

# Spiral Door

Quick and insulated!

40 mm thick panels

Inside sections standard with  
Microline finish in RAL 9002

Also available with  
ALU window sections

Finger pinch protection

Standard light curtain

Outside sections  
standard with  
Microline finish

  RAL 9002 or  
RAL 9006



## Helix

The superfast and space-saving Spiral-door

### Properties

- max. W x H = 5000 x 5000 mm, max. surface area (WxH) = 25 m<sup>2</sup>
- U-value at 5000x5000 mm ISO panels: 1,77 W/m<sup>2</sup>K
- 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)	5000 mm
max. height (H)	5000 mm
max. surface area	25 m <sup>2</sup> (350 kg)
opening speed	1,1 m/s
closing speed	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 <sup>2</sup> 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 aluminium 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 2500 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 1500 mm height to the left or right next to the door
- with standard CEE-plug, the control box is IP54 compliant

## Options / accessories <sup>1)</sup>

### 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

- leading photocell instead of a lightcurtain <sup>2)</sup> (no wiring on the door leaf)
- 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)

<sup>1)</sup> subject to surcharge  
<sup>2)</sup> subject to price reduction



## For more information:

Pittelderstraat 10  
6942 GJ Didam Netherlands  
+31 316 228066  
info@alpha-deuren.nl  
www.alpha-deuren.nl

