



WINDOW TECHNOLOGY
DOOR TECHNOLOGY
AUTOMATIC ENTRANCE SYSTEMS
BUILDING MANAGEMENT SYSTEMS



DOOR TECHNOLOGY

Door closers with slide rail The OTS 73x series

Securing technology for you



Securing technology for you

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Page 4/5 Picture of person: Little girl running provided by Getty Images

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Attractive design and very convenient access, installation flexibility and standard-compliant safety: door closers are only truly efficient if they meet all requirements. You can rely on the Gretsch-Unitas group for this: as one of the international market leaders for window and door technology and automatic entry and building management systems, we are the competent partner for intelligent door closer solutions – from the individual product to an individually coordinated system. The foundation for this is the 100 year old tradition of our family-owned company, which has stood for innovation, progress and cost-effectiveness from the start. With the OTS 73x series, we thus offer a technically advanced solution that pays off from planning to installation through to daily operation. In order to live up to the expectations of our principle "Securing technology for you" we aim to combine first-rate products with first-rate services.

Convenience and design – as simple as that.

Whether for fire protection, barrier-free construction or burglar protection: the use of overhead door closers to automatically close doors plays an important role in public and private buildings. It is fortunate therefore that this exceptionally compact solution that ensures a high degree of comfort and barrier freedom is available! The smallest of their type, the OTS 73x series of door closers with slide rail combines attractive design with straightforward opening – in compliance with the standards DIN SPEC 1104 and DIN 18040 for barrier-free construction.





Advantages at a glance



- Smallest closer body on the market by comparison: with elegant, streamlined design
- Robust cover in modern GU design instead of a slider: available in different materials and finishes, also in stainless steel
- Uniform robust slide rail cover
- Concealed mounting plate below the cover: for a high-quality cohesive visual appearance
- The dimensions are practically uniform throughout the entire range of door closers which produces a harmonious effect within the overall project
- Uniform drilling pattern for all door closer types

Compact and elegant design



High degree of comfort and slender appearance: the OTS 73x series

The comprehensive product range of the OTS 73x series is in a class of its own due to an attractive design and high degree of opening comfort: although even more compact and elegant, this generation of tried-and-tested closers with slide arm is still easy and pleasant to operate.

The bodies of the series OTS 73x are only 63 mm high, 44 mm deep and 268 mm long and are therefore the smallest currently available on the market. All product types have uniform dimensions, hole patterns and looks which ensures that when different door closers are used, the resulting overall appearance is harmonious. The only exception is the free-swing variant where the dimensions vary slightly.

The visually appealing cohesive surface of the OTS 73x series also leaves nothing to be desired: this is ensured by the elegant slide rail cover and the robust cover which is used instead of a slide-on cover. The covers and the slide arm are available in different materials and finishes and can thus be selected to fit the door and the surrounding architecture. The concealed mounting plate adds the final finishing touch to the attractive design.

The promise of quality made by the door closer's appearance is kept with clever technology: integrated double-heart curve technology and the optional free-swing function ensure very convenient access.



A system for all applications? It works!

The possible applications for overhead door closers are as diverse as the functions of the doors themselves. The OTS 73x series covers all applications with its innovative modular system: the components are simply combined to meet requirements and adjusted individually. This not only makes planning, installation and retrofitting easier, it also saves storage space and fixing accessories.





Advantages at a glance



- Modular system: all application and assembly types can be achieved with only a few components
- The slide rail, slide arm, mounting plate and axle extension are identical and can be combined in all versions
- Easy and fast retrofitting of additional components: for extending scope of functions with special solutions
- Flexible individual assembly: for more or less any project-specific requirements
- Uniform, concealed mounting plate to EN 1154

The innovative modular system of the OTS 73x series

Modular components



The right solution for every application

School, hotel or airport? Single or double-leaf doors?
Installation on the hinge-side or the side opposite to hinges?
Transom or standard installation? Each door closer is an individual answer to specific building situations and door variants. The innovative modular system of the OTS 73x series meets these requirements in every respect which makes it much easier to plan and install any application.

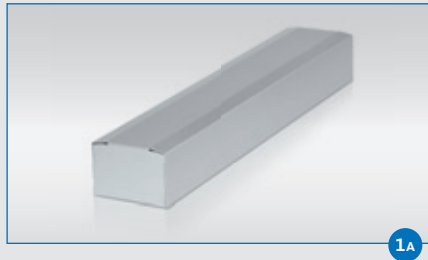
Possible uses range from simple door closing to fire protection all the way through to barrier freedom. In addition, the modular system allows fast retrofitting and easy incorporation of additional functions when implementing special solutions.

Modular components



OTS 73x / OTS 73x BG closer body

- Double-heart curve technology allows the door to be opened and accessed very easily and comfortably.



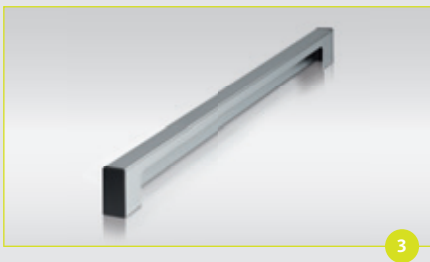
AD-OTS 73x cover

- Elegantly proportioned GU design
- Theft-proof thanks to integrated hood lock



GS slide rail with slide arm

- DIN left and DIN right-handed
- Straightforward, fast and can be flexibly extended to include further components



AD-GS cover

- For the highest expectations in terms of appearance and design
- Fast straightforward installation and retrofitting, with no additional drill holes required



FM mechanical hold-open device

- Steplessly adjustable from 80°–140°
- With integrated ÖB opening restrictor
- On-/off-switchable override function



FE electromechanical hold-open device

- Steplessly adjustable from 85°–140°
- Complete opening beyond hold-open angle possible up to 180°
- Tested and approved by DIBt (German Institute of Building Engineering)

The OTS 73x series makes all this happen as it contains suitable components for all applications and mounting variants across the board: the slide rail and slide arm, the symmetrical mounting plate and axle extension are always the same and can be combined without problems. Without being dismantled, they can be flexibly expanded with additional components – for example, with a mechanical or electromechanical hold-open device, door-leaf coordinator, opening restrictor or smoke switch module.

The advantage is obvious: those who have components that are exactly matched for all requirements need fewer different components in storage and fewer fixing accessories – for more efficiency and cost-effectiveness.



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AD-GS-FE cover

- For the highest expectations in terms of appearance and design
- Simple and fast installation

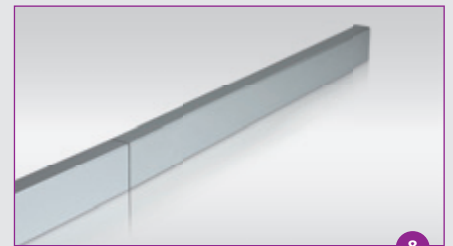


EN
1158

7Bs 7BG

SRI / SRI-BG door-leaf coordinator

- SRI waiting position with load-limiting device
- Optional: with integrated microswitch



8

AD-SRI cover

- For the highest expectations in terms of appearance and design
- Simple and fast installation



EN
1155

9

RSM-H smoke switch module

- For supplying electricity to, and controlling all components of, a hold-open system
- Tested and approved by DIBt (German Institute of Building Engineering)



10

MP mounting plate

- Symmetrical
- For all door closer types and mounting variants



11

ÖB opening restrictor

- Steplessly adjustable limiting angle up to 180°

BS = Hinge side / BG = Site opposite to hinges

The innovative modular system of the OTS 73x series

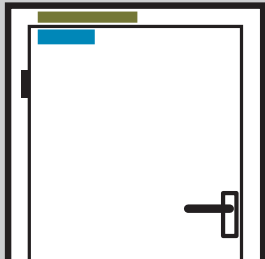
1-leaf solutions



Order poster for download
Hinge-side



Hinge-side

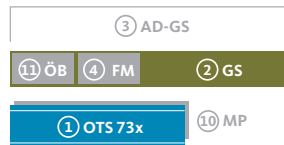


- 1BS OTS 73x
- 1A AD-OTS 73x
- 2 GS

Door closer set with GS slide rail

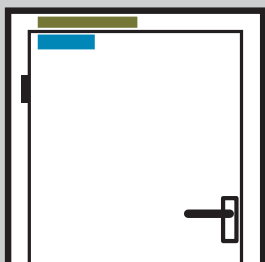
OTS 735 with GS K-18360-00-0-*

OTS 736 with GS K-18362-00-0-*



Option:

- 3 AD-GS K-18364-00-0-*
- 4 FM K-18369-00-0-6
- 11 ÖB** K-18916-00-0-6
- 10 MP K-18280-00-0-1

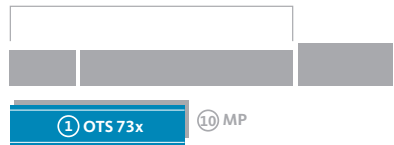


- 1BS OTS 73x
- 1A AD-OTS 73x

Door closer set without slide rail

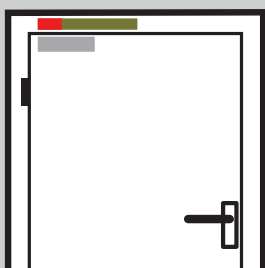
OTS 735 w/o GS K-18498-00-0-*

OTS 736 w/o GS K-18500-00-0-*



Option:

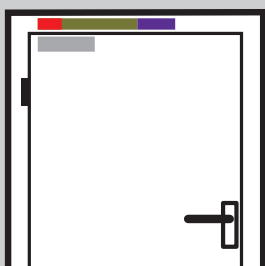
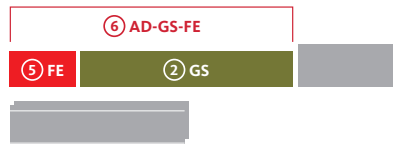
- 10 MP K-18280-00-0-1



- 5 FE
- 2 GS
- 6 AD-GS-FE

Slide rail set GS FE-OTS 73x

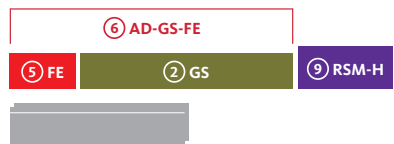
GS FE-OTS 73x K-18352-00-0-*



- 5 FE
- 2 GS
- 6 AD-GS-FE
- 9 RSM-H

Slide rail set GS FER-OTS 73x

GS FER-OTS 73x K-18353-00-0-*



OTS 73x FL door closer sets – ideal for barrier-free project solutions

Our sets can also be supplied with electrically-integrated free-swing function if required.

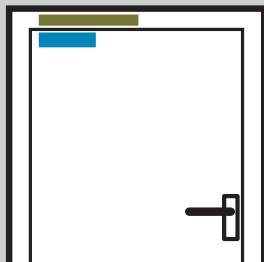
For more information refer to our order catalogue "The door closer range for high-quality project solutions".

*available in finishes -1, -6, -7, -8, -9

Order poster for download
Side opposite to hinges



Side opposite to hinges



- 1BG OTS 73x BG
- 1A AD-OTS 73x
- 2 GS

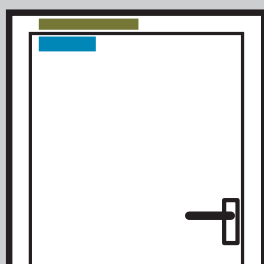
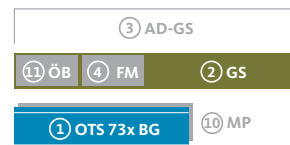
BG door closer set with GS slide rail

OTS 735 BG with GS K-18361-00-0-*

OTS 736 BG with GS K-18363-00-0-*

Option:

- 3 AD-GS K-18364-00-0-*
- 4 FM K-18369-00-0-6
- 11 ÖB**** K-18916-00-0-6
- 10 MP K-18280-00-0-1



- 1BG OTS 73x BG
- 1A AD-OTS 73x

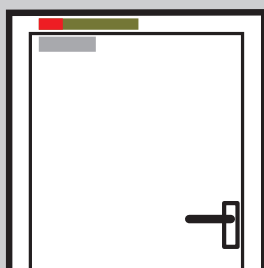
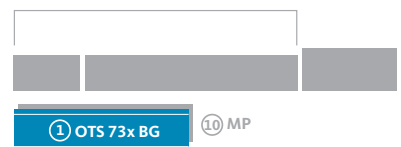
BG door closer set without slide rail

OTS 735 BG w/o GS K-18499-00-0-*

OTS 736 BG w/o GS K-18501-00-0-*

Option:

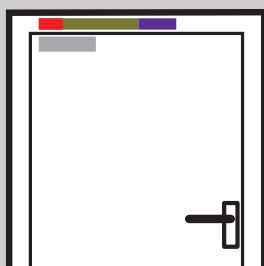
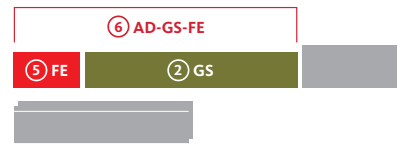
- 10 MP K-18280-00-0-1



- 5 FE
- 2 GS
- 6 AD-GS-FE

Slide rail set GS FE-OTS 73x

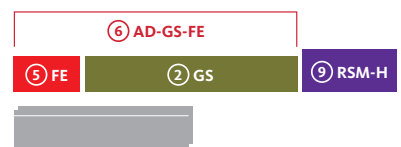
GS FE-OTS 73x K-18352-00-0-*



- 5 FE
- 2 GS
- 6 AD-GS-FE
- 9 RSM-H

Slide rail set GS FER-OTS 73x

GS FER-OTS 73x K-18353-00-0-*



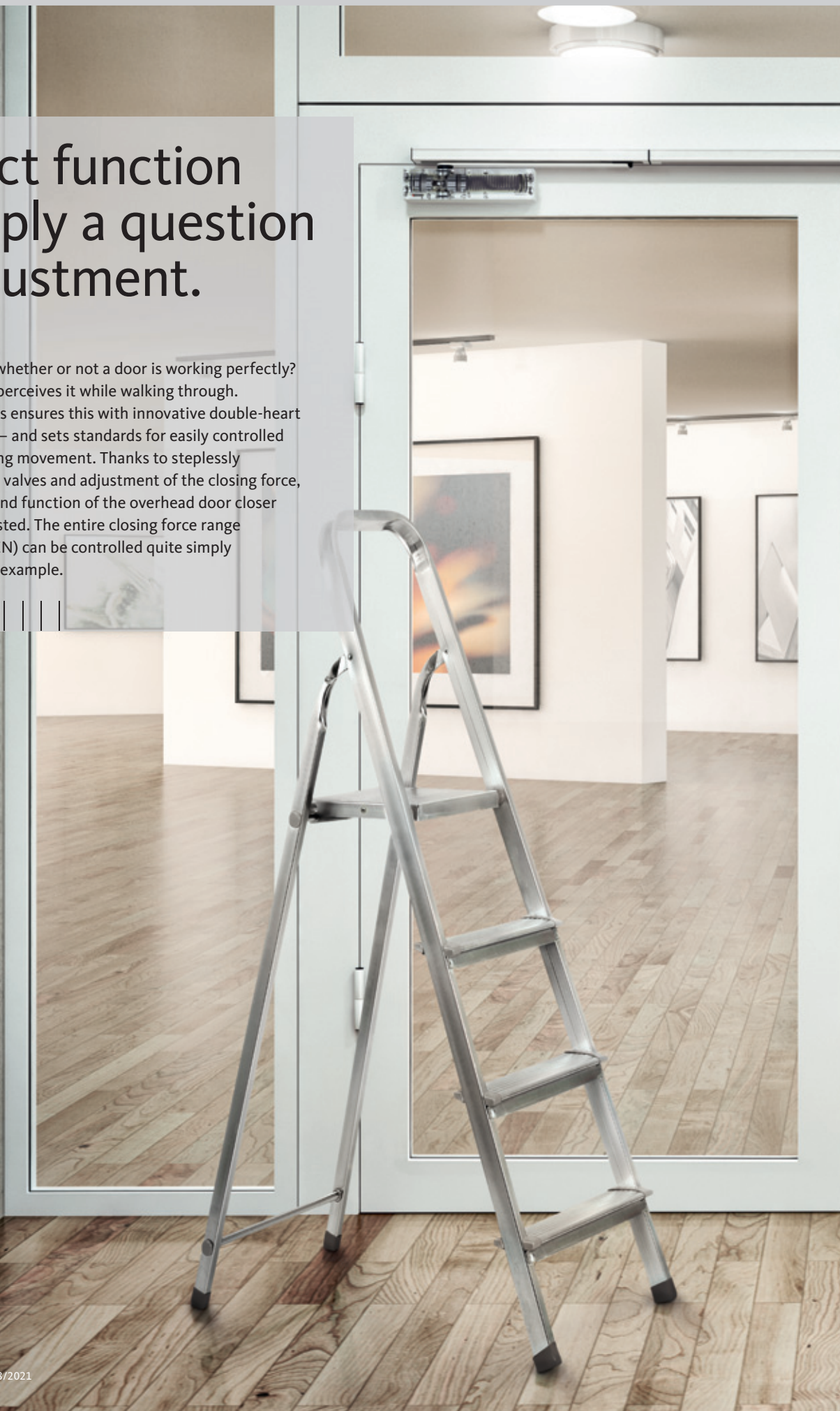
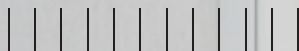
OTS 73x FL door closer sets – ideal for barrier-free project solutions

Our sets can also be supplied with electrically-integrated free-swing function if required.

For more information refer to our order catalogue "The door closer range for high-quality project solutions".

Perfect function is simply a question of adjustment.

How can you tell whether or not a door is working perfectly? When one barely perceives it while walking through. The OTS 73x series ensures this with innovative double-heart curve technology – and sets standards for easily controlled opening and closing movement. Thanks to steplessly adjustable control valves and adjustment of the closing force, the convenience and function of the overhead door closer can be easily adjusted. The entire closing force range (min. EN to max. EN) can be controlled quite simply via nine turns, for example.





Advantages at a glance

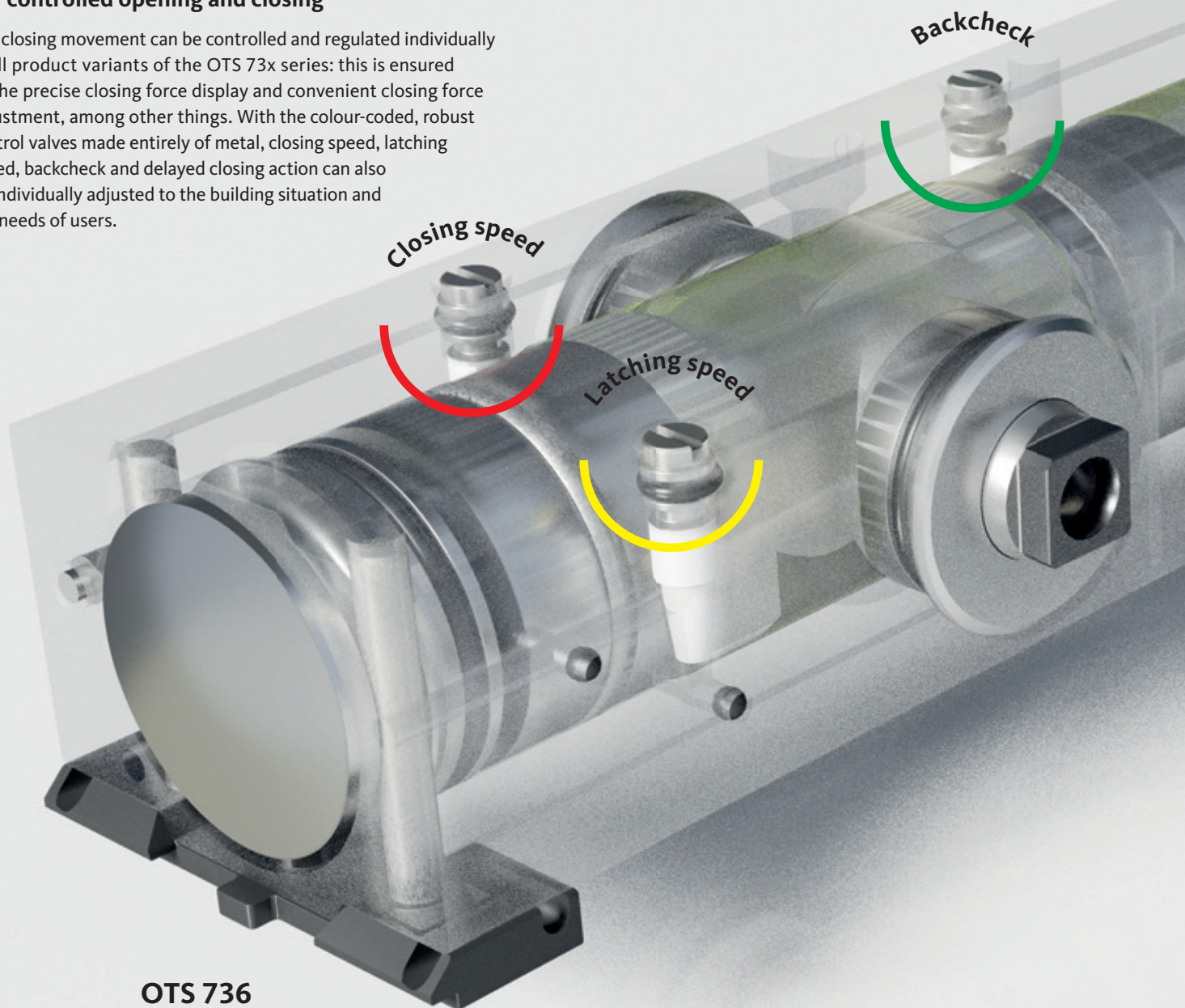


- The closing shaft with patented double-heart curve technology ensures smooth opening and therefore maximum comfort
- Opening and closing movement can be precisely controlled
- For convenient closing force adjustment with only nine turns, from min. up to max. value
- Visual display of set closing force
- Colour-coded control valves prevent confusion during adjustment
- Vandalism-proof due to override function, e.g. the SRI waiting position (can be overcome with pressure) and all hold-open types

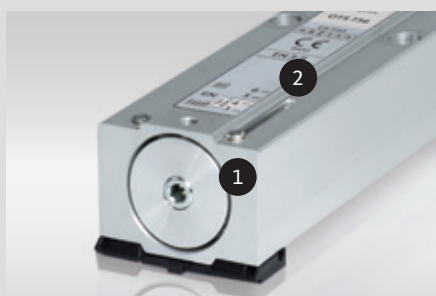
Patented technology meets simple control

For controlled opening and closing

The closing movement can be controlled and regulated individually in all product variants of the OTS 73x series: this is ensured by the precise closing force display and convenient closing force adjustment, among other things. With the colour-coded, robust control valves made entirely of metal, closing speed, latching speed, backcheck and delayed closing action can also be individually adjusted to the building situation and the needs of users.



OTS 736



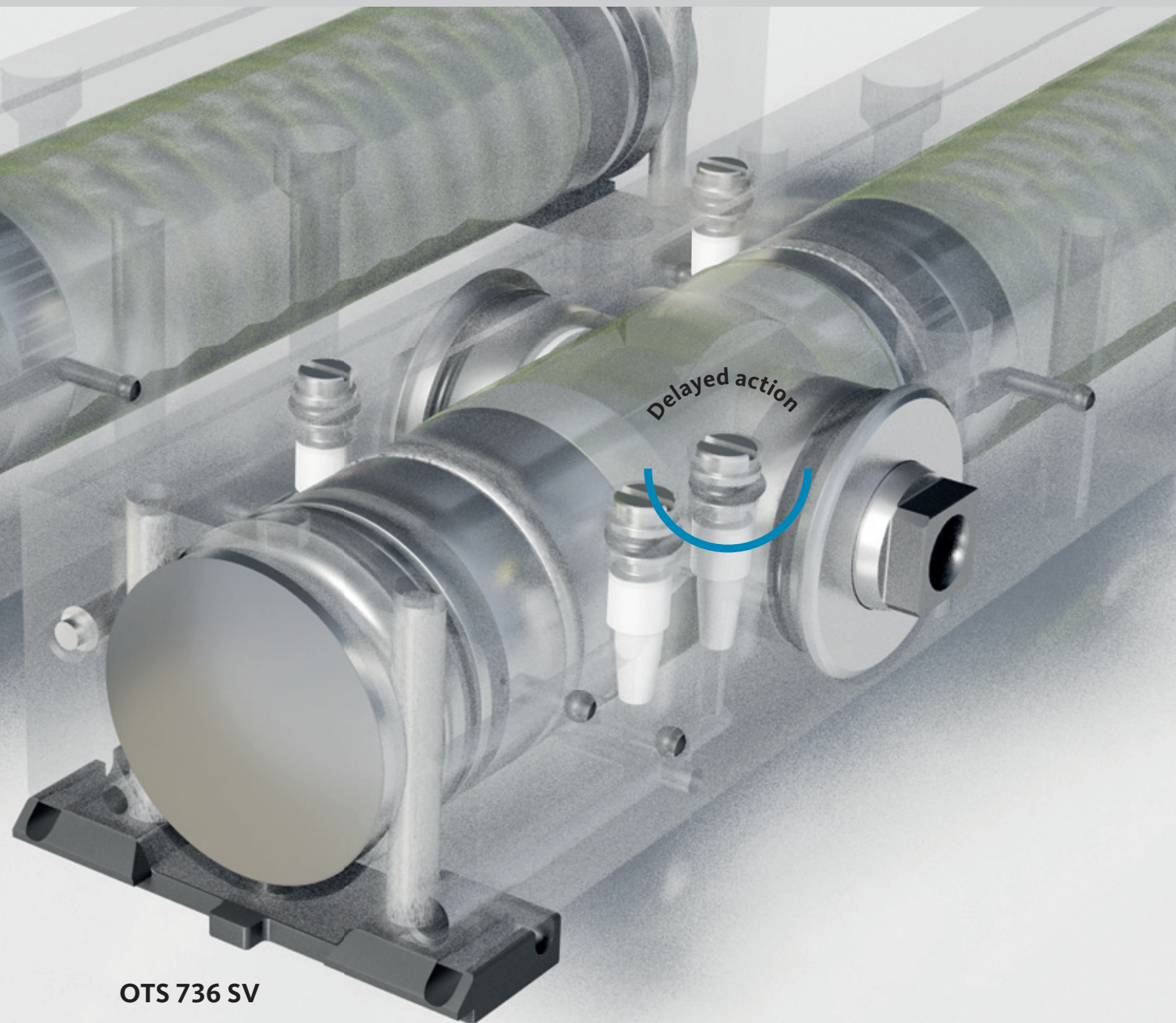
- 1 Closing force adjustment
- 2 Closing force display



Double-heart curve technology



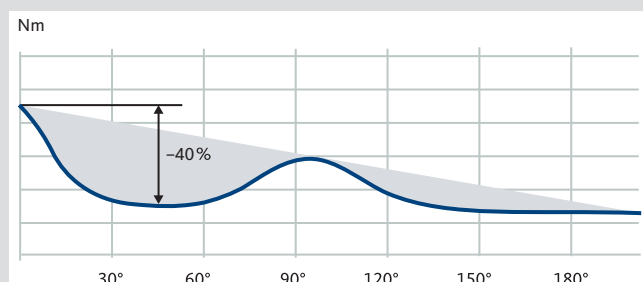
Thermomatic control valves made off metal



OTS 736 SV

Barrier-free convenience due to intelligent use of force

The patented double-heart curve technology of the OTS 73x series allows the door to be opened very easily and comfortably. This enables it to fulfil the DIN SPEC 1104 (CEN/TR 15894) requirements, which prescribe reduction of the opening force by 40% at an opening angle of 2° to 60°. This also allows children and elderly persons or persons with physical disabilities to effortlessly pass through large doors.



The strongly decreasing force at a door opening angle of 2° to 60° makes opening easier

All expectations incorporated.

Whether standard, with free-swing function or delayed closing action: with an all-encompassing product range the slide rail door closer generation of the OTS 73x series caters for an extremely wide range of applications and requirements. Irrespective of which door closer version you use, rest assured it will always provide security that complies with the standards.



Overhead door closer OTS 73x FL with free-swing function

Overhead door closer OTS 73x



One slide rail for all applications



Single-leaf



Double-leaf

Overhead door closer OTS 73x SV with delayed closing action



ction



Standard installation on hinge-side



Standard installation on side opposite to hinges



Transom installation on hinge-side

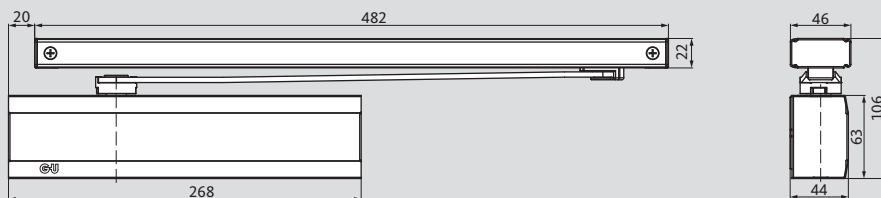


Transom installation on side opposite to hinges

OTS 73x / OTS 73x FL surface-mounted overhead door closers



OTS 73x overhead door closer



- Tested in accordance with EN 1154
- With double-heart curve technology. This ensures DIN SPEC 1104 conformity and suitability for barrier-free construction according to DIN 18040
- Smallest dimension: 268 x 63 x 44 mm, including cover
- Cover with safeguard
- Valve functions:
 - Closing speed
 - Latching speed
 - Backcheck
 - Delayed closing action (type SV) ^[1]

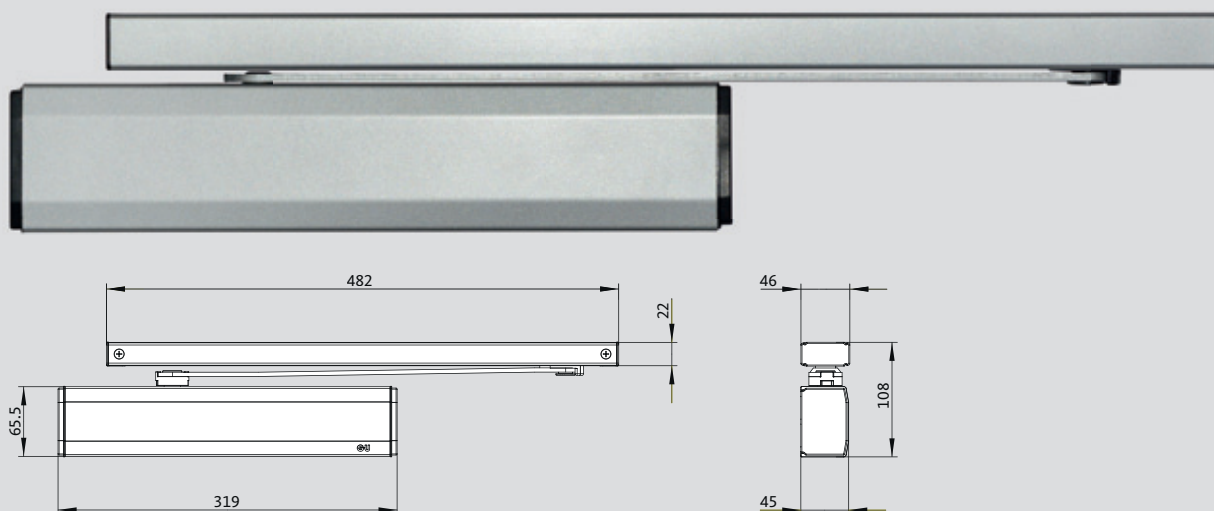


- One slide rail for all application and installation types (modular system)
 - For hinge-side and side opposite to hinges
 - For standard and transom installation
- Slide rail installation height
 - Standard (without cover): 22 mm
 - Standard (with cover): 25 mm
- Fast and uncomplicated extension with further components:
 - FM mechanical hold-open device ^{[1][2]}
 - FE electromechanical hold-open device ^[2]
 - SRI door-leaf coordinator
 - ÖB opening restrictor

Overview of variants

Type designation	OTS 735	OTS 735 BG	OTS 736	OTS 736 BG	OTS 736 SV	OTS 736 SV BG
Installation	Hinge-side	Side opposite to hinges	Hinge-side	Side opposite to hinges	Hinge-side	Side opposite to hinges
Closing force size according to EN 1154	2-5	2-5	3-6	3-6	3-6	3-6

OTS 73x FL overhead door closer with free-swing function



- Tested to EN 1154/EN 1155 and approved by DIBt (German Institute of Building Engineering)
- Accessibility of a door without exertion of force in both directions, as if no door closer were installed
- Smallest dimension: 319 x 65.5 x 45 mm, including cover
- Secure and automatic closing in the event of a fire
- With electrically integrated free-swing function, can be activated from 0°–140°
- Valve functions:
 - Closing speed
 - Latching speed



- Fire and smoke protection doors
- For swing doors up to 1400 mm (1-leaf) or 2800 mm (2-leaf)
- DIN left and DIN right
- Hinge side and side opposite to hinges
- Standard and transom installation
- Min. door leaf width: 600 mm
- Max. door opening and closing angle
 - Standard installation on hinge-side: 180°
 - Standard installation on side opposite to hinges: 120°^[3]

Overview of variants

Type designation	OTS 735 FL	OTS 735 FL BG	OTS 736 FL	OTS 736 FL BG
Installation	Hinge-side	Side opposite to hinges	Hinge-side	Side opposite to hinges
Closing force size according to EN 1154	5	5	6	6

[1] Not approved for fire and smoke protection doors. | [2] Only for overhead door closers without free-swing function.
 [3] Depending on installation situation. Position door stop for max. door opening angle.

Hold-open systems in accordance with EN 1155

officially approved by DIBt (German Institute of Building Engineering)



High level of safety with low-key presence

Their capability goes unnoticed during everyday use, but is indispensable when serious situations arise: electrical hold-open systems are part of preventative fire protection. They perform the task of keeping fire barriers in escape and rescue routes open, especially fire and smoke protection doors. They do this so efficiently that many people pass routinely through the door without noticing it. When fire breaks out on the other hand, an integrated smoke detector triggers the system and the door closes automatically. Thus preventing the spread of smoke gases and fire to adjacent rooms and buildings as legally-prescribed.

Applications

Fire barriers in escape and rescue routes, e.g. fire and smoke protection doors.

These doors are normally used in kindergartens, hospitals, schools, hotels and residential homes for the elderly. In addition to fire protection, their purpose is to provide barrier-free access to children, elderly persons and persons with disabilities.

As a whole they therefore ensure a smooth flow of public and goods traffic during daily operations.

Test requirements/Approval

In Germany, technical approval is required for hold-open systems and is issued by the German Institute of Building Engineering (DIBt). This fundamentally requires that only complete systems, consisting of tested and certified individual components can be approved. If non-approved components are subsequently installed, the testing must be carried out again.



Fig. above:
Hold-open system during daily operations



Fig. on right:
Hold-open system in action in the event of fire

System structure

A hold-open system consists of the following components:

- at least one fire detection element for smoke and heat detection, the ORS 142 **1** or ORS 142 W **2** optical smoke switch
- one power supply unit for energy supply, the RSM-H power supply and tripping unit, for example **3**
- a tripping unit to initiate the closing operation, the RSM-H power supply and tripping unit, for example **3**
- a hold-open device that holds the door open, for example – an electromechanical hold-open device integrated into the slide rail (FE-OTS 73x) **4** or an integrated hold-open system (OTS 73x FL) **4** or a hold-open magnet (electromagnetic) **5**
- an on-wall/in-wall manual release push-button as switch **6**



Door closers

Name of the closer body variant	OTS 735	OTS 735 BG	OTS 736	OTS 736 BG
Dimensions (with cover) L x H x D in mm	268 x 63 x 44	268 x 63 x 44	268 x 63 x 44	268 x 63 x 44
Closing force sizes according to EN 1154	2-5	2-5	3-6	3-6
Application				
1-leaf	■	■	■	■
2-leaf	■	■	■	■
Standard installation on hinge-side	■	-	■	-
Transom installation on side opposite to hinges	■	-	■	-
Standard installation on side opposite to hinges	-	■	-	■
Transom installation on hinge-side	-	■	-	■
Approval for fire and smoke protection doors				
Max. leaf width (mm) 1-leaf	1250	1250	1400	1400
Max. leaf width (mm) 2-leaf	2500	2500	2800	2800
Adjustment functions				
Closing speed	■	■	■	■
Latch action / Latching speed	■	■	■	■
Backcheck	■ ^[1]	■	■ ^[1]	■
Delayed action	-	-	-	-
Installation / Functions				
Steplessly adjustable closing force	■	■	■	■
Freewheel function 0°-140°	-	-	-	-
Max. door opening and closing angle (hinge-side / side opposite to hinges) ^[3]	180° / 120°	180° / 120°	180° / 120°	180° / 120°
Opening restrictor ^[2]	optional	optional	optional	optional
DIN left/DIN right	■	■	■	■
Hold-open device (optional)				
FM mechanical hold-open device ^[4] Adjustable hold-open angle	stepless 80°-140° (opening beyond hold-open angle possible)	stepless 80°-120° (opening beyond hold-open angle possible) ^[3]	stepless 80°-140° (opening beyond hold-open angle possible)	stepless 80°-120° (opening beyond hold-open angle possible) ^[3]
FE electromechanical hold-open device Adjustable hold-open angle	stepless 85°-140° (opening beyond hold-open angle possible)	stepless 85°-120° (opening beyond hold-open angle possible) ^[3]	stepless 85°-140° (opening beyond hold-open angle possible)	stepless 85°-120° (opening beyond hold-open angle possible) ^[3]

[1] Not effective for transom installation on side opposite to hinges
[2] No substitute for doorstop

[3] Depends on the installation situation, BS = hinge-side / BG = side opposite to hinges
[4] Not approved for fire and smoke protection doors.

OTS 736 SV	OTS 736 SV BG	OTS 735 FL	OTS 735 FL BG	OTS 736 FL	OTS 736 FL BG
268 x 63 x 44	268 x 63 x 44	319 x 65.5 x 45	319 x 65.5 x 45	319 x 65.5 x 45	319 x 65.5 x 45
3-6	3-6	5	5	6	6
■	■	■	■	■	■
■	■	■	■	■	■
■	-	■	-	■	-
■	-	■	-	■	-
-	■	-	■	-	■
-	■	-	■	-	■
-	-				
1400	1400	1250	1250	1400	1400
2800	2800	2500	2500	2800	2800
■	■	■	■	■	■
■	■	■	■	■	■
■ ^[1]	■	-	-	-	-
■	■	-	-	-	-
-	-	-	-	-	-
-	-	■	■	■	■
180° / 120°	180° / 120°	180° / 120°	180° / 120°	180° / 120°	180° / 120°
optional	optional	optional	optional	optional	optional
■	■	■	■	■	■
stepless 80°-140° (opening beyond hold-open angle possible)	stepless 80°-120° (opening beyond hold-open angle possible) ^[3]	-	-	-	-
stepless 85°-140° (opening beyond hold-open angle possible)	stepless 85°-120° (opening beyond hold-open angle possible) ^[3]	-	-	-	-



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