

## Tender specification text

**Product:** Aluminium folding door thermally separated  
**Type:** AL603F hand operated/power operated  
**Manufacturer:** SCHNEIDER  
**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 1-4 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 $R_w$ :**

25-35 dB (depending on the infill of the door)

#### **U value**

approx. 1.8 W/m<sup>2</sup>K (depending on the door infill)

### General design:

Aluminium folding door in frame-rung construction, with thermally separated profiles. Door leaf comprising bolted extruded hard-aluminium profiles

Construction depth min. 60 mm, profile depth min. 87 mm

Filling with dual-wall construction elements (panels or glass).

Running rail produced from extruded aluminium profile with downward opening, 5 mm wall thickness, dimensions 85 x 135 mm; 4.7 kg/m with integrated seal carrier and continuous lip sealing. 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 the profiles at least 2 mm aluminium. Two separate extruded aluminium profiles, connected by a glass fibre reinforced plastic web. The heat flow from inside to outside is thus significantly reduced, but the overall stability of the construction is not affected.

Profiles are connected by means of a solid corner connection profile (no welded connection).

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 on the outside and inside, fully bonded with 40 mm hard foam polystyrene (total thickness 42mm).

Glazing with insulating hard glass (safety glass) H4/16/ H4 with a U-value of 1.1 W/m<sup>2</sup>K.

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

Max. 2 m<sup>2</sup> glass panels. Fully glazed doors max. 4200 mm door height.

**Surface:**

Standard: A6/C0 anodised

Optional: Powder-coated in façade quality RAL standard colour of your choice, optionally matt or glossy

Anodising: = anodic oxidation of aluminium. In this electrochemical process, the natural oxide layer of the aluminium is reinforced and the metallic character is retained. Frame, filling and pole profile can be coated in different colours without extra charge.

6 years warranty on the surface with appropriate care.

Powder coating: Here, after appropriate pre-treatment, an organic powder coating with an average thickness of 65 my is applied. The coating is cured in a drying oven.

**Frame:**

Lateral frame profile and running track without thermal separation made of extruded aluminium profile.

The frame profile is attached to the running rail profile with a bolted connection. A mounting bracket is bolted and guided flexibly into a groove to allow it to be adapted to the local conditions. Floor stop by means of double stop angle 60/30/5 and U-profile 50/38/5 hot-dip galvanised with double lip seal

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.

**Size:**

Mounting in front/in/behind the reveal:

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

Outer frame height (max. 5.6 m): ..... mm

Leaf total (max. leaf width 1300 mm) .....

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

Fields per leaf: .....

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

Outer panels: A6/C0 anodised

Inner panels: A6/C0 anodised

Number of fields with glazing: .....

Frame transom profiles: .....

Running rail: 90° opening

Ground detail: Threshold double stop

Labour EUR.....  
Miscellaneous EUR.....

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

Special version:

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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 40 mm  
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.....

**Opening speed:**

System for automatic, mechanical opening by means of spring energy accumulator for reliable opening of the folding door leaves in the case of application inward or outward opening, including gas pressure cylinder for adjustable delay of the movement in the end position. Energy storing system cover made of an extruded aluminium profile in the colour of the leaf frame, optionally A6/C0 anodised or RAL powder-coated.

**Type B:** Leaf arrangement 2+2 opening inwards or outwards; with central release via pull cable in the frame area and individual leaf release.

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

**Type C:** Leaf arrangement 2+2 opening inwards or outwards; with central release via electric drive incl. radio control and hand transmitter 4-channel in the frame area and individual leaf release. 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.....