complete ISO)

Components and construction

The Helix is a high speed spiral door which consists of Microline sections with a working height of 366 mm. During the opening of the door the sections run along a spiral-shaped rail. A powerful drive allows the door to quickly and silently run along the unique rail system.

Materials

- horizontal sandwich-sections consisting of an outer and inner shell of galvanised steel with a CFC-free polyurethane (PUR) core with finger-pinch-protection
- standard section height 366 mm
- panel thickness 40 mm
- rails made of sendzimir galvanized steel
- vibration-free rollers with ball bearings
- middle hinges in galvanized version
- mounting of door fittings with electrolytic galvanized parkers with serrated fixed ring
- specially developed top and bottom sealing
- unique side seal
- wind- and waterproof sealing between the panels

Window options

The Helix is also available with one or more sections made of anodized aluminum profiles, filled with insulating double glazing.

Surface treatment

- the outside of the sections has a polyester-coating in RAL9002 (Off-white) or RAL9006 (aluminium silver)
- the inside of the sections has a polyester-coating in RAL9002 (Off-white)

Drive

The door is powered by an electric motor with gear unit. Drive side on the right or left.

Technical details electric drive

- power..... 400V 3 ph / N + PE / 50Hz / 16A
- degree of protection IP 65

Protection

- EN13241 compliant
- safety light curtain (IP65 and to max. height 2,500 mm). If this curtain is interrupted by an obstacle the door will automatically fully open until the screen is freed again. This does not apply to the door in closed position.
- the door can be manually opened in the case of a power loss
- finger-pinch-protection

Control and operation

The control system has 3 buttons (open-stop-close) and regulates a multitude of functions such as:

- adjustable open time
- service and run mode
- 7-segment display for controlling the various functions
- choice of permanently open or permanently shut

Other forms of operation that can be connected to the standard control box:

- push-button, electronic keypad, pull switch, key-operated switch, photocell, radar, induction loop detection or remote control



Available controls:

TS971, TS981

Structural provisions and connection (by others)

- separate technical data sheets detailing dimensional and structural requirements are available on request
- for both the electric drive and control box a wall socket (400V 3 ph / N + PE / 50Hz / 16A) must be present within 0.5 m at 1,500 mm height to the left or right next to the door
- with standard CEE-plug, the control box is IP54 compliant

Options / accessories¹

Control and operation

- additional controls as described above available at surcharge
- control box directly wired (control box IP65)
- main switch directly wired on the control box (IP65)

Protection

- connection of traffic lights (red/green or red and green)
- Warning flash light (orange or red)

Construction

- customer-specified RAL coating on inside and/or outside of the sections (with the exception of fluorescent and traffic colours)

¹ subject to surcharge



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