dormakaba

# Geryon

## Security Revolving Doors
## Security Turnstiles

Technical Product Brochure

# Geryon security revolving doors and security turnstiles

## Efficient, Reliable, Flexible.

Secure areas require a reliable system for identifying and separating authorized persons. As these areas are usually representative of the building, a secure but at the same time transparent access solution is preferred.

**Two product lines**
The Geryon product family comprises security revolving doors and security turnstiles. Security revolving doors are suitable both for the interior and for the entrance, whereas security turnstiles can be used for indoor or outdoor areas.

**Geryon Security Revolving Doors SRD**
**Security revolving door**
Owing to the high transparency grade of the glass elements and a wide variety of colours for the metal parts, all models elegantly blend in with their surroundings. A sophisticated sensor system in compliance with the latest standards prevents users from being injured. Depending on the security requirements, the door may be equipped with a contact mat, scales or internal monitoring. Other variants are reinforced bullet- and burglar-resistant designs, which are certified according to standards RC2 and RC3 respectively. Options like a rotating unit with emergency exit function[1] or a night closure complete the product range.

**Geryon Security Turnstiles STS**
**(Security Turnstile)**
For this three-winged unit you may either choose U-shaped stainless steel bars or acrylic glass elements for the door wings. Developers aimed to use as little metal as possible in the door design in order to achieve the highest possible level of transparency. The aesthetic design and the low diameter make STS especially suitable for indoor and outdoor areas.

[1] Individual approval required (responsible building authority)

**For secure entry to:**

- Sensitive areas in administrative buildings, industrial premises, government agencies and ministries
- Banks and financial institutions
- Data and research centres
- Staff entrances at airports
- Nuclear power plants

**Geryon**
**Security Revolving Doors SRD**

| | | |
|---|---|---|
| Throughput rate | = | up to 20 per minute |
| Security level | = | ●●●●○ |
| Comfort | = | ●●●●○ |

**Geryon**
**Security Turnstiles STS**

| | | |
|---|---|---|
| Throughput rate | = | up to 20 per minute |
| Security level | = | ●●●○○ |
| Comfort | = | ●●●○○ |

# Advantages of Geryon Security Revolving Doors and Turnstiles

## Options for all security requirements

**Geryon SRD Security Revolving Doors**

- Users cannot become stuck thanks to end point locking
- Safety sensor system according to DIN EN 16005
- Standard version has IR sensor system
- Versions with resistance classes RC2 and RC3
- All-glass units with underfloor drive
- Option with approved emergency exit column
- Option with in-built scales with weight limits or actual weight
- Option with night closure
- Option with optical separation using SRD Vision

**Geryon STS Security Turnstiles**

- Users cannot become stuck thanks to end point locking
- Optional U-shaped stainless steel bars or acrylic glass elements instead of straight bars

Barrier-free access can also be provided by the arrangement of hinge doors or sliding doors at the side.

# The ideal solution for any access point


01


02


03


04

**01**
Units arranged diagonally for narrow passages – multiple units for staff access at an airport

**02**
Double unit in polished stainless steel design

**03**
Flexible integration – security revolving door in a historic setting

**04**
Stylish solution for installation indoors – security turnstile with acrylic glass barrier elements

# SRD Vision – first-rate access security

## Options for all security requirements

**Optional optical individual access control for maximum safety.**
Sensitive areas in particular place increased security demands on access control. The SRD Vision optical separation system, which is integrated into the ceiling, reliably and securely detects whether there is more than one person within a revolving door and allows or denies passage as is appropriate. The special thing about SRD Vision is that it possible to select it both for the three-leaf and four-leaf models.

**Application areas:**
- Banks/insurance companies
- Prisons
- Government buildings
- Airports
- Power plants
- Laboratories
- Data centres
- Office blocks

and many more

**SRD VISION**
The watchful eye

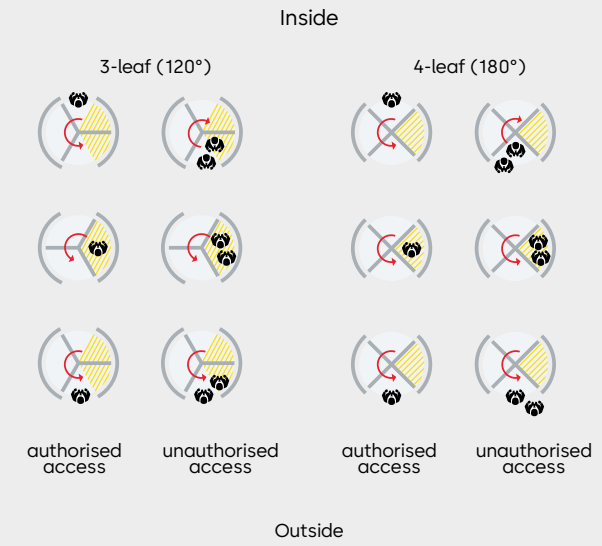
Light beam shows the SRD Vision detection area.

# The SRD Vision option - the advantages at a glance:

- False acceptance rate (FAR) <1%
- False rejection rate (FRR) <1.6%
- For three-leaved and four-leaved models (rotary cycle 120° and 180° respectively)
- Can be operated in two directions
- Inside diameter ranging from Ø1,800 mm to Ø2,500 mm
- Passage heights ranging from 2,300 mm to 2,900 mm
- No modification of the floor structure is necessary
- Retrofitting possible for security revolving doors with corresponding dimensions (except for Geryon SRD-S01 with glass ceiling) with a passage height of 2,300 mm or higher
- Unaffected by extraneous light
- Evaluation unit is suitable for remote maintenance
- Passage rate with SRD Vision remains at a high level
- No risk of people becoming trapped during power failure (automatic, self-monitored set-up of the unit after power is restored)

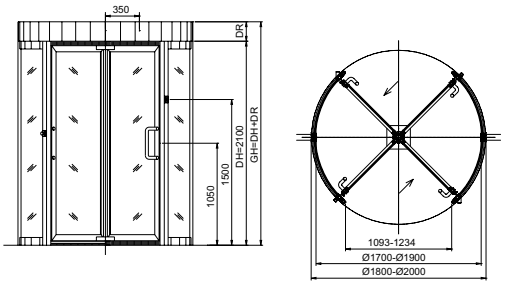
**Please ask for our fact sheet**

**Separation process**



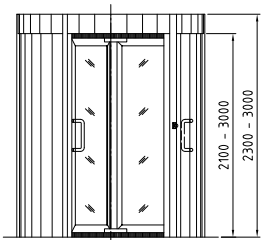

# Geryon security revolving doors

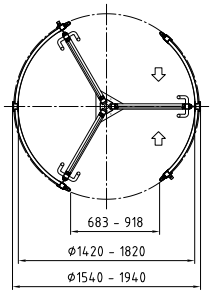
| **Basic equipment** | | **SRD-E01** |
|---|---|---|
| **Construction** | Outside diameter | 1500 – 2000 (standard spacing 100). |
| | Total height | 2300 |
| | Passage height | 2100 |
| | Upper part of body | 200 |
| | Number of door wings | 3 or 4 |
| | Rotary cycle | 120° or 180° (Ø 1800 and larger). |
| **Body** | Side panels | With glass panel, alternatively metal-clad. |
| | Thermal separation | In facade level. |
| | Safety strips | On opposite closing edges. |
| | Top cover | Raw aluminium plate, dustproof. |
| | Maintenance openings | Two, in the lower ceiling plate. |
| **Rotating unit** | | Framed in T40 light metal profiles. |
| | | With sealing brushes. |
| | | Black U-shaped handles. |
| | | Horizontal and vertical safety strips on the door leaves. |
| **Finish** | | Powder-coated in a RAL colour. |
| **Function** | | PR-1 position control drive for automatic access control. |
| | | Started by manually pushing door after release signal. |
| | | Sensor system in the ceiling monitors the intermediate segment, incl. emergency release button. |
| | In the event of a power failure | End point locking system, default can be set to turn freely or lock. |
| | | Two emergency stop switches. |
| **Electrical components** | | The control unit is integrated into the unit. |
| | | Power supply 100-130, 60 Hz or 220-240 VAC, 50 Hz. |
| | | Standby power 60 VA. |
| **Installation** | | On finished floor level (FFL). |

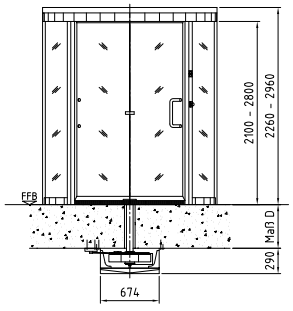


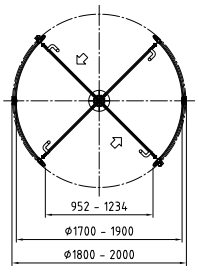

All dimensions in mm

| SRD-C01 | SRD-S01 |
|---|---|
| 1520 – 2020 (standard spacing 100). | 1500 - 2000 (standard spacing 100). |
| 2300 | 2260 |
| 2100 | 2100 |
| 200 | – |
| 3 or 4 | 3 or 4 |
| 120° or 180° (Ø 1820 and larger). | 120° or 180° (Ø 1800 and larger). |
| Metal-clad with steel or stainless steel sub-structure, alternatively with glazing. | With glass panel and filigree profiles, glass ceiling made of laminated safety glass. |
| — | In facade level. |
| On opposite closing edges. | On opposite closing edges. |
| Raw aluminium plate, dustproof. | Laminated safety glass ceiling. |
| Two, in the lower ceiling plate. | — |
| Framed in T56 light metal profiles. | T25 without centre column or profile, toughened safety glass. |
| With sealing brushes. | With sealing brushes. |
| Black U-shaped handles. | Black U-shaped handles. |
| Horizontal and vertical safety strips on the door leaves. | Horizontal and vertical safety strips on the door leaves. |
| Powder-coated in a RAL colour. | Powder-coated in a RAL colour. |
| PR-1 position control drive for automatic access control. | PR-1 position control drive for automatic access control (underfloor). |
| Started by manually pushing door after release signal. | Started by manually pushing door after release signal. |
| Sensor system in the ceiling monitors the intermediate segment, incl. emergency release button. | Sensor system in the ceiling (centre cross beam) and 1-zone contact mat/s monitor the intermediate segment/s (observe the restricted installation possibility for the sensor system), incl. emergency release button. |
| End point locking system locked. | End point locking system, default can be set to turn freely or lock. |
| Two emergency stop switches. | Two emergency stop switches. |
| The control unit is integrated into the unit. | Subsurface mounted control system. |
| Power supply 100-130, 60 Hz or 220-240 VAC, 50 Hz. | Power supply 100-130, 60 Hz or 220-240 VAC, 50 Hz. |
| Standby power 60 VA. | Standby power 60 VA. |
| On finished floor level (FFL). | On finished floor level (FFL), underfloor drive. |



# Options (depending on unit type)

| Construction | SRD-E01 | SRD-C01 | SRD-S01 |
|---|---|---|---|
| Increase passage height. | • | • | • |
| Increase upper part of body. | • | • | |
| Resistance class RC2. | • | • | • |
| Resistance class WK3. | | • | |
| Underfloor suspension for fixing drive to the raw ceiling. | • | • | Standard |
| Water tray or waterproof cover of outer part of body, made of light metal. | • | • | |
| Night closure outside, manual. | • | • | • |
| Motor for night closure. | • | • | |
| Monitoring of night closure, notification of status closed or closed and locked. | • | • | • |
| T25 rotating unit, all-glass version. | • | | Standard |
| T56 rotating unit emergency exit function with manually foldable door leaves on centric bearings (Ø 1800 and larger). | • | | |
| Stainless steel handle horizontal or vertical, installed on door leaf. | • | • | • |
| Floor element in stainless steel for installation in advance. | • | • | • |
| Stainless steel plate, may be perforated, to apply floor covering; alternatively waterproof wooden board. | • | • | • |
| Stainless steel plate for floor element. | • | • | • |
| Clamping rail for fixing on-site sealing foil, measure X = 150 or larger. | • | • | • |
| Coir mats or black rubber mats (optionally equipped with arrow) or carpet as cleaning zone. | • | • | • |
| **Finish** | | | |
| AISI 304 stainless steel, satin finish or S8 mirror polished. | • | • | • |
| Finish anodized C0 and C31-35 (E6). | • | • | • |
| **Function** | | | |
| Automatic starting after entering the security door and after release signal. | • | • | • |
| **Electrical equipment** | | | |
| Various consoles. | • | • | • |
| Push button for manual single release. | • | • | • |
| Electrical key-operated push button. | • | • | • |
| OPL 01 operating panel, functions can be chosen freely. | • | • | • |
| Signal device. | • | • | • |
| Weight control. | • | • | |
| Contact mat for monitoring intermediate segment, on SFL or in FFL. | • | • | • |
| Emergency stop switches with seal cap, instead of the existing ones. ❗ | • | • | • |
| Pre-sensors for heavy rotating units, for additional safeguarding of persons requiring special protection. ❗ | • | • | • |
| Lighting by 2 to 4 LEDs. | • | • | |
| **Security level: SRD** | | | |
| Basic security is achieved by adequate compartment size, light sensors in intermediate segment and card reader for access control. | | | |

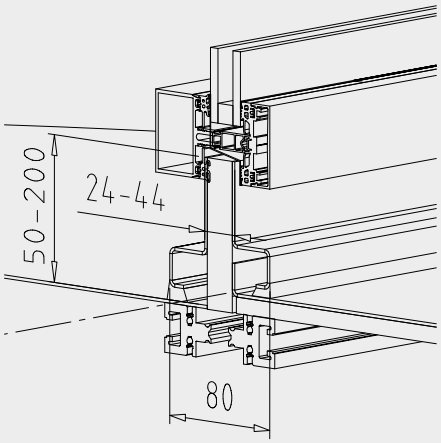
| Enhanced security is achieved by | Passage segment | Inter-mediate segment |
|---|---|---|
| Contact mat (1 zone). | | • |
| Rotating unit scales. | | • |
| Actual weight scales including rotating unit scales. | • | • |
| Scales with weight limit including rotating unit scales. | • | • |
| Biometrics outside SRD. | • | |
| SRD Vision (not for RDR-S01). | • | • |

The security level depends on the object to be protected and trust in the authorized users.

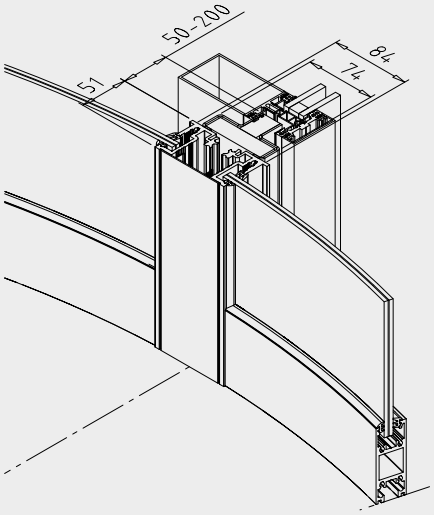
All dimensions in mm ❗ Safety device

# SRD connections

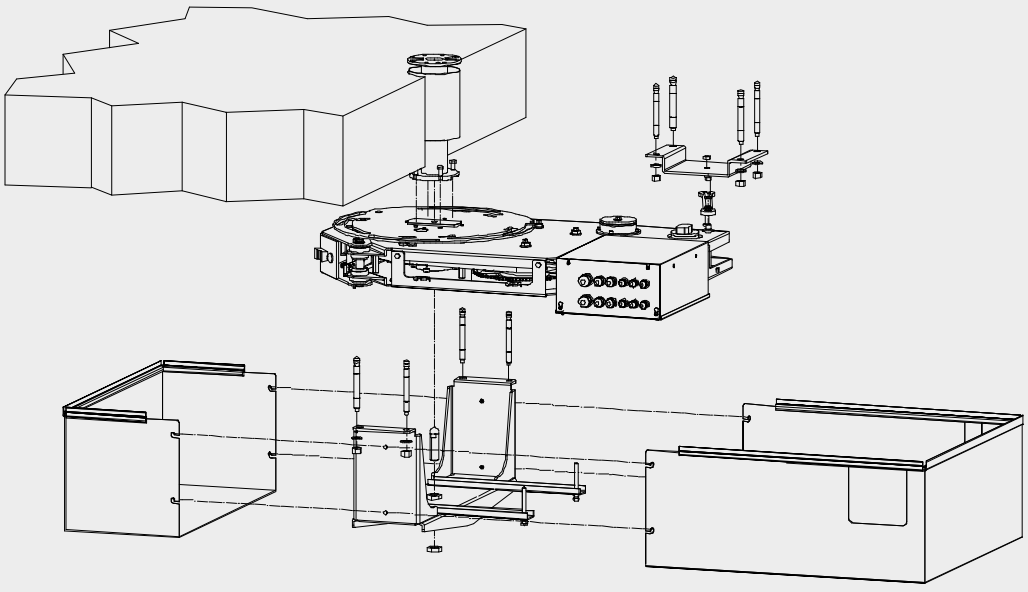
**Example of 200 wall connection, top**




**Example of 200 wall connection, side**




**Underfloor drive**

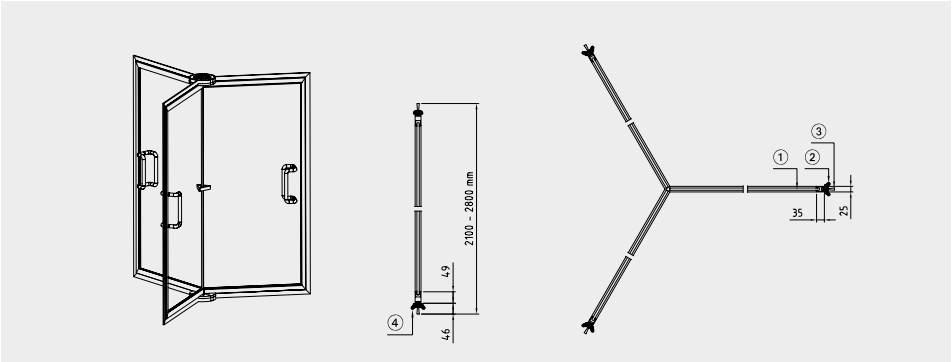


All dimensions in mm

# SRD rotating units

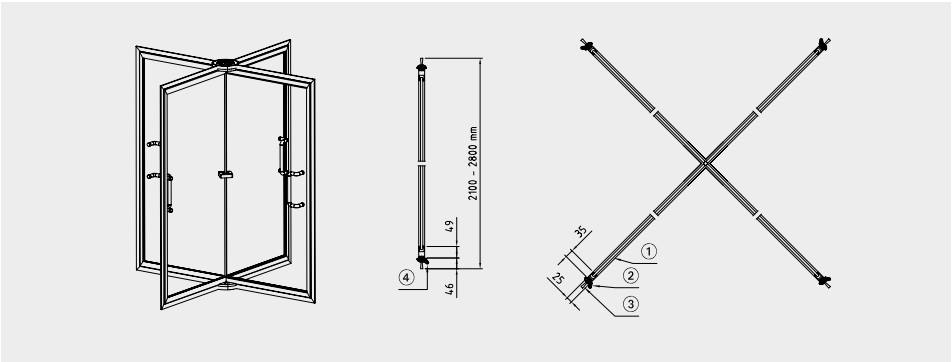
**Rotating unit T25 – 120°**
Outside diameter:
Ø1500 - Ø2000
1. Toughened safety glass
2. Safety strip
3. Sealing brush
4. Safety strip on both sides

Rotating unit without centre column.
Profile depth 25 mm.



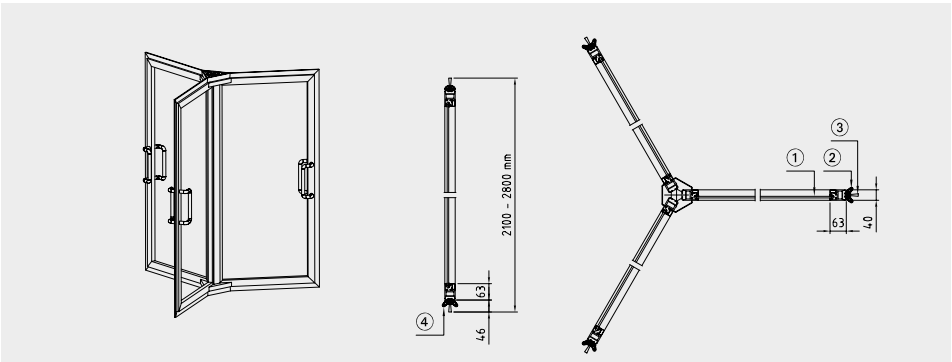

**Rotating unit T25 – 180°**
Outside diameter:
Ø1800 - Ø2000
1. Toughened safety glass
2. Safety strip
3. Sealing brush
4. Safety strip

Rotating unit without centre column.
Profile depth 25 mm.
Safety strips on one side.



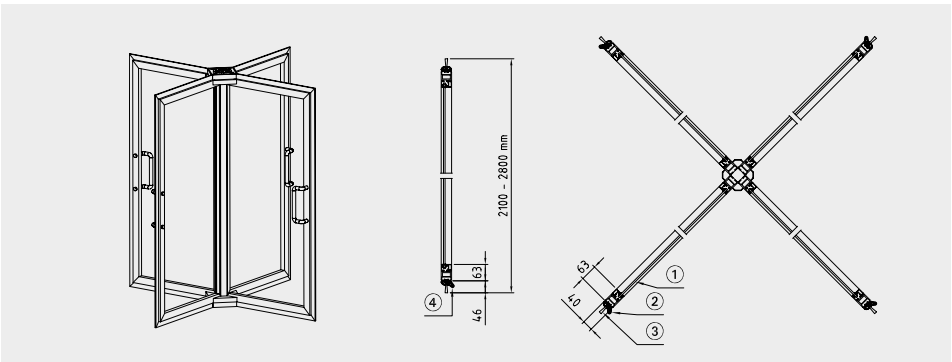

**Rotating unit T40 – 120°**
Outside diameter:
Ø1500 - Ø2000
1. Laminated safety glass
2. Safety strip
3. Sealing brush
4. Safety strip on both sides

Rotating unit with centre column.
Profile depth 40 mm.




**Rotating unit T40 – 180°**
Outside diameter:
Ø1800 - Ø2000
1. Laminated safety glass
2. Safety strip
3. Sealing brush
4. Safety strip

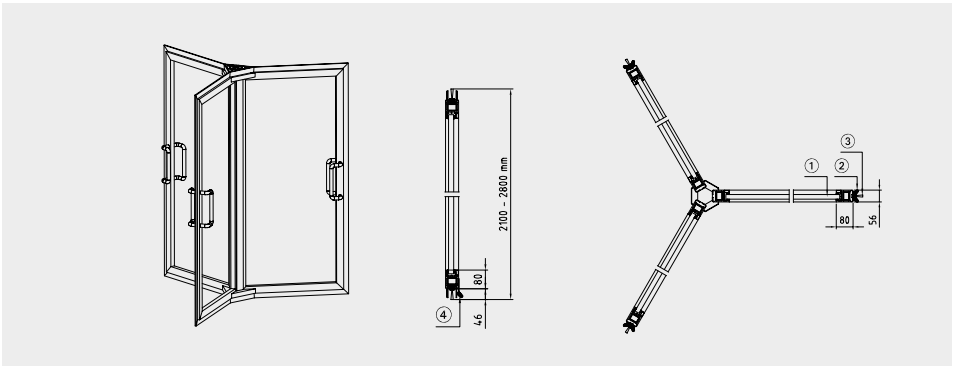
Rotating unit with centre column.
Profile depth 40 mm.
Safety strips on one side.




All dimensions in mm

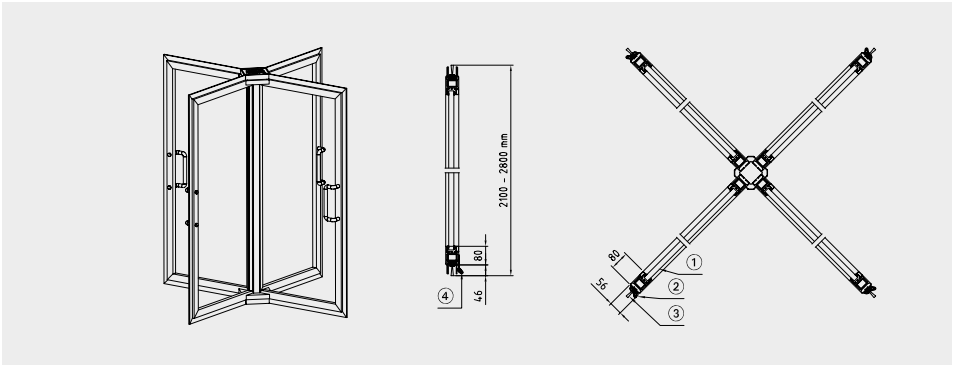
**Rotating unit T56 – 120°**
**Bullet-resistant**
Outside diameter:
Ø1540 - Ø2000
1. BR4 glazing
2. Safety strip
3. Sealing brush
4. Safety strip on both sides

Rotating unit with centre column, bullet-resistant.
Profile depth 56 mm.



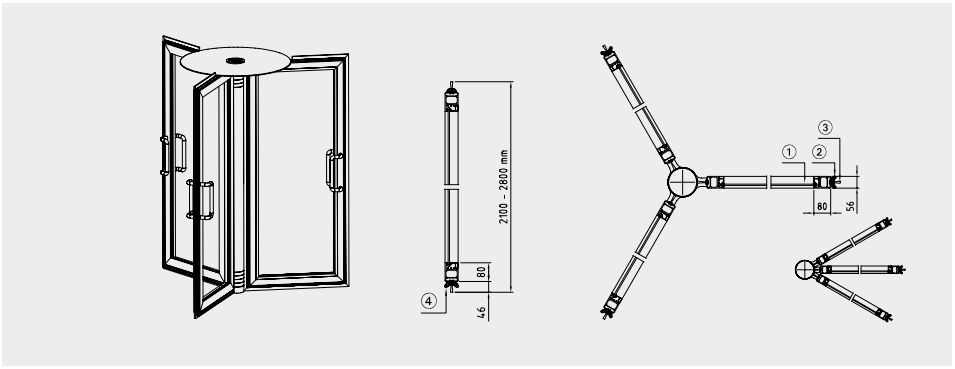

**Rotating unit T56 – 180°**
**Bullet-resistant**
Outside diameter:
Ø1800 - Ø2000
1. BR4 glazing
2. Safety strip
3. Sealing brush
4. Safety strip

Rotating unit with centre column, bullet-resistant.
Profile depth 56 mm.



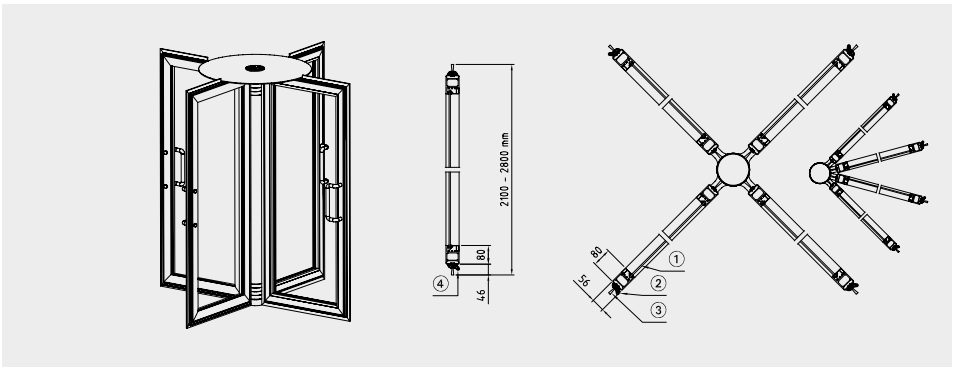

**Rotating unit T56 – 120°**
**Escape route**
Outside diameter:
Ø1800 - Ø2000
1. Laminated safety glass
2. Safety strip
3. Sealing brush
4. Safety strip on both sides

Rotating unit with centre column and emergency exit function.
Profile depth 56 mm.




**Rotating unit T56 – 180°**
**Escape route**
Outside diameter:
Ø1800 - Ø2000
1. Laminated safety glass
2. Safety strip
3. Sealing brush
4. Safety strip

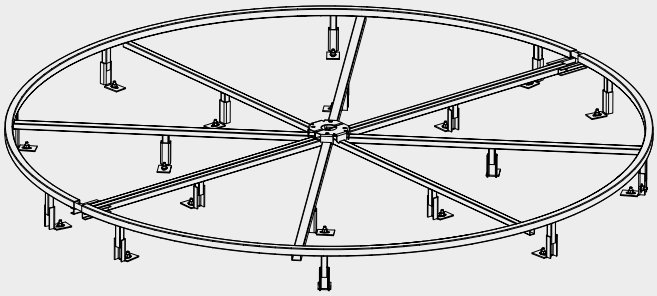
Rotating unit with centre column and emergency exit function.
Profile depth 56 mm.



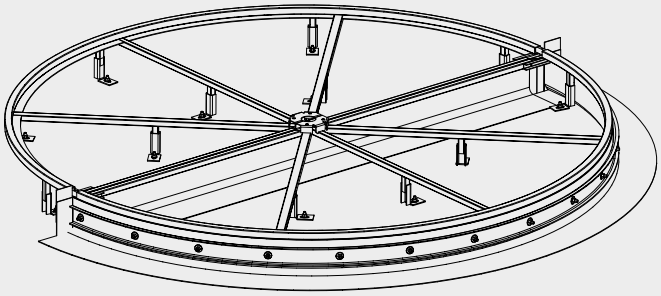

All dimensions in mm

# Floor elements for SRD types

**Floor element without stainless steel plate for sealing**



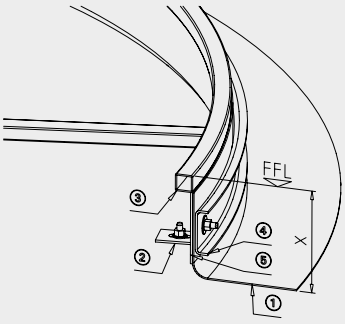
**Floor element with stainless steel plate for sealing, measure X = 150 or larger**



**Detail: floor element with sealing foil at the outer radius, measure X = 150 or larger**

1. Sealing foil 300 mm (self-adhesive) or on-site foil
2. Stainless steel fastening clamp
3. Continuous stainless steel ring (25 mm)
4. Clamping rail with M8 welding stud
5. Adjusting plate

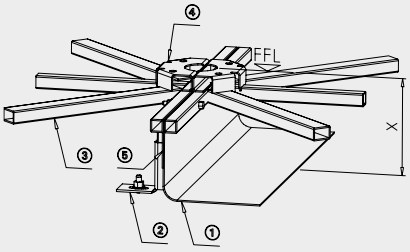
x: installation depth OK FFL to OK SFL




**Detail: floor element with sealing foil in facade axis**

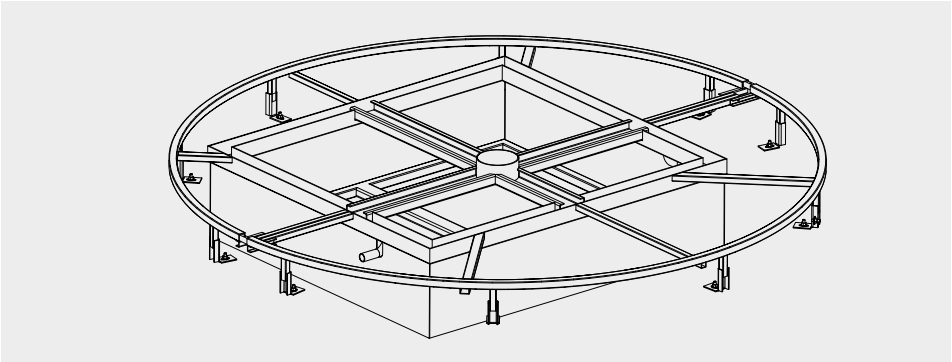
1. Sealing foil 300 mm (self-adhesive) or on-site foil
2. Stainless steel fastening clamp
3. Stainless steel strut for connection and support
4. Floor bearing fixing
5. Adjusting plate

x: installation depth OK FFL to OK SFL

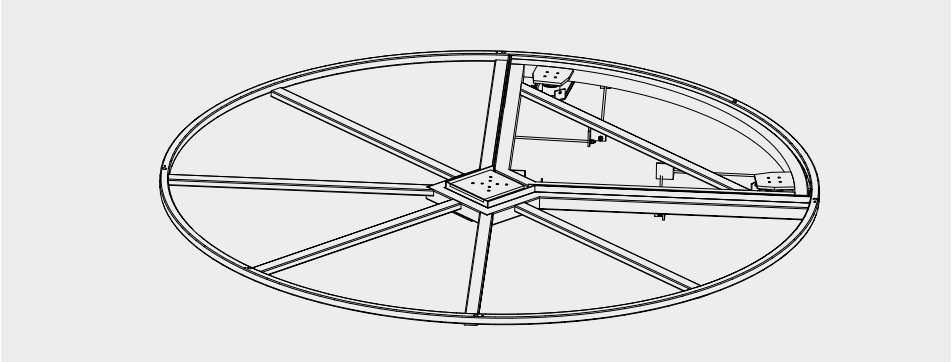



All dimensions in mm

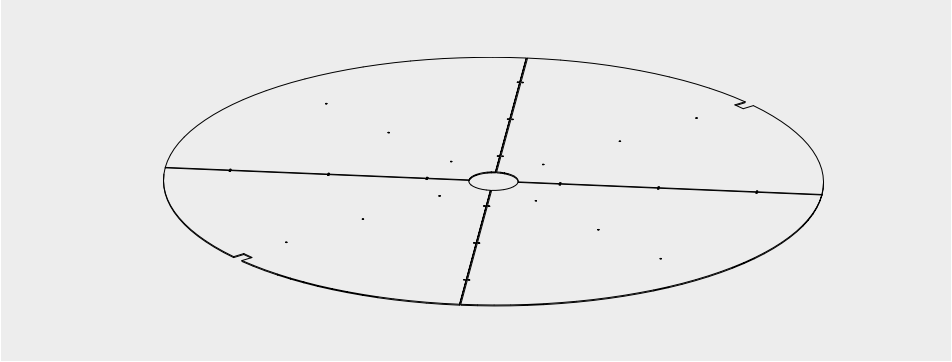
**Floor element with drive box for floor pit, measure X = 350 or larger**



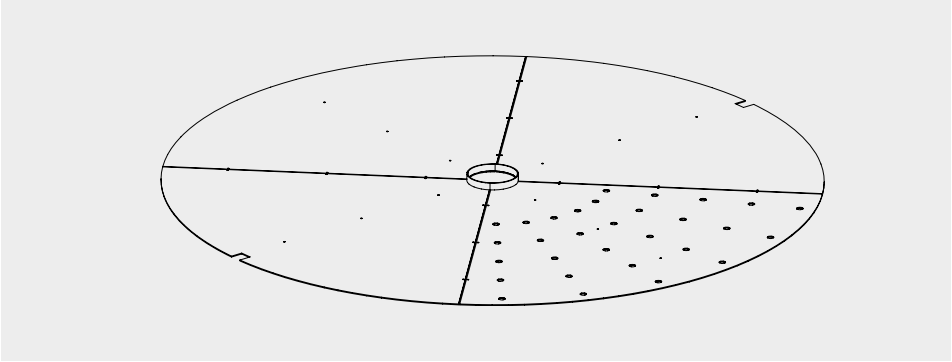
**Floor element with scales 180°, measure X = 90 or larger**



**Stainless steel plate for floor element**



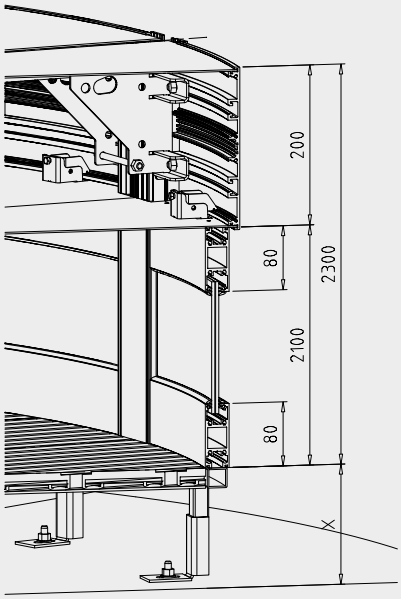
**Stainless steel plate for floor element – perforated (for drainage)**



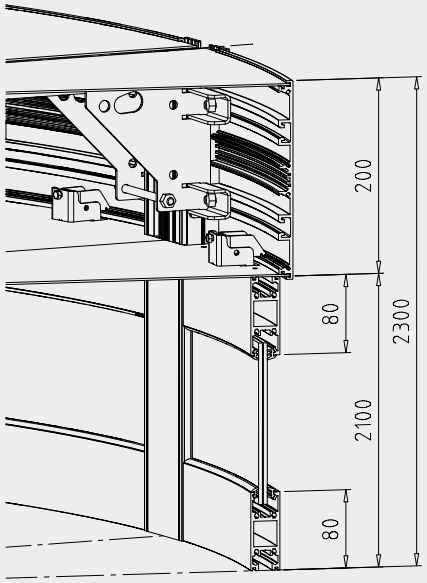
All dimensions in mm

# Alternative bodies for SRD types

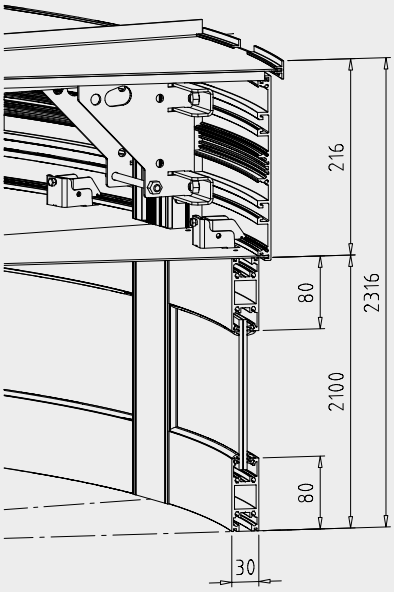
### Body with floor element



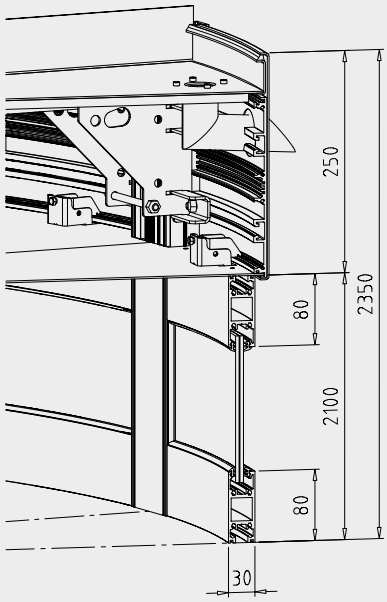

### Body with dustproof cover




### Body with waterproof cover

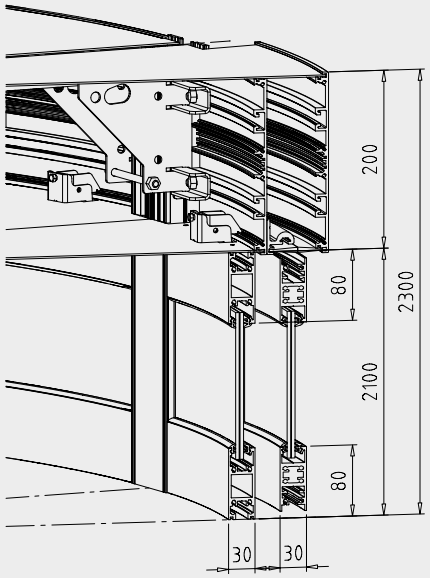



### Body with water tray and spout

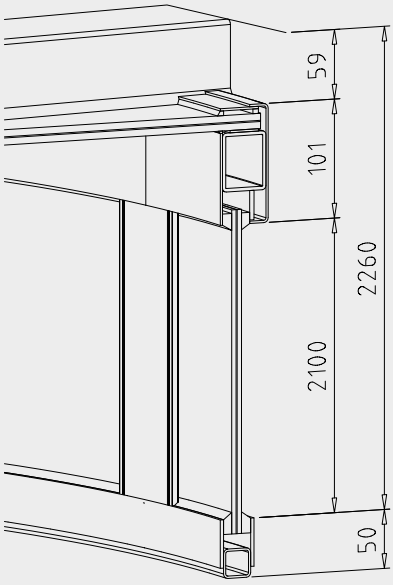



All dimensions in mm

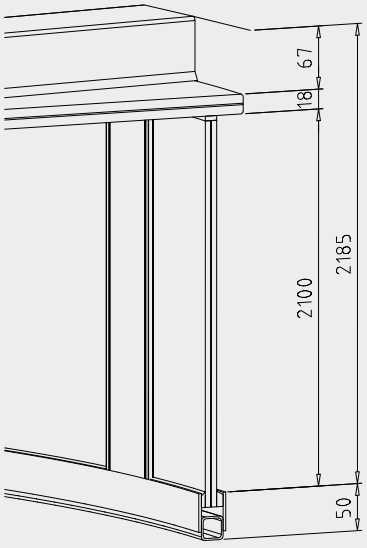
**Body with night closure**




**Body – glass ceiling with frame**




**Body – glass ceiling without frame**

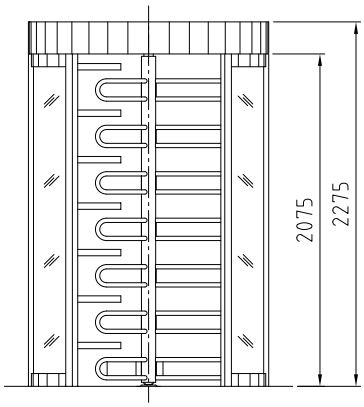


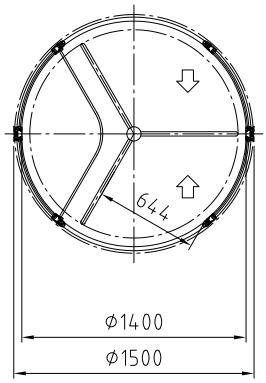

If the SRD-S01 is installed in the facade axis, we recommend a roof is provided on site for drainage

All dimensions in mm

# Geryon security turnstiles

| **Standard unit** | | **STS-S02** |
|---|---|---|
| **Construction** | Outside diameter | 1 500 |
| | Total height | 2275 |
| | Passage height | 2075 |
| | Upper part of body | 200 |
| | Rotating unit | 120°, tubular column Ø 89 with sets of 7 U-shaped Ø 27 crossbars made of glossy AISI 304 stainless steel. |
| **Body** | Side panels | With 8 mm laminated safety glass. |
| | Top cover | Raw aluminium plate, dustproof. |
| | Maintenance openings | Two, in the lower ceiling plate. |
| | Barrier element | Rectangular light metal profiles. |
| **Finish** | | Aluminium elements powder-coated in a RAL colour. |
| **Function** | | Type 2* |
| **Electrical equipment** | | The control unit is integrated into the unit. |
| | | Power supply 110–230 VAC, 50/60 Hz. |
| | | Standby power 20 VA. |
| **Installation** | | On finished floor level (FFL). |




* Type 2: power-assisted motion, servo-positioning drive/electrically controlled in both directions (behaviour in event of power failure can be selected for each direction: free or blocked)

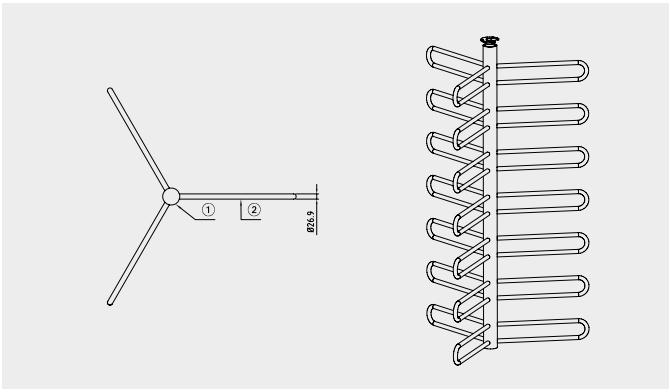
All dimensions in mm

# Options for STS-S02 Security Turnstile

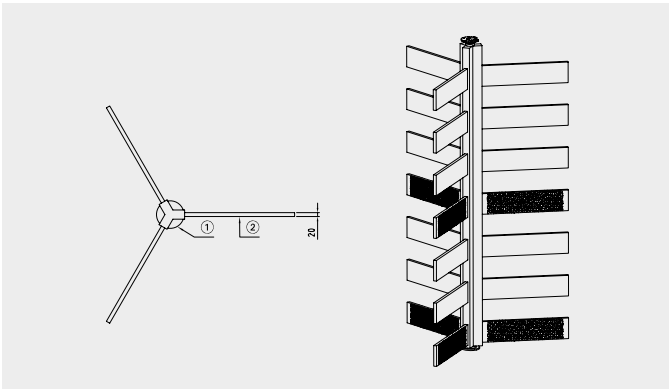
| |
|---|
| **Construction** |
| Rotating unit made of acrylic glass. |
| 200 wall connection. |
| Finish |
| Body: stainless steel satin finish. |
| **Electrical components** |
| Various consoles. |
| Push button for manual single release, integrated in stainless steel console. |
| OPL 05 operating panel. |
| Signal device in stainless steel console consisting of 2 lights red/green. |
| Additional boards to expand the existing inputs/outputs. |
| Lighting by 2 LEDs. |

## STS rotating units

**Stainless steel rotating unit – 120°**
Inside diameter: Ø1400
1. Stainless steel tube, electropolished
2. Stainless steel bar, electropolished

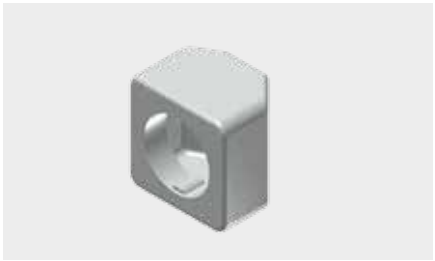



**Acrylic glass rotating unit – 120°**
Inside diameter: Ø1400
1. Metal cladding in unit colour
2. Acrylic glass bar, smooth/with marking optionally with stainless steel inlay



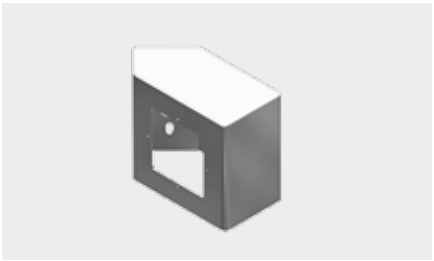

## Consoles

Console 1
plastic in RAL 9006



Width 94
Height 94
Depth 65

Console 4
Stainless steel
Semi-gloss smooth finish



Width 118
Height 93
Depth 60

Console 5
Stainless steel
Semi-gloss smooth finish

Width 118
Height 164
Depth 60

## Our Sustainability Commitment

We are committed to foster a sustainable development along our entire value chain in line with our economic, environmental and social responsibilities toward current and future generations. Sustainability at product level is an important, future-oriented approach in the field of construction. In order to give quantified disclosures of a product's environmental impact through its entire life cycle, dormakaba provides Environmental Product Declarations (EPD), based on holistic life cycle assessments.

**www.dormakaba.com/sustainability**

## Our offering

**Access Automation Solutions**

Entrance Automation
Entrance Security

**Access Control Solutions**

Electronic Access & Data
Escape and Rescue Systems
Lodging Systems

**Access Hardware Solutions**

Door Closers
Architectural Hardware
Mechanical Key Systems

**Services**

Technical Support
Installation and commissioning
Maintenance and Repair

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