

18. Vortex 500



The Vortex 500 is the ultimate in security as it consists of a double full height turnstile unit which offers trouble-free operation combined with maximum security. This turnstile is reliable and all components are treated for anti-corrosion. Vortex 500 can be used for both internal and external installations and with its imposing stylish design is a valuable extension to access control systems.

The Vortex 500 turnstile can have following drive units:

Electro-mechanical drive unit TE2, TE-NB

Operation of the tripod turnstile is controlled by an electro-mechanical mechanism with following standard features:

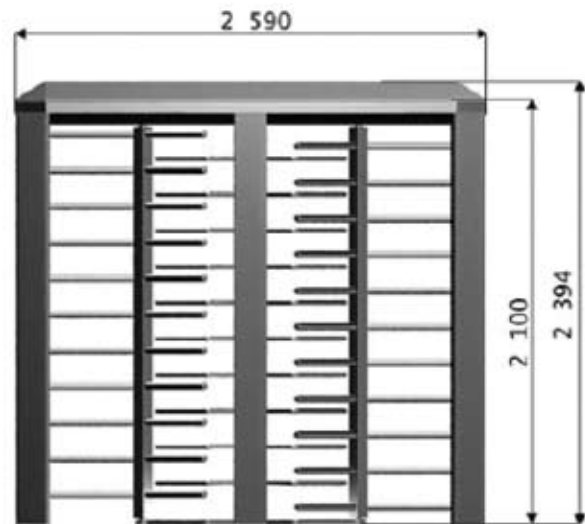
- A locking system with electromagnets that prevents two passages in one time
- A self centering mechanism to complete rotation of the turnstile into the home position
- A hydraulic shock absorber to ensure smooth and progressive slowing down operation
- A blocking mechanism that prevents from reverse rotation

Mechanical drive unit has got the same features as electro-mechanical one except there isn't a logic unit and other parts to control the turnstile. Such a turnstile is used for monitoring and directing of people.

Motorised drive unit MT

High comfort, reliable and trouble-free operation are the priorities of the Vortex 500 turnstile with motorised drive unit. The standard features are:

- Effective blocking system in combination with motorised drive unit
- Automatically set rotation speed according to a force the turnstile is pushed
- Torque setting option





- High level of personal security achieved by stopping the rotation if an obstacle is detected
- Very silent and smooth operation
- Adjustable slowing down of the turnstile

Turnstile variability

Regarding the number of wings on the rotor, there are several different types of the Vortex 500 turnstile:

- 2 wings (angle 180°) - only with MT unit
- 3 wings (angle 120°) - any drive unit
- 4 wings (angle 90°) - only with MT unit

Materials

Casework: Steel sheet (3mm thick) Painted Polyester Powder Coated in Antique Silber or AISI 304 Polished Stainless Steel (2mm thick)

Roof: Steel sheet (3mm thick) Painted Black Polyester Powder Coated

Central pillar: Steel Painted Antique Silber Polyester Powder Coated or Polished Stainless Steel

Tripod Arms: Stainless Steel tube, polished, diameter 40 mm

Anti-corrosion treatment

All internal mechanism parts have been treated against corrosion by zinc plating, thickness:

mechanical parts 10 - 15mm, steel sheets 15 - 20 mm.

Casing: Application of polyester powder coating or AISI 304 stainless steel sheet.

Interface

The turnstile is controlled via the MLU 4V2 microprocessor logic unit. The standard features are as follows:

- One input for opening/closing the mechanism in each direction
- One protected input for unlocking of the turnstile in the event of an emergency
- Two multi-functional inputs ready for future purposes
- One output indicating actual status of the turnstile

(BUSY signal)

- Four protected outputs for communication with LED Traffic lights
- Two outputs to check completed passage through the turnstile in certain direction
- Adjustable time out facility (range from 6s to 30s) to cancel GO signal if passage through the turnstile is not completed within the time

The logic unit is protected against overloads, short circuits and polarity inversion.

Technical parameters

- Operating temperature: -30°C to +50°C
- Humidity: maximum 80%
- MCBF: 3.000.000 cycles (Mean cycle before failure)

Turnstile with electro-mechanical unit

- Power supply: 24VAC/DC, 2A (external power source included)
- Shock absorber: Hydraulic adjustable
- Electromagnet: Duty cycle 100%

Turnstile with motorised unit

- Power supply: 10 to 16VDC
- Power consumption: standby 0.1A, typical 2A, peak 3A

Operational modes

The turnstile can be set for different operational modes in either direction:

- Free access
- Controlled access
- Locked

Emergency

Various modes of operation are available in the event of an emergency or power failure in either direction:

- Free access
- Locked

ACCESSORIES

LED Traffic Light - LED lights indicating turnstile availability for use

Push Button Control

- Remote control of the turnstile
- Remote unlocking of the turnstile

Ceiling Lights

- Ceiling lights to illuminate the turnstile

Alternative Materials and Finishes

- Stainless Steel design of all parts
- Custom painted (RAL colours)
- Specific design

Back-up battery

- Back-up battery 12VDC/15Ah maintains turnstile with motorised drive unit for at least 6 hours of continues operation

Counter

- Mechanical, electro-mechanical or digital counter

Identification systems

- Easy integration and installation of card reader devices: barcode, magnetic card, proximity card, smart card, biometrics, coin/token acceptors

