Gunnebo Metro Swing Gate MFL

Swing Gate for Public Transport Applications

GUNNEBO®
Entrance Control

Metro Swing Gate MFL

The Metro Swing Gate offers **transparent design** and efficient barrier performance with a **small footprint**. For sites where limited space is required and aesthetics are still a must.

The swing gate is **silent and smooth** in operation and offers **unobstructive** visibility for passengers since there is no presence of a central column design to hold the moving panels.

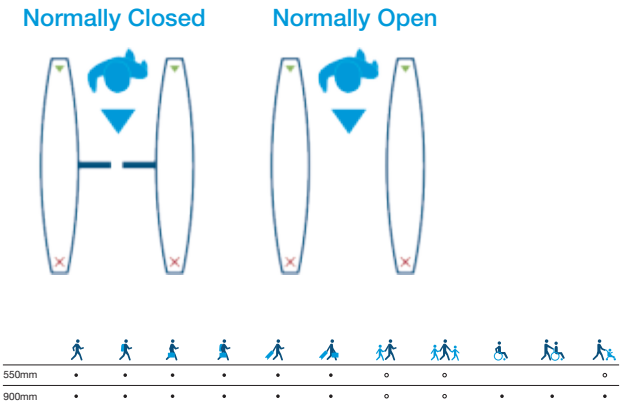
The gate is designed with a compact stainless steel cabinet construction, toughened 17 mm thick laminated glass inlays and 12 mm thick tempered clear safety glass leaves.

Technical Specifications

Mode of Operation

Controllable via interface connection to AFC control system. On receiving a signal from the AFC control system, or remote control, the flap leaves open (Normally Closed NC). If an unauthorised person tries to tailgate or attempts to enter from the opposite direction, the internal alarm system is activated. If within the pre-set timeout no passage has occurred, the flaps will close and reset.

- Uni-directional with single person detection
- Bi-directional with single person detection
- Emergency, configurable to fully open or block the passageway
- Remote passage control
- Traffic way switchable during rush hours
- Passenger stacking (up to 8 stacked transactions)



Plain dot indicates the functionality is implemented, empty dot indicates some limitations, no dot indicates not available.

Features

- Narrow casework
- Easy customisable end leg options
- Common central core
- Panel height from 0.9 to 1.8m using glass or semi-rigid PUR panels
- Passage widths from 0.55m to 0.9m
- MCBF: 10M cycles
- Soft panels are available
- Small housing widths also available for wide lanes

Benefits

- Small footprint (165 mm housing width)
- High resistance against vandalism
- High security against unauthorised passage

Applications

- Mass Transit Systems
- Metro
- Railway
- High Speed Railway
- BRT
- Tramway
- Ferry Terminals

Global Experience

- Global No. 1 for Entrance Control Equipment (IMS Research Report 2013)
- More than 50,000 gates installed worldwide
- More than 90 Million people processed daily
- Over 25 years global experience within the Mass Transit market sector
- International and local support infrastructure
- High productivity and quality levels
- Reduced project risks and long-term investment protection

Technical Specifications (continued)

Security Features

- High-Performance Fraud Detection through sophisticated and proven algorithm
- Strategically concealed 16x TX and RX infrared photocell arrays
- More than 40 different passage scenarios handled
- Intrusion
- Tailgating
- Piggybacking
- Wrong way direction
- Leave aisle timeout
- Anti-crawling flap leaf barrier
- Passenger with hand carried luggage
- Passenger with wheeled trolley luggage

Safety Features

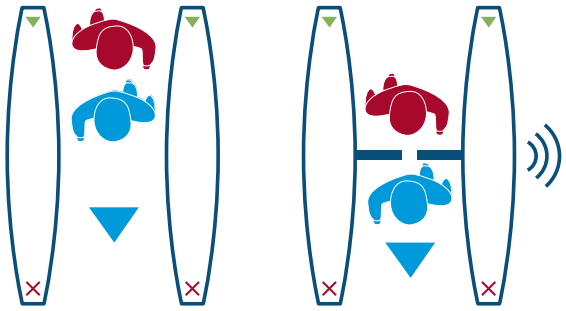
- Dedicated independent safety detection circuit to EN12100 and EN 13849-1 to prevent the moving panels from closing on any passenger
- Emitter / receiver infrared sensors technology monitoring the area immediately around the moving flaps
- Logic voltage 24 VAC
- Voltage free contact input for Fire Alarm fail state
- Moving panels constructed from semi-rigid polyurethane mounted on to a steel core to limit potential damage to passenger (option)
- Safety for users (including finger entrapment and impact force) compliant with EN16005
- Wide walkway for wheel chair or eaiser access
- Accompanied wheelchair or child passage management

Safe Anti-Panic or Fail-Safe Options

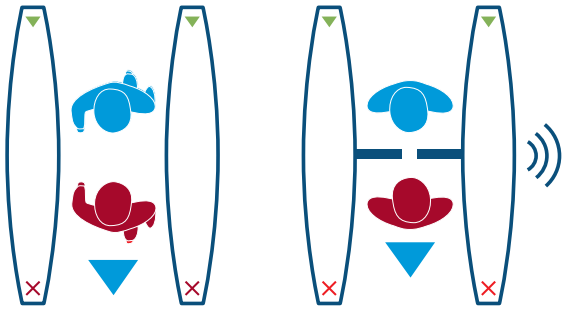
- When anti-panic facility is specified the output shaft of the motor is fitted with a torque limiter to facilitate the forced opening of the walkway. This is constantly monitored and outputs an alarm when activated. The gate will open to the degree of force applied and close if the force is removed (standard setting at 45Nm, factory configurable)
- When Fail Safe option is required the swing panels are automatically released by means of an electromagnetic clutch and opened by a spring

Single Person Detection

Tailgating / Piggybacking Attempt



Wrong Way Detection / Intrusion Attempt



Technical Specifications (continued)

Design - Construction

- Standard passage width (550 mm) and Wide passage width (900 mm) available
- Ease of interchangeable finishes and graphics
- The gate is designed around a common central mechanism section with ”add-on” end leg sections
- The end legs are custom designed to suit the integration of the readers and other AFC internal hardware.
- Access into the cabinets is via security locked hinged access doors

Dimensions

- Height: 940 mm
- Length Central section 1000 mm End cabinets - variable to suit AFC peripheral integration
- Width: 165 mm
- Panel Heights: 900 to 1800 mm

Materials

- Casework: 2mm AISI 304-grade grained stainless steel and 17 mm laminated safety glass
- Finish: Scotch Brite 4
- Glass Panels: Tempered or Laminated 12 mm glass
- Soft Polyurethane: Foamed panels, up to 1500 mm height (optional)
- Polycarbonate: Polycarbonate 12 mm up to 1300 mm height (optional)

Passenger Information

Top casework mounted LED display to show the passenger and/or station staff

- Green - Authorised transit
- Red - Non passage transit
- Orange - Concession transit

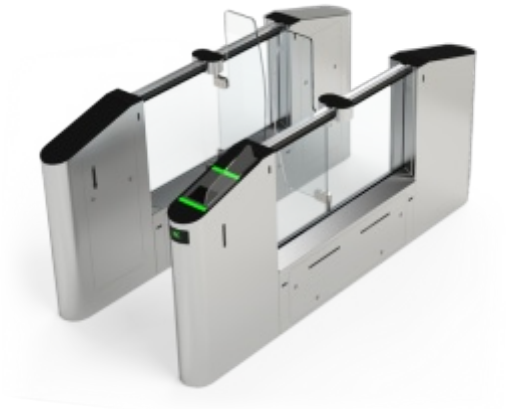
Gate End Displays

- For guiding passengers there are light indicators integrated into each end leg of the housing (Red Cross and Green Arrow)
- Remotely switchable to conform to the flow of gates at peak times or to close the complete system

Maintenance Access

- Access to ticket controller and gate management system via access panels
- Servicing does not impinge on adjacent passageways
- Minimal removal parts to reduce mechanical failure and longevity or wear during servicing

1. Moving panel from 900 to 1800 mm high
2. Common central section
3. Custom designed end leg sections
4. GED (Gate End Display)



Technical Specifications (continued)

Power Failure Management

- The moving panels can be configured to automatically fail open or remain closed dependent upon if failsafe mechanism is chosen
- Upon restoration of power the gate will recycle the panels to the closed position and become available for use once the AFC system is rebooted

Vandalism

- Construction from 2 mm stainless steel
- If no safe Anti Panic, moving panels resistant to lateral 600N impact force for Standard lane, 400N for Wide lane, without loss of functionality

Technical Data

Properties	Values / Description
Power Supply	230 VAC 50Hz or 115 VAC 60Hz
Power Rating	Standby mode: 50 VA, In Operation: 220 VA
Fire Signal	Input for voltage free contact
Operating Temperature	0 to +45°C (RH 95% not condensing); -20°C with heating system (optional)
Reliability Figures	Robust design to withstand high volumes in peak hours Guaranteed long-term investment protection and profitabilty
MCBF	>10,000,000 cycles
MTTR	<30 min
IP Rating	IP 44
Operating Speeds	Different speed profiles are selectable. Depending on panel type and dimension, the minimum opening time varies between 1.7s (1800 mm high, wide glass panel) down to 0.85s for glass panel and 0.7s for a polycarbonate panel on standard width lanes
Flow Rates	Up to 60 passengers/minute throughput (Dependent upon reading technology and response times) Authorisation stacking up to 8 authorisations

Customer References

Metro Systems

- Melbourne TTA, AustraliaBeijing L1, 2, 5, 8, 9, 10, China
- Chengdu L1, L3, L8 China
- Hangzhou L1, China
- Nanjing L1, L2 China
- Shanghai L2, L7, L9, L10, China
- Shenzhen, L1, L2, L5, China
- Toulouse Metro, France
- RATP Disabled SAS, France
- KCRC West and East Rail, Hong Kong
- MTRC, Hong Kong
- Chennai Metro, India
- New Delhi Metro, India
- Tehran Metro, Iran
- AREX Airport Express, Korea
- TMB Barcelona, Spain
- SL Stockholm, Sweden
- Taipei Metro, Taiwan
- Bangkok Metro, Thailand
- Dubai Palm Monorail, UAE

Railway Systems

- Eurostar Station, Belgium
- Bari Railways, Italy
- Fertagus Railways, Portugal
- Bursa Railways, Turkey
- RER B SNCF, France

BRT

- Transmilenio Bogota, Colombia
- Metrobus, Mexico
- Tswane BRT, South Africa

Ferry Stations

- Teso Ferry, Netherlands
- Transtejo, Ferry, Portugal

Gunnebo Metro Swing Gate MFL

For further information please contact:

Gunnebo Entrance Control
The Gate House
Ashdown Business Park
Michael Way
Maresfield
East Sussex
TN22 2DU
United Kingdom

Phone:
+44 (0)1825 761 022

E-mail:
info@gunneboentrancecontrol.com

Website:
www.gunneboentrancecontrol.com