

Product Sheet

**Full - O - Stile 91
Manual security Turnstile**

Full - O -Stile 91 is available in two configurations: single (FOS 91S); double (FOS 91D).

Technical Specification

Unit Dimensions : Outside Dimensions :
 FOS 91S 1480 x 1480mm
 FOS 91D 2200 x 1480mm
 Ceiling Height 1980mm
 Cornice Depth 280mm
 Overall Height of Unit 2268mm

Rotor Elements: 4N^o rotor wings (90°)

Drive: Hand operated

Orientation: Pass Left or Pass right

Materials: Casework: 304 Grade grained stainless steel..
 Rotor Wings: 304 Grade grained stainless steel.
 Rotor Spindle: Tubular 304 Grade grained stainless steel.

Function: Passage in both directions, electronically controllable.

Mechanism: Control of the FOS 91 operation is achieved by an electro-mechanical head mechanism located in the roof drum of the FOS 91. It is silent in rotation and comprises the following standard features:

- A positive action lock which prevents two passages at one time
- A Self centering mechanism to ensure complete rotation of the head to the rest position.
- An anti backup device prevents reverse rotation once the head has moved 30° from its rest position.
- A hydraulic damper to ensure smooth and quiet operation

Operating Modes: The mechanism can be configured to operate in two standard modes.

- Normally Closed – The mechanism is locked until a valid authorisation signal is received.
- Normally Open – The mechanism is permanently unlocked and will only lock if passage is attempted without a valid authorised signal. In this mode the MTBF is increased from 1.5 to 2.5 million cycles and increases passage throughput speeds.

Power Failure: In the event of an emergency or isolation of power supply, unit may be configured to fail-safe i.e. rotor freely rotates or fail-lock i.e. rotor locks. Either option is available in both or one direction. Choice must be denoted at time of order placement.

Note - Head mechanism fail state will be the same as power failure choice.

Interface: The mechanism is controlled by means of a LCM02 microprocessor control logic with the following features :

- One input for opening/locking the mechanism in each direction.
- Two protected outputs for control of the opening/locking solenoids.
- Four protected outputs for piloting way mode indicators.
- Two 0V output relays indicating availability of use in either direction.
- Two 0V outputs to count passage in either direction.

Unit has an adjustable time out facility if required i.e. Go signal will be cancelled if passage through turnstile is not completed within pre-set time. The standard default is 8 seconds adjustable via parameter change.

Additional detailed information is available upon request.



Product Description

Engineered for outdoor high-security areas, the FOS 91 is intended for applications requiring a high-performance turnstile with an elegant design.

Users include

- Government
- Retail
- Finance
- Telecommunications
- Information Technology
- Banking
- Publishing
- Leisure
- Petrochemical
- Pharmaceutical
- Education

**FULL-HEIGHT
TURNSTILES**



Servicing:	From top of the roof
Power Supply	115/230 Volts AC 50/60 Hz
Power Rating:	FOS 91S 50VA (without lights option) FOS 91D 100VA (without lights option)
Logic Voltage:	24 Volt DC
Installation Details:	Full - O - Stile 91 models are delivered as one piece, which may require lifting gear for off loading. Approx. weight (depending on spec.) : FOS 91S 470 kg. FOS 91D 660 kg.

Available models

Full – O – Stile 91

- FOS91 S model Single walkway
- FOS91 D model Double walkway

Extra Accessories and Optionals

Alternative Materials, Finishes and Custom Design

- Refer to Gunnebo Italdis S.p.A. for specific material design requirements.
- Entry/ Exit roof.
- Halogen internal lights.

Cardreader Mounting (Please refer to Gunnebo Italdis S.p.A. for feasibility)

- Integration of customer supplied readers onto the FOS casework uprights.
- Cardreader Pedestals.

Traffic Lights

- LED Red Cross and Green Arrow displays

Push Button Control

- MP20 remote control (COM R1 board required)..
- Remote console to specific requirements.
- Casework mounted push button.

Additional Interface

- RS 485 Serial Interface

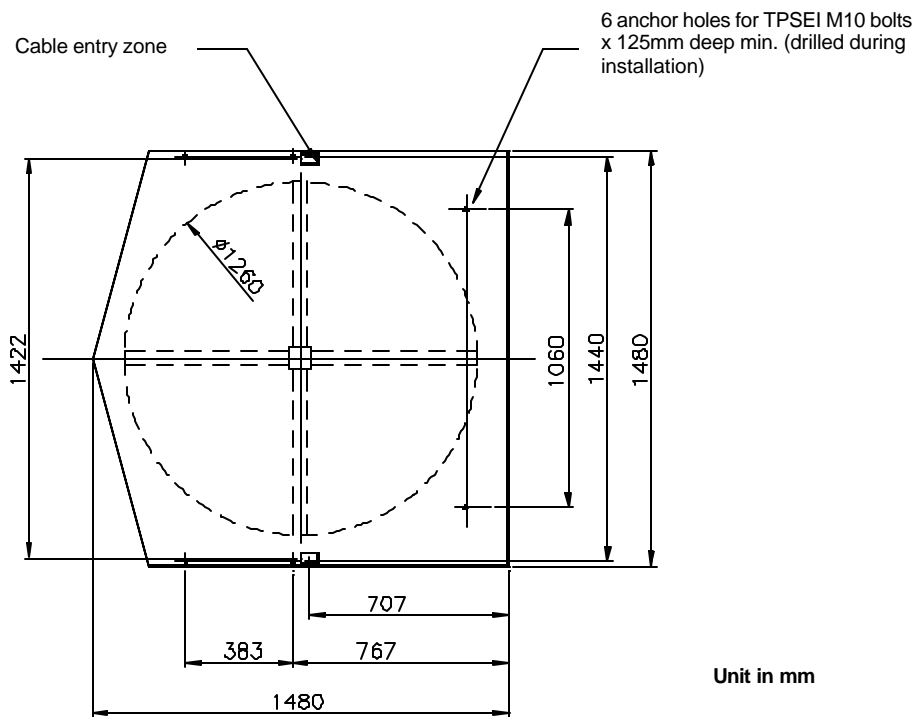
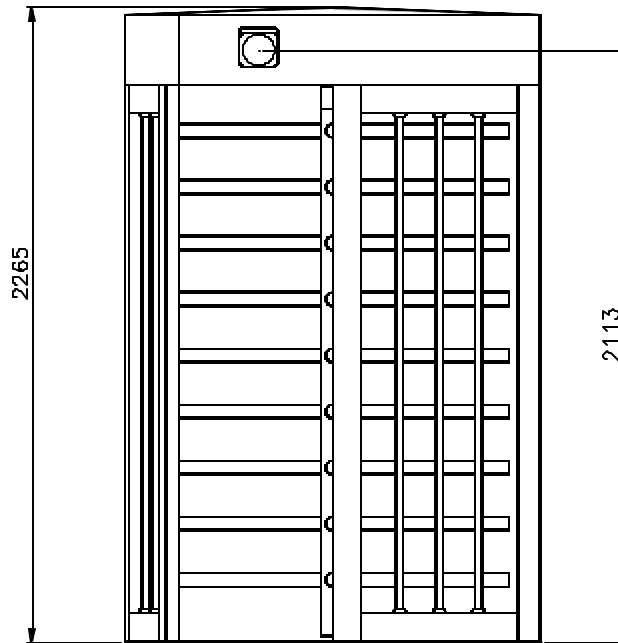
Counting

- LCD Counter
- Electro-mechanical Counter

Installation Examples



FOS 91S Site Preparation.



Unit in mm

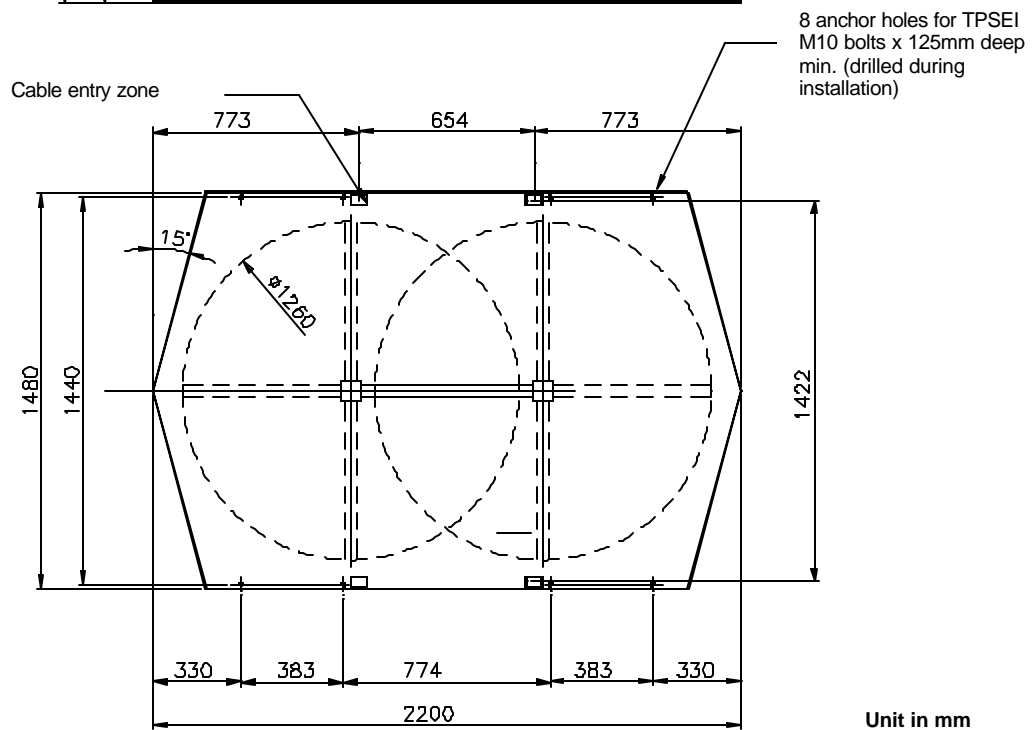
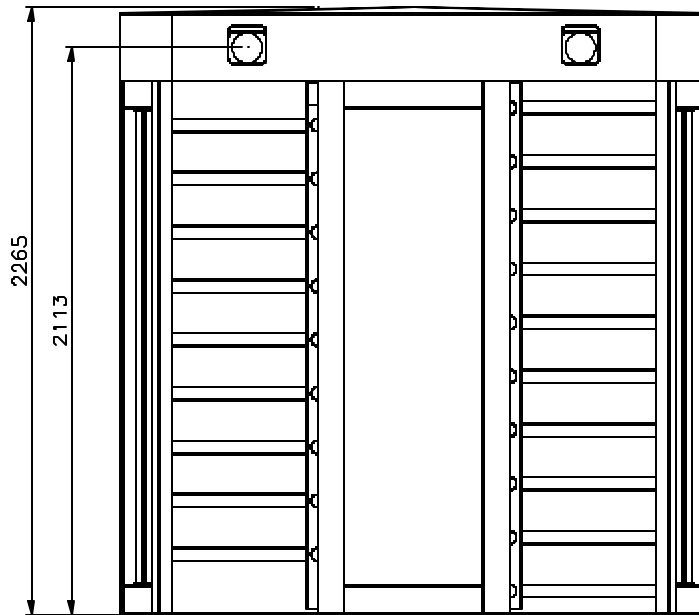
Concrete to UNI 9858, RCK250 type.
Base to be flat and level to +/-5mm over the FOS footprint area.

Cables metal conduit,
shall come up at least
50mm from foundation

IMPORTANT

- Any horizontal pipe or conduit runs below the FOS 91 must be at least 140mm below.
- The dimension reported on this Product Data Sheet are for information only. In order to prepare the Installation Site, please refer to the lay-out drawings prepared by Gunnebo Italdis SpA or ask confirmation.

FOS 91D Site Preparation.



Unit in mm

Concrete to UNI 9858, RCK250 type.
Base to be flat and level to +/- 5mm over the FOS footprint area.

Cables metal conduit,
shall come up at least
50mm from foundation

IMPORTANT

- Any horizontal pipe or conduit runs below the FOS 91 must be at least 140mm below.
- The dimension reported on this Product Data Sheet are for information only. In order to prepare the Installation Site, please refer to the lay-out drawings prepared by Gunnebo Italdis SpA or ask confirmation.

Flow Rates

Reader Device	Number per minute
Insertion type	12
Insertion type with PIN code keypad	7.5
Swipe type	15
Swipe type with PIN code keypad	8.5
Proximity 'Hands Free'	17

- Please note the figures are approximate and must be confirmed with Gunnebo Italdis SpA. Figures quoted are for one person per complete passage per walkway and per minute. It is assumed the access control authorisation response is instantaneous. Flow rates will increase with multiple passage use.



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Note: In pursuit of its policy of continuous refinement and improvement, Gunnebo Italdis Sp.A. reserves the right to modify design and details.

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