



KTV 3
KTV 4
KTV ATRIUM-A

Revolving doors
Varioline

REVOLVING DOORS THAT COMBINE ELEGANCE AND FUNCTIONALITY

The main entrance gives a clear statement of your company's image. It is extremely important that it conveys a positive first impression, as well as allows a smooth flow of traffic.

The KTV series of DORMA revolving doors combine these two characteristics perfectly. DORMA KTV revolving doors also hold back noise, dust and dirt, reliably protect employees in the vicinity of the entrances from draughts, and help to keep heating costs down. DORMA KTV doors are exceptionally versatile. Any inside diameter of door can be supplied from 2000 – 3400 mm. Plus, standard fixed diameters of 3600 mm and 3800 mm are

also available. Depending on the diameter, clear passage heights of up to 3000 mm can be achieved. KTV series revolving doors can optionally be fitted with

- 3- or 4-wing design
- glazed drum walls or with metal panelling
- additional curved sliding doors in front of the entrance to act as night shields (optional)
- for manual operation (KTV/M),
- with positioning auto-matic (KTV/P)
- with servomatic (KTV/S)
- for Automatic operation (KTV A)
- accessories that ensure compliance with the requirements of DIN 18650

Benefits

... for the installer

- Flexible system to suit all requirements.
- Easy installation and rapid commissioning.
- Guaranteed state-of-the-art design and compliance with all regulations.

... for the architect/specifier

- Extensive design flexibility in terms of planning and technical requirements.
- Visually, technically and economically the ideal application.

... for the user

- Enhanced working conditions.
- Optimisation of the building energy balance.
- Efficient noise protection.
- Tailored integrated application combining industrial engineering precision and assured quality.

Traffic capacity 3/4-wing design

Internal diameter (D) in mm	Theoretical capacity ¹⁾ Persons/hour →	Practical capacity ²⁾ → Persons/hour ↔		Maximum capacity ³⁾ Persons/hour →
2000	1440	480	960	24
2400	1800	600	1200	30
2700	2400	800	1600	40
3000	3240	1080	2160	54
3600	3060	1230	2670	69

¹⁾ The theoretical capacity value indicates how many people can pass through the revolving door in one (→) direction per hour, assuming that the traffic flow is uniform and the internal segments are constantly occupied.

²⁾ The practical capacity values indicate how many people can actually pass through the revolving door in one direction (→) and in both (↔) directions.

³⁾ The maximum capacity value indicates how many people can pass through the revolving door in one direction (→) per minute when, for a certain limited period, there is a constant stream of traffic, for example in the morning and evening.



Data and features		KTV
Internal diameter	3/4-wing design	2000–3800 mm, all dimensions possible between
External diameter	3/4-wing design	Internal diameter + max. 96 mm without night shield
Clear passage height	3/4-wing design	2100–4000 mm*
Canopy height	3/4-wing design	17.5–700 mm*

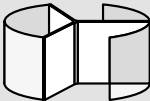
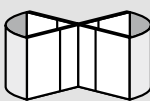
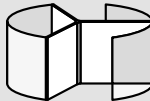
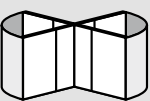
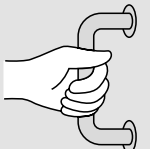
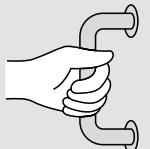


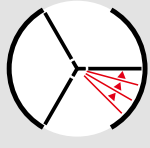

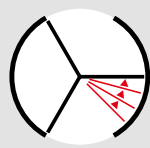

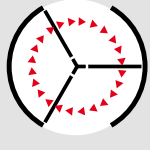
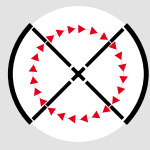
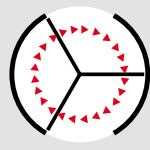
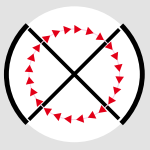
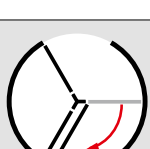
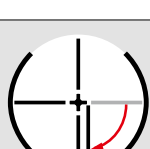


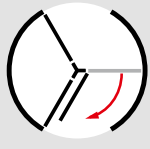



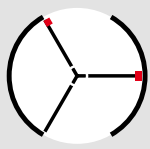

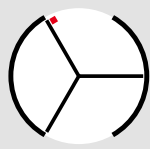

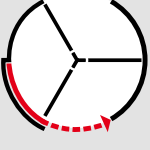

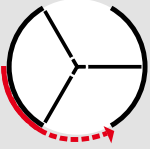

* See Table Page 14/15

Characteristics of KTV-series

Detail	KTV standard	KTV with glass ceiling	KTV ATRIUM-A full-glass system
Drum wall, framed glass	○	○	–
Drum wall, metal panelling	○	○	–
Full-glass drum wall without frame	–	–	○
Wings with push handles (version M/P/S)	○	○	○
Wings with push handles (version A)	–	–	–
Manual night shield, internal	○	–	–
Manual night shield, external	○	○	–
Electrical night shield, internal	○ (KTV 4)	–	–
Mechanical wing locking device	○	○	○
Mechanical locking device at night shield	○	○	○
Electrical wing locking device	○	–	–
Electrical locking device, electrical night shield	○	–	–
Positioning automatic (P), canopy-integrated operator	○	–	–
Positioning automatic (P), under floor operator	○	○	○
Servomatic (S), canopy-integrated operator	○	–	–
Servomatic (S), under floor operator	○	○	○
Automatic (A), canopy-integrated operator	○	–	–
Automatic (A), under floor operator	○	○	○
Framed turnstile, rigid	○	○	–
Framed turnstile Bookfold (suitable for application in emergency exits and escape routes)	○	3200 – 3800 mm	–
Framed turnstile, 1-wing, hinged (transport opening)	○	○	–
Turnstile with fine-frame profile, rigid	○	○	○
Wing with center midrails	○	○	–
Drum wall with center midrails	○	○	–
Floor ring	○	○	○
Floor finish	○	○	○
Ceiling-integrated downlights	○	–	–
Prepared for rainproof ceiling	○	–	–
Rainproof ceiling	○	○	–
Anti-vandalism brake	○	○	–
Speed limiter	○	○	○
Manufactured according to DIN 18650	○	○	○

○ = available as an option – = not available

DESIGNS, FUNCTIONS, STANDARD EQUIPMENT, OPTIONAL EXTRAS

Models	KTV 3	KTV 4	KTV 3 ATRIUM-A	KTV 4 ATRIUM-A
				
Operator types				
M – manual operation				
Automatic				
P – Positioning Automatic The door has to be operated manually and automatically rotates to its starting position following every activation.				
S – Servomatic The door is activated by radar motion detector and operated manually while the rotation is power-assisted. The positioning automatic is also included in this version.				
A – Automatic I: Door starts and stops automatically II: Door rotates continuously at low speed with the speed increasing as a user approaches.				
Configurations				
Transport opening Also ideal for the passage of bulky items or luggage, and for consignment deliveries				
Emergency escape configuration with breakout fittings (optional)				
Options				
Locking device (optional extra)				
Night shields, internal (optional extra)				
Night shields, external (optional extra)				



STANDARD

Dimensions of KTV 3 for internal diameters (D) of up to 3,800 mm

3-wing design (without night shield)

Internal diameter (D)	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800
External diameter (B)	2096	2296	2496	2696	2896	3096	3296	3496	3696	3896
Clear passage width (LW)	940	1040	1140	1240	1340	1440	1540	1640	1740	1840
Escape route width	895	995	1095	1195	1295	1395	1495	1595	1695	1795

3-wing design (with single-piece external night shield)

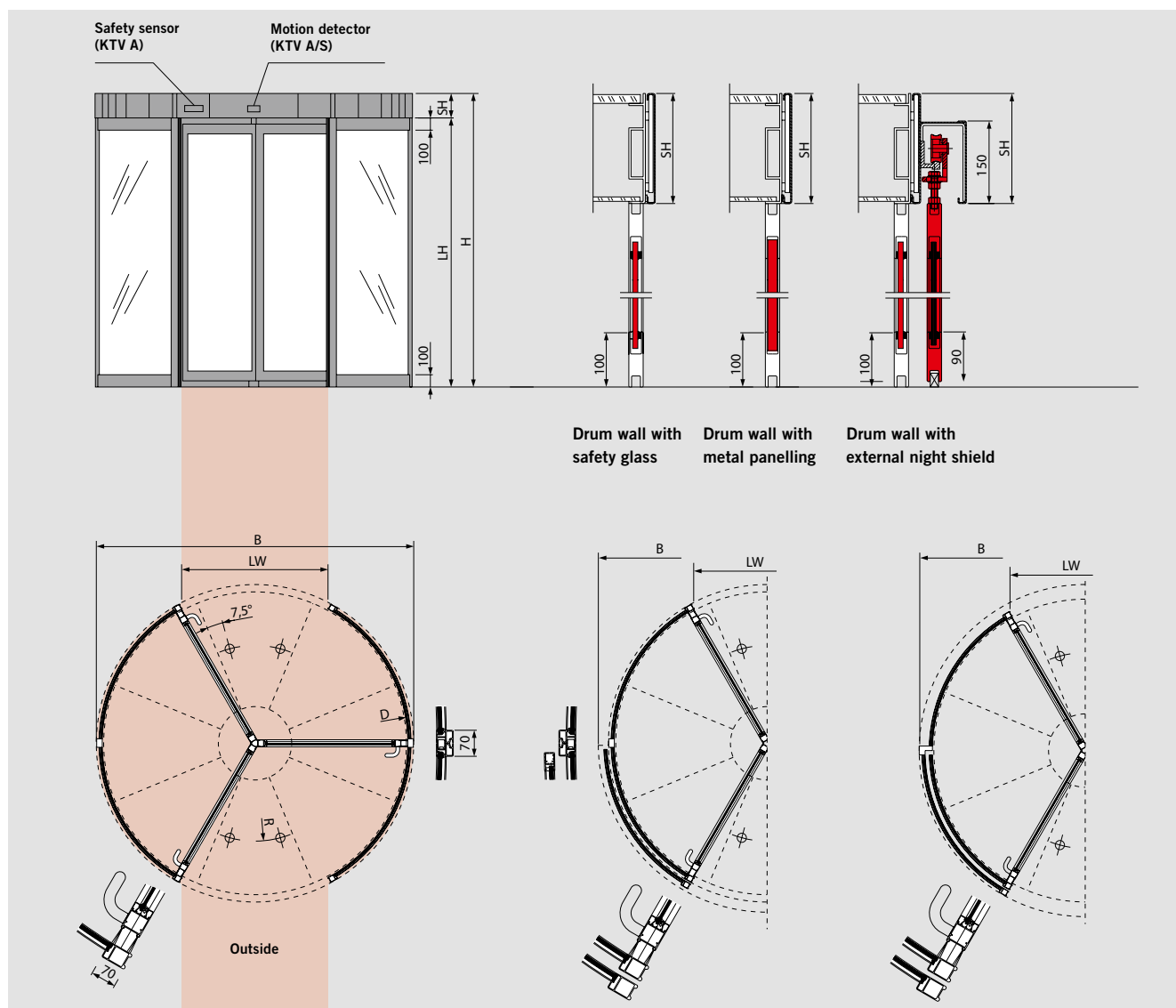
Internal diameter (D)	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800
External diameter (B)	2262	2462	2662	2862	3062	3262	3462	3662	3862	4062
Clear passage width (LW)	940	1040	1140	1240	1340	1440	1540	1640	1740	1840
Escape route width	895	995	1095	1195	1295	1395	1495	1595	1695	1795

3-wing design (with single-piece internal night shield)

Internal diameter (D)	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800
External diameter (B)	2216	2416	2616	2816	3016	3216	3416	3616	3816	4016
Clear passage width (LW)	940	1040	1140	1240	1340	1440	1540	1640	1740	1840
Escape route width	895	995	1095	1195	1295	1395	1495	1595	1695	1795

All dimensions in mm.

KTV 3 M/P/S/A



KTV M/P/S/A

Rigid wings or pivot-mounted wings. Drum wall options:

- Curved aluminium special profiles, posts 70 x 46 mm, base section height (at top and bottom): 100 mm, safety glazing: 8.7 mm laminated safety glass or 8 mm toughened safety glass, clear. Laminated safety glass is pendulum body impact resistant according to class A 1 of DIN 52290 (German Industrial Standard).
- Curved aluminium special profiles, posts 70 x 46 mm, base section 100 mm high top and bottom with metal panelling, 18 mm thick.

KTV M/P/S/A

- 3/4-wing design also with internal or external night shield and safety glass
- 8.7 mm laminated safety glass or 8 mm toughened safety glass, clear.
- Also available with 18 mm metal panelling as an option.
- Laminated safety glass is pendulum body impact resistant according to class A 1 of DIN 52290 (German Industrial Standard).

Dimensions of KTV 4 for internal diameters (D) of up to 3,800 mm

4-wing design (without night shield)

Internal diameter (D)	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800
External diameter (B)	2096	2296	2496	2696	2896	3096	3296	3496	3696	3896
Clear passage width (LW)	1364	1505	1647	1788	1930	2071	2213	2354	2496	2637
Escape route width	895	995	1095	1195	1295	1395	1495	1595	1695	1795

4-wing design (with double-leaf external night shield)

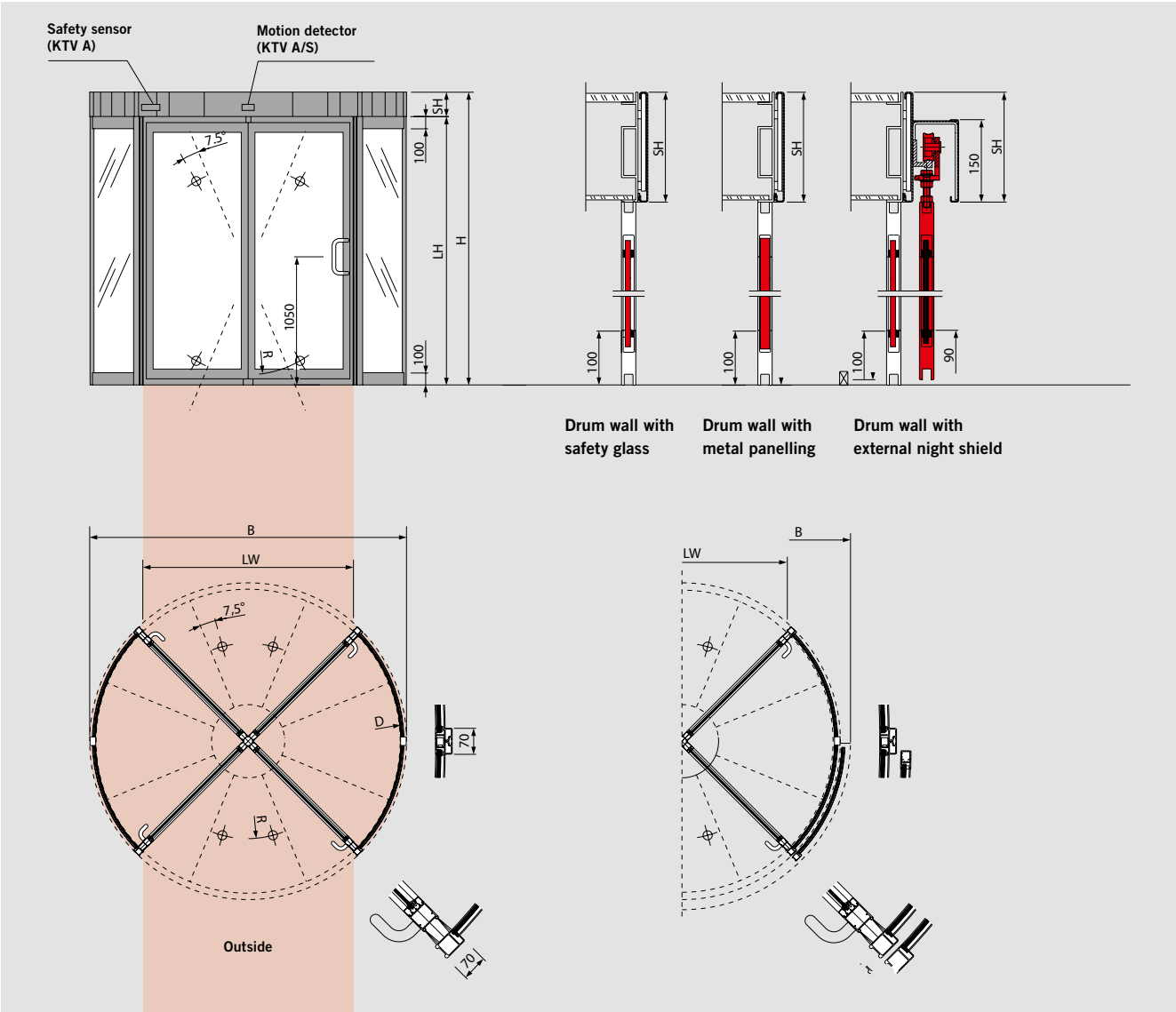
Internal diameter (D)	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800
External diameter (B)	2262	2462	2662	2862	3062	3262	3462	3662	3862	4062
Clear passage width (LW)	1364	1505	1647	1788	1930	2071	2213	2354	2496	2637
Escape route width	895	995	1095	1195	1295	1395	1495	1595	1695	1795

4-wing design (with double-leaf internal night shield)

Internal diameter (D)	2000	2200	2400	2600	2800	3000	3200	3400	3600	3800
External diameter (B)	2216	2416	2616	2816	3016	3216	3416	3616	3816	4016
Clear passage width (LW)	1364	1505	1647	1788	1930	2071	2213	2354	2496	2637
Escape route width	895	995	1095	1195	1295	1395	1495	1595	1695	1795

All dimensions in mm.

KTV 4 M/P/S/A



WITH GLASS CEILING

Dimensions of KTV 3 with glass ceiling for internal diameters (D) of up to 3,000 mm

3-wing design (without night shield)

Internal diameter (D)	2000	2200	2400	2600	2800	3000
External diameter (B)	2092	2292	2492	2692	2892	3092
Clear passage width (LW)	940	1040	1140	1240	1340	1440

3-wing design (with double-leaf external night shield)

Internal diameter (D)	2000	2200	2400	2600	2800	3000
External diameter (B)	2092	2292	2492	2692	2892	3092
Clear passage width (LW)	940	1040	1140	1240	1340	1440

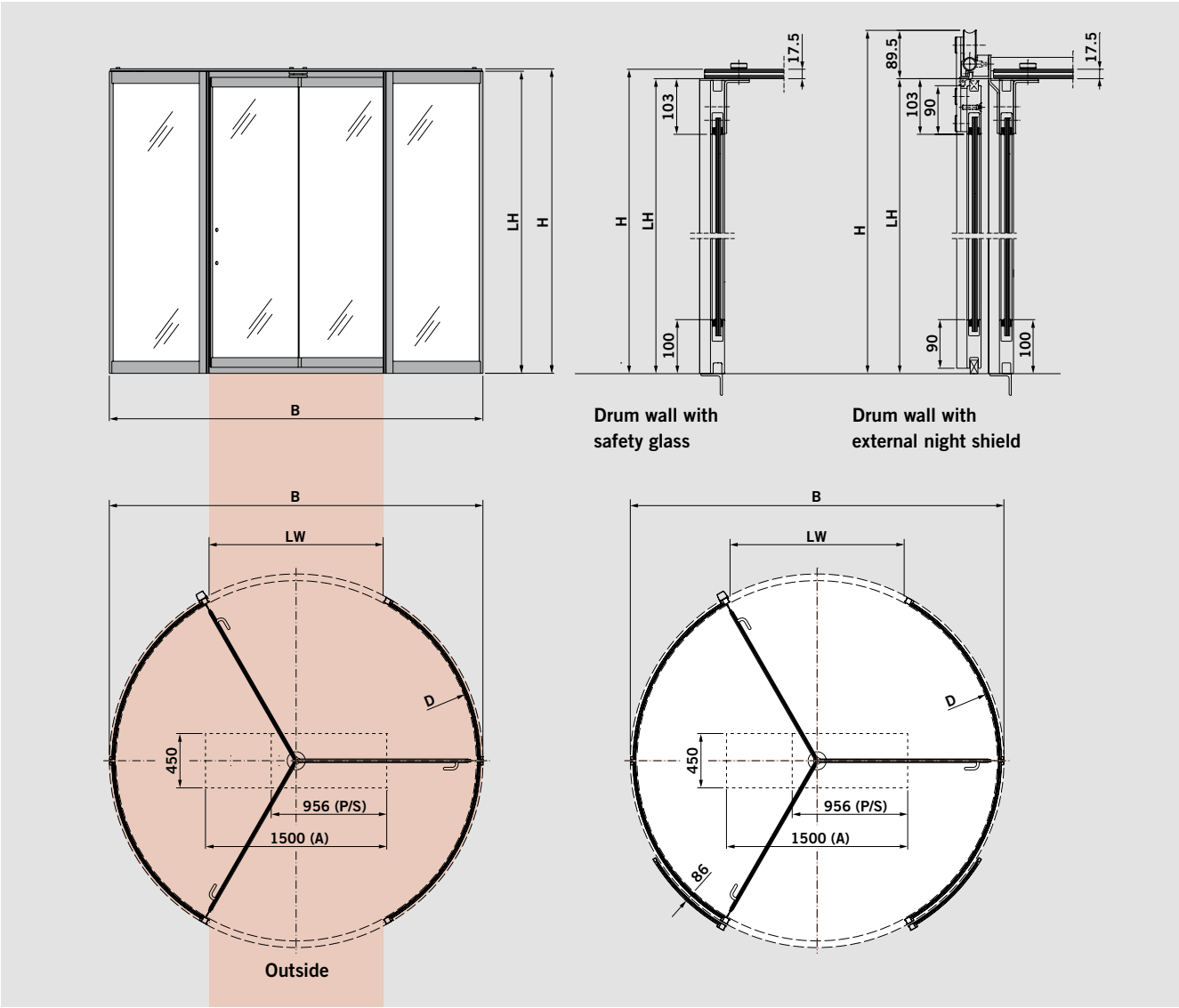
All dimensions in mm.

KTV M/P/S/A

Rigid wings, drum walls optionally made of

- Curved aluminium special profiles, posts 70 x 46 mm, base section height (at top and bottom): 100 mm and safety glazing: 8.7 mm laminated safety glass or 8 mm toughened safety glass, clear. Laminated safety glass is pendulum body impact resistant according to class A 1 of DIN 52290 (German Industrial Standard).
- Curved aluminium special profiles, posts 70 x 46 mm, base section 100 mm high top and bottom with metal panelling, 18 mm thick.

KTV 3 with glass ceiling M/P/S/A



KTV M/P/S/A

- 3/4-wing design also with internal or external night shield made of safety glass 8.7 mm laminated safety glass or 8 mm toughened safety glass, clear. Laminated safety glass is pendulum body impact resistant according to class A 1 of DIN 52290 (German Industrial Standard).

Dimensions of KTV 4 with glass ceiling for internal diameters (D) of up to 3,000 mm

4-wing design (without night shield)

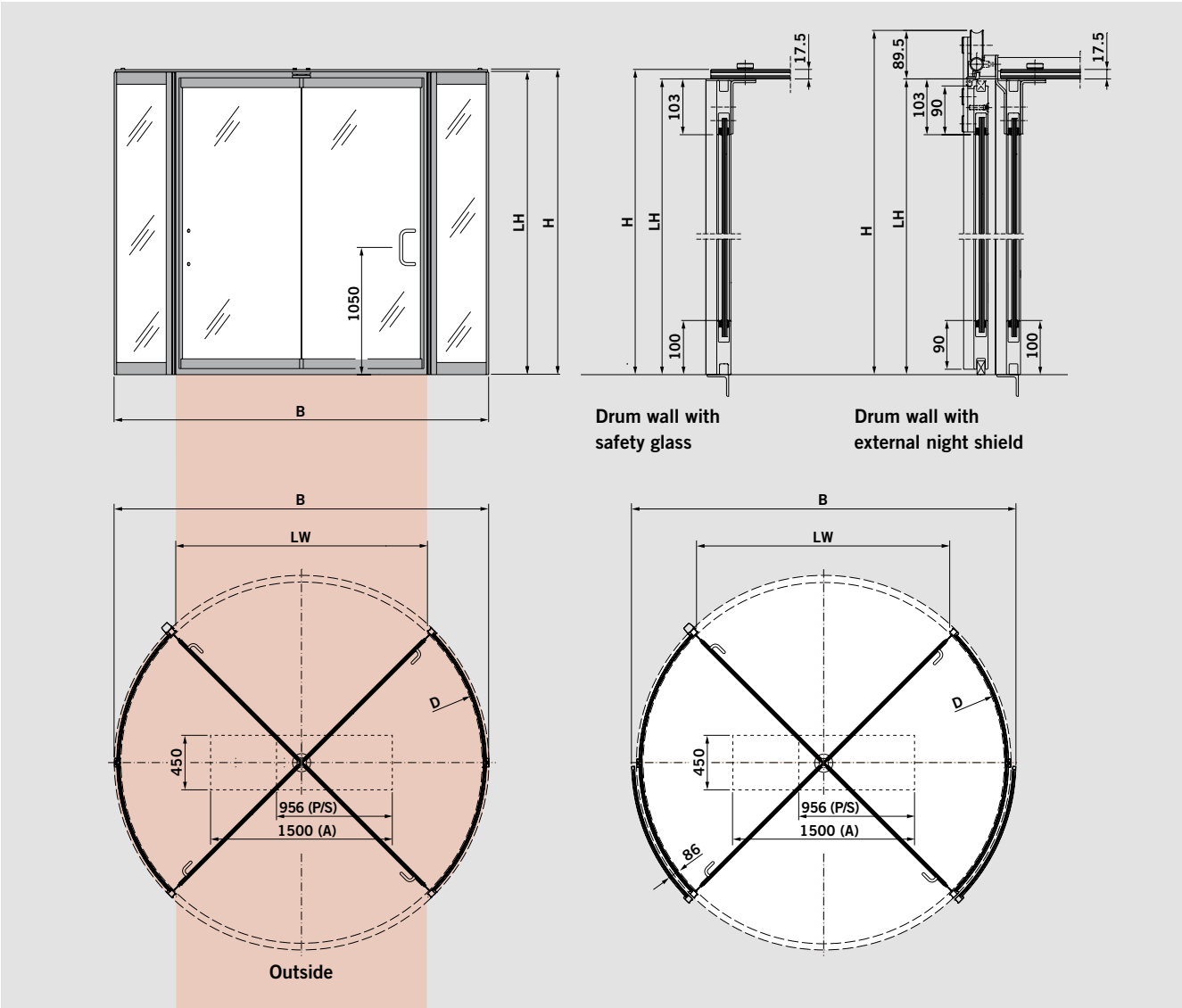
Internal diameter (D)	2000	2200	2400	2600	2800	3000
External diameter (B)	2092	2292	2492	2692	2892	3092
Clear passage width (LW)	1364	1505	1647	1788	1930	2071

4-wing design (with double-leaf external night shield)

Internal diameter (D)	2000	2200	2400	2600	2800	3000
External diameter (B)	2188	2388	2588	2788	2988	3188
Clear passage width (LW)	1364	1505	1647	1788	1930	2071

All dimensions in mm

KTV 4 with glass ceiling M/P/S/A



WITH GLASS CEILING

Dimensions of KTV 3 with glass ceiling for internal diameters (D) of or beyond 3,200 mm

3-wing design (without night shield)

Internal diameter (D)	3200	3400	3600	3800
External diameter (B)	3292	3492	3692	3892
Clear passage width (LW)	1540	1640	1740	1840
Escape route width	1495	1595	1695	1795

3-wing design (with double-leaf external night shield)

Internal diameter (D)	3200	3400	3600	3800
External diameter (B1)				
without cover for door suspension	3388	3588	3788	3988
External diameter (B2)				
with cover for door suspension	3458	3658	3858	4058
Clear passage width (LW)	1540	1640	1740	1840
Escape route width	1495	1595	1695	1795

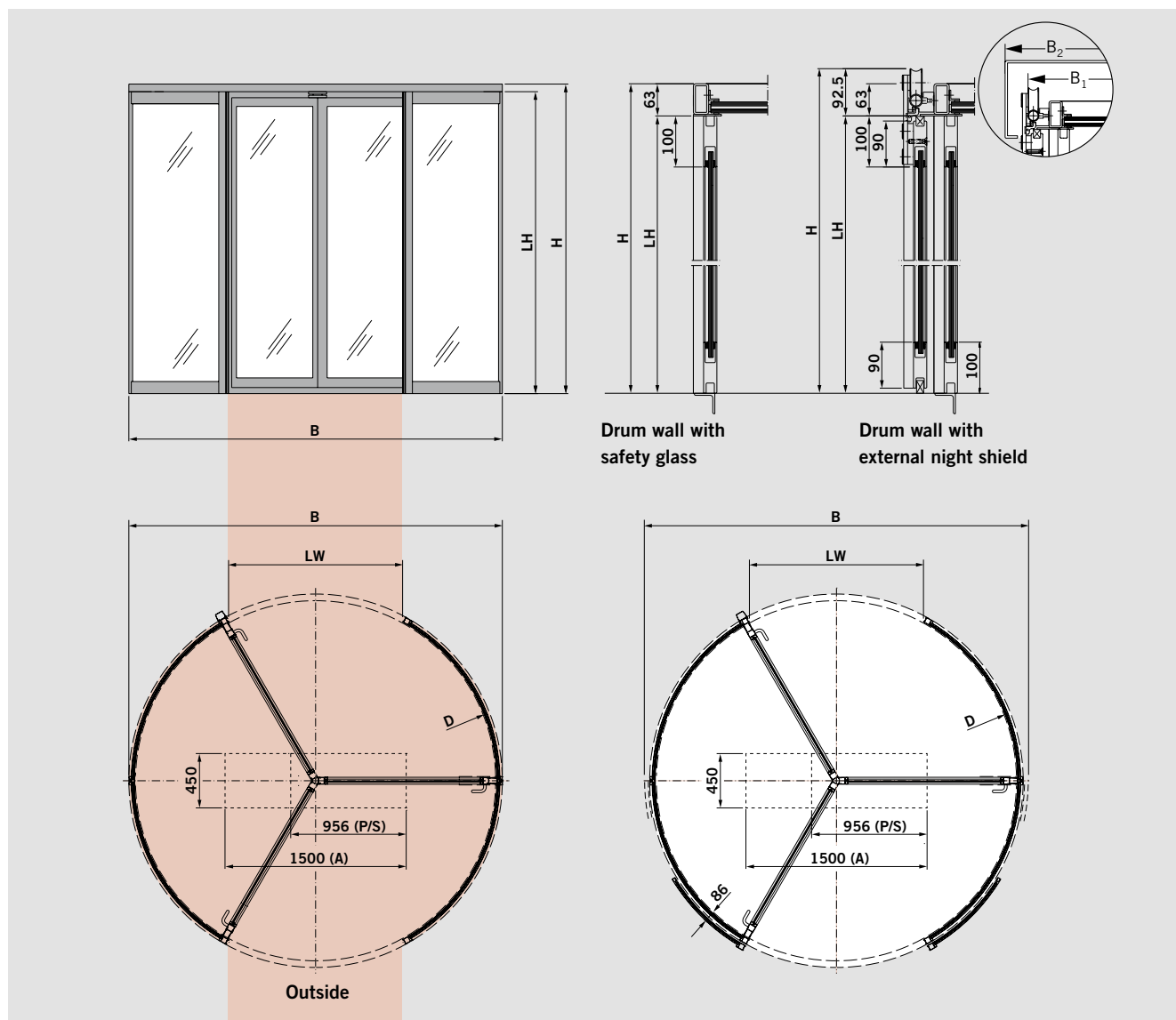
All dimensions in mm.

KTV 3 with glass ceiling M/P/S/A

KTV M/P/S/A

Rigid or pivot-mounted wings, drum walls optionally made of

- Curved aluminium special profiles, posts 70 x 46 mm, base section height (at top and bottom): 100 mm and safety glazing: 8.7 mm laminated safety glass or 8 mm toughened safety glass, clear. Laminated safety glass is pendulum body impact resistant according to class A 1 of DIN 52290 (German Industrial Standard).
- Curved aluminium special profiles, posts 70 x 46 mm, base section 100 mm high top and bottom with metal panelling, 18 mm thick.



KTV M/P/S/A

- 3/4-wing design also with internal or external night shield and safety glass made of 8.7 mm laminated safety glass or 8 mm toughened safety glass, clear.

Laminated safety glass is pendulum body impact resistant according to class A 1 of DIN 52290 (German Industrial Standard).

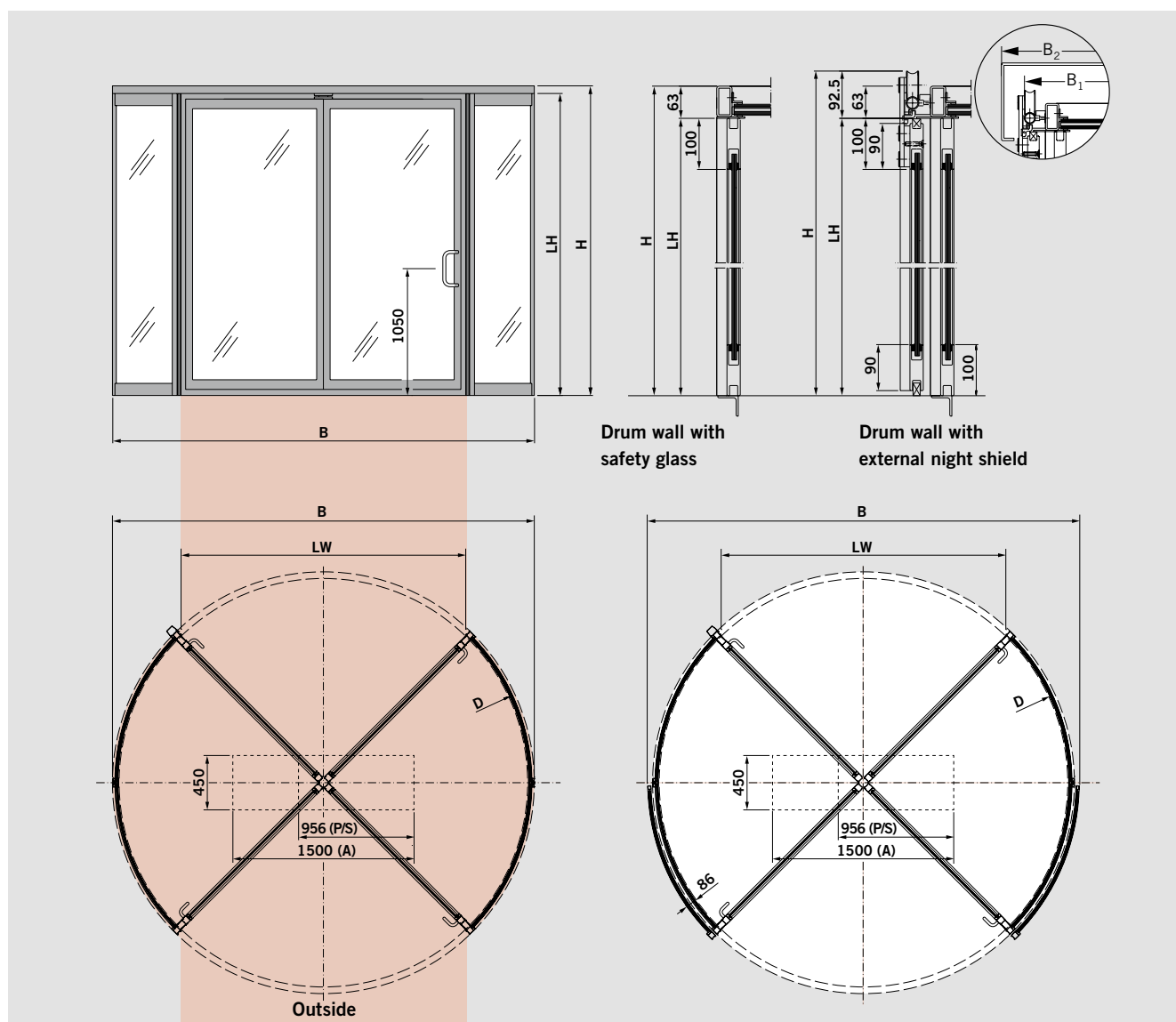
Dimensions of KTV 4 with glass ceiling for internal diameters (D) of or beyond 3,200 mm**4-wing design (without night shield)**

Internal diameter (D)	3200	3400	3600	3800
External diameter (B)	3292	3492	3692	3892
Clear passage width (LW)	2213	2354	2496	2637
Escape route width	1495	1595	1695	1795

4-wing design (with double-leaf night shield)

Internal diameter (D)	3200	3400	3600	3800
External diameter (B1) without cover for door suspension	3388	3588	3788	3988
External diameter (B2) with cover for door suspension	3458	3658	3858	4058
Clear passage width (LW)	2213	2354	2496	2637
Escape route width	1495	1595	1695	1795

All dimensions in mm.

KTV 4 with glass ceiling M/P/S/A

ATRIUM-A

Dimensions KTV 3 ATRIUM-A					
3-wing design (without night shield)					
Internal diameter (D)	2000	2200	2400	2600	2800
External diameter (B)	2140	2340	2540	2740	2940
Width at mid post (B1)	2076	2276	2476	2676	2876
Clear passage width (LW)	965	1065	1165	1265	1365

All dimensions in mm.

- KTV ATRIUM-A

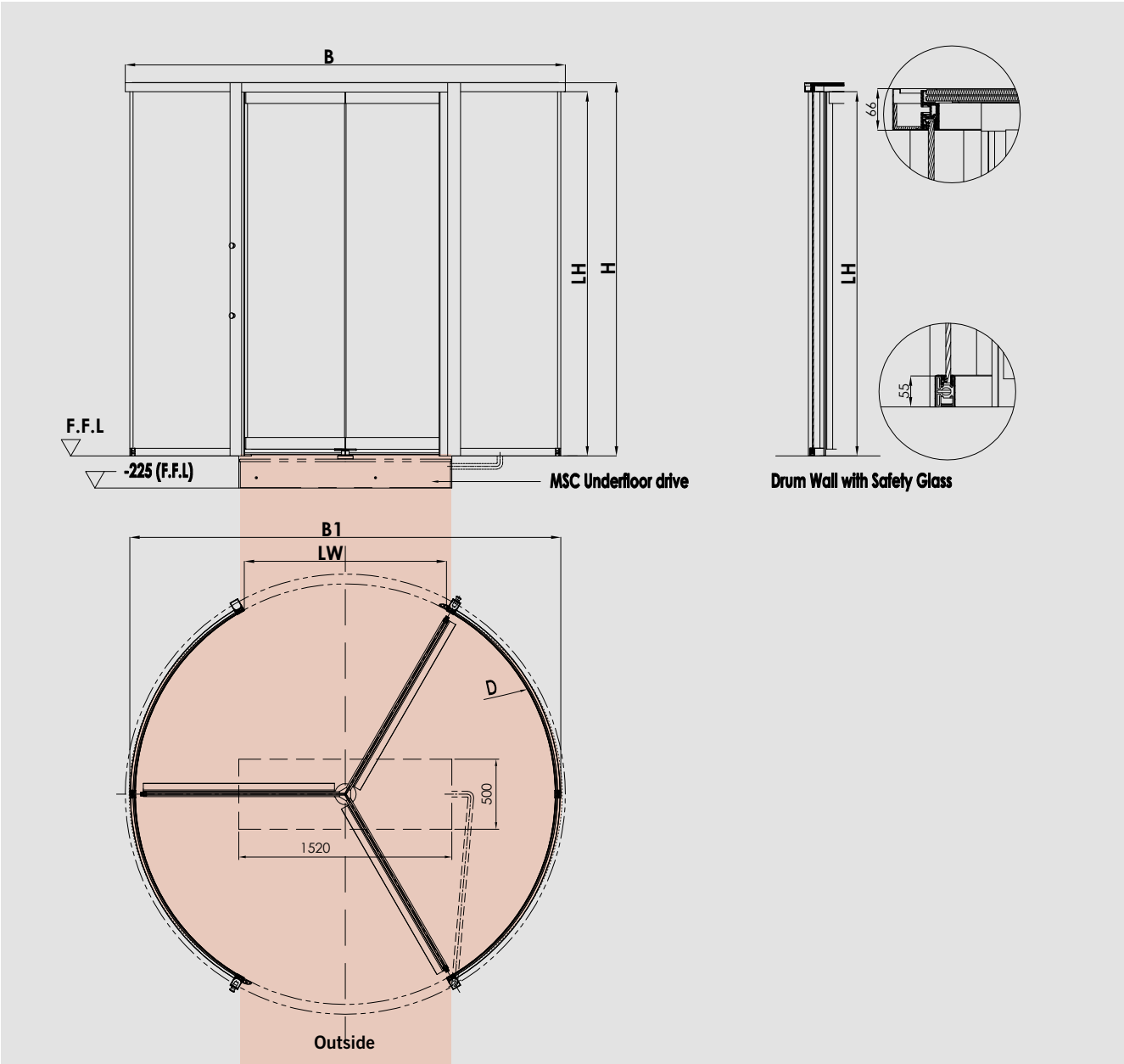
Drum side walls of

 - 4+0.38+5mm laminated safety glass (LSG)
 Laminated safety glass is pendulum body impact resistant according to Class A of DIN 52290 (German Industrial Standard)
- Ceiling:

- 8+1.52+8 mm laminated safety glass LSG (TSG)
- Wing:

- 12 mm toughened safety glass, clear (TSG)

KTV 3 ATRIUM-A



KTV ATRIUM-A

Drum side walls of

- 4+0.38+5mm laminated safety glass (LSG)
Laminated safety glass is pendulum body impact resistant according to Class A of DIN 52290 (German Industrial Standard)

Ceiling:

- 8+1.52+8 mm laminated safety glass LSG (TSG)

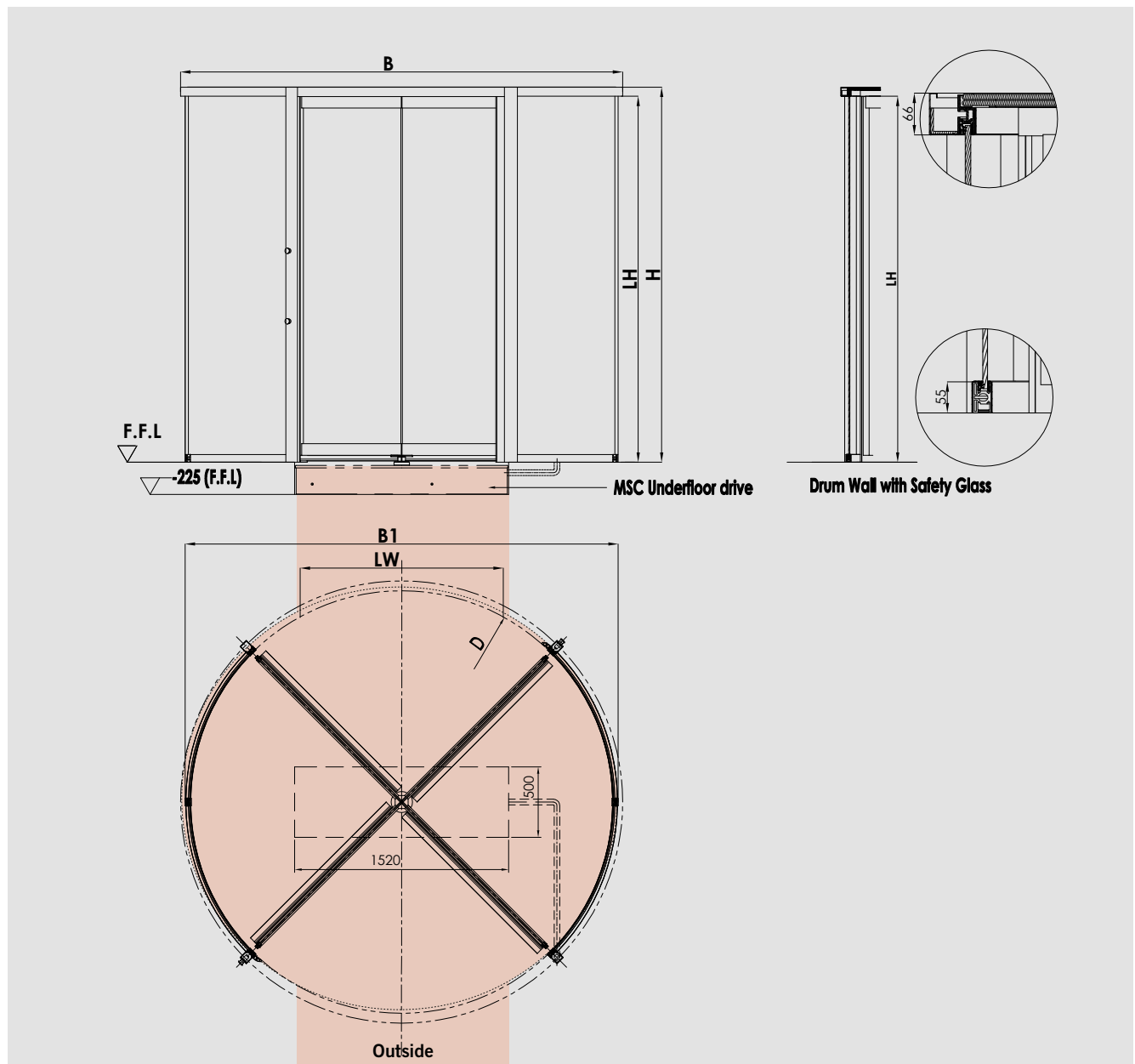
Wing:

- 12 mm toughened safety glass, clear (TSG)

Dimensions KTV 4 ATRIUM-A**3-wing design (without night shield)**

Internal diameter (D)	2000	2200	2400	2600	2800
External diameter (B)	2140	2340	2540	2740	2940
Width at mid post (B1)	2076	2276	2476	2676	2876
Clear passage width (LW)	1365	1506	1648	1789	1931

All dimensions in mm.

KTV 4 ATRIUM-A

DETAILS

1. KTV A canopy heights depending on function and installation features

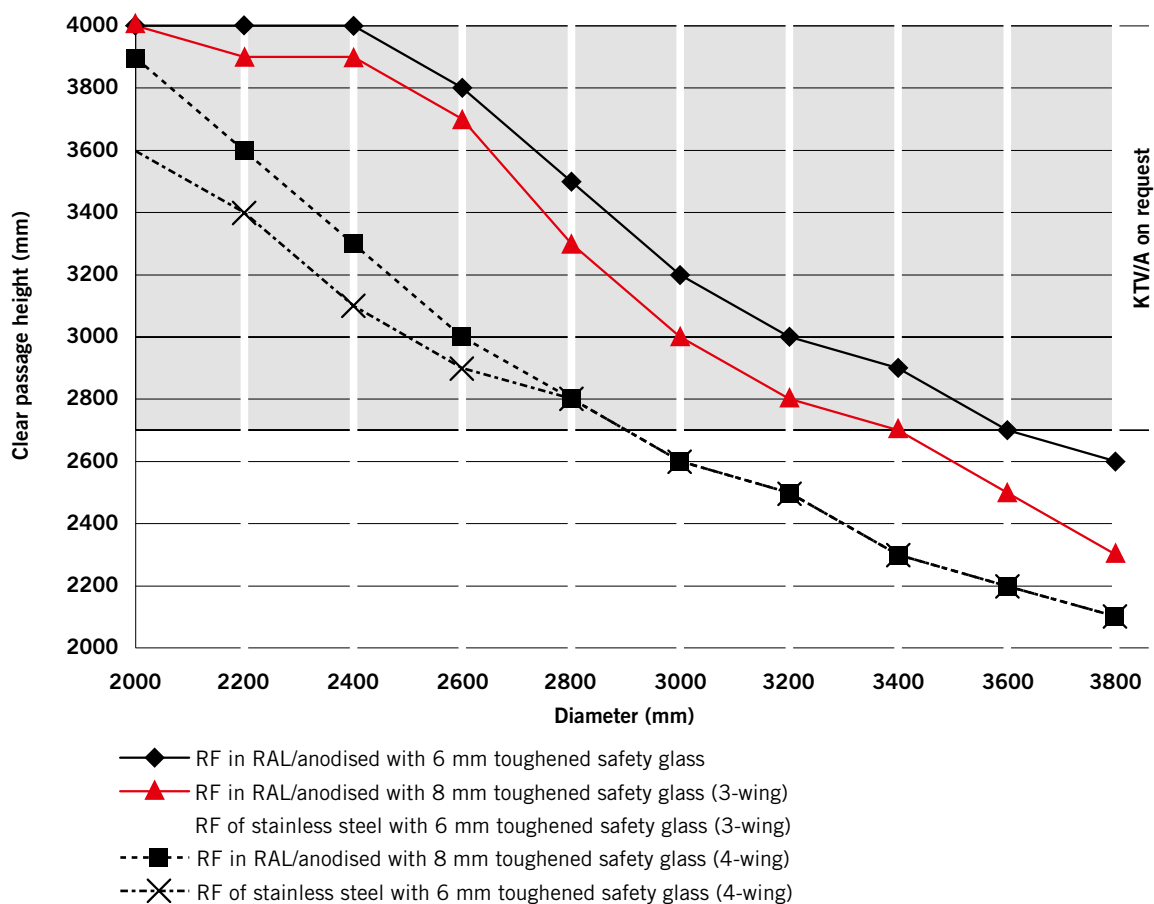
Function	Canopy height
Manual operation	100
Positioning automatic (Canopy-integrated operator)	
Servomatic (Canopy-integrated operator)	200
Automatic (Canopy-integrated operator)	
Positioning automatic (Under floor operator)	
Servomatic (Under floor operator)	100 / 21.5* / 17.5* / 63*
Automatic (Under floor operator)	
Manual night shield (Under floor operator)	200
Electrically operated night shield (Under floor operator)	300
Speed limiter (Canopy-integrated operator)	200
Shock-Stop anti-vandalism brake (Canopy-integrated operator)	200
Overhead warm-air curtain	500/600

*For glass ceilings see product descriptions on page 8–11

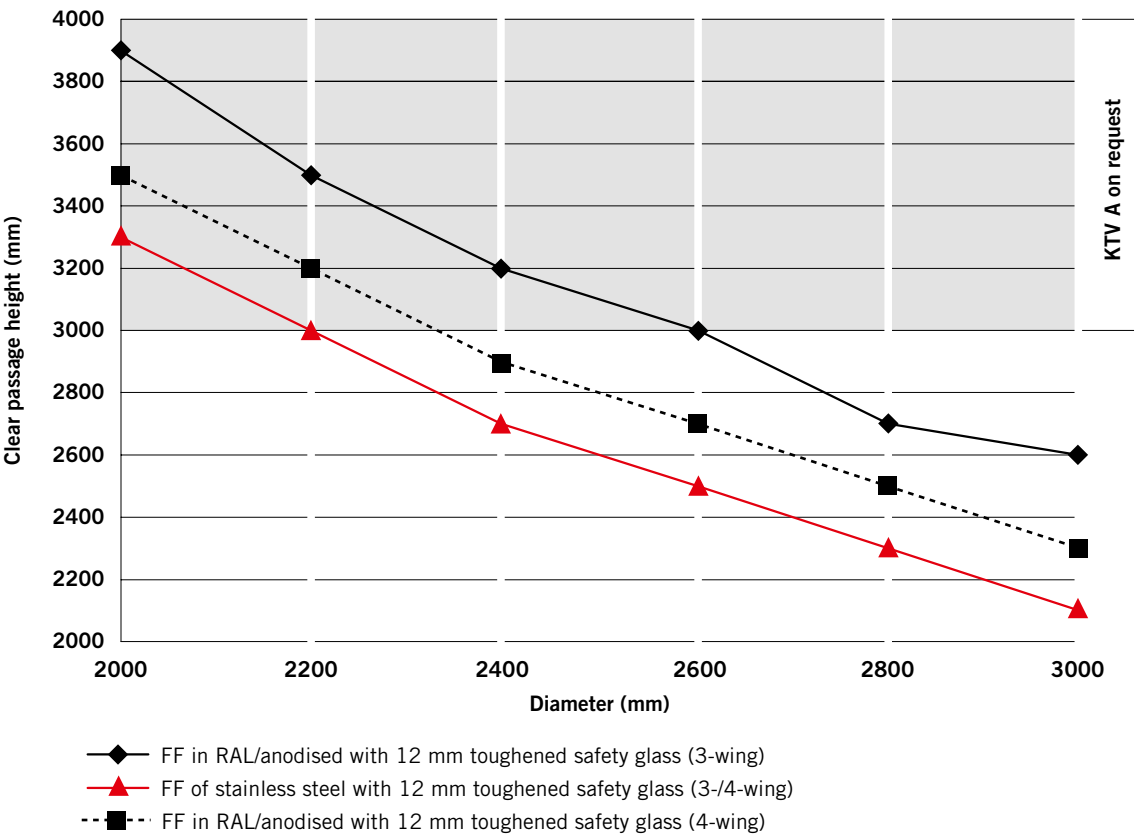
The highest indicated height is the decisive factor.

Canopy covers of or beyond 700 mm on request. The upper ceiling remains at the minimum height indicated in the table.

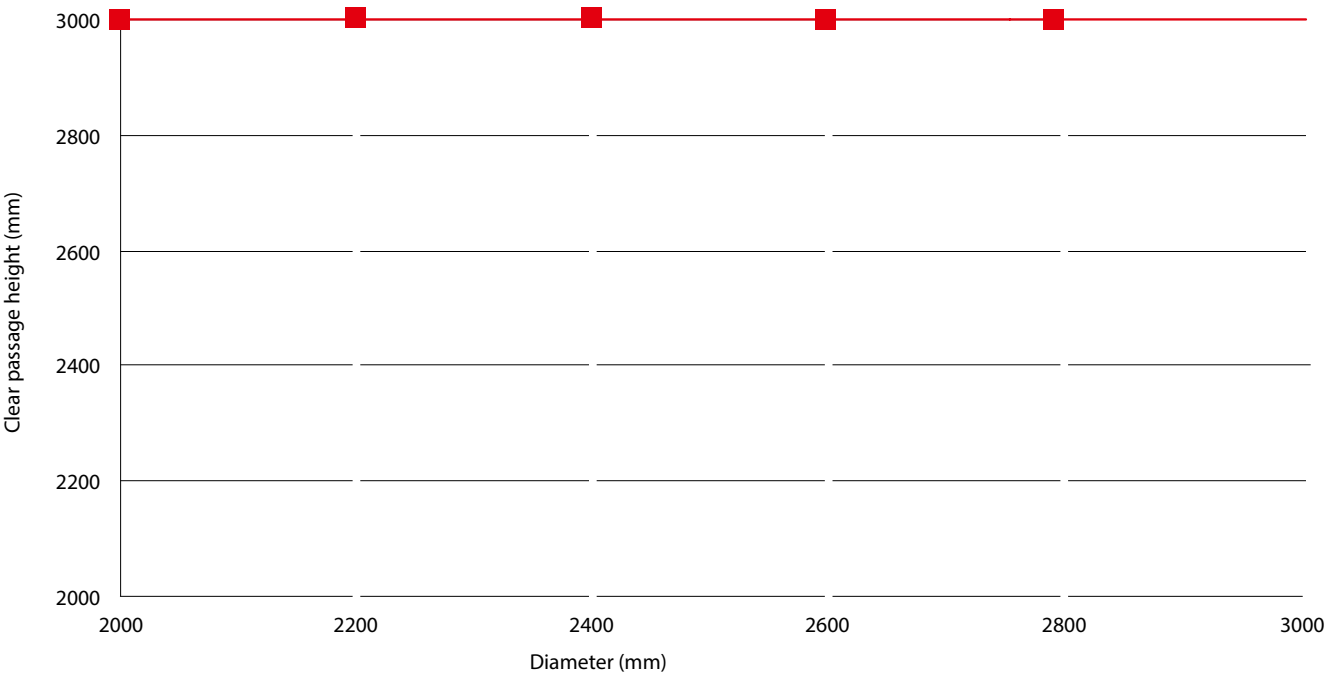
Dependency table for KTV 3/4 with framed turnstile



Dependency table KTV 3/4 with turnstile in fine-frame design



Dependency table KTV ATRIUM-A

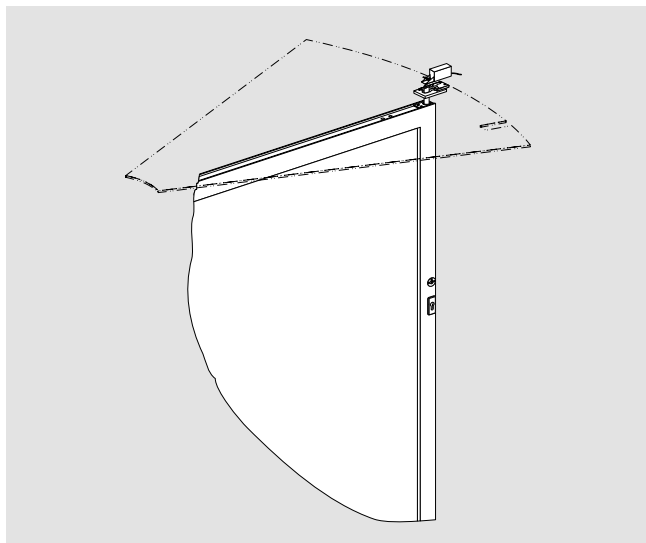


TURNSTILE VERSIONS

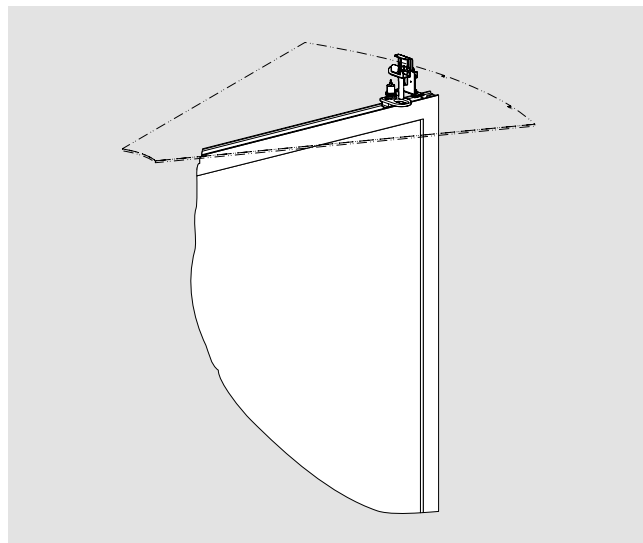
	3-wing design	4-wing design
Framed turnstile, rigid		
Framed turnstile with maximum opening configuration		
Rigid turnstile in fine-frame design for internal diameters of max. 3,000 mm		

WING LOCKS

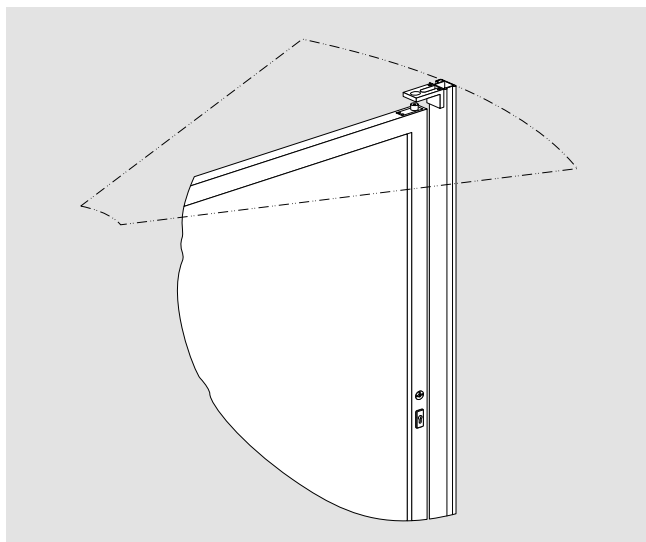
Manual locking device



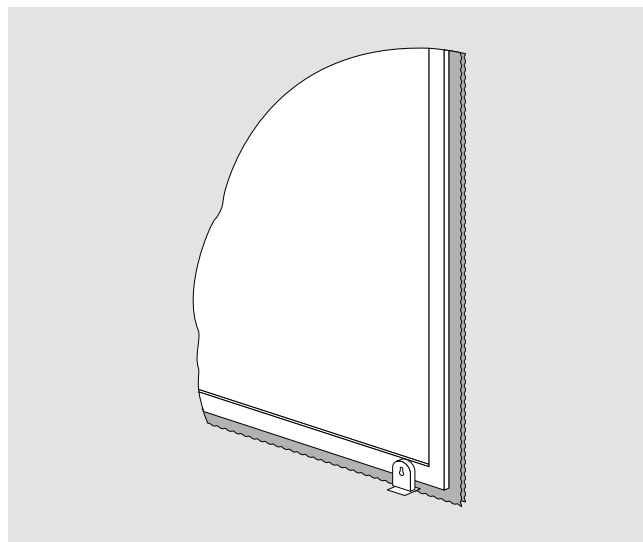
Electro-mechanical locking device



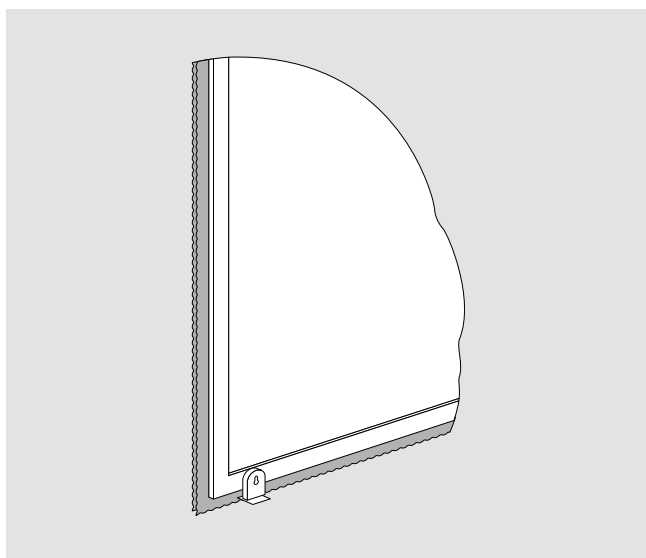
Locking device for KTV with glass ceiling (framed wings)



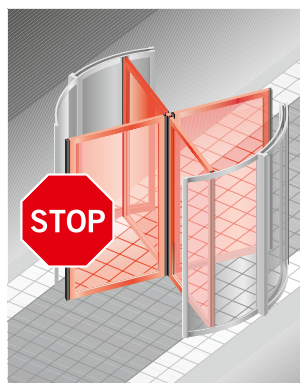
Floor locking device for KTV with glass ceiling (wings in fine-frame design)



Floor locking device for KTV ATRIUM-A



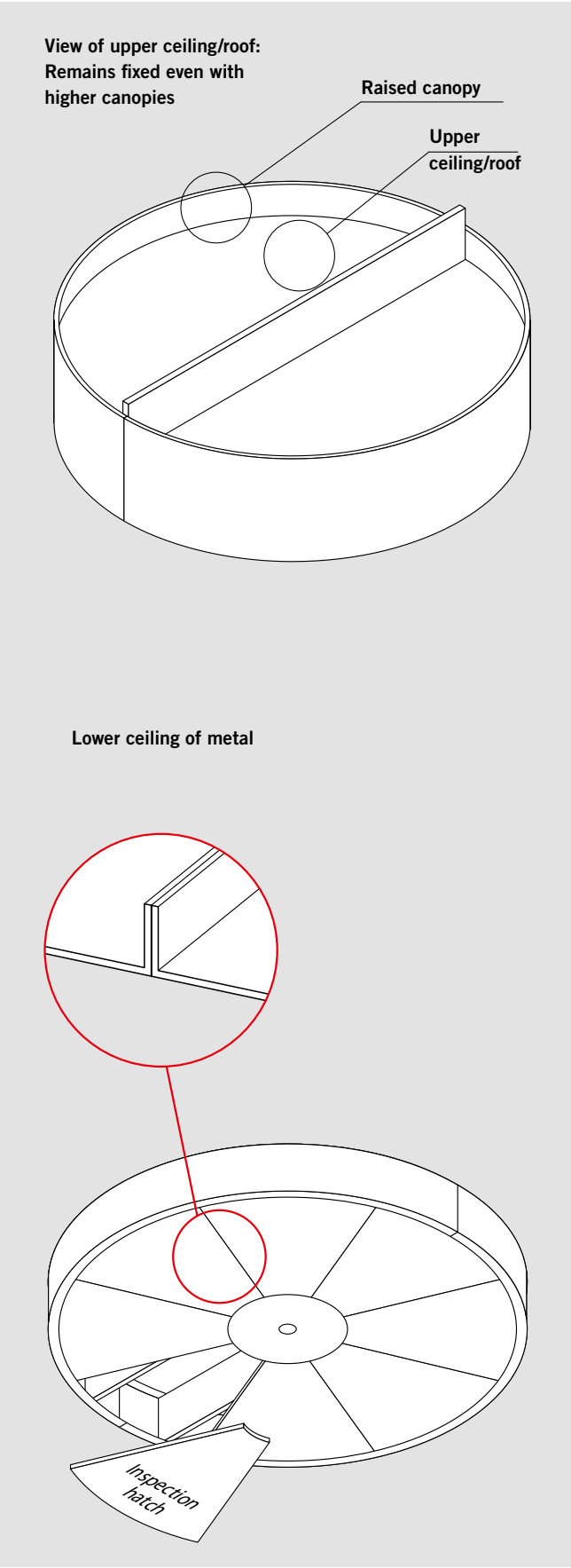
Shock-Stop



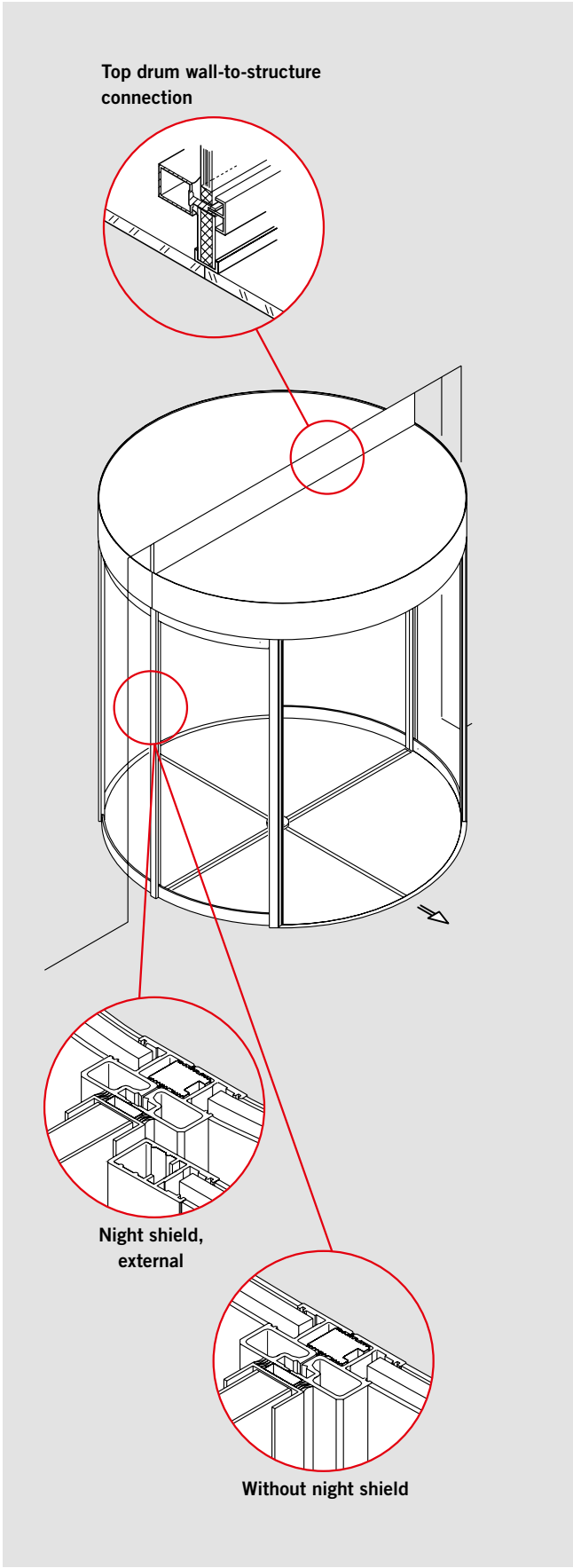
The Shock-Stop function is able to lock the turnstile in any position. In the event of a power failure the turnstile is released and can be rotated in either direction (fail-safe design). The Shock-Stop function can only be used with rigid wings and has a holding torque of 1,200 Nm. The activator for the Shock-Stop function must be positioned within sight of the door.

CEILING STRUCTURE DRUM WALL-TO-STRUCTURE CONNECTION

Ceiling structure KTV 3/4



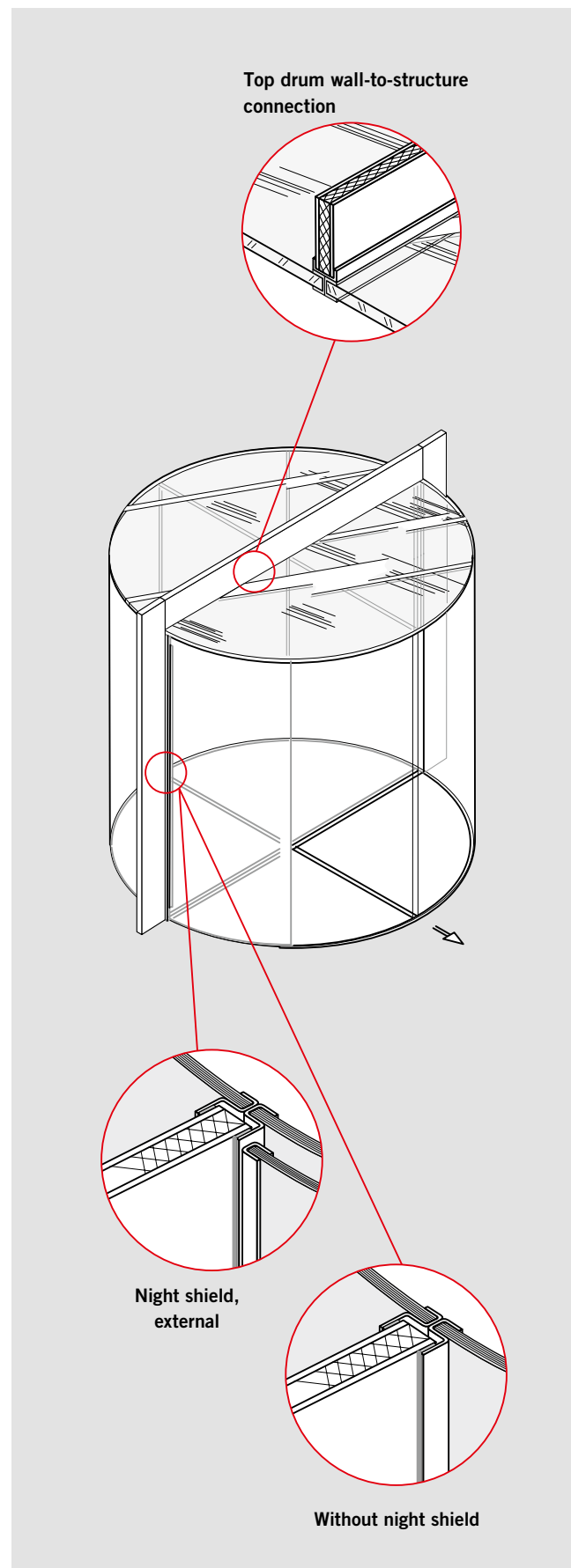
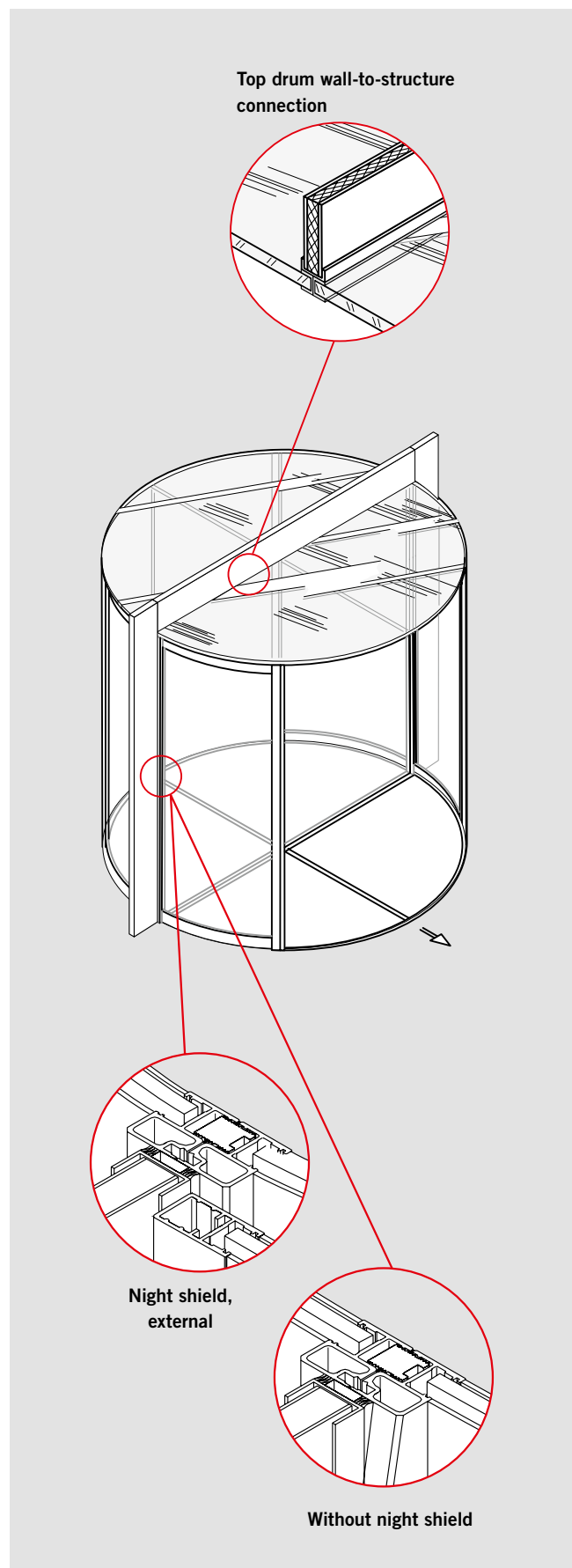
Drum wall-to-structure connection KTV 3/4



DRUM WALL-TO-STRUCTURE CONNECTION

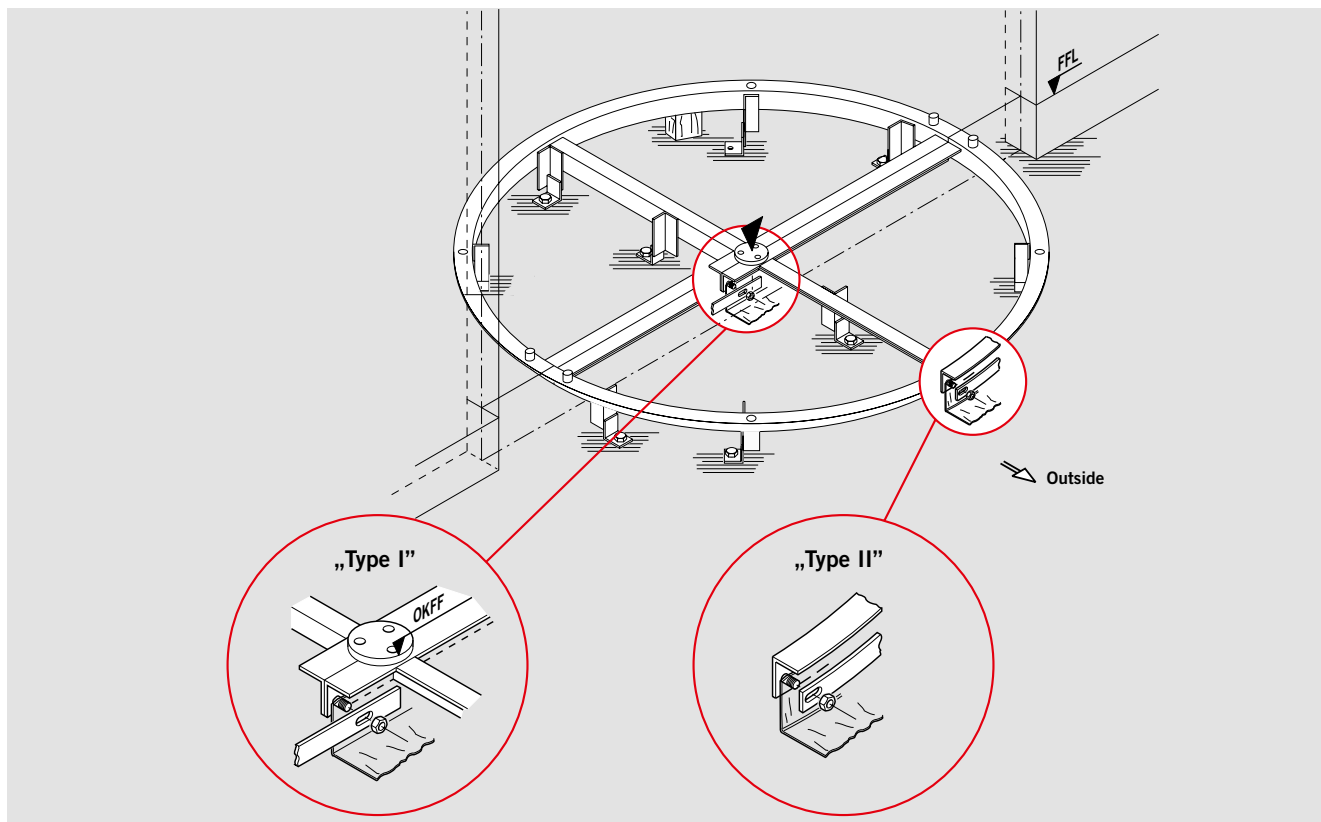
KTV with glass ceiling

KTV ATRIUM-A



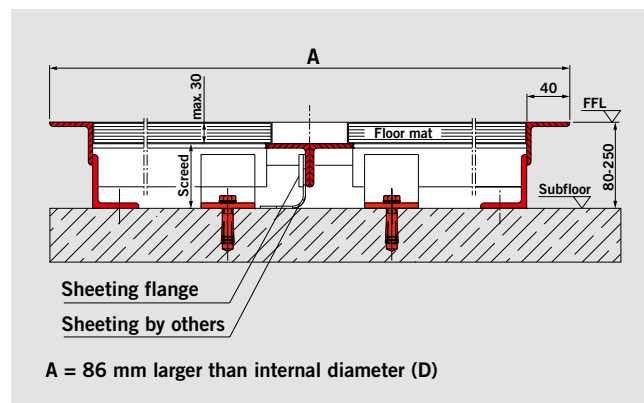
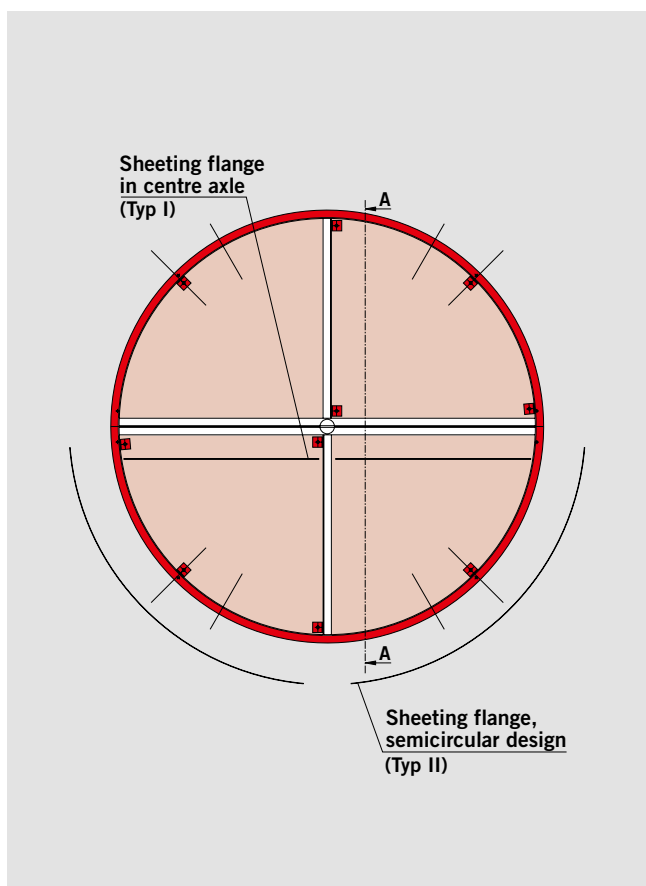
FLOOR RING

Without under floor operator

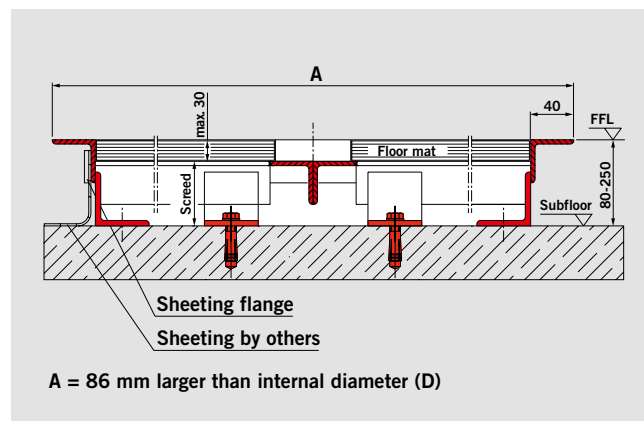


Floor ring without night shield

Cross-section A – A with sheeting flange in centre axle (Type I)



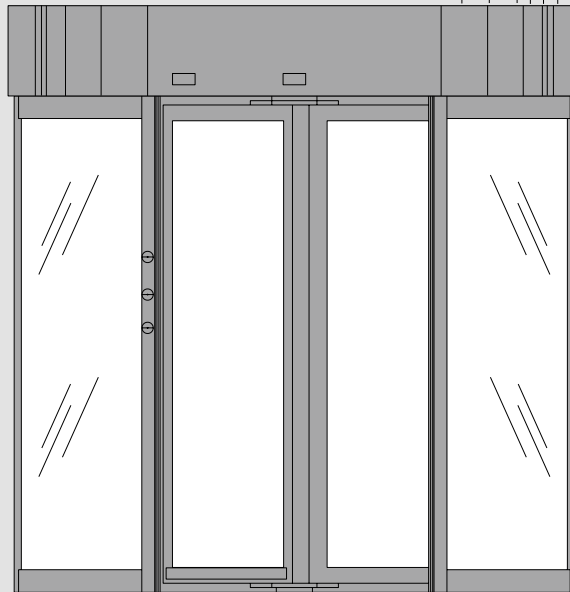
Cross-section A – A with sheeting flange, semicircular design (Type II)



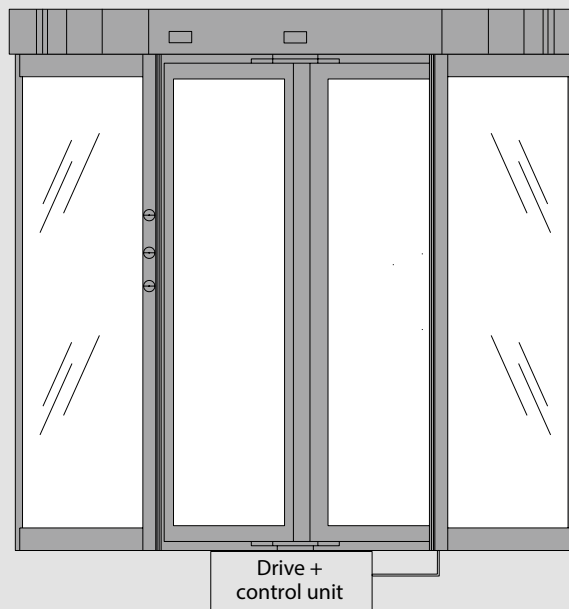
WIRING DIAGRAMS

Wiring diagram KTV A canopy-integrated operator

External pushbutton for autom. night shield (option) $3 \times 0.75 \text{ mm}^2$ (by others)
 Potential-free contact for Night-/Bank Function (option) $2 \times 0.75 \text{ mm}^2$ (by others)
 Pushbutton for anti-vandalism brake (option) $2 \times 0.75 \text{ mm}^2$ (by others)
 External program switch (option) $5 \times 0.75 \text{ mm}^2$ (by others)
 Equipotential bonding of at least 6 mm^2 (by others)
 Power supply line $3 \times 1.5 \text{ mm}^2$ (by others)



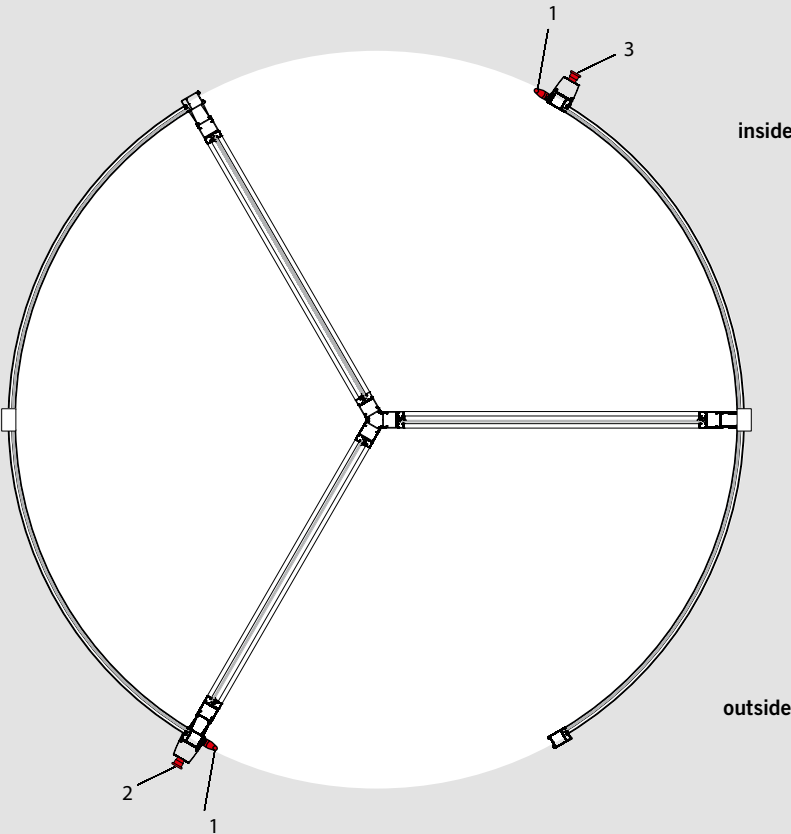
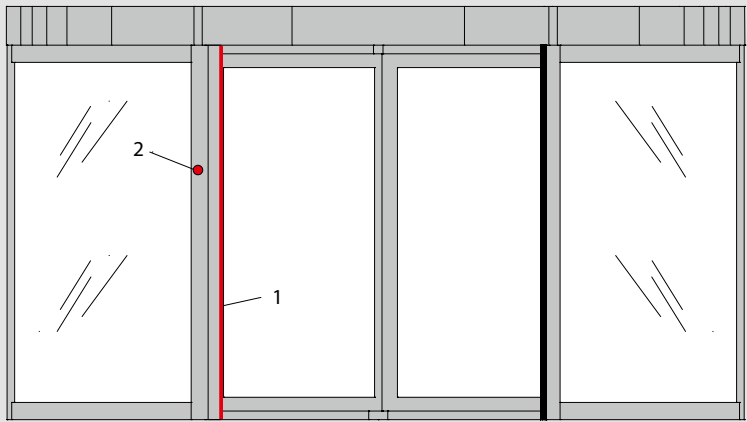
Wiring diagram KTV A under floor operator



External pushbutton for autom. night shield (option) $3 \times 0.75 \text{ mm}^2$ (by others)
 Potential-free contact for Night-/Bank Function (option) $2 \times 0.75 \text{ mm}^2$ (by others)
 Pushbutton for anti-vandalism brake (option) $2 \times 0.75 \text{ mm}^2$ (by others)
 External program switch (option) $5 \times 0.75 \text{ mm}^2$ (by others)
 Equipotential bonding of at least 6 mm^2 (by others)
 Power supply line $3 \times 1.5 \text{ mm}^2$ (by others)

SAFETY EQUIPMENT

Safety equipment for KTV P/S, 3- and 4-wing design



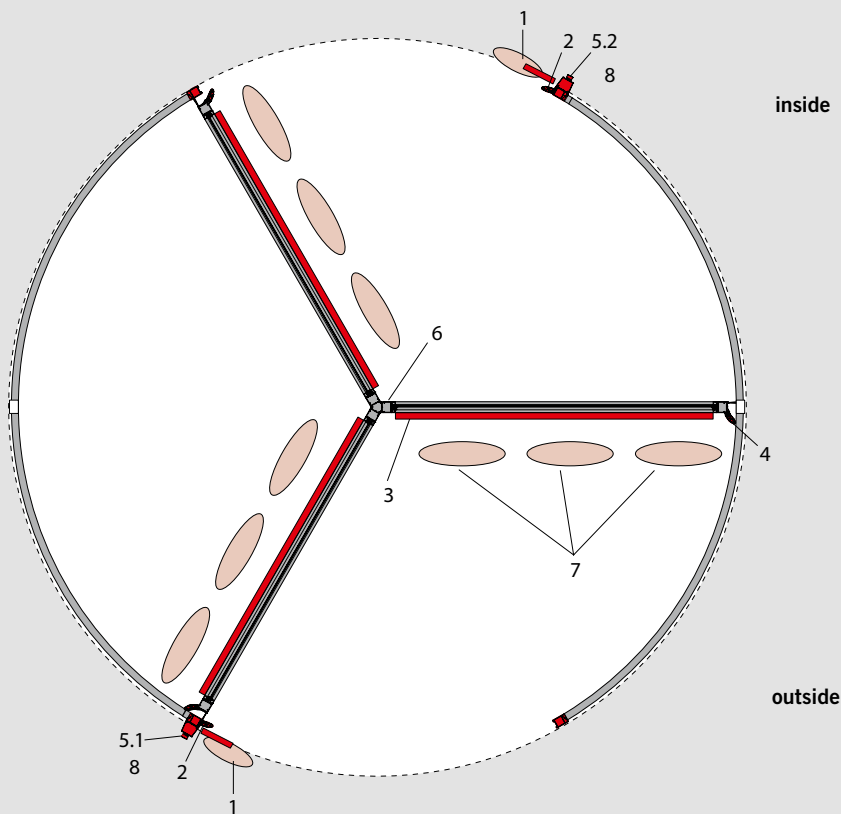
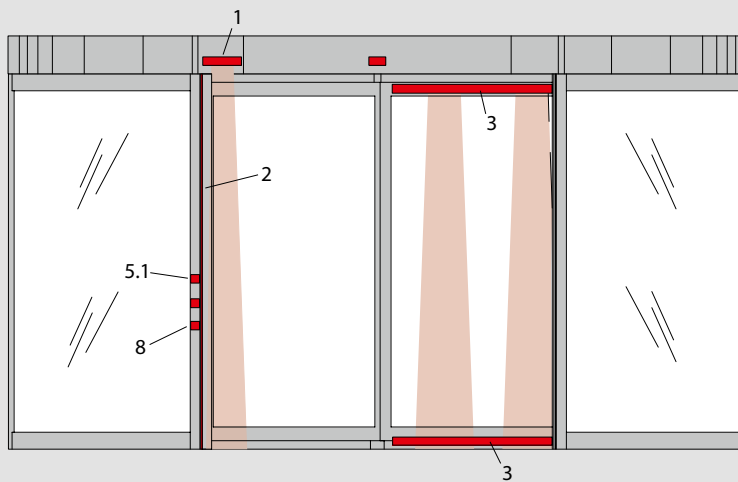
	Function
1 Rubber strip (door post)	Impact protection
2 Emergency pushbutton (door post/near the door, external)	Stop
3 Emergency pushbutton (door post)	Stop

The KTV has to be equipped with an emergency pushbutton when choosing version P or S (refer to page 4). The door post has to be protected with a collide protection.

Please note:
Safety equipment has to be selected according to the national requirements.

In order to comply with DIN 18650, doors require all below-mentioned safety equipment.

Safety equipment for KTV A, 3- and 4-wing design



	Function
1 Canopy-integrated sensor (door post, top/canopy)	Slow cycle/stop
2 Rubber strip (door post)	Impact protection
3 Safety contact strip (wing, bottom)	Stop
4 Safety contact strip (wing, top)	Stop
5.1 Emergency pushbutton (door post/near the door, external)	Stop
5.2 Emergency pushbutton (door post, internal)	Stop
6 Limit switch for deflection device (only for pivot-mounted wings)	Stop
7 Limit switch for deflection device (only for pivot-mounted wings)	Slow cycle/stop
8 Disabled access pushbutton (door post)	Slow cycle

Revolving doors equipped with Automatic operators offer a comprehensive range of safety equipment.

Fail-safe function

After the emergency pushbutton has been activated, the turnstile is disengaged from the drive unit and can then be rotated freely.

Please note:

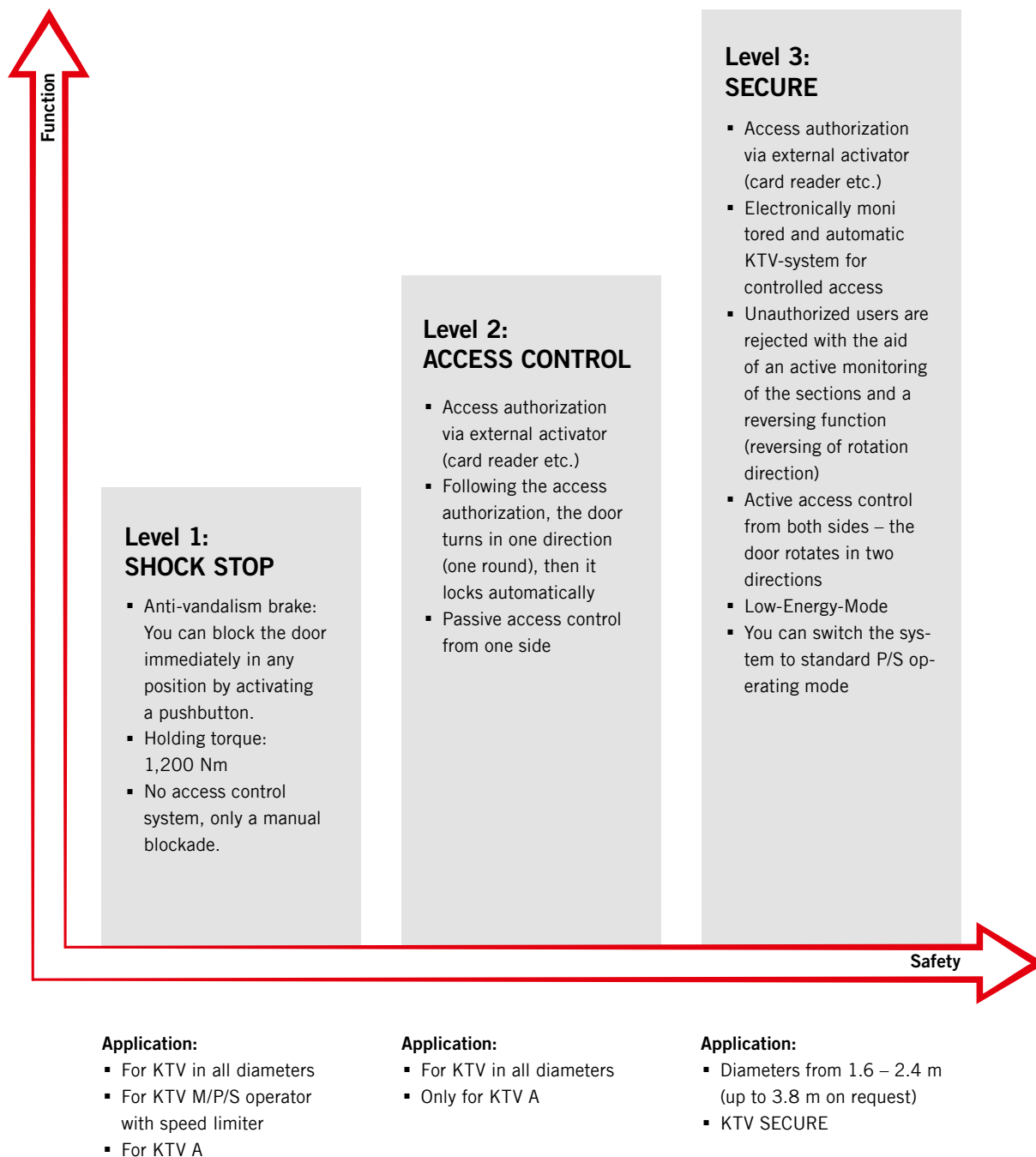
Safety equipment has to be selected according to the national requirements.

In order to comply with DIN 18650, doors require all below-mentioned safety equipment.

ACCESS SECURITY

KTV versions for secured access

DORMA KTV revolving doors can be fitted with security equipment for controlled access depending on their equipment and the prevailing version/configuration.



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