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## SECIFICATION – CLEANROOM

POS.	DESCRIPTION	QUANTITY	UNIT	UNIT PRICE	TOTAL PRICE
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### 01.01 CLEANROOMDOORS

#### 01.01.0010 HIGH-SPEED ROLLING DOOR

Leading product: **EFAFLEX Typ „EFA-SRT® CR Efficient“**

Manufacture: **0.000 x 0.000 mm**

Manufacture, delivery and installation of:

Roller door with flexible curtain and low air permeability for continuous industrial use in clean rooms and clean areas with limited space and low to medium GMP requirements.

The 'EFA-SRT® CR Efficient' door system is TÜV SÜD-certified for use in classified rooms up to ISO class 6 (according to DIN ISO 14644) for particle sizes  $\geq 0.1 \mu\text{m}$ . This results in air pressure differences of up to 30 Pa with an air loss of up to 40 m³/h (depending on size and installation side).

All visible parts of the self-supporting, self-contained door construction are made of powder-coated steel, with a choice of colours according to RAL. Particularly narrow frames (75x100 mm) and low lintel dimensions (min. 380 mm) enable particularly space-saving installation.

The door system is designed with a 15° cover as standard.

The drive (electric motor with integrated gearbox, brake and absolute encoder, protection class IP55) is axially coupled to the winding shaft ; it is controlled by a microprocessor control system and frequency converter. All control components, including the membrane keypad (OPEN-STOP-CLOSE) and information display, are housed in a polycarbonate enclosure measuring 220 x 565 x 200 mm with protection class IP 65 next to the door.

The presence of an absolute encoder eliminates the need for manual or automatic synchronisation after the system is switched on for the first time or after a power failure.

The door leaf (curtain) consists of 2 mm thick, PVC-coated flexible polyester fabric (FDA-compliant, antistatic, silicone-free), which is wound onto and unwound from a horizontally mounted, galvanised shaft. Curtain colour: papyrus white similar to RAL 9018, light grey similar to RAL 7035, signal grey similar to RAL 7004.

Safety buttons attached to the left and right edges of the door curtain hold it in its guide (the frames).

The scope of delivery includes a one-way light barrier, which is integrated into the door frame, and an electric safety contact strip in accordance with DIN EN12453, which is self-monitoring. The signal from the contact strip is transmitted via a wireless radio link. An emergency stop switch is fitted to the control cabinet as standard.

Emergency opening of the door, e.g. in the event of a power failure, is possible from the installation side using a hand crank supplied.

All regulations in accordance with DIN EN 13241-1 are fulfilled.

**OPENING SPEED: ca. 0,8 m/sec.**

**MAX. DOOR LEAF SPEED: bis ca. 1,0 m/sec.**

(abhängig von der Torgröße)

**CLOSING SPEED: ca. 0,5 m/sec.**

Connection on site to 230 V / 50-60 Hz. Fuse protection 16 A.

With functional test and commissioning for clear opening (max. W x H = 3,000 x 3,500 mm):

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

**Manufacture's certificate:**

EFAFLEX Tor- und Sicherheitssysteme GmbH &amp; Co. KG

[www.efaflex.com](http://www.efaflex.com)

Product offered::

EFAFLEX Typ „EFA-SRT® CR Efficient“  
(bidder's specification)

1,000 pieces ..... ..

**01.01.0020****Alternative curtain types:**

2 mm PVC-coated polyester fabric  
In accordance with FDA paragraphs  
175.300, 178.2010 and 178.3740 for the  
transport of dry foodstuffs in the  
colours:

- blue, similar to RAL 5002, antistatic, silicone-free
- orange, similar to RAL 2008, non-antistatic, silicone-free
- red, similar to RAL 3002, non-antistatic, silicone-free
- yellow, similar to RAL 1021, non-antistatic, silicone-free

1,000 pieces ..... ..

**01.01.0030****Viewing window:**

Curtain design with viewing window  
(with horizontal and vertical weld seams due to manufacturing process)  
Viewing window height freely selectable

1,000 pieces ..... ..

**01.01.0040****Alternative complete cover 45°:**

For drive and shaft

1,000 pieces ..... ..

**01.01.0050****Alternative complete cover over 90°:**

In straight design for drive and shaft

1,000 pieces ..... ..

**01.01.0060****Infrared presence detector:**

With active detection of moving AND  
stationary objects.  
For personal and gate protection.  
Various designs:  
• Above the gate system on the wall.  
Colour: black or white.

1,000 pieces ..... ..

**01.01.0070****Contactless pulse generator:**

Type 'Magic Switch Chroma'  
Various designs:  
• Surface-mounted on the wall  
with an installation height of 20 mm  
• Flush-mounted on the wall  
with an installation height of 7 mm

1,000 pieces ..... ..

**01.01.0080****Clean room-compatible push buttons:**

Push button TYPE Jung LS 990 in  
various designs

1,000 pieces ..... ..

01.01.0090	<b>Traffic light displays:</b> LED-CR, red/green Various versions: <ul style="list-style-type: none"> <li>Flush-mounted, incl. flush-mounted box for wall mounting</li> </ul>	1,000 pieces	.....
01.01.0100	<b>Independent power supply UPS-EDO-CR:</b> in separate control cabinet (380x600x210) with plug-in connection, 230 volts / 50 Hz designed for at least one complete gate movement (opening or closing) at reduced running speed (availability: max. 1 hour) Continuous ambient temperature up to max. 25°C Optional: push button for the opposite side, flush-mounted or surface-mounted	1,000 pieces	.....
01.01.0110	<b>Independent power supply UPS-ADO:</b> In separate control cabinet (380x600x210 mm) Ready to plug in, designed for 230 V AC voltage, for at least ten complete gate cycles at regular running speed (availability with active UPS: max. 1 hour), continuous ambient temp. max. +25 °C Standard cable length to door control max. 5 m Optional: Push button for the opposite side, flush-mounted or surface-mounted	1,000 pieces	.....
01.01.0120	<b>GVM control extension:</b> Mutual interlocking of two EFAFLEX high-speed doors incl. cabling up to max. 5 m in on-site cable routing	1,000 pieces	.....
01.01.0130	<b>Control extension for conveyor technology:</b> Separate terminal area in standard control cabinet For the following inputs and outputs: Inputs: Pulse open, pulse closed, emergency stop, interlock Pulse generator Outputs: Potential-free signal door open, door closed, potential-free signal ready/fault (outputs assignable with max. 24 volts DC)	1,000 pieces	.....
01.01	<b>CLEAN ROOM DOORS</b>	Total: .....	