

# Besam Revolving Door Besam 2-Wing UniTurn

ASSA ABLOY

ASSA ABLOY Entrance Systems

The global leader in  
door opening solutions



Providing ease of access for pedestrians with or without trolleys, whilst maintaining a draught barrier, is a challenge for which revolving doors are the ideal solution

## Sustainable Entrances

Besam revolving doors can reduce the amount of energy needed to heat or cool a building, resulting in optimal energy savings and smaller carbon footprint. Regular maintenance, additional sensors and add-on products can further increase saving capabilities while prolonging the equipment's life.

## The UniTurn range is the optimum solution

To achieve high throughput with uncompromising safety, the best choice is the two-winger. The UniTurn range is the optimum solution. A two-wing automatic revolving door has the largest compartments in relation to the diameter of the revolving door. The shape of the UniTurn allows it to be fitted with many safety devices mounted in both the horizontal and vertical plane.

The large size of the compartment also allows the safety devices to have the longest possible fields without hindering the traffic flow. A unique design option now available with the UniTurn is automatic sliding doors in the centre of the unit, which provide even more flexibility from the door. When in operation, the sliding doors give the same clear opening width as the throat opening of the outer drum.

## Technical specifications

Power supply	230 V, 50 Hz, mains fuse max 10 A, 100-120 V, 50/60 Hz, mains fuse max 16 A
Power consumption	400 W /30 W resting
Lighting LED 5 W	70 W

## Versatility worldwide

The Besam UniTurn range is versatile, available in different diameters, and can be delivered in clockwise or anti-clockwise rotation. This versatility has resulted in the UniTurn being installed in thousands of entrances worldwide. Facilities such as airports, hospitals, hotels, banks, offices and supermarkets have been quick to realize the great benefits of using the UniTurn, which maintains a draught free environment at the same time as allowing high traffic throughput with or without trolleys and wheelchairs.

## Design

The design of the UniTurn, as with all Besam products, is the result of a continual development program. The first two-wing units were manufactured by Besam in the mid-eighties, and with each subsequent generation the product has moved on in terms of design and reliability.

This development includes the drive system which is located on the periphery resulting in low stresses to the unit and therefore a reduction in maintenance costs.

The geometry of the rotating section is another example of good design. The trailing edge is designed to retain as much of the air within the rotating section as possible, whilst the safety of the user is enhanced by presenting a leading flat surface protected by many safety devices.

The UniTurn is designed to be placed and fixed directly onto the finished floor surface. No special foundations are required.

The two-wing configuration means that night security doors are not required as the rotating section can be parked and locked in the closed position.

## Safety the highest priority

The UniTurn range combines safety and practicability, whilst placing the safety of the user as its number one priority. The system is designed to be non-touch.

Both the rotating section and the outer walls have a combination of presence detectors and soft safety edges in the vertical and horizontal planes.

If the rotating section meets a stationary or slow moving object, the door automatically slows down and, if necessary, stops.

## Safety features

- Emergency safety unit powered by a constantly monitored back-up battery
  - Non-touch sensors placed vertically above the entrances
  - Compressible vertical/horizontal safety switches placed on the leading edges of the rotating section
  - Non-touch safety sensors placed in the ceiling of the rotating section
  - Automatic emergency positioning of the door to get clear evacuation path
  - Centre door leaves with break-out function
- National standards may influence the choice of safety functions. The safety systems of the UniTurn range have been tested and approved by authorized/accredited laboratories.

## CDC Control system

Unique and state-of-the-art to ensure:

- Lowest operating/maintenance cost
- Highest safety
- Best availability

During installation:

- Automatic system check-up
- Fast and safe adjustments of all safety zones and speed settings
- Shorter installation time

During operation:

- Access codes to program selector
- Remote access
- Self-checking of safety systems
- Real-time clock with programmable modes/functions
- Automatic indication of service intervals
- Performance measurements
- Climate control
- Shorter stopping distances

During service:

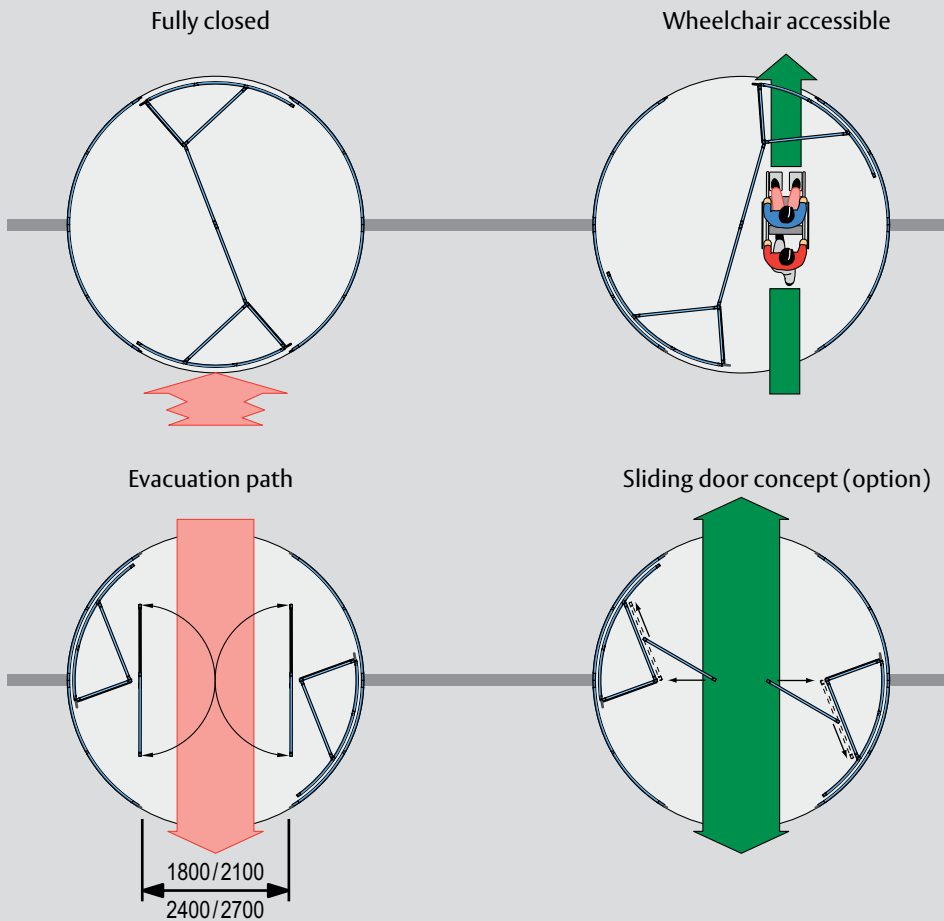
- Automatic event log showing the 600 latest events/errors
- Automatic diagnostics
- Connected to Besam Service by phone/modem
- Easy access by program selector or std. PC terminal
- Remote fault finding
- Minimum down time

## Operating modes

Besam activators built-in above each entrance

Programme selector operated by access code

- Autostart from open
- Auto start from open, exit only
- Autostart from closed
- Auto start from closed, exit only
- Continuous rotation on low speed, automatic startup to high speed when impulse is activated
- Manual override, forward or reverse
- Closed (locked)
- Summer position
- Programmable clock



### Rotating advertising space

The rotating advertising section of the UniTurn has two enclosed triangular sections. The position of these glass covered enclosures makes them ideal for display or advertising areas. By renting out these cubicles, it is possible to make a good return on the initial capital outlay. UniTurn not only saves money by reducing heating or air conditioning costs, it earns money with this unique advertising feature.

### Minimized ventilation effect

Unlike traditional three- or four-wing revolving doors, the unique two-wing geometry does not create ventilation effect. This minimizes the volume of air from the outside going into the building and vice versa, which results in best possible energy savings and draught control.

### Climate control

As an option the UniTurn revolving door can be equipped with climate control to produce an even better indoor climate. The climate control equipment is operated by the CDC control system.

### Evacuation path

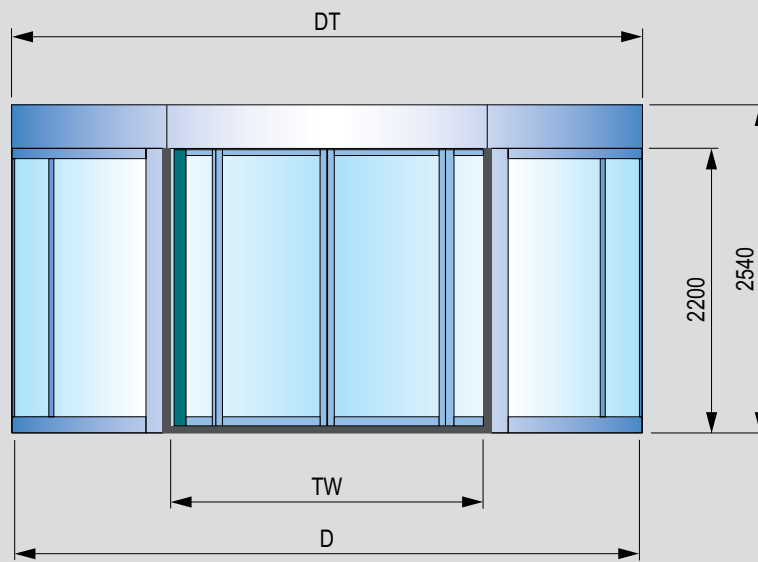
The revolving door can be linked to the fire alarm system to stop the door in the escape position, or in the case of power failure the doors will automatically rotate to the escape position by means of the supervised emergency safety unit. The centre door leaves with break-out function produce a clear unimpeded evacuation path.

### Additional functionality

During periods of extremely high traffic, or perhaps on a nice summer's day, the optional centre sliding door leaves can be activated simply by the turn of a key. The revolving drum is parked and does not rotate, which allows the door to be used as a fully automatic sliding door entrance, giving additional ventilation/access to the building.

### Wheelchair accessible

When designing the UniTurn, great consideration was given to accessibility and ease of use for persons in wheelchairs. By taking the dimensions of a wheelchair with an attendant into consideration, the two-winger is unique in allowing the wheelchair virtual straight-line access through the unit. This straight-line access is also greatly appreciated by the elderly, the infirm, or disabled.



	D	DT	TW
UniTurn 36	3600	3688	1800
UniTurn 42	4200	4288	2100
UniTurn 48	4800	4888	2400
UniTurn 54	5400	5488	2700

### Rotation speed adjustment

High Speed	Adjustable between 1 and 3 rpm
Low Speed	Adjustable between 0,5 and 2,5 rpm

### Standard equipment

Curved glass 4 + 4 mm clear laminated
Flat glass 3 + 3 mm clear laminated
Other types of glass available
Door sections of aluminium profiles
Centre door leaves with break-out function
Ceiling of white laminated panels
Dust protection roof
CDC control unit built-in behind the fascia beside the inside entrance
Built-in activators

### Accessories and Options

Powder-coated finish (RAL colours)
Anodizing, clear or bronze
Stainless steel cladding
Electromechanical lock
Mechanical lock
Remote control
Modem
Extra programme selector
Spotlights or downlights
Midrails
Sheet metal sandwich panel instead of glass
Water-resistant cover
Internal height non-standard (max. 2600 mm)
Fascia height non-standard (max. 1250 mm)
Push-button activated reduced speed rotation (for use by the disabled)
Motorized opening of centre door leaves for service opening/smoke evacuation
Sliding doors in centre
Direction sensing radar
Climate control
Clockwise rotation
Besam air curtain system

This equipment should be installed, regularly inspected, maintained and serviced by trained and authorized personnel. Preventive maintenance plans are highly recommended for a proper and safe operation. Talk to your ASSA ABLOY Entrance Systems representative to learn more about our service offering!