Tender specification text

Product: Steel folding door

Type: ST602F hand operated/power operated

Manufacturer: LINDPOINTNER

Technical design in accordance with the applicable standards and regulations for the protection of employees.

Data given in the description are minimum requirements.

**Area of application:**

Door for industry and workshops. An accurately designed door for every requirement. A solid folding door contains virtually no wear parts so there are minimal maintenance and servicing costs. After professional installation, no initial technical acceptance by a civil engineer or TÜV is necessary for a manually operated door.

Cycles per day: approx. 50

**Air tightness (EN12426):**

Class 1-3 with a door size of 5200x5600 mm (WxH)

**Resistance to wind load** **(EN 12424):**

Class 2-3 with a door size of 5200x5600 mm (WxH)

**Sound insulation value Rw:**

28-32 dB (depending on the infill of the door)

**U value**

approx. 3 W/m²K (depending on the door infill)

**General design:**

Steel folding door in frame design. Door leaf comprising hot-dip galvanised steel profiles (Strip galvanizing according to EN 10346) with powder-coated surface. Construction depth min. 60 mm, profile depth min. 95 mm; Filling with dual-wall construction elements (panels or glass).

Running rail produced from hot-dip galvanised steel profile (Strip galvanizing according to EN 10346) with powder-coated surface and downward opening, 3.6 mm wall thickness, dimensions 85 x 125 mm; 6.3 kg/rm with bolted seal carrier to partially cover the steel running rail (aluminium cover profile) with continuous sealing lip. Suspension of the door leaves by horizontal and vertical guided roller units. Plastic-covered track roller diameter 59 mm, Ø 59 mm per 2 track rollers for horizontal and vertical guide. Dust-proof, maintenance-free ball bearings.

Hinges 120 mm high, bolted to the frame by means of steel clamping plates adjustable and exchangeable) with 20 mm stainless steel bolts and a dust-sealed thrust bearing between the hinged hinges

Fixing of the panels with aluminium holding strips inside A6/CO anodised which are fixed in a groove provided on the frame by means of a rubber seal.

Internal espagnolette bolt mechanism and concealed locking bars made of hot-dip galvanised steel.

Operation via robust anodised aluminium loop lever and additional handle.

**Frame:**

Wall thickness of profiles min. 2 mm; hot-dip galvanised steel (Strip galvanizing according to EN 10346) with powder-coated surface.

Profiles mitred and joined by brazing. Profiles must not be welded in the visible area, as there is an increased risk of corrosion due to the burning of the zinc. Sealing and finger trap protection between the leaves with 50 mm leaf spacing made of EPDM material (PVC not permitted).

**Infill:**

Standard division up to 3200 mm 1 panel/leaf.

Double-walled, insulated sandwich panel.

Consisting of 1 mm hot-dip galvanised sheet steel (Strip galvanizing according to EN 10346) with powder-coated surface on the outside and inside, fully bonded with 40 mm hard foam polystyrene (total thickness 42 mm).

Glazing with insulating hard glass (safety glass) min. H4/19/ H4 with a U-value of 1.1 W/m²K.

Dry glazing (without silicone) inside with aluminium retaining strips A6/C0 anodised with EPDM clamping rubber on both sides (different glass infills are possible on request).

Max. 4 m² glass panels.

**Surface:**

Powder-coated in exterior (façade) quality RAL standard colour of your choice, optionally matt or glossy.

After appropriate pre-treatment, an organic powder coating is applied. The coating is cured in a drying oven.

Frame, filling and pole profile can be coated in different colours without extra charge.

The combination of galvanized base material with powder-coated surface corresponds to corrosivity category C4 according to EN ISO 12944-2.

**Frame:**

Lateral frame profile produced from steel (60 x 75; 5.5 kg/rm), hot-dip galvanised (strip galvanising according to EN 10346) and powder-coated in the same colour as the door. The frame profile is attached to the running rail profile with a bolted connection. A mounting bracket is bolted to the side and guided flexibly into a groove to allow it to be adapted to the local conditions. The mounting bracket is fixed to the running rail. Floor stop by means of floor angle 50/50/5 hot-dip galvanized incl. claws.

From 4 leaves/side a floor guide with ball bearing floor rollers is required.

**Mounting:**

Complete mechanical assembly incl. possibly required hoists or crane. Including sealing to the mounting surface by means of compriband but without connection sheeting or jointing.

Including installation of suitable leaf retainers between the leaves in solid galvanised steel.

**Size:**

Mounting in front/behind the reveal:

Outer frame height (max. 15.6 m): …................................. mm

Outer frame height (max. 7 m): …................................. mm

Leaf total (max. leaf width 1300 mm)

Leaf arrangement: …............. + ................

Fields per leaf: …................................. mm

Number of fields with panel infill: ….................................

Outer panels: smooth zinc-plated

Inner panels: smooth zinc-plated

Number of fields with glazing: ….................................

Frame transom profiles: ….................................

Running rail: 90° opening

Ground detail: Ground bracket 50/50/5 galvanised

 Labour EUR…………………

 Miscellaneous EUR…………………

 ST Unit price EUR………………… EUR….....................

Special version:

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….............................................................................................................

….............................................................................................................

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 Labour EUR…………………

 Miscellaneous EUR…………………

 ST Unit price EUR………………… EUR….....................

**Pedestrian door in the folding door leaf:**

Pedestrian door built into folding door

Profiles of the door as for the folding door

Ground sill profile max. 40 mm (special version with 10 mm possible).

Door closer Dorma TS 92 with opening limiter

Handle/flat lever handle made of anodised aluminium

Panic lock pusher/pusher, function B

Panic lock pusher/fixed knob, function E

 Labour EUR…………………

 Miscellaneous EUR…………………

 ST Unit price EUR………………… EUR….....................

**Special stainless steel version**

**(washing boxes, sewage treatment plants, salt storage):**

Drives, locking bars, screw connections,

Mounting bracket and base profile in stainless steel V4A

 Labour EUR…………………

 Miscellaneous EUR…………………

 ST Unit price EUR………………… EUR….....................

**BASIC folding door drive:**

Electromechanical drive with gear motors on the door leaf

24 Volt motor with self-locking die-cast aluminium gear with permanent grease lubrication. Mounted on a strong mounting plate and fastened to the folding door frame with clamping plates. Motor cover made of an extruded aluminium profile in the colour of the leaf frame, optionally A6/C0 anodised or RAL powder-coated.

Operator release with cable pull on the inside of the door leaf can be operated from the floor. Infinitely adjustable force cut-off for normal and soft run. Flashing light with integrated flasher electronics. Adjustable leaf deceleration. Adjustable running speed and adjustable soft stop in the end positions.

Controls: Dead man CLOSED / Dead man OPEN

Operating voltage 230 V

Protection class IP54

Suitable for leaf separations 2+2, 2+1, 1+2, 2+4, 4+2.

Door opening time approx. 15 -25 seconds

Including cabling at the gate and commissioning.

Electrical main connection on site.

Incl. initial technical acceptance by civil engineer and defect-free inspection book.

 Labour EUR…………………

 Miscellaneous EUR…………………

 ST Unit price EUR………………… EUR….....................

**POWER folding door drive:**

Consisting of electric gear motor and drive housing made of cast light alloy, with digital limit switch for travel limitation, with flexible claw coupling to the power transmission shafts.

2x lateral angular gears with 200 mm long drive arms. Curved arm roller with dust-proof, bearing-mounted needle bearings which engage on the door leaf in a bolted, adjustable U rail.

Sinusoidal acceleration and deceleration of the movement cycle

Emergency release with cable pull and aluminium operating lever from the ground.

Controls: Dead man CLOSED / Dead man OPEN

Housing with IP54 protection, contact protection by covering of live parts, integrated OPEN-STOP-CLOSE button, with CEE plug and 1-m cable, setting via rotary selector and 7-segment display, status and information display, cycle counter, programmable relay contact, maintenance cycle counter.

Maintenance cycle counter

Suitable for leaf separations 2+2, 2+0, 0+2.

Door opening time: approx. 10 seconds

Required lintel height: 360 mm

Motor data: IP-54

 50 Hz

 4 rpm

 0.45 kW

 3 x 230/400V,1.83/1.5 A

 600 Nm

 ED S3-60%

Including cabling at the gate and commissioning.

Electrical main connection on site.

Incl. initial technical acceptance by civil engineer and defect-free inspection book.

 Labour EUR…………………

 Miscellaneous EUR…………………

 ST Unit price EUR………………… EUR….....................

**Automatic closure surcharge:**

Safety strip on the main closing edge, light barrier transmitter-receiver. Installation of the light barrier on one side 0.4 m for cars and 1.0 m for trucks. Automatic closing, termination of the open time after passage. 2 pcs. red traffic lights with LED luminaries for inside and outside incl. cabling. No power cut-off, endangered areas must be additionally insulated

 Labour EUR…………………

 Miscellaneous EUR…………………

 ST Unit price EUR………………… EUR….....................

**Radio board:**

Radio board

 Labour EUR…………………

 Miscellaneous EUR…………………

 ST Unit price EUR………………… EUR….....................

**Handheld transmitter:**

Handheld transmitter 4 channel

 Labour EUR…………………

 Miscellaneous EUR…………………

 ST Unit price EUR………………… EUR….....................