



PRODUCT CATALOGUE

SPEED GATES | ROAD BLOCKERS | BOLLARDS





Contents



Pedestrian access control

SPEED GATES 6

Slide 10

Speedblade 11

Sweeper 12

Sweeper-G 13

Sweeper-W 14

Sweeper-HG 15

Sweeper-S 16

Sweeper-S-HG 17

Jetpan 18

TRIPOD TURNSTILES 21

Onyx-XS/S/M 23

Centurion-M 24

Bastion-M 25

Twix-M 26

Galaxy-M 27

Twix All-in-one-M/Onyx-XL 28

SWING GATES 30

Onyx-TS/GS 33

XGate 34

Gate-GS/GSH/Slim 35

Gate-TS/TTS/SPR 36

FULL-HEIGHT TURNSTILES 37

Sesame IS/ISL 41

Sesame/L/S 42

Sesame Basic/L/S 43

Sesame Twin/L 44

Bicyclone/L 45

GlassGO / S 46

HighWay-G / NG 47

Additional equipment 48

Vehicle access control

BOLLARDS 50

ASTM F2656/IWA14-1 Fixed/
Removable bollards 52

Semi-automatic bollards 53

Traffic automatic bollards 54

ASTM F2656 High-security
automatic bollards 54

ROAD BLOCKERS 55

City-light Cyclope 57

ASTM F2656/IWA14-1
High security Cyclope 58

ASTM F2656/IWA14-1
High security Speedbump 59

ASTM F2656/IWA14-1 High
security Mobile Speedbump 60

ASTM F2656/IWA14-1
Mobile Mechanical Road
Blocker 61


ASTM F2656
High security road blocker 62

PAS68/IWA14-1
Ultra shallow road blocker 63

Automatic Tire-killer 64

Mechanical Tire-killer 65

Reference list 66



"LET'S MAKE LIFE SAFER" – is our motto at TiSO, it's the mindset that encapsulates the beliefs of the entire TiSO team, and sums up in four simple words the secret of our success.

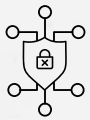
"LET'S MAKE LIFE SAFER" is our mission statement. We promote this ideology at every stage of the process from first introduction of the TiSO range to our partners, through manufacture, to installation and maintenance of our products on site. The successful delivery of our mission is ensured thanks to the quality of the products that we manufacture and distribute internationally. Our manufacturing processes and all of the products in the TiSO range, **(from turnstiles through road blocking systems to fire-resistant doors)** have been certified in accordance with the highest international standards for health, safety and environment by leading international laboratories.



OUR VALUES



Personalisation. Despite our busy manufacturing program, we always treat each customer as an individual, and we will always go the extra mile to create a product that fully satisfies their needs and aspirations.



Safety and security. These are the key values which have enabled us to achieve our mission.



Team. Each person in the TiSO team makes an invaluable contribution to production and distribution of our products. The impressive team at TiSO is not limited to our full-time employees. All of our partners, customers and end users are equally important and vital to TiSO, so “Let’s Make Life Safer” together.



Flexibility and adaptability. Willingness to create a product that fully complies with our customers requirements is a fundamental part of our company’s mindset.



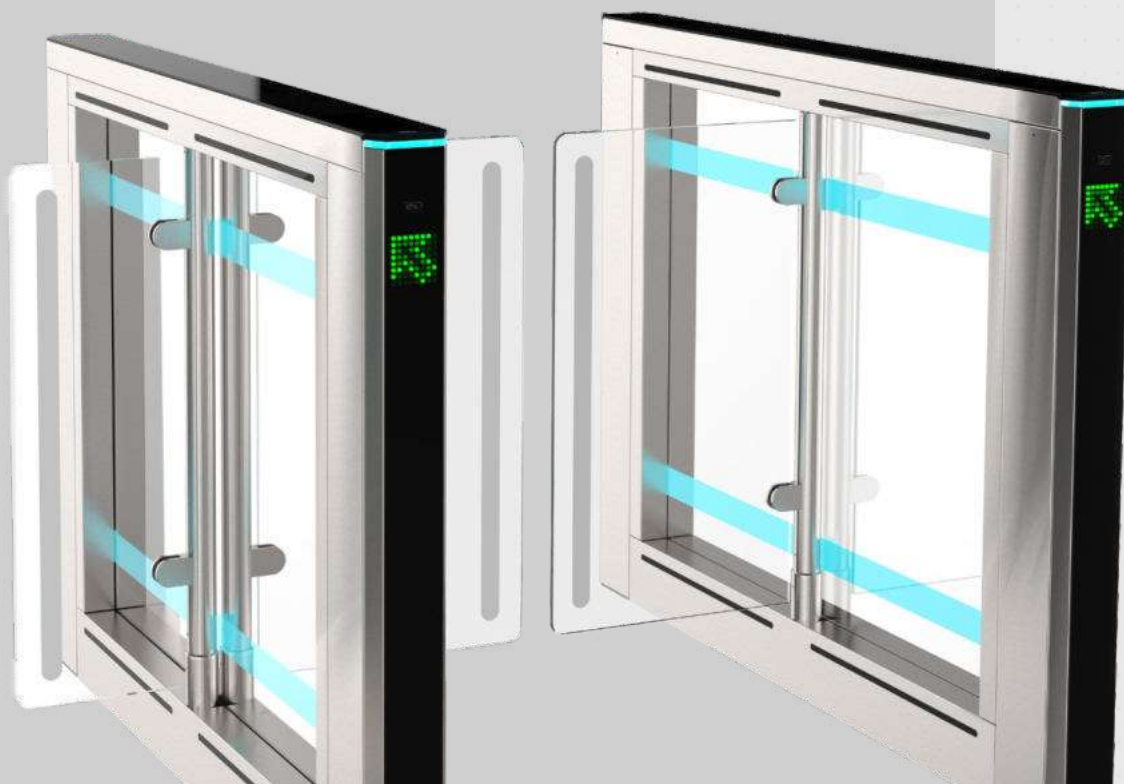
Research and innovation. Our products set the latest standards in design and engineering. Our innovations are not just a fashion statement in a fast-paced world. These are developed primarily to enable user friendly operation and end user satisfaction.



Eco-responsibility. During production, all the requirements of our Environmental Policy are at the forefront of the processes adopted by our company.

Speed Gates

- The speed gates have an ultra-modern futuristic design. Our speed gates of this series are ideal for stylish lobby interiors in hotels, banks, office centers, etc.
- BMDrive® Reliable mechanism with powerful BLDC gear motor ensures long term maintenance-free operation;
- Robust PinLock® locking system prevents from full leaves opening manually in case of vandalism;
- The smart self-diagnosing system of mechanism BMDrive® automatically analyzes the system, detects critical malfunctions, and records error log and warnings;
- The BMDrive® mechanism controller is equipped with an OLED display for easy setup and configuration without special programmers, also a full configuration and diagnostics is possible via a USB connector by using a service software for Windows OS;
- Digital control of force and leaf speed in combination with safety sensors prevent a passing person from being struck by a leaf, even in case of an unauthorized passage;
- By use of artificial intelligence algorithms and large number of high-precision infrared passage sensors, the speed gates detects and alarms when two people try to pass by one card, pass in the wrong direction and pass without authorization;
- Sensor system allows detecting the passage of person with luggage, arranging a free exit without the need for identification.







Touchless Access

that means even more safer than ever

Global pandemic situation influenced all areas of life. New trends force organizations adapt workers space according to new norms. We help companies to choose the right entrance solutions, taking into account new requirements.

Ideal solution for contactless access are our speed gate series. Such speed gates open automatically without impact at gate. Thus, the norms are observed safety during a global pandemic. Speed gates by TiSO are adapted for the installation of any contactless readers (**face recognition system, temperature or mask detection system etc**). Such access control systems allow supporting the idea of contactless secure access to the territory.





Slide

550
900
mm

PASSAGE WIDTH

30
pers/min

SINGLE ACCESS

60
pers/min

FREE ACCESS

0,7
sec

OPENING/CLOSING



MANUAL CONTROL

IP 41

PROTECTION LEVEL



ANTI-TAILGATING



BI-DIRECTIONAL



ACCESS CONTROL SYSTEM

Model Slide

Mechanism BMDrive® servodrive (BLDC)

Anti-tailgating function +

Blocking mechanism FoldEmLock®

Emergency mode Free entry/exit
(gates are opened automatically)

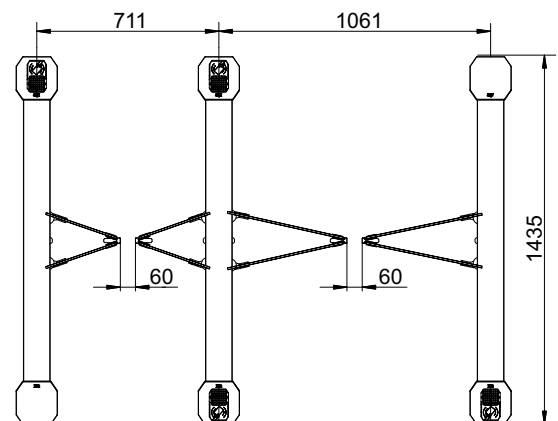
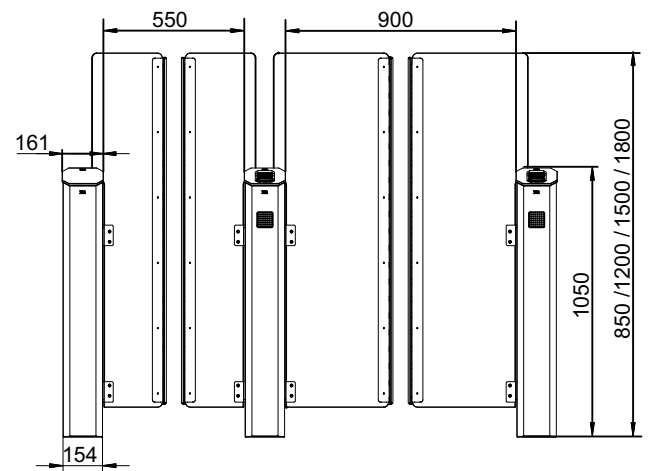
Power fail Fail safe (gates could be opened manually – standard)
Automatically open – super capacitor (option)

Standard housing Brushed stainless steel AISI 304

Available housing Brushed stainless steel AISI 316
Polished stainless steel AISI 304
Polished stainless steel AISI 316
Powder coated (any RAL upon request)

Top lid Solid glass top

Voltage AC (100-240) V, 50/60Hz
DC source 12 V



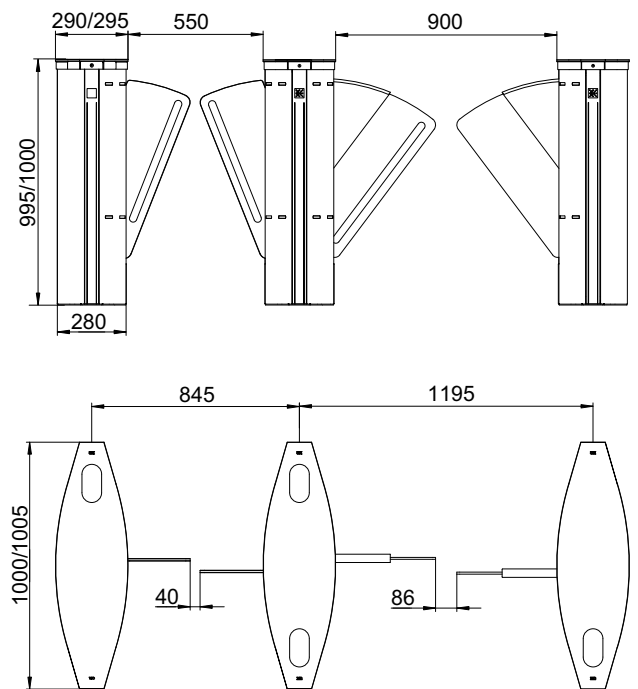


Speedblade



*Available upon request

Model	Speedblade
Mechanism	BMDrive® servodrive (BLDC)
Anti-tailgating function	+
Blocking mechanism	DeadLock®
Emergency mode	Free entry/exit (gates are opened automatically)
Power fail	Fail safe (gates could be opened manually – standard) Automatically open – super capacitor (option)
Standard housing	Brushed stainless steel AISI 304
Available housing	Brushed stainless steel AISI 316 Polished stainless steel AISI 304 Polished stainless steel AISI 316 Powder coated (any RAL upon request)
Top lid	Stainless steel top (with glass inserts) Solid glass top
Voltage	AC (100-240) V, 50/60Hz DC source 12 V

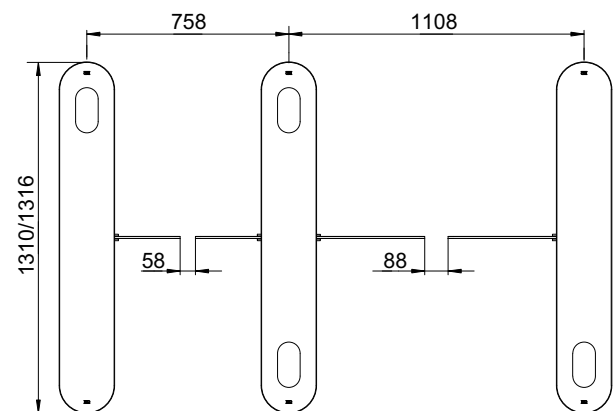
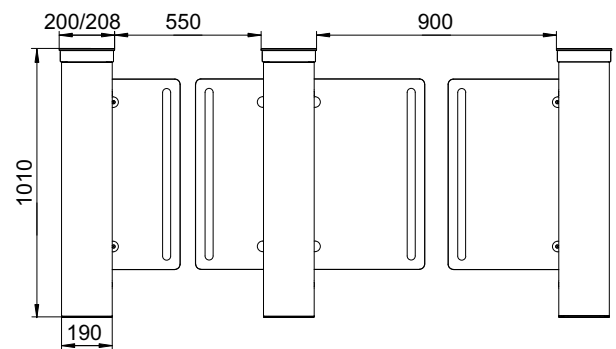




Sweeper

- 
550
900
mm
 PASSAGE WIDTH
- 
40
30
pers/min
 SINGLE ACCESS
- 
60
pers/min
 FREE ACCESS
- 
0,3
0,6
sec
 OPENING/CLOSING
- 
 MANUAL CONTROL
- 
IP 41
 PROTECTION LEVEL
- 
 ANTI-TAILGATING
- 
 BI-DIRECTIONAL
- 
 ACCESS CONTROL SYSTEM

Model	Sweeper
Mechanism	BMDrive® servodrive (BLDC)
Anti-tailgating function	+
Blocking mechanism	ToothLock®
Emergency mode	Free entry/exit (gates are opened automatically)
Power fail	Fail safe (gates could be opened manually – standard) Automatically open – super capacitor (option)
Standard housing	Brushed stainless steel AISI 304
Available housing	Brushed stainless steel AISI 316 Polished stainless steel AISI 304 Polished stainless steel AISI 316 Powder coated (any RAL upon request)
Top lid	Stainless steel top (with glass inserts) Solid glass top
Voltage	AC (100-240) V, 50/60Hz DC source 12 V





Sweeper-G



500
mm

PASSAGE
WIDTH



40
pers/min

SINGLE ACCESS
FLOW RATE



60
pers/min

FREE ACCESS
FLOW RATE



0,3
sec

OPENING / CLOSING



IP 41

PROTECTIVE LEVEL



ANTI-TAILGATING



BI-DIRECTIONAL

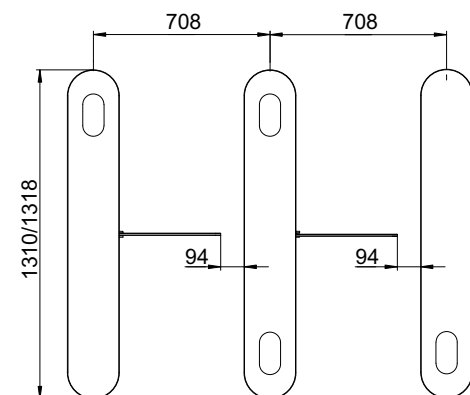
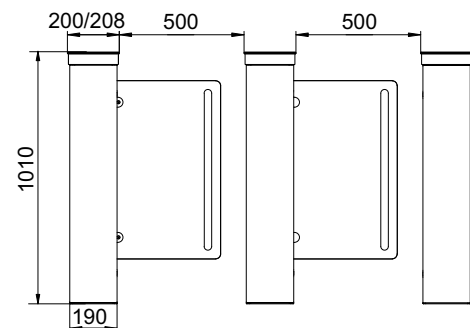


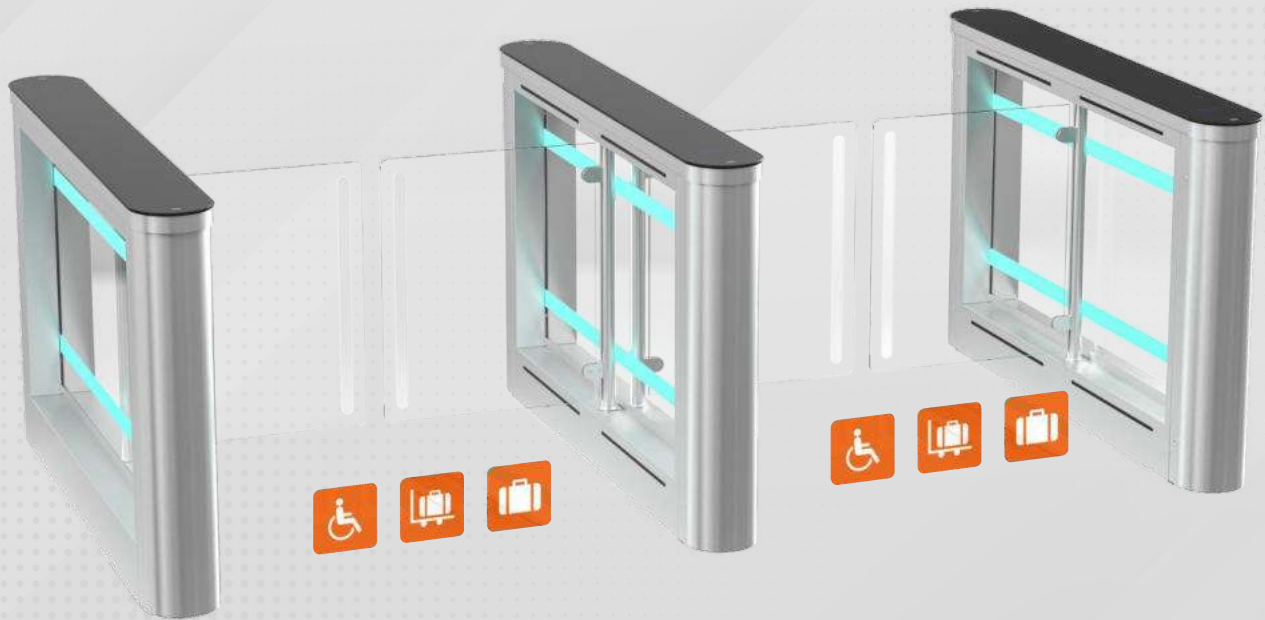
ACCESS CONTROL
SYSTEM



MANUAL
CONTROL

Model	Sweeper-G
Mechanism	BMDrive® servodrive (BLDC)
Anti-tailgating function	+
Blocking mechanism	ToothLock®
Emergency mode	Free entry/exit (leaves are opened automatically)
Power fail	Fail safe (gates could be opened manually – standard) Automatically open – super capacitor (option)
Standard housing	Brushed stainless steel AISI 304
Available housing	Brushed stainless steel AISI 316 Polished stainless steel AISI 304 Polished stainless steel AISI 316 Powder coated (any RAL upon request)
Top lid	Solid glass top
Voltage	AC (100-240)V, 50/60Hz DC source 12 V

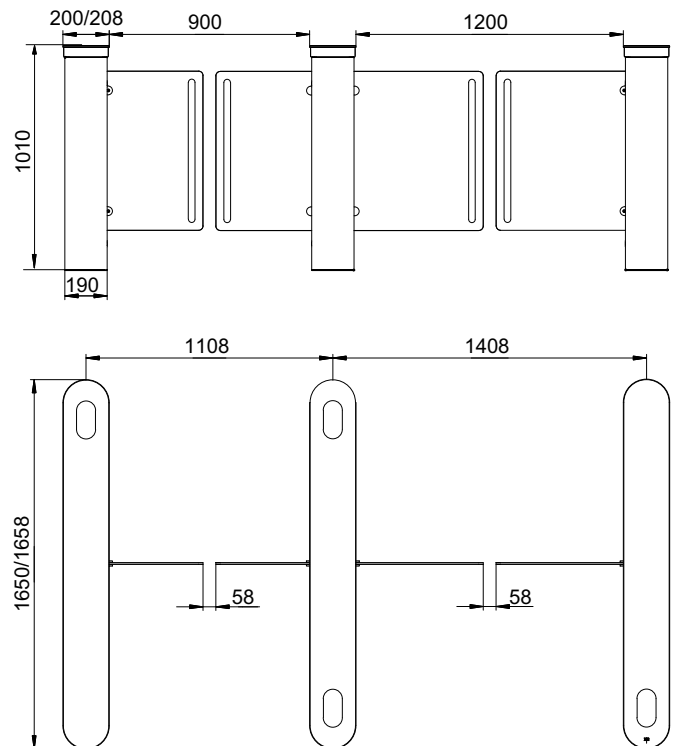




Sweeper-W



Model	Sweeper-W
Mechanism	BMDrive® servo-driven (BLDC)
Anti-tailgating function	+
Blocking mechanism	ToothLock®
Emergency mode	Free entry/exit (gates are opened automatically)
Power fail	Fail safe (gates could be opened manually – standard) Automatically open – super capacitor (option)
Standard housing	Brushed stainless steel AISI 304
Available housing	Brushed stainless steel AISI 316 Polished stainless steel AISI 304 Polished stainless steel AISI 316 Powder coated (any RAL upon request)
Top lid	Stainless steel top (with glass inserts) Solid glass top
Voltage	AC (100-240)V, 50/60Hz DC source 12 V





Sweeper-HG



550
900
mm

PASSAGE WIDTH



30
25
pers/min

SINGLE ACCESS



60
pers/min

FREE ACCESS



0,7
0,9
sec

OPENING/CLOSING



MANUAL
CONTROL



41

PROTECTION LEVEL



ANTI-TAILGATING

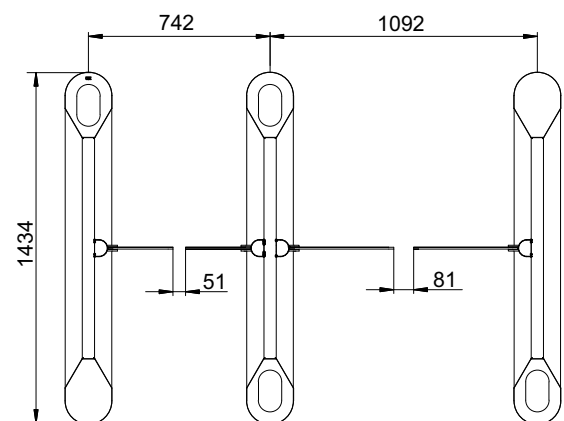
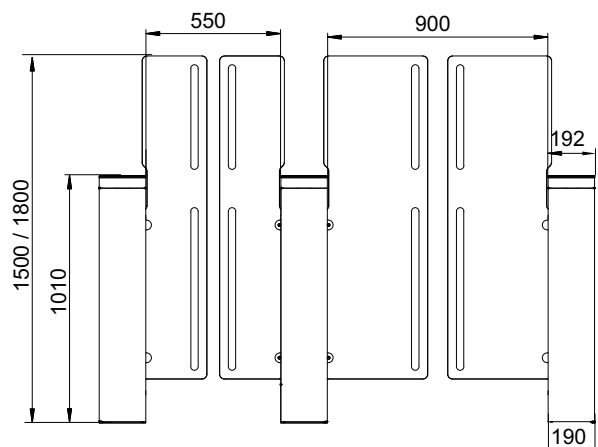


BI-DIRECTIONAL



ACCESS CONTROL
SYSTEM

Model	Sweeper-HG
Mechanism	BMDrive® servodrive (BLDC)
Anti-tailgating function	+
Blocking mechanism	ToothLock®
Emergency mode	Free entry/exit (gates are opened automatically)
Power fail	Fail safe (gates could be opened manually – standard) Automatically open – super capacitor (option)
Standard housing	Brushed stainless steel AISI 304
Available housing	Brushed stainless steel AISI 316 Polished stainless steel AISI 304 Polished stainless steel AISI 316 Powder coated (any RAL upon request)
Top lid	Stainless steel top (with glass inserts)
Voltage	AC (100-240) V, 50/60Hz DC source 12 V





Sweeper-S



PASSAGE WIDTH



SINGLE ACCESS



FREE ACCESS



OPENING/CLOSING



MANUAL CONTROL



PROTECTION LEVEL



ANTI-TAILGATING

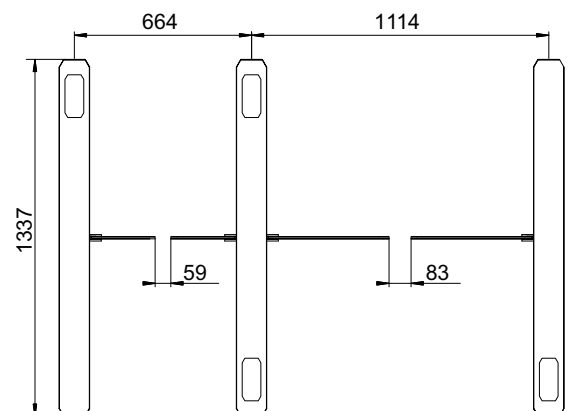
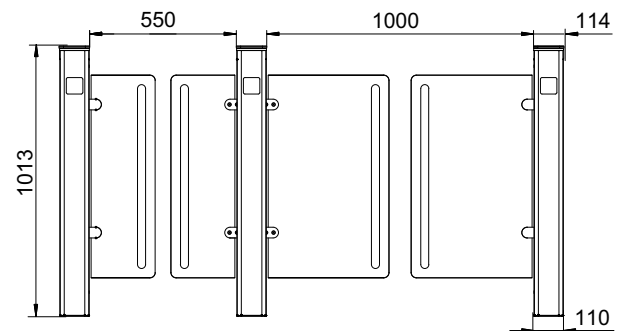


BI-DIRECTIONAL

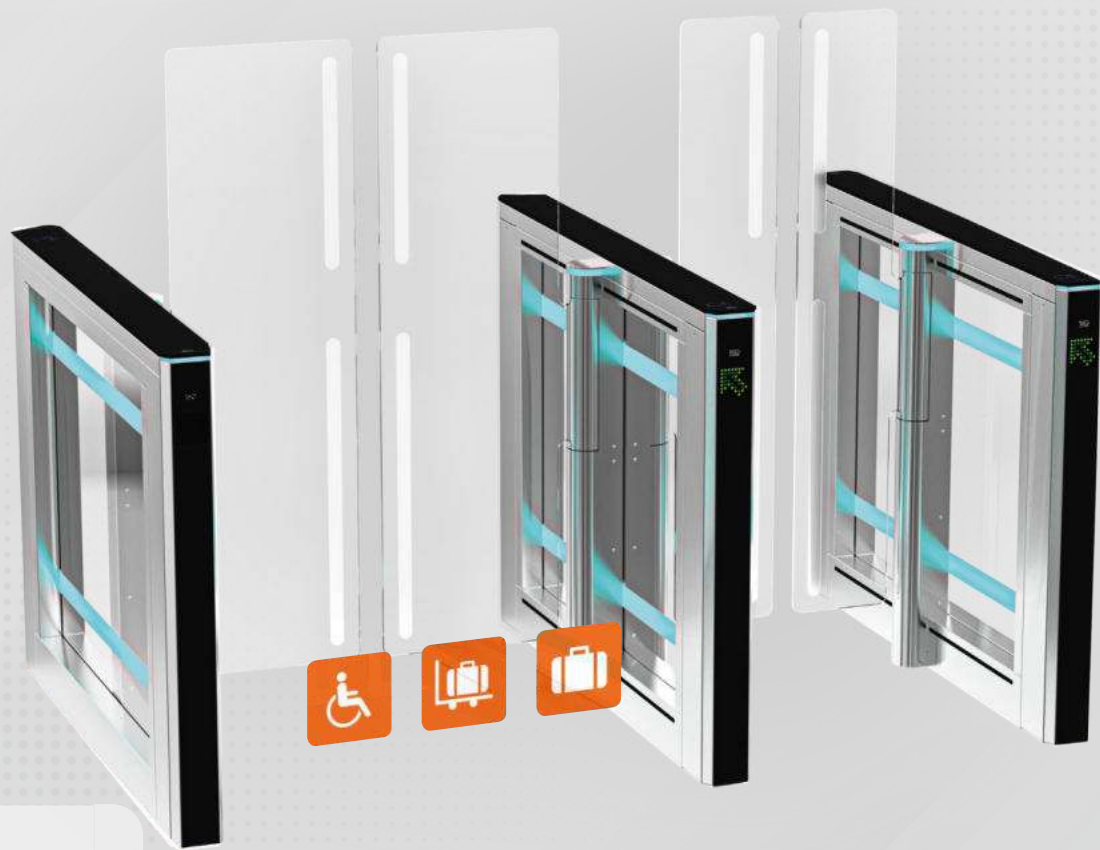


ACCESS CONTROL SYSTEM

Model	Sweeper-S
Mechanism	BMDrive® servodrive (BLDC)
Anti-tailgating function	+
Blocking mechanism	PinLock®
Emergency mode	Free entry/exit (gates are opened automatically)
Power fail	Fail safe (gates could be opened manually – standard) Automatically open – super capacitor (option)
Standard housing	Brushed stainless steel AISI 304
Available housing	Brushed stainless steel AISI 316 Polished stainless steel AISI 304 Polished stainless steel AISI 316 Powder coated (any RAL upon request)
Top lid	Solid glass top



Voltage AC (100-240) V, 50/60Hz
DC source 12 V



Sweeper-S-HG

550
900

PASSAGE
WIDTH

30
25

SINGLE ACCESS
FLOW RATE

60
pers/min

FREE ACCESS
FLOW RATE

0,6
0,8

OPENING / CLOSING

IP 41

PROTECTIVE LEVEL



ANTI-TAILGATING



BI-DIRECTIONAL

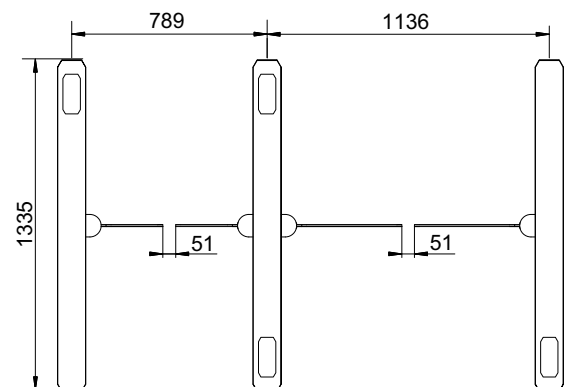
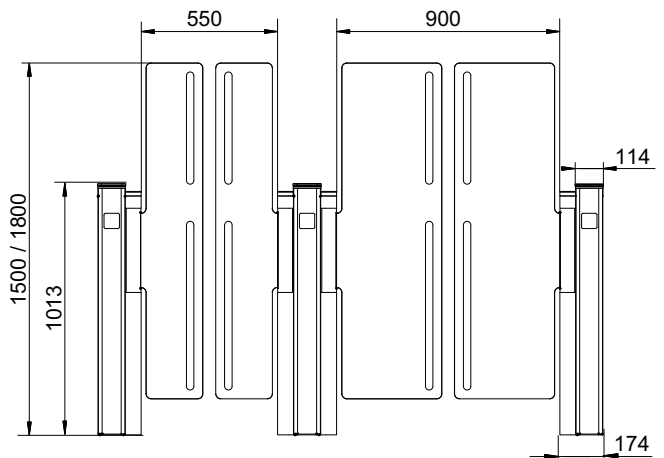


ACCESS CONTROL
SYSTEM












MANUAL
CONTROL

Model	Sweeper-S-HG
Mechanism	BMDrive® servo-driven (BLDC)
Anti-tailgating function	+
Blocking mechanism	ToothLock®
Emergency mode	Free entry/exit (gates are opened automatically)
Power fail	Fail safe (gates could be opened manually – standard) Automatically open – super capacitor (option)
Standard housing	Brushed stainless steel AISI 304
Available housing	Brushed stainless steel AISI 316 Polished stainless steel AISI 304 Polished stainless steel AISI 316 Powder coated (any RAL upon request)
Top lid	Solid glass top
Voltage	AC (100-240)V, 50/60Hz DC source 12 V

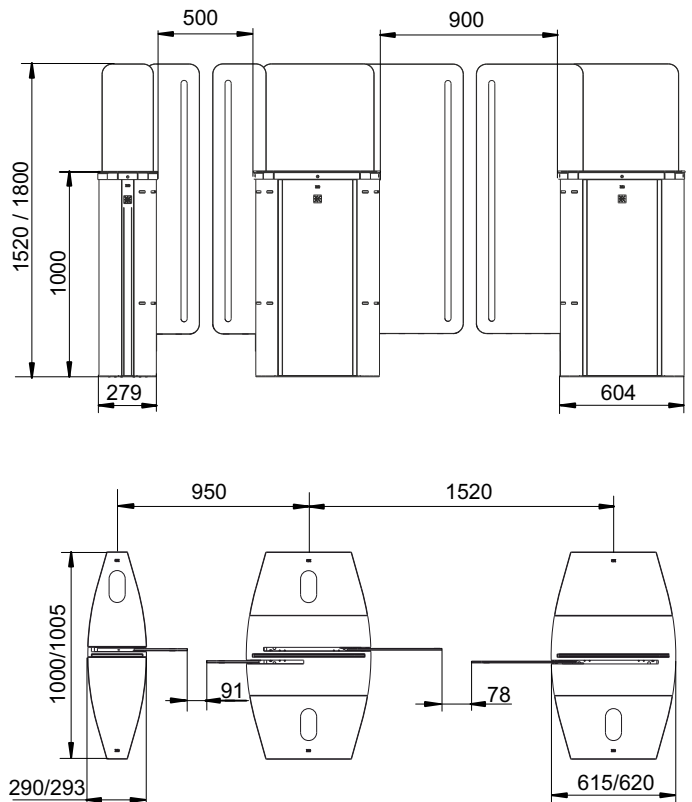




Jetpan

- 
500
900
mm
 PASSAGE WIDTH
- 
30
18
pers/min
 SINGLE ACCESS
- 
60
pers/min
 FREE ACCESS
- 
0,7
2,2
sec
 OPENING/CLOSING
- 
 MANUAL CONTROL
- 
IP 41
 PROTECTION LEVEL
- 
 ANTI-TAILGATING
- 
 BI-DIRECTIONAL
- 
 ACCESS CONTROL SYSTEM

Model	Jetpan	Jetpan-900
Mechanism	BMDrive® servodrive (BLDC)	Servodrive
Anti-tailgating function	+	
Blocking mechanism	DeadLock®	Electromagnetic brake
Emergency mode	Free entry/exit (gates are opened automatically)	
Power fail	Fail safe (gates could be opened manually – (standard) Automatically open – super capacitor (option)	
Standard housing	Brushed stainless steel AISI 304	
Available housing	Brushed stainless steel AISI 316 Polished stainless steel AISI 304 Polished stainless steel AISI 316 Powder coated (any RAL upon request)	
Top lid	Stainless steel top (with glass inserts) Solid glass top	
Voltage	AC (100-240) V, 50/60Hz DC source 12 V	



Tripods

- Bi-directional motorized tripod turnstile
- Integration with any type of access control and ID systems
- Low power consumption
- Panic / bar drop function with automatic reset
- Whisper quiet, low noise operation
- Optional indoor or outdoor housing types
- Wide range of accessories
- Availability of a backup battery connection
- Any additional devices could be integrated (e.g. passage counter, RFID/Proximity/BioMetric readers, coin acceptor, push-button, barcode and QR-code reader)



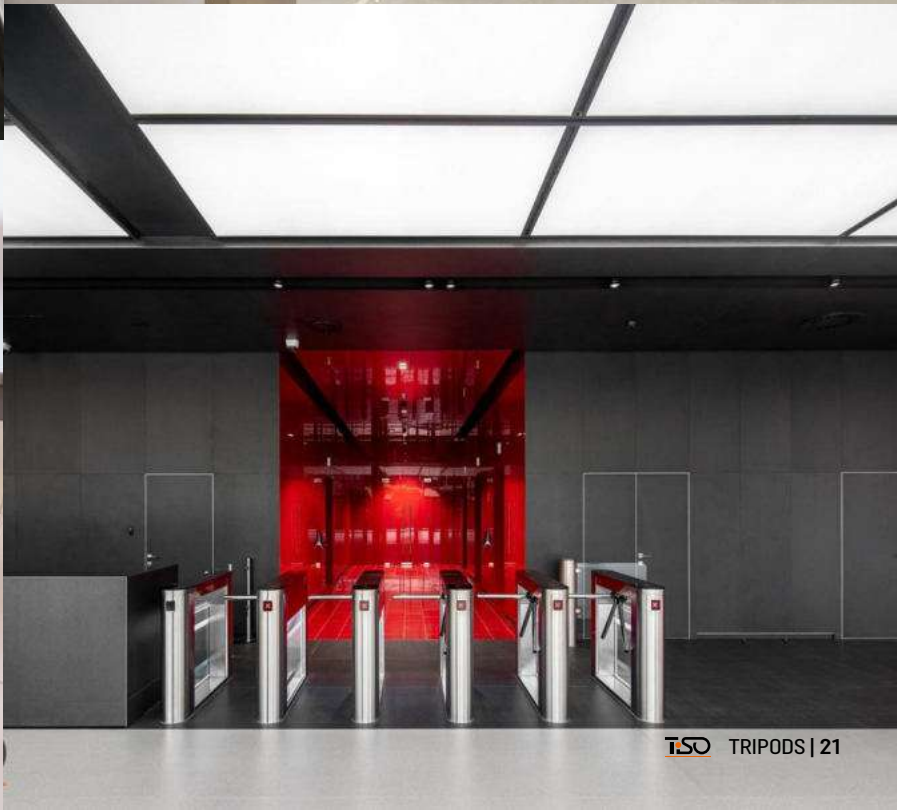


Functionality and Availability

Tripod turnstiles by TiSO company are appropriate solution for access control for high traffic area. The mechanism of our tripod turnstiles will withstand the most intense loads and will make access quick and safe.

Our tripods have anti-panic function (standard), which makes these turnstiles safe users. In case of emergency, the turnstile leashes are automatically lowered, so people can quickly leave the dangerous area.

The range of tripod turnstiles has very stylish models that are suitable for installation in stylish interiors and will definitely be an excellent addition to great design solutions.



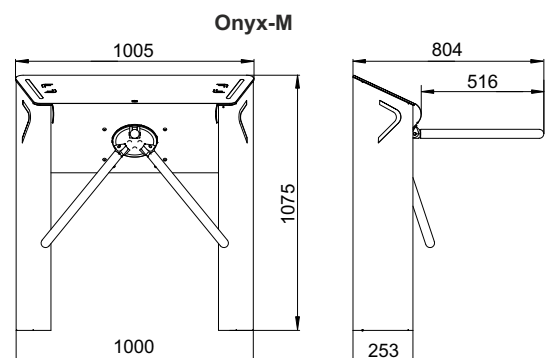
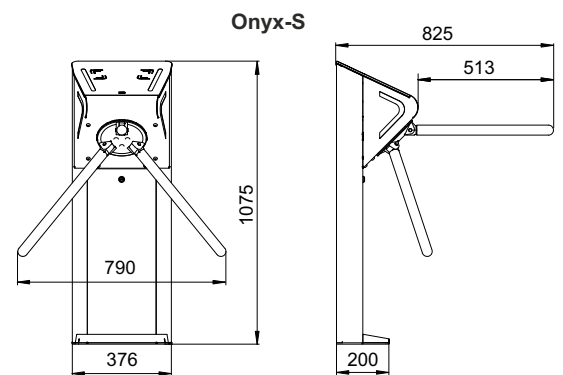
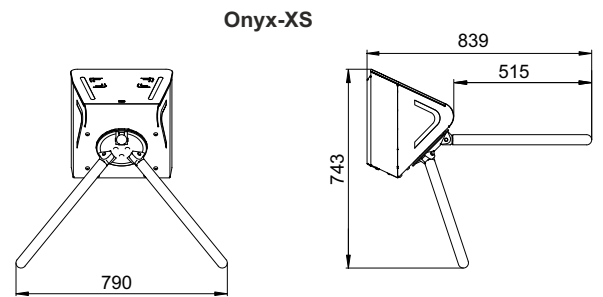




Onyx-XS/S/M

- 
600
mm
PASSAGE WIDTH
- 
25
pers/min
SINGLE ACCESS
- 
60
pers/min
FREE ACCESS
- 
IP 41
PROTECTION LEVEL
- 
MANUAL CONTROL
- 
DROP-ARM
- 
SERVO-DRIVEN
- 
BI-DIRECTIONAL
- 
ACCESS CONTROL SYSTEM

Model	Onyx-XS/S/M
Mechanism	Servo-drive (Triservo-M)
Blocking mechanism	Two electromagnetic stoppers (separate locking system)
Emergency mode (when the power goes off)	Fail-safe (Arm drops)
Drop arm function	Activates manually by push button/ fire alarm system; Activates automatically when power goes off; The arm returns automatically in locking position after the power on.
Standard housing	Brushed stainless steel AISI 304
Available housing	Brushed stainless steel AISI 316 Polished stainless steel AISI 304 Polished stainless steel AISI 316 Powder coated (any RAL upon request)
Voltage	AC (100-240) V, 50/60Hz DC source 12 V





Centurion-M



600
mm

PASSAGE WIDTH



25
pers/min

SINGLE ACCESS



60
pers/min

FREE ACCESS



IP 41-54*

PROTECTION LEVEL



MANUAL
CONTROL



DROP-ARM



MOTORIZED



BI-DIRECTIONAL

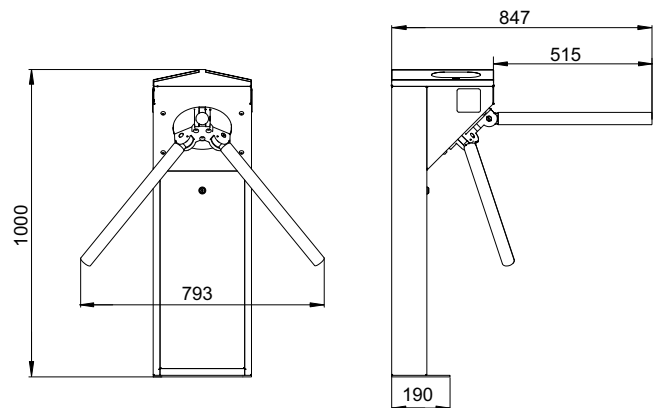


ACCESS CONTROL
SYSTEM

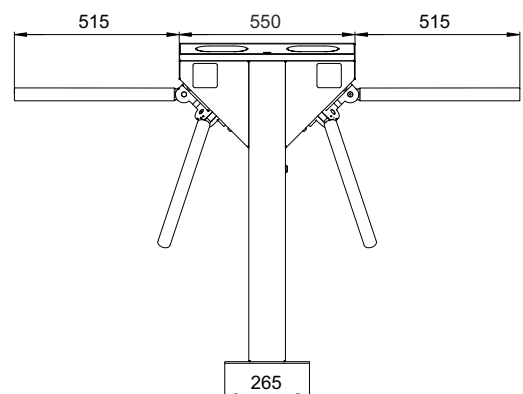
*Available upon request

Model	Centurion-M/M Twin
Mechanism	Servo-driven (Triservo-M)
Blocking mechanism	Two electromagnetic stoppers (separate locking system)
Emergency mode (when the power goes off)	Fail-safe (Arm drops)
Drop arm function	Activates manually by push button/ fire alarm system; Activates automatically when power goes off; The arm returns automatically in locking position after the power on.
Standard housing	Brushed stainless steel AISI 304
Available housing	Brushed stainless steel AISI 316 Polished stainless steel AISI 304 Polished stainless steel AISI 316 Powder coated (any RAL upon request)
Voltage	AC (100-240) V, 50/60Hz DC source 12 V

Centurion-M



Centurion-M Twin





Bastion-M



600
mm

PASSAGE WIDTH



25
pers/min

SINGLE ACCESS



60
pers/min

FREE ACCESS



IP 41-54*

PROTECTION LEVEL



MANUAL
CONTROL



DROP-ARM



MOTORIZED



BI-DIRECTIONAL

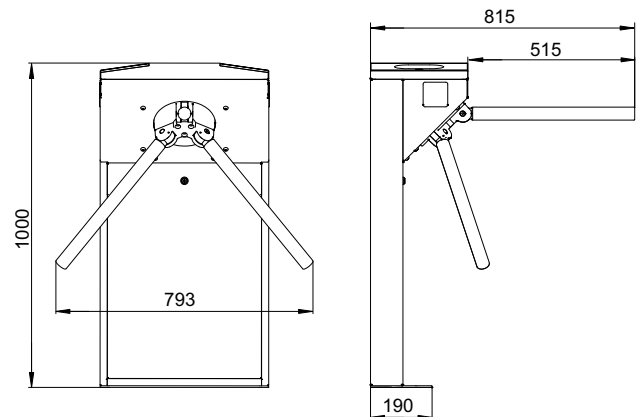


ACCESS CONTROL
SYSTEM

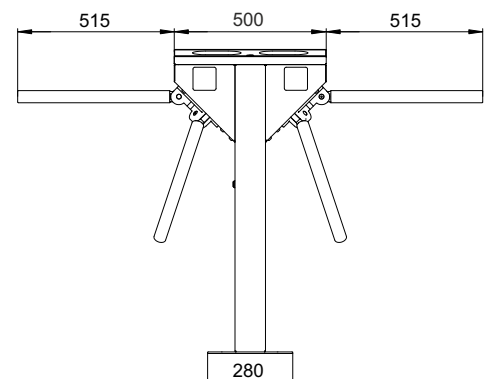
*Available upon request

Model	Bastion-M/M Twin
Mechanism	Servo-driven (Triservo-M)
Blocking mechanism	Two electromagnetic stoppers (separate locking system)
Emergency mode (when the power goes off)	Fail-safe (Arm drops)
Drop arm function	Activates manually by push button/ fire alarm system; Activates automatically when power goes off; The arm returns automatically in locking position after the power on.
Standard housing	Brushed stainless steel AISI 304
Available housing	Brushed stainless steel AISI 316 Polished stainless steel AISI 304 Polished stainless steel AISI 316 Powder coated (any RAL upon request)
Voltage	AC (100-240) V, 50/60Hz DC source 12 V

Bastion-M



Bastion-M Twin





Twix-M



600
mm

PASSAGE WIDTH



25
pers/min

SINGLE ACCESS



60
pers/min

FREE ACCESS



IP 41-54*

PROTECTION LEVEL



MANUAL CONTROL



DROP-ARM



MOTORIZED



BI-DIRECTIONAL



ACCESS CONTROL SYSTEM

*Available upon request

Model Twix-M/M Twin

Mechanism Servo-driven (Triservo-M)

Blocking mechanism Two electromagnetic stoppers (separate locking system)

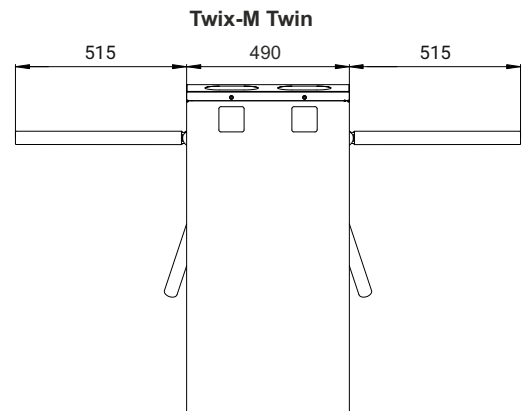
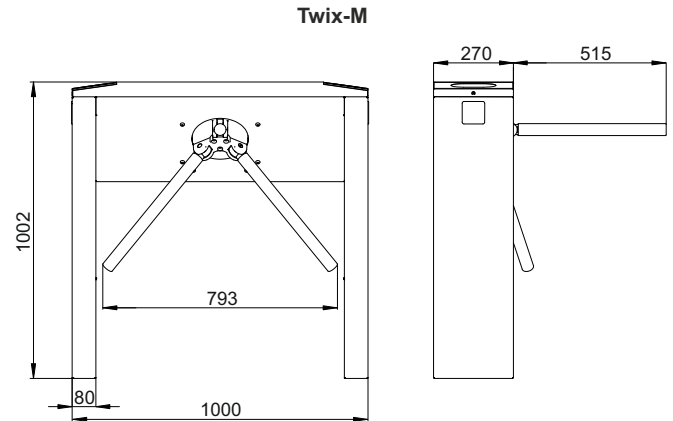
Emergency mode (when the power goes off) Fail-safe (Arm drops)

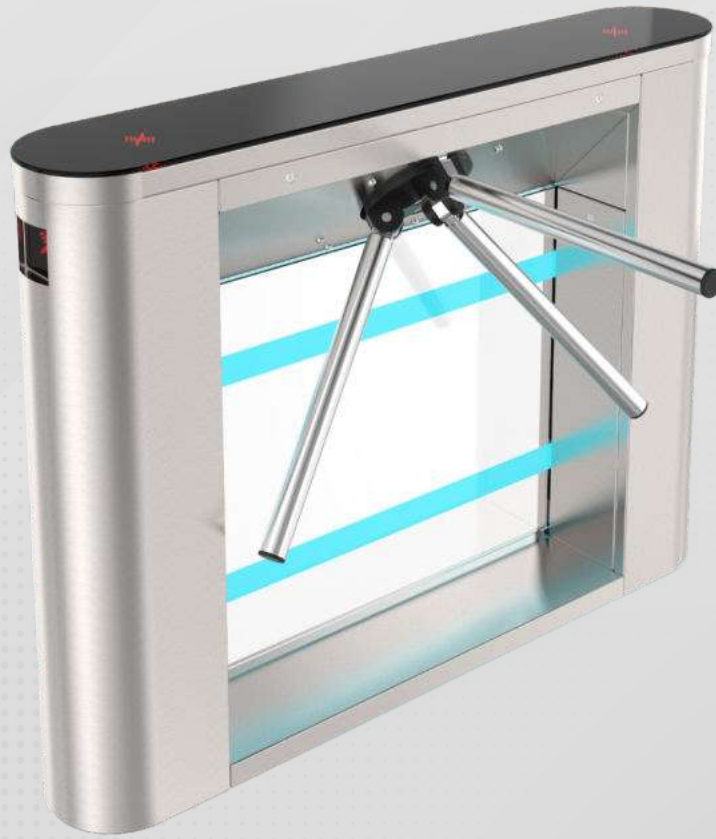
Drop arm function Activates manually by push button/ fire alarm system; Activates automatically when power goes off; The arm returns automatically in locking position after the power on.

Standard housing Brushed stainless steel AISI 304

Available housing
Brushed stainless steel AISI 316
Polished stainless steel AISI 304
Polished stainless steel AISI 316
Powder coated (any RAL upon request)

Voltage AC (100-240) V, 50/60Hz
DC source 12 V





Galaxy-M



600
mm

PASSAGE WIDTH



25
pers/min

SINGLE ACCESS



60
pers/min

FREE ACCESS



IP 41

PROTECTION LEVEL



MANUAL
CONTROL



DROP-ARM



MOTORIZED

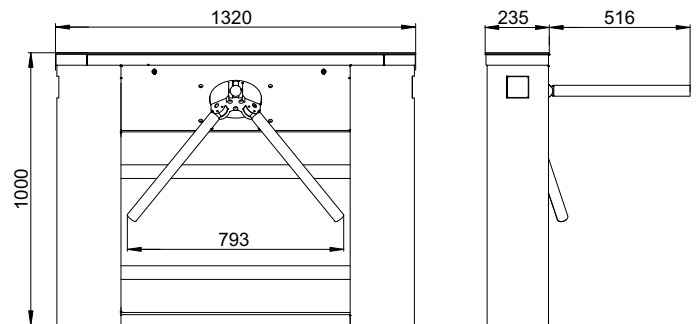


BI-DIRECTIONAL



ACCESS CONTROL
SYSTEM

Model	Galaxy-M
Mechanism	Servo-driven (Triservo-M)
Blocking mechanism	Two electromagnetic stoppers (separate locking system)
Emergency mode (when the power goes off)	Fail-safe (Arm drops)
Drop arm function	Activates manually by push button/ fire alarm system; Activates automatically when power goes off; The arm returns automatically in locking position after the power on.
Standard housing	Brushed stainless steel AISI 304
Available housing	Brushed stainless steel AISI 316 Polished stainless steel AISI 304 Polished stainless steel AISI 316 Powder coated (any RAL upon request)
Voltage	AC (100-240) V, 50/60Hz DC source 12 V





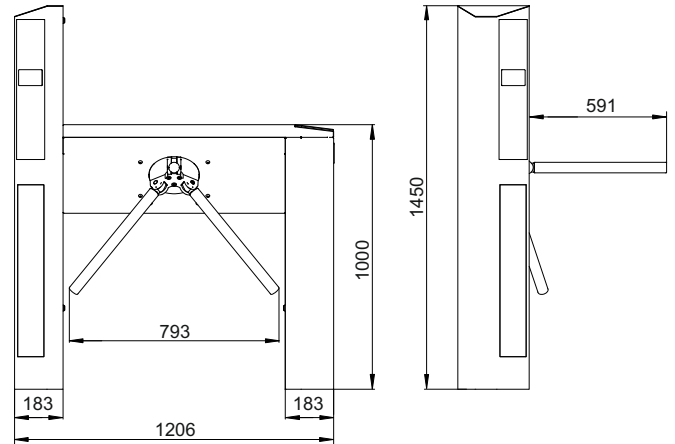
Twix All-in-one-M/Onyx-XL

- 600**
mm
PASSAGE WIDTH
- 25**
pers/min
SINGLE ACCESS
- 60**
pers/min
FREE ACCESS
- 41-54***
41
PROTECTION LEVEL
- MANUAL CONTROL**
- DROP-ARM**
- MOTORIZED**
- BI-DIRECTIONAL**
- ACCESS CONTROL SYSTEM**

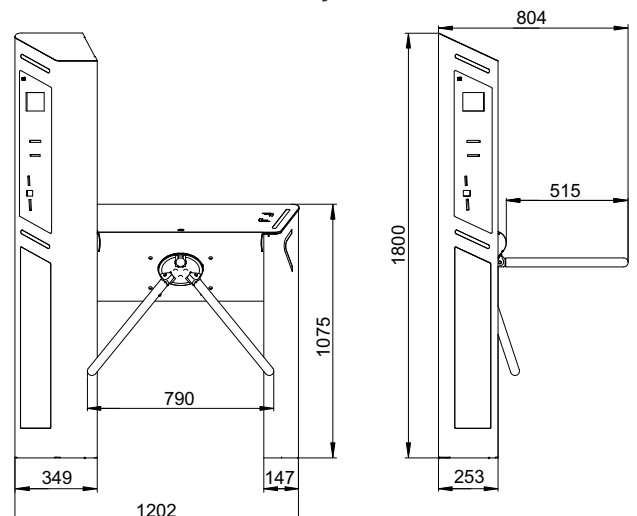
*Available upon request

Model	Twix All-in-one-M/Onyx-XL
Mechanism	Servo-driven (Triservo-M)
Blocking mechanism	Two electromagnetic stoppers (separate locking system)
Emergency mode (when the power goes off)	Fail-safe (Arm drops)
Drop arm function	Activates manually by push button/ fire alarm system; Activates automatically when power goes off; The arm returns automatically in locking position after the power on.
Standard housing	Brushed stainless steel AISI 304
Available housing	Brushed stainless steel AISI 316 Polished stainless steel AISI 304 Polished stainless steel AISI 316 Powder coated (any RAL upon request)
Voltage	AC (100-240) V, 50/60Hz DC source 12 V

Twix All-in-one-M



Onyx-XL





Swing Gates

- Motorized;
- Bi-directional;
- Integration with any type of access control and ID systems;
- Low power consumption;
- Whisper quiet, low noise operation;
- Possibility of a barrier gate customization;
- Complete supply set as a standard.





**Inalienable part of
the entrance group of turnstiles**





Onyx-GS/TS

650-900
mm
PASSAGE WIDTH

30
pers/min
SINGLE ACCESS FLOW RATE

60
pers/min
FREE ACCESS FLOW RATE

1,5-2,5
sec
OPENING / CLOSING

IP 41
PROTECTIVE LEVEL

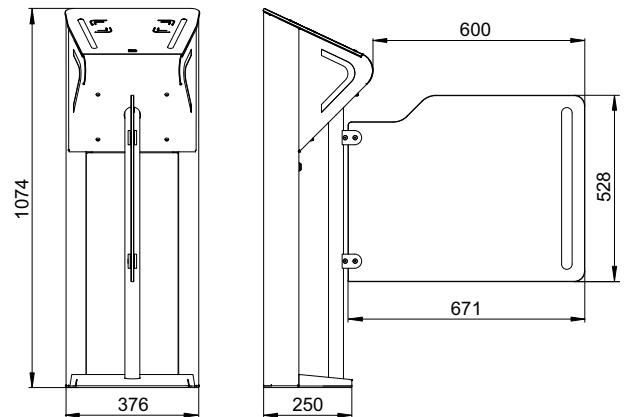
↕
BI-DIRECTIONAL

☑
ACCESS CONTROL SYSTEM

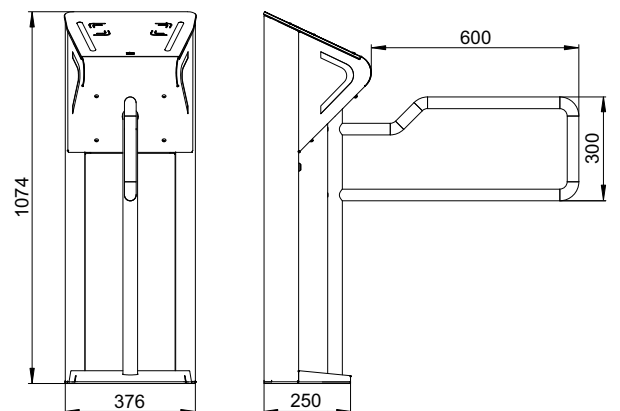
☑
MANUAL CONTROL

Model	Onyx-GS/TS
Mechanism	BMDrive® servo-drive (BLDC)
Operation mode	CW (90°) and CCW (90°)
Blocking mechanism	ToothLock®
Emergency mode	Free exit/entry (gate is opening automatically)
Power fail	Fail-safe – leaf could be opened manually Automatically open – super capacitor (option)
Standard housing	Brushed stainless steel AISI 304
Available housing	Brushed stainless steel AISI 316 Polished stainless steel AISI 304 Polished stainless steel AISI 316 Powder coated (any RAL upon request)
Voltage	AC (100-240)V, 50/60Hz DC source 12 V

Onyx-GS



Onyx-TS

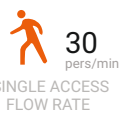




XGate-GS/TS



PASSAGE
WIDTH



SINGLE ACCESS
FLOW RATE



FREE ACCESS
FLOW RATE



OPENING /
CLOSING



PROTECTIVE
LEVEL



BI-DIRECTIONAL



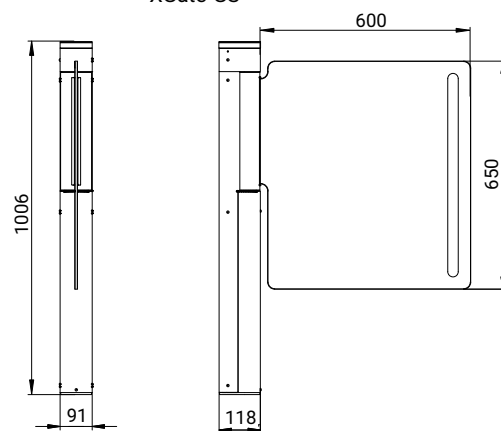
ACCESS CONTROL
SYSTEM



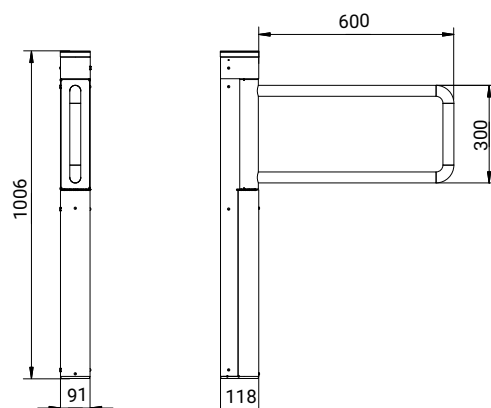
MANUAL
CONTROL

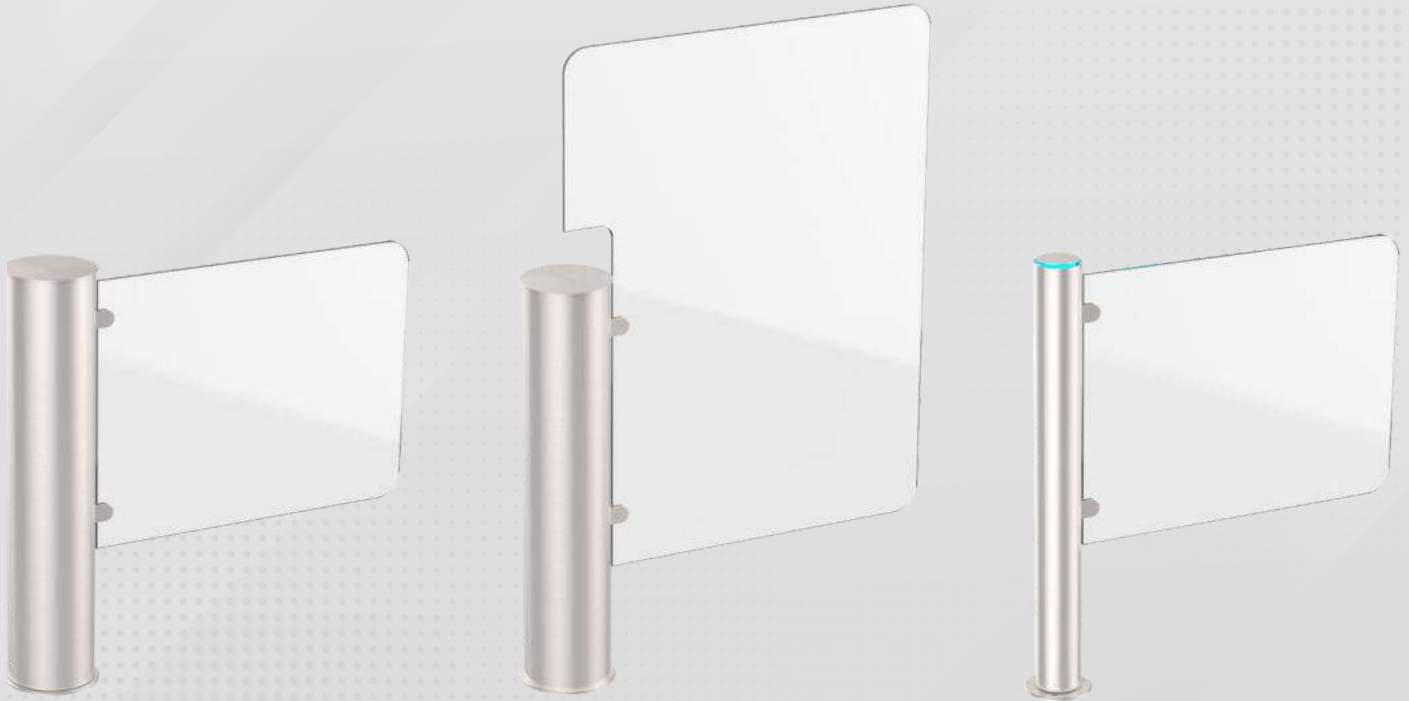
Model	XGate-GS/TS
Mechanism	BMDrive® servo-drive (BLDC)
Operation mode	CW (90°) and CCW (90°)
Blocking mechanism	ToothLock®
Emergency mode	Free exit/entry (gate is opening automatically)
Power fail	Fail-safe – leaf could be opened manually Automatically open – super capacitor (option)
Standard housing	Brushed stainless steel AISI 304
Available housing	Brushed stainless steel AISI 316 Polished stainless steel AISI 304 Polished stainless steel AISI 316 Powder coated (any RAL upon request)
Voltage	AC (100-240)V, 50/60Hz DC source 12 V

XGate-GS



XGate-TS





Gate-GS/GSH/Slim

650-900
mm
PASSAGE
WIDTH

IP 41 54
PROTECTIVE
LEVEL

PASSAGE FOR DISABLED

MOTORIZED

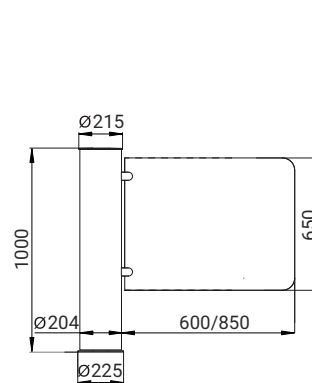
BI-DIRECTIONAL

ACCESS CONTROL
SYSTEM

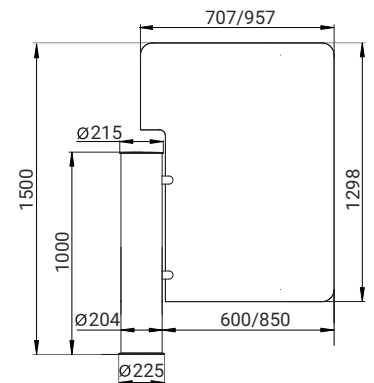
MANUAL
CONTROL

Model	Gate-GS/GSH/Slim
Mechanism	Servo-driven
Operation mode	CW (100°) and CCW (100°)
Blocking mechanism	Single electromagnetic brake
Emergency mode	Free exit/entry (gate is opening automatically)
Power fail	Fail-safe – can be rotated manually (standard) Automatically open – super capacitor (option)
Standard housing	Brushed stainless steel AISI 304
Available housing	Brushed stainless steel AISI 316 Polished stainless steel AISI 304 Polished stainless steel AISI 316 Powder coated (any RAL upon request)
Voltage	AC (100-240) V, 50/60Hz DC source 12 V

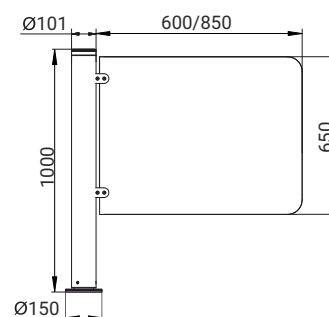
Gate-GS



Gate-GSH



Gate-GS Slim





Gate-TS/TTS/SPR

650-1050
mm
PASSAGE
WIDTH

IP 41 54
PROTECTIVE
LEVEL

PASSAGE FOR DISABLED

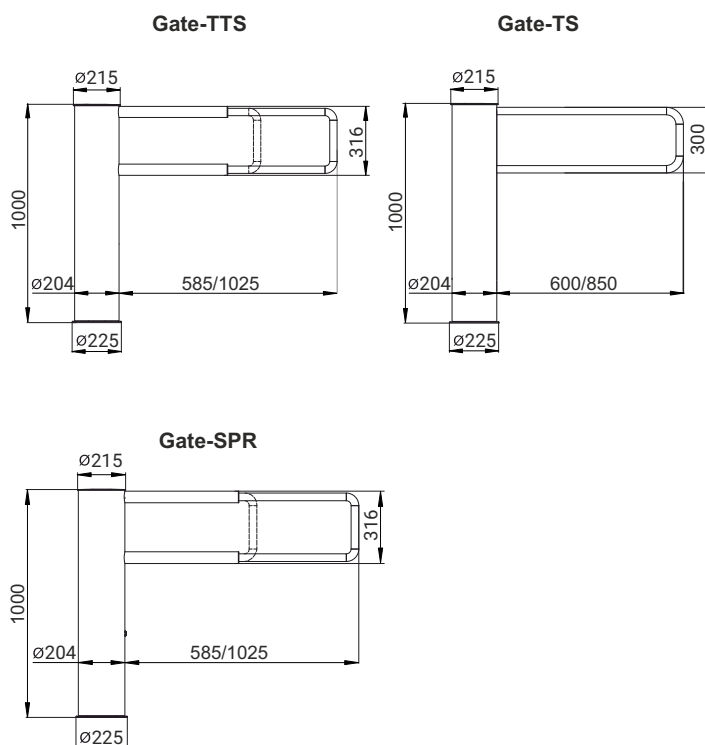
MOTORIZED

BI-DIRECTIONAL

ACCESS CONTROL
SYSTEM

MANUAL
CONTROL

Model	Gate-TS/TTS	Gate-SPR
Mechanism	Servo-driven	Mechanical
Operation mode	CW (100°) and CCW (100°)	CW (100°) or CCW (100°)
Blocking mechanism	Single electromagnetic brake	Can be locked manually by key
Emergency mode	Gate is open	Can be unlocked manually by key
Power Fail	Fail-safe – free rotation (standard) Automatically open – super capacitor (option)	–
Standard housing	Brushed stainless steel AISI 304	
Available housing	Brushed stainless steel AISI 316 Polished stainless steel AISI 304 AISI 316 / Powder coated Polished stainless steel (any RAL upon request)	
Voltage	AC (100-240) V, 50/60Hz; DC source 12 V	–



Full-height turnstiles

- Can be supplied as fully welded or in disassembled condition which has perfect effect to transportation cost;
- Turnstile is Bi-directional;
- Depending on installation place conditions and Customer`s requirements can be produced of different types of material;
- Y-type or X-type of rotor for your choice available;
- Easy integration with any type of ACS;
- Low power consumption as well as low noise operation;
- Possibility of customization;
- Fail safe or fail secure for your choice;
- Indoor/outdoor application.



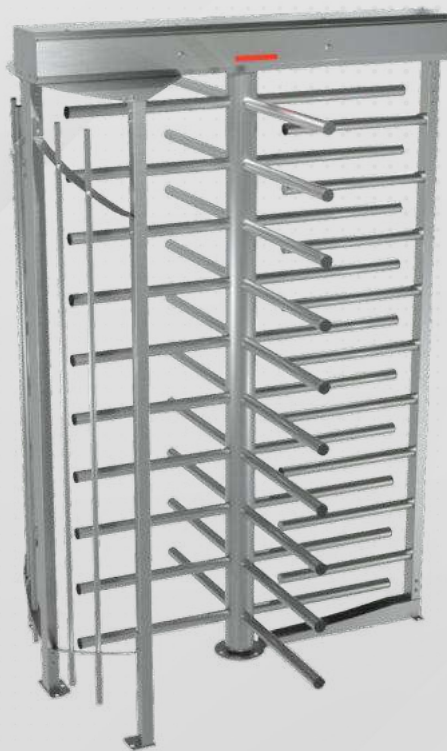
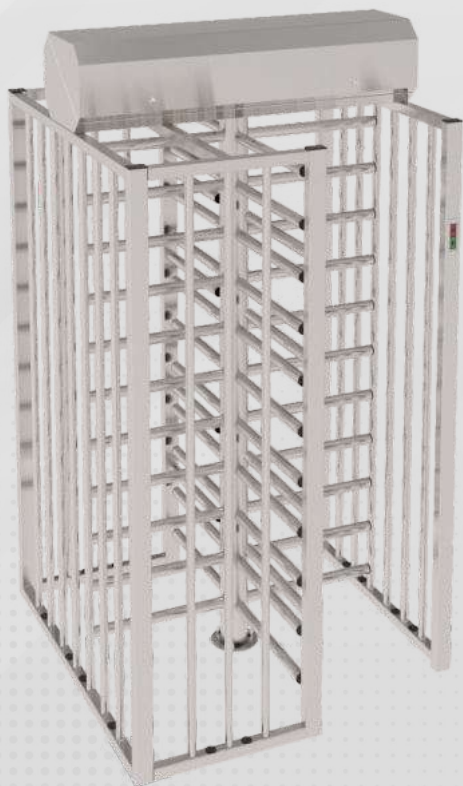


TOTAL SECURITY OF THE SITE

TiSO full-height turnstiles ensures vandal proof security level to large variety of possible applications: stadiums, factories, parks, premises with highest security requirements etc. Strength and durability is granted by robust fully welded design. On the other hand, attractive for shipment assembly modification of automatic barrier gate is also available.







Sesame IS/ ISL

Y: 650
X: 535
mm

PASSAGE WIDTH

20
pers/min

SINGLE ACCESS

30
pers/min

FREE ACCESS



ACCESS CONTROL SYSTEM



MANUAL CONTROL

IP 41-65*

PROTECTION LEVEL

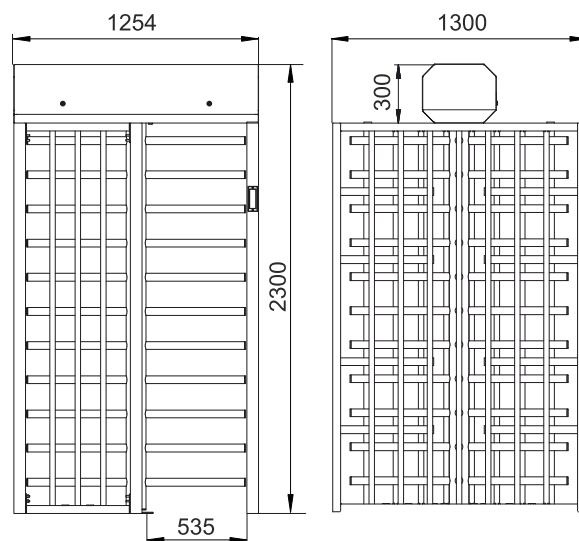
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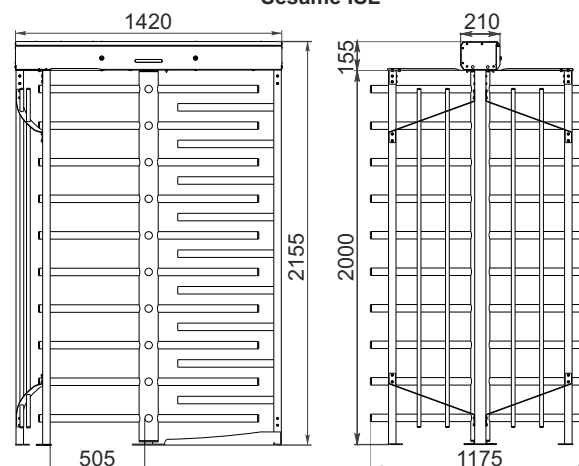
BI-DIRECTIONAL

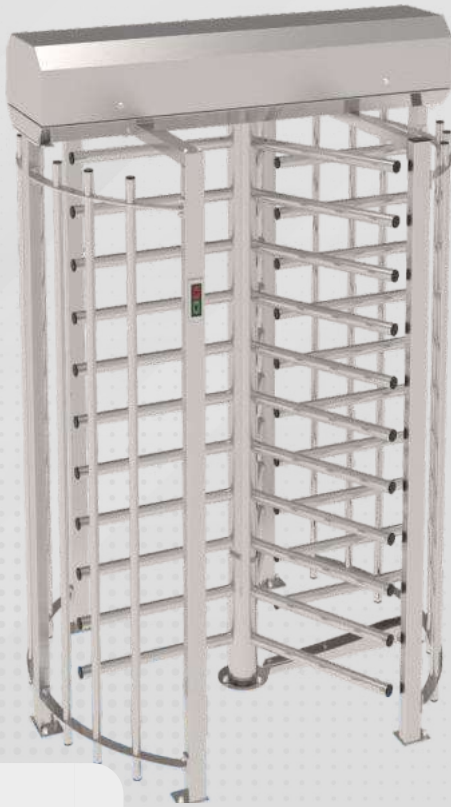
Model	Sesame IS	Sesame ISL
Mechanism	StrongLock-EM (standard) StrongLock-Servo (option)	SafeLock-EM
Blocking mechanism	Two electromechanical stop catches (separate locking system)	
Emergency mode	Free pass in both directions	
Power fail	Fail secure (entrance) Fail safe (exit)	
Extra features (included)	Manual Override, ACS Control, Rotation Sensor, User Sensor, Auto-Lock	
MCBF	20 000 000	5 000 000
Available configurations	X type rotor (90°, 4 arms)	
Standard housing	Brushed stainless steel AISI 316 (body and rotor) Galvanized and powder coated body with polished AISI 304 rotor Other options available upon request	
Voltage	AC (100-240) V, 50/60Hz DC source 12 V	

Sesame IS



Sesame ISL





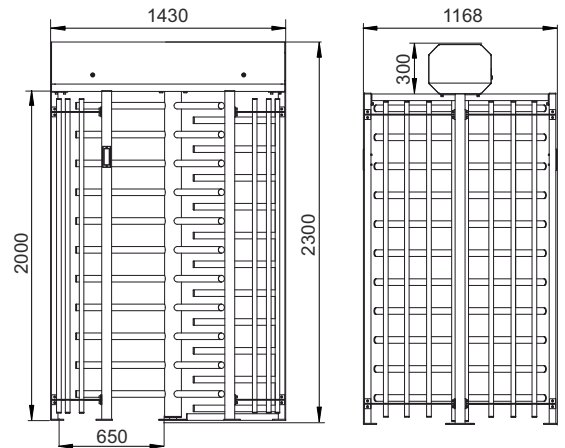
Sesame/L/S

- 
20
pers/min
SINGLE ACCESS
- 
30
pers/min
FREE ACCESS
- 
 ACCESS CONTROL SYSTEM
- 
 MANUAL CONTROL
- 
IP 41-65*
PROTECTION LEVEL
- 
 BI-DIRECTIONAL

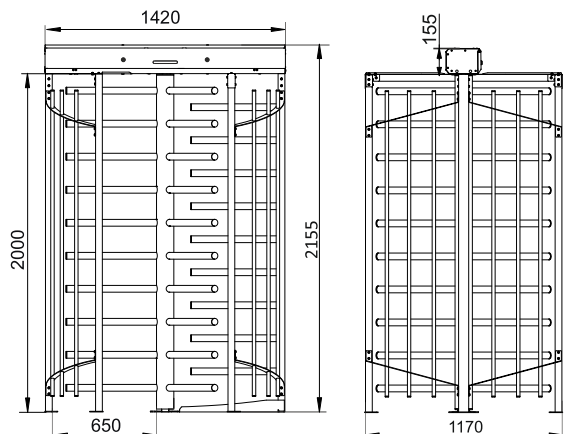
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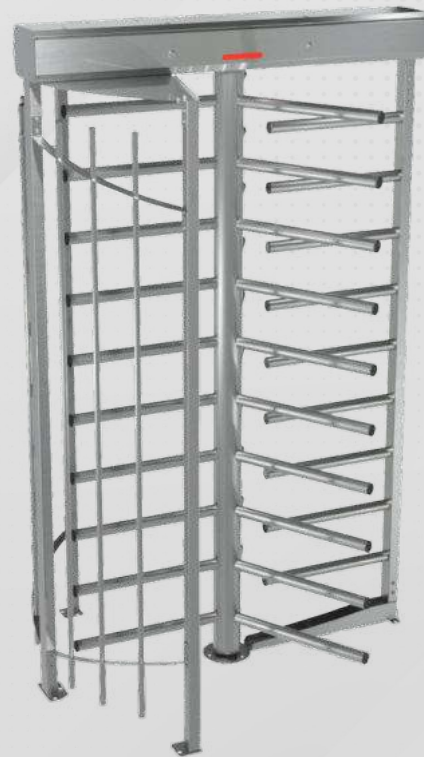
Model	Sesame	Sesame-L	Sesame-S
Mechanism	StrongLock-EM (standard) StrongLock-Servo (option)	Triservo	SafeLock-EM
Blocking mechanism	Two electromechanical stop catches (separate locking system)		
Emergency mode	Free pass in both directions		
Power fail	Fail secure (standard) Fail safe (option)	Fail safe (standard) Fail secure (option)	Fail safe (standard) Fail secure (option)
Construction features	Disassembled (standard) Full welded (option) Could be installed by a crane		Disassembled
Available configurations	Y type rotor (120°, 3 arms)/X type rotor (90°, 4 arms)		
Passage width	Y-type 650 X-type 535	650 535	615 615
MCBF	20 000 000	5 000 000	5 000 000
Standard housing	Brushed stainless steel AISI 304		
Available housing	Brushed stainless steel AISI 316 Polished stainless steel AISI 304 Polished stainless steel AISI 316 Powder coated (any RAL upon request)		
Voltage	AC (100-240) V, 50/60Hz DC source 12 V		

Sesame/L



Sesame S





Sesame Basic /L/S



PASSAGE WIDTH



SINGLE ACCESS



FREE ACCESS



ACCESS CONTROL SYSTEM



MANUAL CONTROL



PROTECTION LEVEL

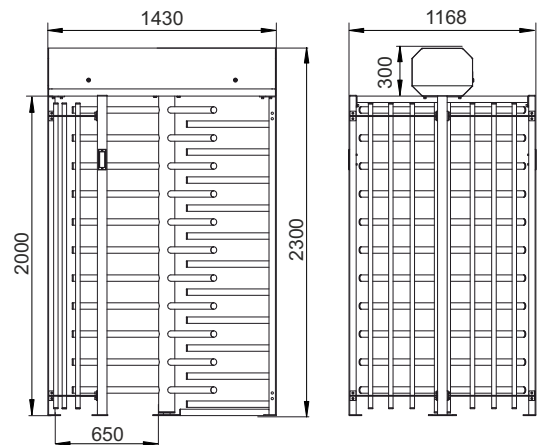
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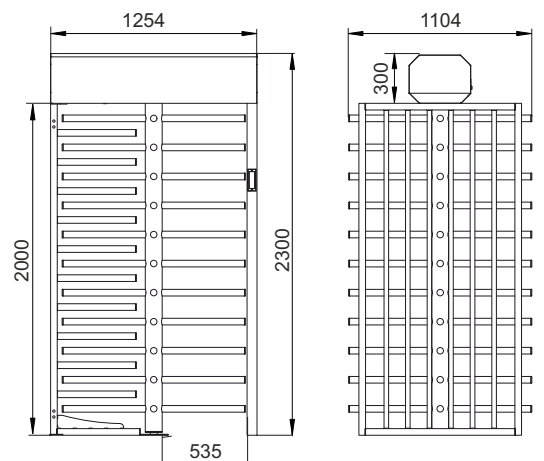
BI-DIRECTIONAL

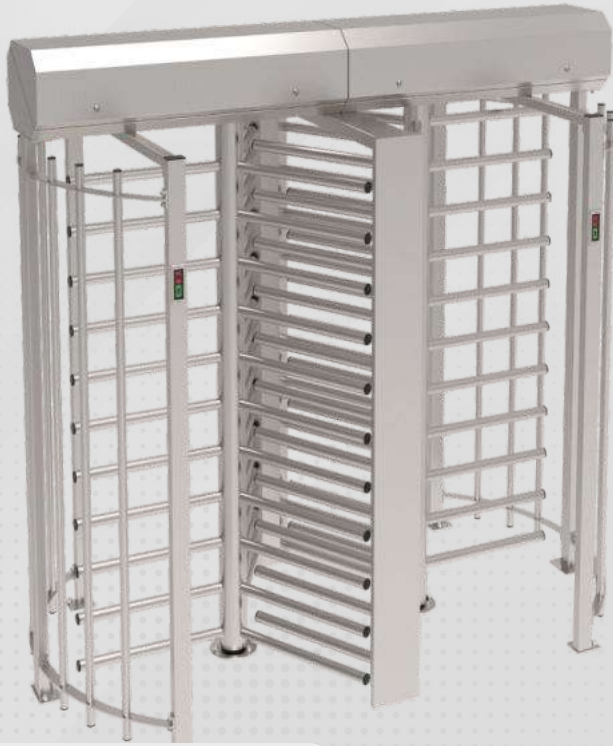
Model	Sesame Basic	Sesam Basic-L	Sesame Basic-S
Mechanism	Electromechanical (standard) Servo-drive (option)	Servo-drive (Triservo-M)	Servo-drive (Triservo-M)
Blocking mechanism	Two electromechanical stop catches (separate locking system)		
Emergency mode	Free pass in both directions		
Power fail	Fail secure (standard) Fail safe (option)	Fail safe (standard) Fail secure (option)	Fail secure (for entrance) Fail safe (for exit)
Construction features	Disassembled (standard) Full welded (option) Could be installed by a crane		
Available configurations	Y type rotor (120°, 3 arms)/X type rotor (90°, 4 arms)		
Standard housing	Brushed stainless steel AISI 304		
Available housing	Brushed stainless steel AISI 316 Polished stainless steel AISI 304 Powder coated (any RAL upon request)		
Voltage	AC (100-240) V, 50/60Hz DC source 12 V		

Sesame Basic Y-type



Sesame Basic X-type





Sesame Twin/L

Y: 650
X: 570
mm

PASSAGE WIDTH

40
pers/min

SINGLE ACCESS

60
pers/min

FREE ACCESS



ACCESS CONTROL SYSTEM



MANUAL CONTROL

IP 41-65*

PROTECTION LEVEL

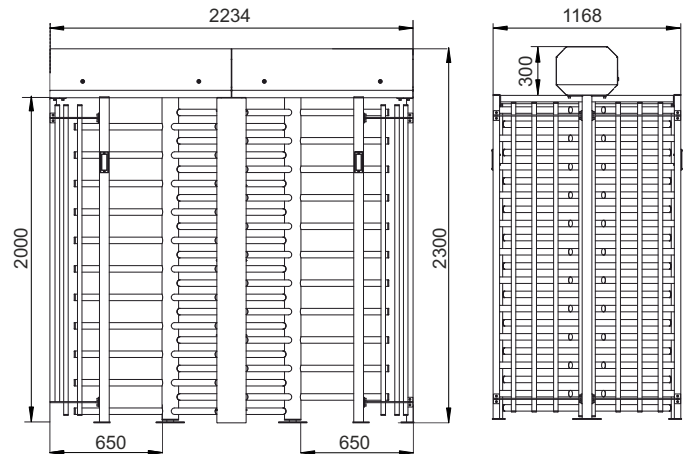


BI-DIRECTIONAL

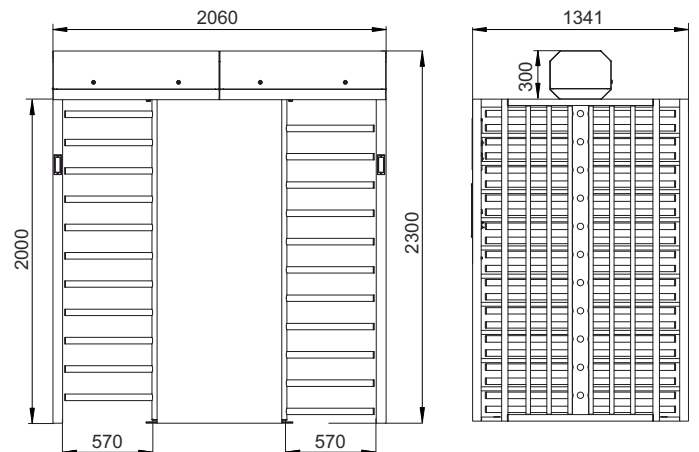
*Available upon request

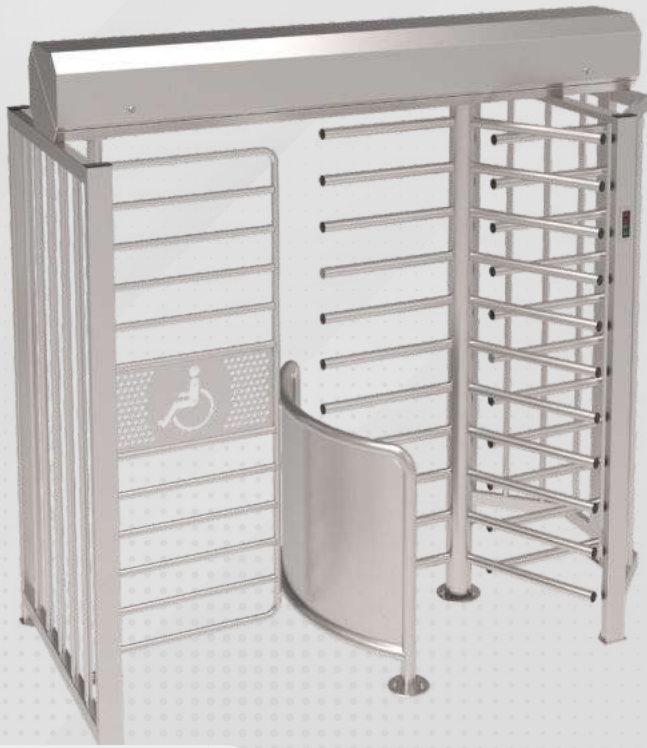
Model	Sesame Twin	Sesame Twin-L
Mechanism	Electromechanical (standard) Servo-drive (option)	Servo-drive (Triservo-M)
Blocking mechanism	Two electromechanical stop catches (separate locking system)	
Emergency mode	Free pass in both directions	
Power fail	Fail secure (standard) Fail safe (option)	Fail safe (standard) Fail secure (option)
Construction features	Disassembled (standard) Full welded (option) Could be installed by a crane	
Standard housing	Brushed stainless steel AISI 304	
Available housing	Brushed stainless steel AISI 316 Polished stainless steel AISI 304 Polished stainless steel AISI 316 Powder coated (any RAL upon request)	
Voltage	AC (100-240) V, 50/60Hz DC source 12 V	

Sesame Twin Y-type






Sesame Twin X-type





Bicyclone/L

- 
Rotor: 620
Gate: 700/900
mm
 PASSAGE WIDTH
- 
20
 pers/min
 SINGLE ACCESS
- 
30
 pers/min
 FREE ACCESS

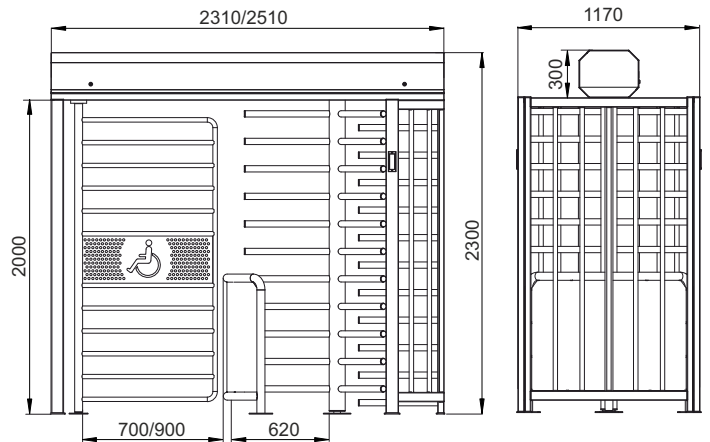
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41-65*
 PROTECTION LEVEL
- 
 BI-DIRECTIONAL
- 
 ACCESS CONTROL SYSTEM
- 
 MANUAL CONTROL

*Available upon request

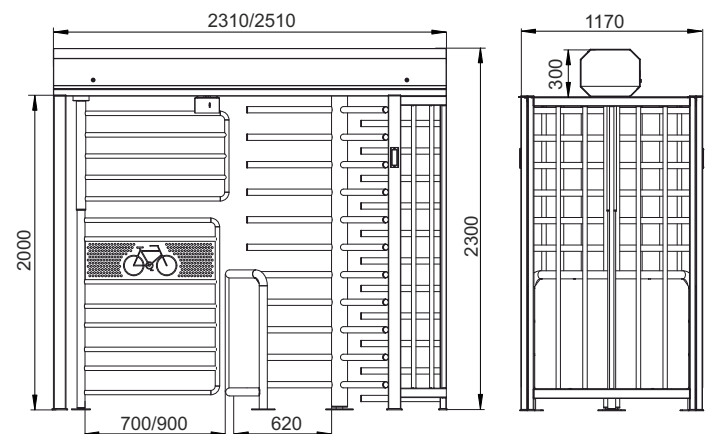
Model	Bicyclone	Bicyclone-L
Mechanism rotor	Electromechanical (standard) Servo-drive (option)	Servo-drive (Triservo-M)
Mechanism gate	Servo-drive (Triservo-M)	
Blocking mechanism	Two electromechanical stop catches (separate locking system)	
Emergency mode	Free pass in both directions	
Power fail	Fail secure (standard) Fail safe (option)	Fail safe (standard) Fail secure (option)
Construction features	Disassembled (standard) Full welded (option) Could be installed by a crane	
Standard housing	Brushed stainless steel AISI 304	
Available housing	Brushed stainless steel AISI 316 Polished stainless steel AISI 304 Polished stainless steel AISI 316 Powder coated (any RAL upon request)	

Voltage AC (100-240)V, 50/60Hz
DC source 12 V

Bicyclone-W



Bicyclone-B





GlassGO/S



620
mm

PASSAGE WIDTH



20
pers/min

SINGLE ACCESS



30
pers/min

FREE ACCESS



ACCESS CONTROL
SYSTEM



MANUAL
CONTROL



41

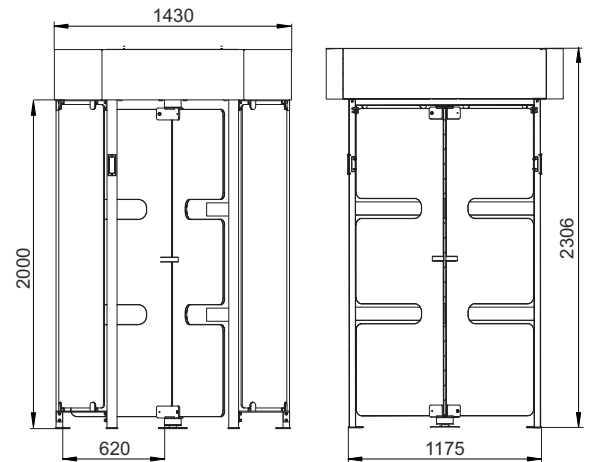
PROTECTION LEVEL



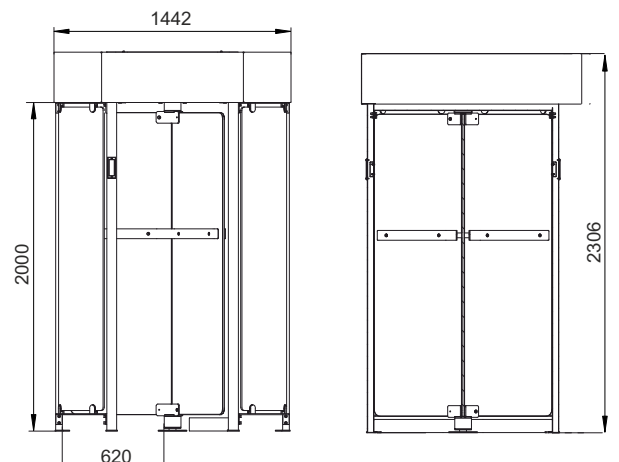
BI-DIRECTIONAL

Model	GlassGO	GlassGO-S
Rotor type	Three shaped glass leaves angle between arms 120°	Three solid glass leaves angle between arms 120°
Wrong way prevention	Fencing	Motion sensors (with sound alarm)
Mechanism	Servo-drive	
Blocking mechanism	Two electromechanical stop catches (separate locking system)	
Emergency mode	Free pass in both directions	
Power fail	Fail secure (standard) Fail safe (option)	
Standard housing	Brushed stainless steel AISI 304	
Available housing	Brushed stainless steel AISI 316 Polished stainless steel AISI 304 Polished stainless steel AISI 316 Powder coated (any RAL upon request)	
Voltage	AC (100-240) V, 50/60Hz DC source 12 V	

GlassGO



GlassGO-S





HighWay-G/NG



1000
mm

PASSAGE WIDTH



20
pers/min

SINGLE ACCESS



60
pers/min

FREE ACCESS



ACCESS CONTROL
SYSTEM



1,5
sec

OPENING /
CLOSING



41-
54*

PROTECTIVE
LEVEL



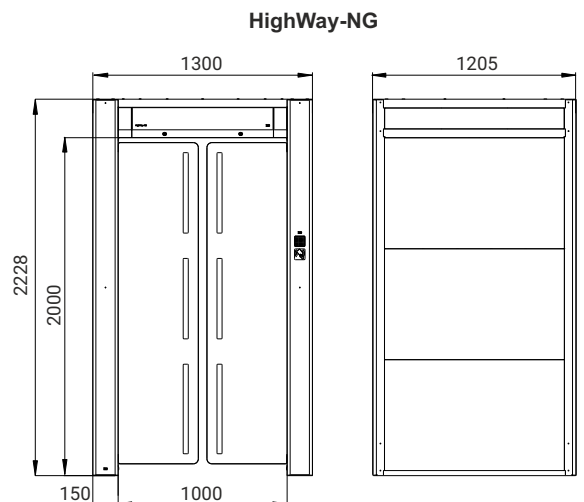
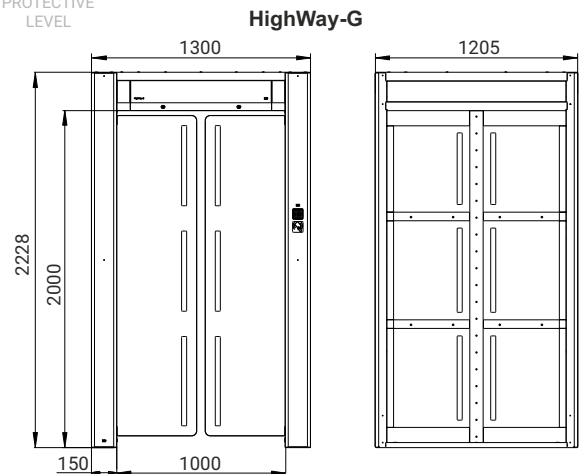
ANTI-TAILGATING



MANUAL
CONTROL



BI-DIRECTIONAL



Model	HighWay-G	HighWay-NG
Mechanism	BMDrive® servo-driven (BLDC)	
Blocking mechanism	ToothLock®	
Emergency mode	Free entry/exit (gates are opened automatically)	
Power fail	Fail safe (gates could be opened manually - standard) Automatically open - super capacitor (option)	
Standard housing	Brushed stainless steel AISI 304	
Available housing	Brushed stainless steel AISI 304 and tempered glass	Brushed stainless steel AISI 304
Voltage	AC (100-240)V, 50/60Hz DC source 12 V	

Additional equipment



Emergency door

Emergency Door with Magnetic Lock is designed for installation as a part of a full-height turnstile to provide a free exit in an emergency case for evacuation or in case of unavailable power to the turnstile. Also the door is used for pulling through big-sized items.



Enclosure

Stylish enclosure (balustrade) from TiSO is now becomes unseparatable accessory for any our turnstiles. Its design is very simple but really efficient and easy-to install. You can purchase any combination of side or middle posts with different width of glass.



Emergency gate

Emergency gate is designed for installation at the entry points in enterprises, administrative facilities, banks and other sites to provide a free exit in an emergency case for evacuation or for pulling through big-sized items.



Mobile Platform

Mobile Platform consists of landing, enclosure, and can have any tripod turnstile attached to it. The main purpose of the Mobile Platform is to ensure quick and easy displacement of an installed tripod turnstile to a place of temporary usage.



TWiC

TWiC manages and controls large group of turnstiles and road blockers. The user friendly 8" touch screen display graphics requires minimal training for proficiency in navigating the various pages, remotely controlling the lanes and understanding the real time feedback such as alarm events when unauthorized access is detected.



Card reader post/Card collector

Card readers post/Card collectors are designed for installation as a part of an access control system for enterprises, administrative facilities, banks and other sites. Elegance, lightness and simplicity make this model very popular as part of access control system.



Occupancy control and people counter system

Occupancy control and people counter system was developed to prevent the spread of the disease. In order to prevent the spread of the disease number of people who can be present in stores simultaneously should be limited. Therefore, we came up with turnstile solution which will enable you to control number of people coming in and out of stores daily.

Systems to detect symptoms of virus

Systems to detect symptoms of virus is special solution for authorizing access depending on persons state of health. More specifically, such system enables to limit access of people with suspected disease symptoms such as high temperature. TiSO speed gates with special integrated authorization system performs face identification and monitors body temperature. Such solution can be widely used in public places like hospitals, airports, border control zones, etc.

Bollards





Fixed/Removable bollards



Traffic fixed bollards

TiSO fixed and removable traffic bollards are widely used as static barriers in order to provide vehicle access control and parking management of secured areas. Due to bollards' design and wide variety of available models, this type of solution becomes a good addition to different urban architectural concepts.

Model	RB344-36	RB344-39	RB344-37	RB344-40
Type	Traffic fixed bollards			
Tube diameter, mm	220	273	220	273
Tube height, mm	600		800	
Installation depth, mm	300			
Tube materials	Brushed stainless steel AISI 304 Galvanized and powder coated tube (any RAL upon request)			

ASTM F2656/IWA14-1



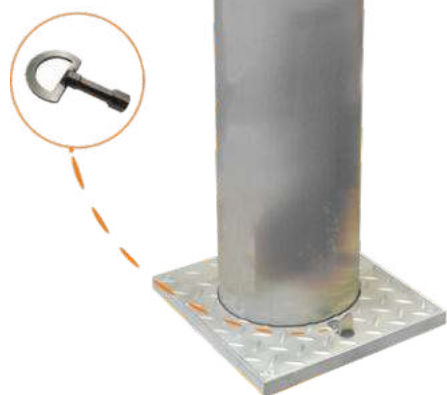
High security fixed/removable bollards

TiSO high security fixed and removable bollards are the most cost effective solution for vehicle unauthorized access prevention. Being pedestrian friendly, TiSO high security bollards correspond to the requirements of anti-terroristic protection. Installation simplicity and absence of necessity in service maintenance are the main features to be outlined. On the other hand, the greatest advantage related to its mobility, when free access is required. Advanced technologies and large manufacturing experience allow TiSO high security fixed bollards to be simple, reliable, and wellfitting equipment.



Model	RB343-68	RB345-09-S-035
Type	High security removable / fixed bollards	
Security class	ASTM F2656/F2656 M-15, M50, P2; IWA 14-1:2013, Bollard V/7200[N2B]/80/90:4.1	ASTM F2656/2656M-20, C750 (K12), P1; IWA 14-1:2013, Bollard V/7200[N2B]/80/90:0.7
Tube diameter, mm	325	355
Tube height, mm	1000	1200
Wall thickness, mm	20	30
Tube materials	Galvanized and powder coated tube (any RAL upon request) Stainless steel sleeve / casing up on request	

Semi-automatic bollards



With gas-spring mechanism

TiSO semi-automatic bollards is a perfect solution for effective vehicle access control under the circumstances of unavailable power supply. Semi-automatic bollards have gas spring mechanism which is locked at down position and rise rapidly when released. Being complete and independent solution, semi-automatic bollards require manual impact for driveway opening or closing.

Model	RB343-60	RB343-61	RB343-63	RB343-64
Drive	Gas-spring mechanism			
Tube diameter, mm	220	273	220	273
Tube height, mm	600		800	
Wall thickness, mm	4			
Axle load, t	15			
Tube materials	Brushed stainless steel AISI 304 Brushed stainless steel AISI 316. Galvanized and powder coated tube (any RAL upon request)			



With drill drive mechanism

The same like semi-automatic, TiSO drill drive bollards intend to fit installations without power supply availability. The operation principle determined by the drill impact, which gets blocking segment up or down according to screw direction. This solution intends to manage traffic of low intensity and featured with outstanding lifetime, due to lack of consumables in its operation and design concept.

Model	RB343-01	RB343-02	RB343-04	RB343-05
Drive	Drill drive mechanism			
Tube diameter, mm	220	273	220	273
Tube height, mm	600		800	
Wall thickness, mm	4		4	
Axle load, t	15			
Tube materials	Brushed stainless steel AISI 304 Brushed stainless steel AISI 316. Galvanized and powder coated tube (any RAL upon request)			

Traffic automatic bollards

TiSO automatic bollards are engineered in order to provide maximum operation durability. Traffic bollards is the perfect choice for installations at private and other areas without strict requirement to antiterrorism protection. All equipment is designed and tested for high intensity operation.



Model	RB343-21	RB343-23	RB349-11	RB349-12	RB343-24	RB343-26	RB349-14	RB349-15
Type	Traffic hydraulic bollards							
Tube diameter, mm	114	170	220	273	114	170	220	273
Tube height, mm	600				800			
Wall thickness, mm	3	5	4	8	3	5	4	8
Axle load, t	15							
Rising/Lowering time, s (+/- 1s)	7,0/5,5				9,0/8,0			
Operating temperatures*, °C	-40 / +60							
Power supply	1 phase 230V, 50/60 Hz							
Protection level	IP 67 (for bollard); IP 55 (for control box)							
Tube materials	Brushed stainless steel AISI 304 Brushed stainless steel AISI 316. Galvanized and powder coated tube (any RAL upon request)							

High-security automatic bollards

ASTM F2656

Model	RB348	RB342
Type	High security hydraulic bollards	
Security class	ASTM F2656-07, M30, P1	ASTM F2656-07, M50, P1
Tube diameter, mm	325	325
Tube height, mm	1000	1200
Wall thickness, mm	20	30
Impact resistance, J	679 900	1 845 000
Axle load, t	15	
Rising/Lowering time, s (+/- 1s)	4,0/3,5 (1,5 with EFO)	
Operating temperature*, °C	-40 / +60	
Power supply	3 phase 400V, 50/60 Hz	
Protection level	IP 67 for road-blocker; IP 54 for control box (IP 65 optional)	
Tube materials	Galvanized and powder coated tube (any RAL upon request) Stainless steel sleeve / casing up on request	

HCIS
COMPLIANT



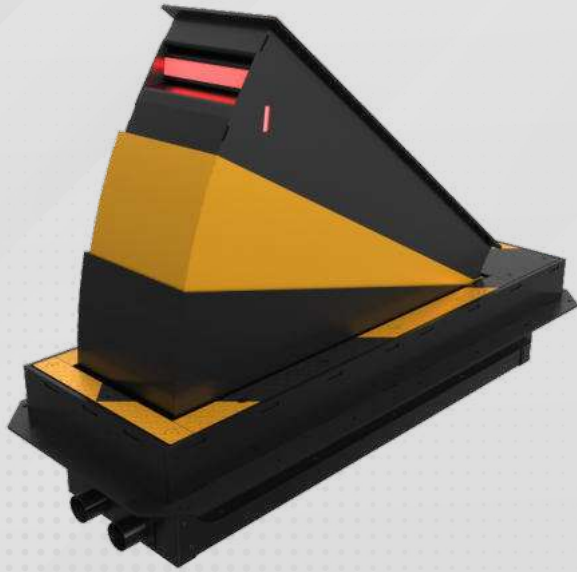
TiSO automatic high security bollards intend to prevent vehicles unauthorized access to secured areas and keep the highest level of antiterrorism protection. It demanded for installation sites with high risk of heavy vehicle attack: public places (stadiums, fairgrounds), governmental institutions, or military infrastructures etc. This type of equipment can be easily connected with ACS and other vehicle access control equipment (arm barriers etc.).



Road blockers







City-light Cyclopes

City-light Cyclopes is an outstanding part of TiSO traffic barriers range. This type of equipment intends to manage pedestrian friendly vehicle access control. In difference to bollards, Cyclope does not require big installation depth. This kind of approach is a good solution to simplify installation and service maintenance procedures. All features in common make Cyclope well applicable solution to the widest range of projects with large scope of requirements.

Model	RB319-01
Installation type	Shallow mounted
Drive	Hydraulic
Width, mm	270
Height, mm	600
Axle load, t	15
Rising time, s (+/- 1s)	3,5
Lowering time, s (+/- 1s)	2
Operating temperatures*, °C	-40/ +60
Power supply	1 phase 230V, 50/60 Hz
Protection level	IP 67 (for road blocker); IP 54 (for control box)
Materials	Brushed stainless steel AISI 304; Structural steel C22 (powder coated)



ASTM F2656/IWA14-1

High security Cyclopes

High security Cyclopes ensure highest level of anti-terrorism protection. As far as it was certified according to ASTM F2656/F2656-15, M40, P1 & IWA14-1, Blocker V/7200[N2B]/64/90:12.1 standards. The blocking segment is operated from outside control box with HPU and PLC in it. Interconnection between two elements provided via connection cable and power/oil hoses.

Model	RB320-01	RB320-02	RB320-03
Security class	Designed to keep ASTM F2656, M30 (K4) standard	ASTM F2656/F2656 M-15, M40, P1; IWA 14-1:2013 Blocker V/7200 [N2B]/64/90:-0,2	Designed to keep ASTM F2656, M50 (K12) standard
Installation type	Shallow mounted		
Drive	Hydraulic (HPU)		
Width, mm	520		
Height, mm	800	900	1100
Impact resistance, J	656 000	1 110 000	1 680 000
Axle load, t	15		
Rising time, s (+/- 1s)	3,5		
Lowering time, s (+/- 1s)	2,0		
Operating temperatures*, °C	-40/ +60		
Power supply	3 phase 400V, 50/60 Hz		
Protection level	IP 67 (for road blocker) IP 54 (for control box)		
Materials	Structural steel C22 (powder coated)		



ASTM F2656/IWA14-1

High security Speedbumps

Model	RB359-02	RB359-03	RB359-04
Security class	ASTM F2656/F2656 M-15, M30, P1; IWA 14-1:2013 Blocker V/7200 [N2B]/48/90:-0,3		
Installation type	Shallow mounted / Above the ground (with ramps)		
Drive	Hydraulic (HPU)		
Width, mm	2000	3000	4000
Height, mm	500		
Impact resistance, J	664 000		
Axle load, t	15		
Rising time, s	3,5 (1,5 with EFO)		
Lowering time, s	3,5		
Operating temperatures*, °C	-40 / +60		
Power supply	3 phase 400V, 50/60 Hz		
Protection level	IP 67 (for blocker) IP 54 (for control box)		
Materials moving part	Structural steel C22 (powder coated)		
Materials ramps	Structural rubber		

This type of equipment was certified according to ASTM F2656/F2656-15, M30, P1 & IWA14-1, Blocker V/7200[N2B]/48/90:0,3 standards. The standard delivery set includes blocking segment, control box with HPU and PLC, connection cable, power/oil hoses, and push-button control unit. Herewith large list of accessories enables its adapting to various severe weather and environment conditions. Well selected list of available blocking widths, together with availability of customized solutions, installation simplicity, and high security are useful to get a wide extension of successful projects.



ASTM F2656/IWA14-1

High security Mobile Speedbump

Model	RB358-06	RB358-07	RB358-08
Security class	ASTM F2656/F2656M-18a, M30, P2; IWA 14-1:2013, Blocker V/7200[N2B]/48/90:5.3		
Installation type	Above the ground (mobile, with no fixation)		
Drive	Hydraulic (build-in)		
Width, mm	2000	3000	4000
Height, mm	570		
Impact resistance, J	649 000		
Axle load, t	15		
Rising time, s (+/- 1s)	4		
Lowering time, s (+/- 1s)	3		
Operating temperatures*, °C	-40 / +60		
Power supply	1 phase 230**V, 50/60 Hz		
Protection level	IP 67 (for road blocker) IP 54 (for control box)		
Materials	Structural steel (galvanized and powder coated)		

TISO high security Mobile Speedbumps are reliable compact solution to provide security of your territory. It does not require any installation to the ground. High security Mobile Speedbump was tested and certified according to ASTM F2656/F2656-18a and IWA14-1:2013 standards.

- Key advantages of Mobile Speedbumps M30:
- full mobility of crash-rated, automatic wedge barrier;
 - easy application: setting up within 10 minutes: simply by delivering to the site — unloading — plug in to the power;
 - no civil works required: no anchors/ no bolts.

High security Mobile Speedbump has warning LED indication and warning painting. Also can be interfaced with any ACS. Ideal for organising temporary protection of driveways during public events (fairs, festivals, weekly markets, public holidays etc.).



PAS 68/IWA14-1

Mobile Mechanical Road Blocker

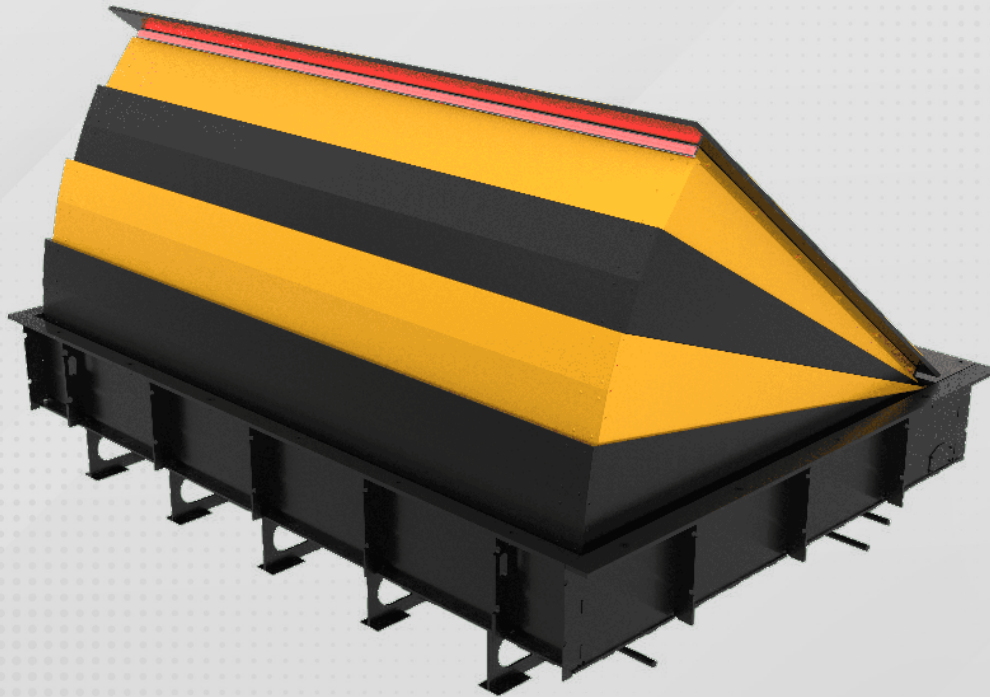
Model	RB319-25-M
Security class	PAS68 / IWA14-1 7,5t@48km/h
Installation type	Above the ground
Drive	mechanical
Width, mm	4900
Height, mm	830
Impact resistance, J	689 000
Protection level	IP 67
Materials moving part	Structural steel C22 (hot galvanizing 70-110 / priming / painting)

The road blocker RB319-25-M designed to limit access / reduce the speed of cars to the territory. The feature of the blocker is the construction of sections (the blocker and the ramp), so there are almost no restrictions on the width of the limitation of the moving part. Also, one of the main advantages is the mobility of the blocker is that it does not need to be installed in the road surface. Such a mobile version of the blocker just needs to be installed on the road surface and it is ready for work.

Mechanical road blocker RB319-25-M was tested and certified according to PAS68 / IWA14 - 1 (7,5t@48km/h).

When unfolded, it does not interfere with the free passage of citizens.

Ideal for organising temporary protection of driveways during public events (fairs, festivals, weekly markets, public holidays etc.)



ASTM F2656

High security road blocker

High security road blockers engineered and designed to prevent unauthorized access of vehicles to a secured area and keep the standards of antiterrorism protection. This is heavy duty equipment for projects with appropriate requirements. TiSO road blockers has successfully passed crash test and certified according to ASTM F2656-07, M50, P1 and ASTM F2656-07, M30, P1. Being developed by engineers with extensive background in appropriate field, this type of wedge barriers is featured with installation simplicity, easy service, reliability, durability, and multi functionality.

Model	RB312	RB313	RB314	RB322	RB323	RB324	RB332	RB333	RB334
Security class	Certified ASTM F2656-07, M30, P1			Designed to keep ASTM F2656 M40 standard			Certified ASTM F2656-07, M50, P1		
Installation type	Shallow mounted								
Drive	Hydraulic (HPU)								
Width, mm	2000	3000	4000	2000	3000	4000	2000	3000	4000
Height, mm	800			1000			1200		
Impact resistance, J	656 000			1 110 000			1 843 900		
Axle load, t	15 (up to 50 with increased foundation depth)								
Rising time, s (+/- 1s)	3,5 (1,5 with EFO*)			3,5 (1,5 with EFO)			3,5 (1,5 with EFO)		
Lowering time, s (+/- 1s)	3,5			3,5			3,5		
Operating temperatures**, °C	-40/ +60								
Power supply	3 phase 400V, 50/60 Hz								
Protection level	IP 67 for road-blocker; IP 54 for control box (IP 65 optional)								
Materials	Structural steel C22 (powder coated)								

*EFO - emergency fast operator

** for temperatures lower than -10 °C use the heating device



PAS68/IWA14-1

Ultra shallow road blocker

*safety skirt goes as an option

Ultra shallow road blockers were designed to protect the perimeter of the protected area. This blocker can stop truck of 7 500 kg (7,5 t) mass driving at 48 kph (30 mph)/64 kph (40 mph)/80 kph (50 mph). This is confirmed by successfully passed tests BSI PAS 68:2013 and IWA 14-1:2013. Such a blocker fully meets the requirements for the protection of highly classified objects. In addition to anti-ramming properties, this blocker has another advantage - this is an minimal installation depth of 200 mm. The completely innovative design of this lock allows you to combine its main anti-ram function with the simplicity and speed of installation.

Model	RB312-01	RB313-01	RB314-01	RB322-01	RB323-01	RB324-01	RB332-01	RB333-01	RB334-01
Security class	PAS68/IWA14-1 (7,5t@48kph)			PAS68/IWA14-1 (7,5t@64kph)			PAS68/IWA14-1 (7,5t@80kph)		
Impact resistance, J	689 000			1 139 000			1 868 000		
Installation type	Shallow mounted								
Drive	Hydraulic (HPU)								
Width, mm	2000	3000	4000	2000	3000	4000	2000	3000	4000
Height, mm	800			950			950		
Installation depth, mm	200								
Axle load, t	15 (up to 50 with increased foundation depth)								
Rising time, s (+/- 1s)	3.5 (1.5 with EFO*)								
Lowering time, s (+/- 1s)	3,5								
Operating temperatures**, °C	-40 / +60								
Power supply	3 phases 400 V, 50/60 Hz (standard); 1 phase 230 V, 50/60 Hz (option)								
Protection level	IP 67 for road-blocker; IP 54 for control box (IP 65 optional)								
Materials	Structural steel C22 (powder coated)								

*EFO - emergency fast operator

** for temperatures lower than -10 °C use the heating device



Automatic Tire-killers

TiSO Tire-Killers are affordable and at the same time efficient solution for vehicle access control management. Among available configurations, we should stress out installation type options (surface /above the ground or shallow/ground level), one or two directional driveway control, and spikes of varied lengths. The diversity of options enables this traffic barriers to be widely applicable for projects at different sorts of area. The concept of built-in hydraulic unit advances equipment to be suitable for installations under severe climate conditions, as well as for projects which require large distances between PLC and blocking segment.

Model	RB373-02	RB373-03	RB373-04	RB370-02	RB370-03	RB370-04
Installation type	Shallow mounted / Above the ground (with ramps)					
Drive	Hydraulic (HPU)					
Spikes direction	One-directional			Bi-directional		
Width, mm	2000	3000	4000	2000	3000	4000
Height, mm	170					
Axle load, t	15					
Rising time, s (+/- 1s)	2.5 (1.5 with EFO*)					
Lowering time, s (+/- 1s)	1,5					
Operating temperatures,** °C	-40 / +60					
Power supply	1 phase 230 v, 50/60 Hz					
Protection level	IP 67					
Material	Structural steel C22 (powder coated)					

*EFO - emergency fast operator

** for temperatures lower than -10 °C use the heating device



Mechanical tire-killer

Mechanical tyre killers is a good choice for vehicle access control projects without available power supply. TiSO offers two types of such devices: springs or lever drive. In the first case, spikes always remain raised and one direction free to pass. Dealing with lever operated tyre killers, you get three operation modes: spikes up and blocked to both directions, spikes down and blocked, spikes up and free to one direction. The range is classified according to variety of blocking widths and spikes lengths. Also, we should mention optional installation configurations: surface / above the ground or submerge / ground level.

Model	RB379-06	RB379-07	RB379-16	RB379-17
Installation type	Above the ground (with ramps)		Shallow mounted	
Drive	Mechanical			
Spikes direction	One-directional			
Width, mm	2000	3000	2000	3000
Height, mm	80			
Axle load, t	15 (up to 50 with increased foundation depth)			
Material	Structural steel C22 (powder coated)			



TiSO company provides entrance security solutions at wide range of sites all over the world. More than 30 000 references in 100+ countries are equipped with pedestrian and vehicle access control systems manufactured by European brand TiSO. Some of the most significant are outlined below:

FINANCIAL INSTITUTIONS

- Bahrain World Trade Center, Bahrain
- Singapore Stock Exchange, Singapore
- Bank of Portugal, Portugal
- Islamic Bank, KSA
- The Headquarters of BBVA, Spain
- Deutsche Bank Head Office, Romania
- Bank of America Indian HQ, Mumbai, India
- Social Development Bank, KSA

GOVERNMENTAL INSTITUTIONS

- Abu-Dhabi Municipality, UAE
- Ministry of Defense, KSA
- Ministry of Foreign Affairs, Kuwait
- Ministry of Defense, UAE
- RAK Police, UAE
- Riyadh Municipality, KSA
- Ministry of National Development, Singapore
- NATO HQ, Kuwait
- Ministry of Foreign Affairs, Bahrain
- Ministry of Health Riyadh, KSA
- Saudi Authority of Intellectual Property, KSA
- Netherlands Embassy, Lebanon

PRODUCTION

- Mallaghan Engineering, Northern Ireland
- GASCO, KSA
- Emirates Steel, UAE
- ALSTOM Power Plant, Estonia
- LG Factory, China
- Equate Petrochemicals, Kuwait

AIRPORT/TRANSPORT FACILITIES

- Lisbon International Airport, Portugal
- Jeddah King Abdulaziz airport, KSA
- Riyadh King Khalid Airport, KSA
- Al Ula Airport, KSA
- Beirut International Airport, Lebanon
- ASECNA, Dakar, Senegal
- Texel Air, Bahrain
- Saudi Airlines, KSA
- Saudi Ports offices, Yanbu and Madinah, KSA
- Bahrain Airport Company

BUSINESS (OFFICE) CENTER

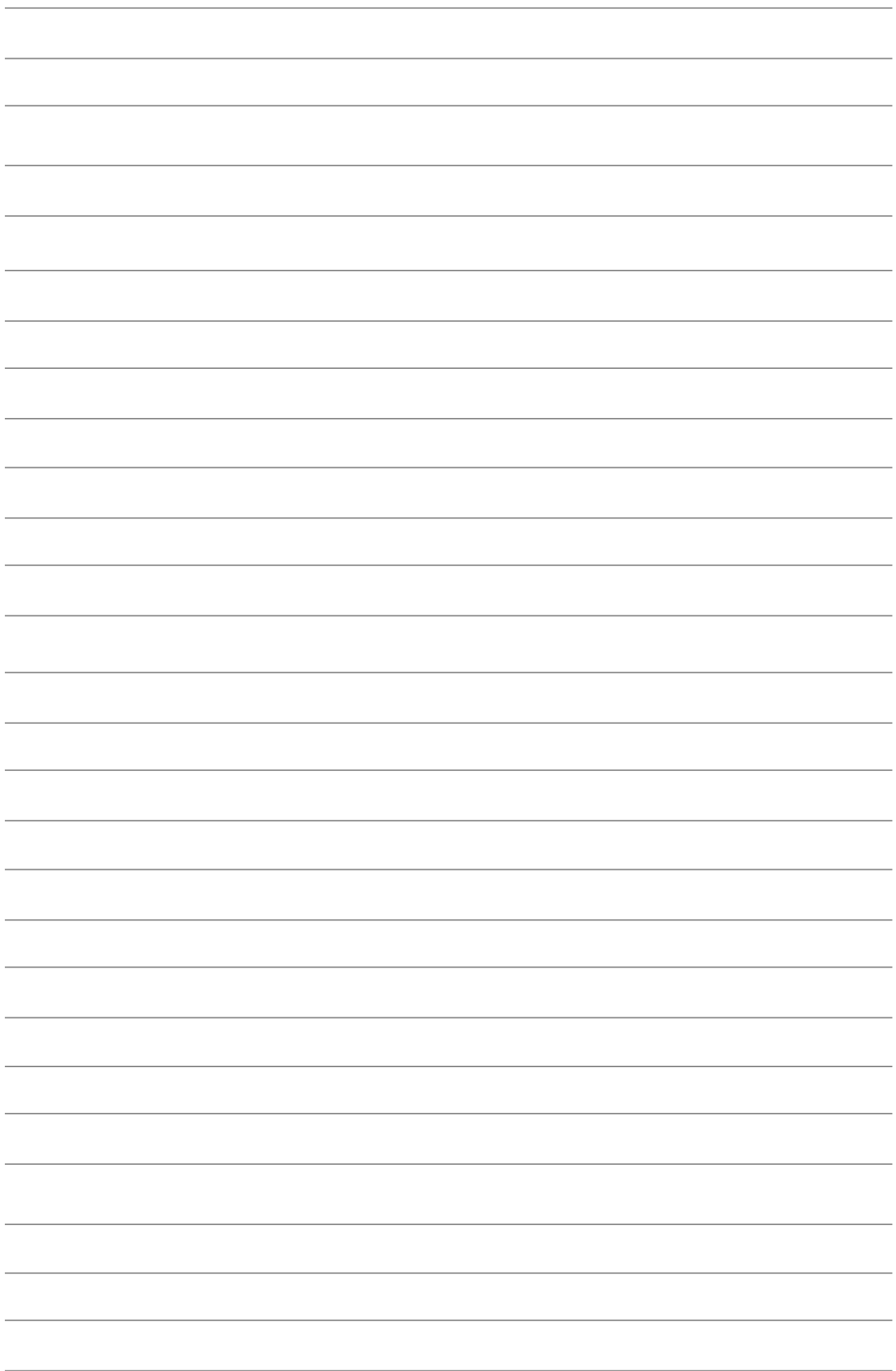
- Badir Incubator, KSA
- DHL Office, Germany
- Arab Processing Holding, KSA
- Saipem Regional Office, Kuwait - Abu Dhabi Ports, UAE
- Almas Tower Dubai, UAE

SPORT/RECREATION

- UFC Gym, UAE
- FitForever Fitness, KSA
- Birmingham Central Park, UK
- Fitness Time, KSA
- Louvre Abu Dhabi, UAE
- Gold's Gym, UAE and Oman

OTHERS

- Expo 2020 HQ, UAE
- Royal Air forces Bases, KSA
- Alexandria Library, Egypt
- Burj Al Arab Hotel, UAE
- Border check-points between UAE and Oman
- ADNOC, UAE



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