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## SPECIFICATIONS – EX-DOORS

POS.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
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### 01.01 EX-DOORS

#### 01.01.0010 HIGH-SPEED SPIRAL DOOR Flagship Product: EFAFLEX Type “EFA-SST®-L EX” Manufacturing: 0.000 x 0.000 mm

Manufacturing, delivery, and installation of:

High-speed spiral gate type "EFA-SST®-L EX", with electro-mechanical high-performance gate drive for the heaviest industrial continuous use, both outdoors and indoors.

The gate system essentially consists of:

Self-supporting, lateral steel frames,  
steel parts generally galvanized,  
spiral-shaped door panel mounting

The force transmission takes place on both sides: A synchronizing shaft is installed for this purpose. To ensure precise, smooth, and quiet guidance of the hinge straps, precision roller assemblies with ball bearings must be used. In the door frames, a sufficiently dimensioned tension spring mechanism is also installed, which, according to DIN EN 12604, ensures the weight balance of the door leaf and guarantees emergency opening of the door (e.g., in the event of a power failure).

The SPIRAL BODY (optionally round or oval spiral) is designed so that the slats of the gate leaf pass by each other completely without contact, and thus wear-free and quiet.

The gate drive is operated by a high-frequency motor. The gate positions are continuously detected using wear-free, inductive proximity switches (Zone 1) or by means of absolute encoders (Zone 2), with the end positions being determined electronically. Electromechanical limit switches are not permitted for this purpose.

#### GATE LEAF CONFIGURATIONS:

##### Variant 1 Lamella spacing 151 mm (spiral body with round or oval spiral guide):

Gate leaf made of double-walled ALU lamellae, attached to hinge bands and moved in a vertical direction (i.e., up or down), surface finish of the lamellae anodized (E6/EV1).

##### Variant 2 Lamella spacing 225 mm (spiral body with round spiral guide):

Gate leaf consisting of two outer strips made of anodized aluminum (E6/EV1) and a central section made of transparent, single-layer acrylic glass. The visible surface of the gate leaf must be at least 70%, and long-term transparency must be ensured.

The MICROPROCESSOR CONTROL is installed together with the integrated frequency converter in a separate steel control cabinet, protection class IP 65. Connection to 230V - 50 Hz power to be provided on site. The control system MUST be mounted outside the EX protection zone

#### SAFETY FEATURES:

- Safety contact strip according to DIN EN12453, self-monitoring, in EX protection version. The supply cable must be routed safely in an energy chain within the door frame.
- Safety light curtain in EX protection version, integrated safely into the door frames.
- Emergency stop button in EX protection version (surface-mounted industrial version)

**EX-PROTECTION VERSIONS:**

The gate system is suitable according to ATEX Directive RL 2014/34/EU for use in:

- EX protection zone 1 (II 2G IIB T4 X)
- EX protection zone 2 (II 3G IIB T4 X)

(X: Operating and ambient temperature -15°C to +50°C)

All electrical components (except the control cabinet) have an ATEX certificate. The mechanical EX protection is designed according to the EX protection zone.

Regulations according to DIN EN 13241-1 are met;  
Resistance to wind load according to DIN EN 12424 up to class 4  
Air permeability according to DIN EN 12426 class 2  
Airborne sound insulation according to DIN EN 7171 up to 23 dB(A)  
(Values depend on the gate size and equipment)

**OPENING SPEED: approx. 1.0 m/sec.**

**CLOSING SPEED: approx. 0.5 m/sec.**

Connection on site to 230 V / 50-60 Hz. Fuse 16 A  
With functional check and commissioning for clear opening:

Width = ..... mm x Height = ..... mm

Offered product:

*EFAFLEX* Typ „EFA-SST®-L EX“  
(Bidder specification)

**1,000 pieces** ..... ..

**01.01.0010**

**Spiral baffle at the bottom and front:**

Sheet metal, galvanized, powder-coated, or stainless steel (V2A) (mandatory when mounting on the cold side)

**1,000 pieces** ..... ..

**01.01.0020**

**Spiral baffle on top as a dust cover:**

Sheet metal, galvanized, powder-coated, or stainless steel (V2A) (not available when mounted on the cold side)

**1,000 pieces** ..... ..

**01.01.0030**

**Powder coating**

of all visible steel parts according to RAL (excluding pearl and fluorescent colors)

**1,000 pieces** ..... ..

**01.01.0040**

**Stainless steel version**

of all visible sheet metal parts made of stainless steel (V2A), including ball bearings for deflection and running rollers made of V2A. (Small parts located in the frame are not stainless steel)

**1,000 pieces** ..... ..

**01.01.0050**

**Push buttons in EX-protection version Various versions:**

- DT-EX surface mounted
- DT2-EX, OPEN/CLOSE surface mounted
- DT3-EX, OPEN/STOP/CLOSE surface mounted

**1,000 pieces** ..... ..

01.01.0060	<b>Push Button Switch</b> in explosion-proof version	1,000	pieces	.....	.....
01.01.0070	<b>Induction Evaluator</b> 2-channel, in explosion-proof version * including laying of 2 loops	1,000	pieces	.....	.....
01.01.0080	<b>Control Cabinet Heater</b> Thermostatically controlled (Required at a temperature < +5 °C)	1,000	pieces	.....	.....
01.01.0090	<b>Impact Protection Bollard:</b> FLEXCORE 6 consisting of stable metal core, rotatable HDPE outer shell, and shock- absorbing rubber ring Height = 1,370 mm Diameter = 182 mm	1,000	pieces	.....	.....
01.01	<b>EX-GATES</b>	Total: .....			