

## Full Height Turnstile SESAME

Full Height Turnstile is to be installed for unmanned entrances with high level of security requirements. Only one person is permitted to pass on each turn of the turnstile. The system shall comprise and not limited to the following:

- 1) The turnstile will be single or double full height turnstiles.
- 2) The turnstile will have three/four groups of wings, standing 120°/90° apart on the square/triangular cross-sectioned rotor beam. The turnstile should have an easy center rotation by hand, solenoid locking system and hydraulic damper for smooth operation
- 3) Locking system should have latches made of 12 mm thick hardened steel.
- 4) Mechanism should have two steel plates with 12 mm thickness.
- 5) Magnetic encoder should be used for detection of rotor position. Accuracy of sensor should be 0.5 degrees.
- 6) In case of outdoor application turnstile should be manufactured from rust resistant material AISI 316 Quality Mirror/Satin Polished/Powder Coated/Brushed Stainless Steel or galvanized steel.
- 7) It should be Bi-directionally rotatable.
- 8) Indicator: Red/Green matrix cards for direction and status should be provided.
- 9) The turnstile should be vandal proof and all moving parts must be protected against the ingress of dust and water and confirm to IP54, besides control electronics, should be mounted in IP65 box as most of the installations are made outdoors.
- 10) In case of Power Failure the turnstile should provide Free passage (fail safe), or locked (fail secure) upon desire of customer before order.
- 11) Transition Speed of 25 person/minute
- 12) Operating temperature between -20 °C and +65 °C, % 95 non-condensing humidity
- 13) Mechanics shall be processed on CNC machines.
- 14) For trouble free, turnstile shall include contactless position sensing technology and rust preventing precautions.
- 15) A locking sub-mechanism shall inhibit rotor's turning backwards after 30 degrees of rotation, forcing the passage to be completed.
- 16) Hydraulic damper shall ensure smooth rotation of rotor.
- 17) The damper shall absorb the dynamic loads during the rotation of rotor without impact.
- 18) Elastic coupling should be used to connect mechanism with rotor.
- 19) Rotor should be installed on closed bearing, and shouldn't require any maintenance.
- 20) The end points of the turnstile frame shall be rounded for ease of passage. In this way, the arm-wall distance shall remain constant during the passage and the possibility of jamming shall be eliminated.
- 21) The mechanism arms shall be designed to be disassembled with special apparatus.
- 22) The upper mechanism cover shall be designed to be detachable.
- 23) After release of opening pulse, center shall immediately unlock. Afterwards the center column shall lock again. If there is no passage after release of opening pulse, center shall lock in a certain time.
- 24) Turnstile shall be controlled by a PCB.
- 25) Every kind of reader either for security or any access control applications shall be integrated very easily with the turnstile system.
- 26) For safety reasons, only 12V and 5V shall be running through the control electronics and the whole turnstile.
- 27) Power supply unit should have connectivity of external batteries.
- 28) Turnstile shall operate at 230V 50/60Hz.
- 29) Warranty for the turnstiles mechanism should be at least 20 000 000 passes.
- 30) Origin: Only European or USA products allowed. Origin to be confirmed by Certificate of Origin issued by Chamber of Commerce.