



## Pedestrian Turnstile Rotating

### MPT 12

#### Technical Data: Type

		MPT
Mechanism		STA 210
Protection	IP	55
Supply Voltage	VAC	230
Frequency	Hz	50
Current	A	2.0
Duty Cycle	%	100
Throughput	P/min	20
Weight	Kg	325
Height	mm	2340
Diameter	mm	1500

#### Description

The MPT 12 Series of security turnstiles are designed to control areas, usually in perimeter locations outside of and away from principal buildings. This turnstile can be used for bi-directional access control applications, with a passage frequency of between 15-20 people per minute. The turnstile consists of a cylindrical cage and a centre column with 3 x 120 degrees offset bars.

The MUC Controller and the torque positioning drive are mounted on top of the centre column in a powder coated sheet metal enclosure, where there is also space for additional access control equipment.

As a rule, the turnstile may be installed directly to a concrete floor, or in the case of a sub floor, with an optional foundation ring. This sub floor foundation ring can also be used for installations on cobble stones and other paved areas.

#### Typical Installations

Industrial Plants  
Military Zones  
Public Venues  
Sport & Leisure Centres  
Administration Areas

#### Housing

Heavy gauge RHS steel is used in the construction of the cage, and centre column that has U bars attached made of solid steel. Both sections are fully "hot dip" galvanised after fabrication. Turnstiles can be powder coated to special colours available in consultation with our factory. Alternatively the complete cage and column may be constructed from stainless steel, with tubular U-bars. It is possible to install access control devices such as card readers and intercoms on to the turnstile cage.

#### Technology

The drive system consists of a 3 phase Magnetic torque motor which is controlled by our MUC (Magnetic Universal Controller). This controller contains a special integrated frequency inverter, developed by Magnetic, to provide a safe and smooth rotation of the turnstile arms with several ramping parameters during each rotation of 120 degrees. A maximum pre-programmed rotation speed provides the highest level of safety to pedestrians. After a release impulse has triggered the mechanism, and a person pushes slightly on the turnstile bar, the controller immediately provides high acceleration power for a very short period of time.

The pre-programmed allowable speed is compared with the actual speed so that the controller provides the optimal power to frequency ratio to the torque motor.

This technology adapts itself to the transfer speed of the person entering or exiting through the turnstile and is very user friendly and safe. The relative position of the centre column is provided to the MUC from an encoder mounted directly onto the torque drive. Therefore the home position is precisely monitored so that any deviation can be used to provide alarm and status feed back to the MUC.

An electromagnetic disc brake forms a part of the locking system to guarantee its release in case any pressure is applied to the turnstile bars coincidental with the release signal from the access controller.

The complete drive locking unit is basically maintenance free. This design subsequently assures a very long operational life span. On power failure, the turnstile can be turned freely in either direction. No clutch is required. In case of extreme vandalism, resulting in excessive pressure being applied to the centre column, a potential free alarm contact on the MUC will be triggered.

#### Option

Locking solenoids with assembly to lock the turnstile on power failure in both directions or one way only.

Roof Sections  
Counters  
User Guidance Displays

