Project xx

**SECIFICATION – CLEANROOM**

POS. DESCRIPTION QUANTITY UNIT UNIT PRICE TOTAL PRICE

**01.01 CLEANROOMDOORS**

**01.01.0010 HIGH-SPEED ROLLING DOOR**Leading product: ***EFAFLEX* Typ „EFA-SRT® CR Efficient“**Manufactrue**: 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 >= 0.1 µm. 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.

**OPENDING 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 & 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 Traffic light displays:**

LED-CR, red/green

Various versions:

• Flush-mounted, incl. flush-mounted box for wall mounting **1,000 pieces ………………… …………………**

**01.01.0100 Independent power supply UPS-EDO-CR:**

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 Independent power supply UPS-ADO:**

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 GVM control extension:**

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 Control extension for conveyor technology:**

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 CLEAN ROOM DOORS Total: …………………**