

HIGH SPEED SPIRAL DOOR, type „SST - Premium“

| Item | Qty | DESCRIPTION | Unit Price | Total Price |
|------|-----|--|------------|-------------|
| | | <p>Manufacture, supply and correct installation of</p> <p>High speed spiral door according to Quotation ref. _____ Type „SST-Premium“, with electro-mechanical high-performance drive unit for permanent industrial application</p> <p>CONSTRUCTION PRINCIPLE (MODULAR DESIGN) The door system mainly consists of:</p> <ul style="list-style-type: none"> - Self-supporting lateral steel frames; steel parts generally galvanized - Door leaf made of double-walled EFA-THERM laths, fixed onto hinge straps and moved vertically (i.e. up or down). - Spiral-shaped door leaf receptacles - High-speed drive, operation and control via frequency converter and microprocessor control in plastic control box - Safety equipment according to DIN EN 12453. - Fire class B2 - max. wind load (accord to DIN EN 12424) up to class 4 - direct wind sound damping (accord to DIN EN 7171) up to class 30 dB(A) <p>The DOOR LEAF is generally manufactured from double-walled, thermally separated and insulated EFA-THERM sections. The laths are optimally smooth without protruding edges or screws. Lath format: 225 x 40/60/80/100 mm, depending on door size. Overall heat transfer coefficient (depending on dimensions) up to 0.8 W/m²K. Surface as 2-layer painting similar to RAL 9006 (white aluminum). They are connected windtight by flexible rubber seals. The laths themselves must not mesh into each other as with conventional types, but must be fixed in large hinge straps on both sides. Load is also transmitted on both sides: For this, a synchronization shaft will be installed. For the exact, smooth and low noise guidance of the hinge straps, ball-bearing precision rolling units have to be used.</p> <p>The GUIDE RAILS necessary for this are integrated under the cover of the vertical FRAMES. The construction of these frames enables easy accessed, e.g. for inspections. A sufficiently dimensioned tension spring mechanism, ensuring the counter balance of the door leaf ensuring the counter balance of the door leaf's weight according to the EU standard DIN EN 12604 and a manual opening of the door (e.g. in the case of a power failure) is installed. For this purpose, an appropriately marked emergency hand-lever on the frame is pulled, disengaging the motor brake (and if possible the locking unit), whereupon the door opens via spring force. The special guide rails terminate in a space-saving spiral shaped door leaf receptacle.</p> <p>This SPIRAL BODY is designed to guide the laths of the door leaf completely without contact thus without wear and with best possible noise reduction. Conventional designs, such as winding the door blade onto a drum, do not fulfil the purposes.</p> <p>The door system is equipped with a LOCKING MECHANISM. Operated by an inside hand lever.</p> | | |

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| | | <p>DOOR DRIVE is by a geared motor (0.75, 1.5 kW and/or 2.2 kW) of the high-frequency type.</p> <p>Speed regulation is to be achieved using a FREQUENCY CONVERTER with wear- and service-free semiconductor electronics modifying the revolutions per minute via the frequency and supplying the drive motor with 3 phase 230 V. This way, the door is gently accelerated to its maximum speed and equally decelerated into its respective limits.. The motor is not started at full force, the drive elements are not loaded with a jerk, but evenly and easily. This technology is indispensable for longevity with the least wear and thus compulsory. Moreover, the operating speed can be programmed variably on the site:</p> <p>OPENING SPEED: up to approx. 1.5 m/s Max. DOOR LEAF SPEED: up to approx. 2.5 m/s (Number dependent on the lifting height) CLOSING SPEED: up to approx. 1.0 m/s</p> <p>The door leaf is continually positioned via non-wearing inductive 24 VDC proximity switches (INITIATORS) whereby the limits are determined electronically. Electro-mechanical limit switches are not permissible.</p> <p>The MICROPROCESSOR CONTROL EFACON is installed together with the integrated frequency converter in a separate plastic switch cabinet protected IP 54.</p> <p>The SWITCH CABINET is to be equipped as follows:</p> <ul style="list-style-type: none"> * Lockable main switch * Foil keypad „AUTOMATIC“ / „MANUAL“ * Foil keypad OPEN, STOP, CLOSE * VF Info display with display of functions and remote diagnosis. <p>Connection to 230V and/or 400 V -50 Hz power supply on site.</p> <p>The scope of delivery includes an opto-electronic DOOR LIGHT – LINE GRID (TLG), TÜV certified and <u>exactly</u> effective in the door closing line: The safety system is completely integrated in the frames and generates a very tight light grid made of infrared beams at ta height of 2.5 m. Obstacles are recognized without contact, the automatic closing move is immediately stopped.</p> <p>Requirements as per DIN EN 12453 and/or DIN EN 12604, UVV, VDE as well as machine protection law are complied with. Incl. functional checking and commissioning for clear opening dimensions</p> <p>Width = mm x Height = mm</p> <p style="text-align: right;">at the basis price of €</p> <p>plus the following specified accessories as well as pulse generator ... (compare 8.1 – 8.4)</p> | | |

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| | <p><u>OPTION:</u></p> <ul style="list-style-type: none"> - ADDITIONAL Approach area protection as two sided Personal and door protection, consisting: * 2 Active IR presence detectors * 2 Brackets with swivelling head <u>for external assembly, if necessary:</u> * 1 Rain cover <p><u>SURFACE</u></p> <p>Powder coating of all sendzimir-galvanized steel parts according to RAL _____ (metallic colours <u>not</u> possible)</p> <p><u>In addition, if desired:</u> Special coating of the laths according to RAL _____</p> <p>Should steel parts as well as laths parts be coated in the same RAL colour, minor deviations in colour may occur which can not be fully avoided due to the different surface structures. The supplier, however, will make the best possible efforts to keep deviations in colour as small as possible through influencing the degree of gloss.</p> <p><u>TRANSPARENCY</u></p> <ul style="list-style-type: none"> - Additional aluminium window laths EFA CLEAR with fully transparent, <u>double-walled</u> and thermally separated window fields made of plexiglass. <p><u>Option:</u></p> <ul style="list-style-type: none"> - Additional aluminium window laths EFA CLEAR with fully transparent, <u>single-walled</u> window fields made of plexiglass. <p><u>Fixed side element:</u></p> <ul style="list-style-type: none"> - Additional fixed lateral element consisting of: <ul style="list-style-type: none"> * Integrated pedestrian door, DIN (positioned left and right of the door) with lock and set of door handles (closing cylinder provided on the site) clear passage height max. w = 1500 mm, h = 2500 mm * Above fixed cover element, incl. required frame design, similar surface to door leaf Total dimensions approx. W = mm H = mm (plus any required C section supports)! <p>(* comp tender text 7.1)</p> | | |
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TENDER TEXT

1.1

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- OPTIONS:
- Panic lock for pedestrian door
 - Overhead door closer
 - Closing cylinder with 3 keys

Crash version:

Version of the door with "**ACS-DS**" (**Active Crash System**) according to Quotation ref _____ by interlinked hinge change which are detachably connected up to a height of 900 mm. Power transmission by direct synchronous drive and two linearly moved pistons. Crash recognition by inductive proximity switches integrated on both sides of the bottom section.

Reoperation of the door optionally by:

- Fully automatic retraction (standard)
- Manual retraction on foil pad
or by key switch (option)

(Crash version only available in connection with door light – line grid)

IF REQUIRED

- Version with space-saving **oval coil**
- **Automatic interim stop** at a height of H = _____ mm

Traffic light in robust design for all industrial doors

- LED traffic light, Ø ca. 150 mm red or green (please state)
- LED traffic light, Ø ca. 150 mm red and green
- Traffic light according to the German traffic regulations
red or green (please state)
- Traffic light according to the German traffic regulations
red and green

Traffic lights incl. basic control