



WINDOW TECHNOLOGY
DOOR TECHNOLOGY
AUTOMATIC ENTRANCE SYSTEMS
BUILDING MANAGEMENT SYSTEMS



DOOR TECHNOLOGY – ORDER CATALOGUE

The door closer range for high-quality project solutions

Edition 01/2018

- Surface-mounted overhead door closers with slide rail
- Concealed door closers
- Surface-mounted overhead door closers with scissor-action arm
- Hold-open systems
- Accessories

Securing technology for you





By courtesy of kap Planungsbüro für Bauleistungen GmbH, Fellbach

Commitment to tradition – setting the highest design and quality standards

A corporate group with tradition

For over 100 years, the owner-managed GU Group has been fascinated with the opening, moving, closing and locking of windows and doors. Technical innovations and continual development of architectural hardware technology have and will continue to shape forces in the market, setting new standards and trends for the future.

The Gretsch-Unitas Group

The corporate group consists of more than 50 manufacturing and sales companies in 35 countries. With the internationally leading brands GU (architectural hardware), BKS (locks, locking systems) and FERCO (architectural hardware), the group offers "Securing technology for you".

Corporate group product overview

In its window technology, door technology, automatic entrance systems and building management systems divisions, the GU Group manufactures and distributes about 30,000 products which are easy to combine.

Securing technology for you

We use the major challenges of creating innovative and visionary system solutions to break new ground. Together with architects, planners and profile system manufacturers, we develop individual comprehensive solutions.

Technical information

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Surface-mounted overhead door closers with slide rail

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Concealed door closers

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Surface-mounted overhead door closers with scissor-action arm

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Accessories

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General information

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Exclusion of liability / Copyright notice / Image credits

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List of abbreviations



Legend / Definition of terms

Abbreviation	Meaning
AD	Cover
AV	Axle extension
BC	Backcheck
BG	Side opposite to hinges
BS	Hinge-side
FE	Electromechanical hold-open device
FE-SRI	Electromechanical hold-open device with door leaf coordination (for 2-leaf doors)
FER	Hold-open systems with fire detector and additional power supply
FER-SRI	Hold-open systems with fire detector, additional power supply and door leaf coordination (for 2-leaf doors)
FL	Free-swing function
FM	Mechanical hold-open device
FS	Fire protection door
GFB	Active leaf width
GS	Slide rail
KM	Transom installation
MNK	Carrier bar
MP	Mounting plate
NM	Standard installation
ÖB	Opening restriction
ÖD	Backcheck
OTS	Overhead door closers
RS	Smoke protection door
RSM	Smoke switch module
SFB	Passive leaf width
SRA	Door-leaf coordinator, face-fixed
SRI	Integrated door-leaf coordinator
SV	Delayed closing action
UTS	Floor spring
VTS	Concealed door closer

Definition of logos

Logo	Meaning
	EN 1154 Certified door closing equipment with controlled closing sequence
	EN 1155 Certified and approved products for electrically-operated hold-open systems
	EN 1158 Certified door-leaf coordinators for use on 2-leaf swing doors
	DIN SPEC 1104 Suitable for barrier-free construction in compliance with DIN SPEC 1104
	DIN 18040 Suitable for barrier-free construction in compliance with DIN 18040
	VdS-tested
	Certified and approved for use on fire and smoke protection doors
	CE = The abbreviation 'CE' stands for the European Communities (French; "Communautés Européennes") The product satisfies all legally-prescribed conditions for the CE marking and matches the characteristics stated in the Declaration of Performance: "The CE-marking is the technical passport for the product within the European Economic Area." (Deutsches Institut für Normung e. V., the German institute for standardisation)

Closing force sizes in accordance with EN 1154

Sizes	Door leaf widths in mm
EN 1	to 750
EN 2	to 850
EN 3	to 950
EN 4	to 1100
EN 5	to 1250
EN 6	to 1400

If required due to the structural (door height and weight) or local (wind) conditions, larger size adjustments must be selected.

Standard finish

Number	Colour
0	raw/uncoated (for painting onsite)
1	silver
6	black (only for OTS 73x series)
7	white
9	other shades and special colours available upon request

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Overview matrix

Surface-mounted overhead door closers with slide rail



Surface-mounted overhead door closers with slide rail

Model	OTS 736	OTS 736 BG	OTS 735	OTS 735 BG
Page	32, 44 – 51	32, 44 – 51	32, 44 – 51	32, 44 – 51
Application range				
1-leaf	■	■	■	■
2-leaf	■	■	■	■
Approved for use on fire and smoke protection doors				
Max. door leaf width, 1-leaf (mm)	1400	1400	1250	1250
Max. door opening and closing angle	180° ^[3] /120° ^[4]	180° ^[3] /120° ^[4]	180° ^[3] /120° ^[4]	180° ^[3] /120° ^[4]
Adjustment functions				
Closing force sizes in accordance with EN 1154	EN 3 – 6	EN 3 – 6	EN 2 – 5	EN 2 – 5
Closing speed	■	■	■	■
Latching speed	■	■	■	■
Backcheck ^[2]	■	■	■	■
Delayed closing action ^[1]	Type SV	Type SV	–	–
Hold-open variants				
Electromechanical hold-open device	optional	optional	optional	optional
Mechanical hold-open device ^[1]	optional	optional	optional	optional
Installation variants				
Standard installation on hinge-side	■	–	■	–
Transom installation on side opposite to hinges	■	–	■	–
Standard installation on side opposite to hinges	–	■	–	■
Transom installation on hinge-side	–	■	–	■
Suitable for barrier-free construction				
according to DIN SPEC 1104	■	■	■	■
according to DIN 18040	■	■	■	■

Surface-mounted overhead door closers with slide rail and free-swing function

Model	OTS 736 FL	OTS 736 FL BG	OTS 735 FL	OTS 735 FL BG
Page	56 – 63	56 – 63	56 – 63	56 – 63
Application range				
1-leaf	■	■	■	■
2-leaf	■	■	■	■
Approved for use on fire and smoke protection doors				
Max. door leaf width, 1-leaf (mm)	1400	1400	1250	1250
Max. door opening and closing angle	180° ^[3] /120° ^[4]	180° ^[3] /120° ^[4]	180° ^[3] /120° ^[4]	180° ^[3] /120° ^[4]
Adjustment functions				
Closing force sizes in accordance with EN 1154	EN 6	EN 6	EN 5	EN 5
Closing speed	■	■	■	■
Latching speed	■	■	■	■
Hold-open variants				
Electromechanical hold-open device	–	–	–	–
Mechanical hold-open device ^[1]	–	–	–	–
Installation variants				
Standard installation on hinge-side	■	–	■	–
Transom installation on side opposite to hinges	■	–	■	–
Standard installation on side opposite to hinges	–	■	–	■
Transom installation on hinge-side	–	■	–	■
Suitable for barrier-free construction				
according to DIN SPEC 1104	■	■	■	■
according to DIN 18040	■	■	■	■



Concealed door closers			Rebate door closers		
Model	VTS 735	VTS 735/4	VTS 735 FL	20	24
Page	100, 112 – 113	101, 112 – 113	102, 114 – 115	136 – 137	136 – 137
Application range					
Concealed "invisible" installation	in the vertical door rebate	-	-	-	■
	in the door leaf	■	■	■	-
1-leaf doors – interior use	■	■	■	■	■
2-leaf doors – interior use	■	■	■	-	-
Approved for use on fire and smoke protection doors				-	-
For timber and metal doors	■	■	■	■	■
Round, segmental and lancet arched doors	-	-	-	■	■
Max. door leaf width (mm)	1250	1250	1250	900	1000
Min. door leaf thickness (mm)	40	40	40	30	40
Max. Door opening and closing angle ^[5]	120°	120°	120°	-	-
Adjustment functions					
Closing force sizes in accordance with EN 1154	EN 3 – 5	EN 3 – 5	EN 5	EN 1 – 2	EN 2 – 3
Closing speed	■	■	■	■	■
Latching speed	■	■	■	■	■
Backcheck	■	■	-	-	-
Hold-open variants					
Electromechanical hold-open device	optional	optional	-	-	-
Mechanical hold-open device ^[1]	optional	optional	-	-	-
Installation variants					
For DIN left and DIN right swing doors	■	■	■	■	■
Suitable for barrier-free construction					
according to DIN SPEC 1104	■	■	■	-	-
according to DIN 18040	■	■	■	-	-

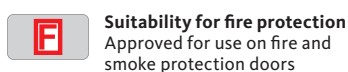
[1] Not approved for fire and smoke protection doors

[2] Not with transom installation on side opposite to hinges

[3] Standard installation on hinge-side (OTS 73x)

[4] Standard installation on side opposite to hinges (OTS 73x BG); depending on installation situation

[5] Depending on installation situation



Overview matrix

Surface-mounted overhead door closers with scissor-action arm Crank closer



Surface-mounted overhead door closers with scissor-action arm

Model	OTS 536	OTS 430	OTS 210
Page	140 – 145	150 – 155	160 – 165
Application range			
1-leaf	■	■	■
Approved for use on fire and smoke protection doors			-
Max. door leaf width, 1-leaf (mm)	1400	1250	1100
Max. door opening and closing angle ^[4]	180°	180°	180°
Adjustment functions			
Closing force sizes in accordance with EN 1154	EN 2 – 6	EN 2 – 5	EN 2/3/4
Closing speed	■	■	■
Latching speed	■	■	■
Backcheck	■	Type BC	-
Delayed closing action ^[1]	Type SV	-	-
Hold-open variants			
Electromechanical hold-open ^[2]	optional	optional	-
Mechanical hold-open ^[1]	optional	optional	optional
Installation variants			
Standard installation on hinge-side	■	■	■
Transom installation on side opposite to hinges	■	■	■

Crank closer

Model	OTS 81	OTS 80
Page	170 – 175	176 – 179
Application range		
1-leaf	■	■
Approved for use on fire and smoke protection doors	^[3]	-
Maximum door leaf width, 1-leaf (mm)	1280	1600
Adjustment functions		
Closing force sizes according to DIN 18263-1	2 – 5	2 – 6
Closing speed	■	■
Latching speed	■	■
Backcheck	-	-
Delayed action	-	-
Hold-open variants		
Electromechanical hold-open	-	-
Mechanical hold-open ^[1]	optional	optional
Max. door opening and closing angle	90° or 180°	90 to 180°
Installation variants		
Standard installation on hinge-side	■	■
Transom installation on side opposite to hinges	■	■

[1] Not approved for fire and smoke protection doors

[2] Only with magnetic clamp

[3] According to DIN 18263, part 1

[4] Standard mounting on hinge-side



Suitability for fire protection
Approved for use on fire and smoke protection doors



General

Designation	Installation instructions (MA)	Installation drawing
Product information OTS/UTS/VTS	0.46884	-

OTS 73x surface-mounted overhead door closers

Designation	Installation instructions (MA)	Installation drawing
Door closers with slide rail OTS 735/OTS 736	0.45969	0.45942
Door closers with slide rail OTS 735 BG/OTS 736 BG	0.45979	0.45942
Door closers with slide rail with delayed closing action OTS 736 SV	0.46009	-
Door closers with slide rail with delayed closing action OTS 736 SV BG	0.46010	-
Door closer with slide rail and free-swing function OTS 735 FL/OTS 736 FL	0.46542	0.45942
Door closer with slide rail and free-swing function OTS 735 FL BG/OTS 736 FL BG	0.46543	0.45942
Integrated door-leaf coordinator for OTS 73x SRI-OTS 73x	0.46527	0.47034
Integrated door-leaf coordinator for OTS 73x BG SRI-OTS 73x BG	0.46538	0.47034
Smoke switch module RSM	0.46838	0.47033
Cover AD-OTS 735/736	0.45996	-
Electromechanical hold-open device FE-OTS 73x	0.46006	0.47032
Mechanical hold-open device FM-OTS 73x	0.46007	-
Opening restriction ÖB	0.46716	-
Flat plate for OTS 73x	0.46567	0.46567
Angular lintel bracket for OTS 73x	0.46568	0.46568
Clamping plate for OTS 73x	0.46569	0.46569
Carrier bar (MNK) 8642	0.46521	-
Adjustable carrier bar (MNK) 8642	0.46863	-
Axle extension for sliding block OTS 73x	0.46903	-

Installation instructions / Installation drawings

VTS 73x concealed door closers

Rebate door closers



VTS 73x concealed door closers

Designation	Installation instructions (MA)	Installation drawing	
		Metal	Timber
Concealed door closer VTS 735	0.45990	0.47114	0.45947
Standard slide rail for 1-leaf doors GS VTS 73x 20x12	0.45980	0.47114	0.45947
Functional slide rail for FE-VTS and SRI-VTS GS VTS 73x 26x32	0.45998	0.47114	0.45947
Mechanical hold-open device FM-VTS 20x12	0.46797	-	-
Mechanical hold-open device FM-VTS 26x32	0.46008	-	-
Electromechanical hold-open device FE-VTS 26x32	0.46001	0.47115	0.47037
Door-leaf coordinators SRI-VTS 735 26x32	0.46000	0.47116	0.47038
Opening restriction ÖB-VTS 73x 20x12	0.47045	-	-
Opening restriction ÖB VTS 73x 26x32	0.47046	-	-
Fixing plate VTS 73x	0.45999	0.47114	-

Rebate door closers

Door closer type	Installation instructions (MA)	Installation drawing	
		Metal	Timber
20/24	0.45411	0.43723 (Schüco profile system)	0.45411 (flush interior door) 0.43722 (flush interior door with steel door frame) 0.43736 (rebated door)

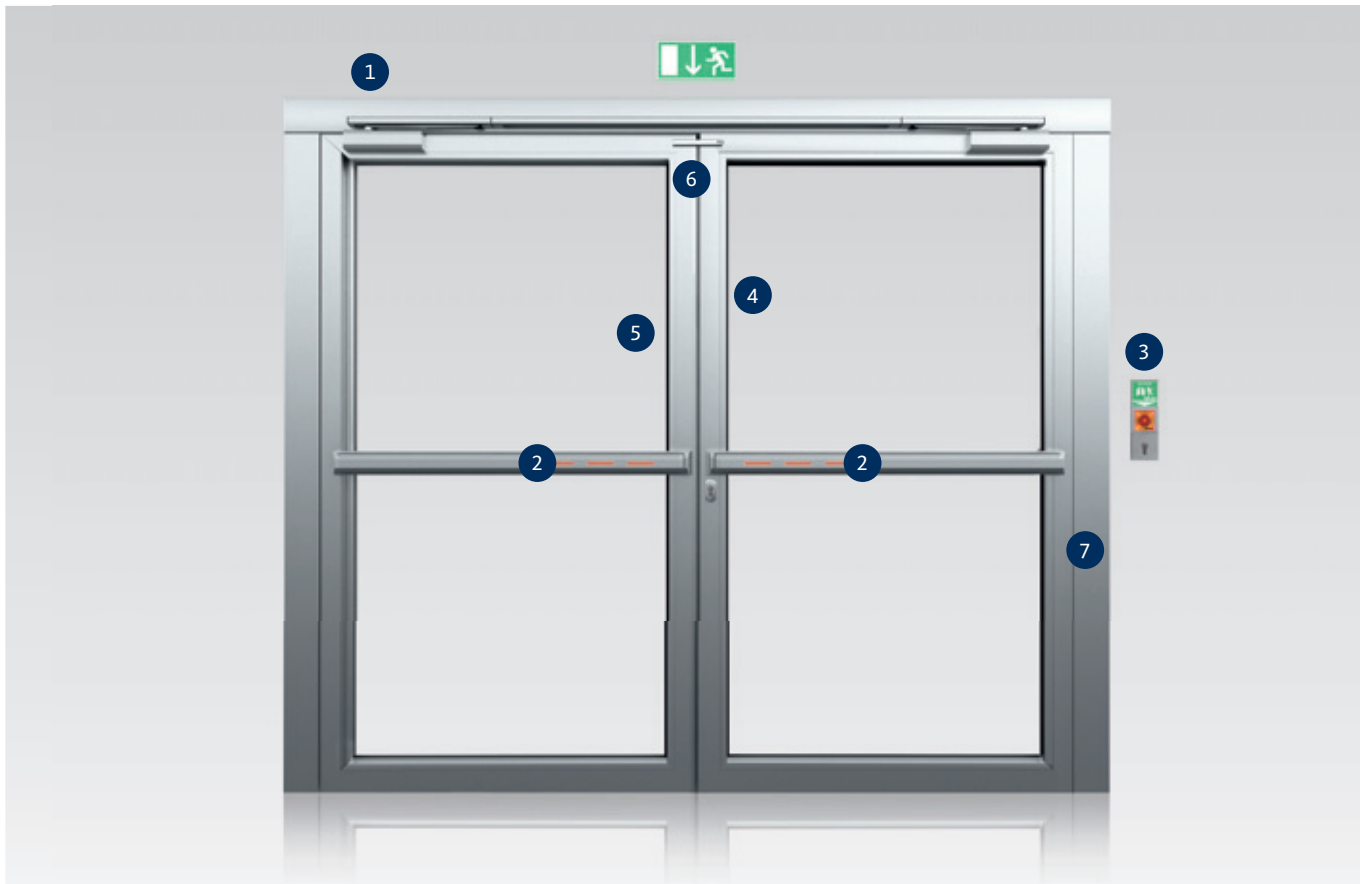


Surface-mounted overhead door closers with scissor-action arm

Door closer type	Accessories	Installation instructions (MA)
OTS 210	–	0.45361
OTS 430	–	0.45360
OTS 430 BC	–	0.45359
OTS 210/OTS 430	Hold-open arm E/A	0.45661
	Angular lintel bracket	0.45994
	Clamping plate	0.45753
	Flat plate	0.45997
	Cover	0.45769
OTS 536	–	0.45431
OTS 536 SV	–	0.45667
OTS 536	Hold-open arm E/A	0.45661
	Combined angular bracket	0.45562
	Clamping plate for all-glass doors	0.45563
	Angular bracket for parallel arm assembly	0.45484
	Axle extension	0.45652

Doors in escape and rescue routes

Components



Suggested components

- 1 Surface-mounted overhead door closer with OTS 736 slide rail and GS SRI-OTS 73x slide rail set
- 2 Electrically-locking Touch Bar EVT
- 3 FTNT10 escape door terminal
- 4 SECURY 19 multi-point lock, self-locking, with panic function (optionally B/C/E)
- 5 Shoot-bolt lock series 19
- 6 Carrier bar (MNK) 8642
- 7 Detachable cable duct



Application areas

It is difficult to maintain an overview of door types and combinations owing to their sheer diversity. They vary depending on the building type, what they are used for and on other requirements which in part vary considerably. In addition to fire protection, safety, accessibility, access control, design and comfort requirements play a particularly important role.

The local building regulations (LBO) in Germany stipulate the **self-closing characteristic** for fire and smoke protection doors in particular. After all, these door assemblies must close safely during a fire to reliably prevent the spread of smoke gases and fire to other rooms and buildings. The **self-closing operation** can be unchecked using spring (pretensioned) hinges or **implemented more comfortably using door closers**.

This means that the door closer (with the designation "Door closing device with a controlled and reliable closing sequence" in applicable standards such as EN 1154) plays a central role in fire protection safety. EN 1154 (already mentioned) states the basic and additional requirements to be met by door closers. Products are also tested and approved according to this standard. EN 1158 describes extended functions such as the door leaf coordination at double-leaf doors with a defined closing sequence of active and passive leaf. These functions are also tested in accordance with this standard.

Fire and smoke protection doors are often used together with a hold-open system. During daily operation, the system holds these doors open electrically if they are very frequently used, and only closes the leaves automatically in the event of fire to prevent the spread of smoke gases and fire. These kind of hold-open systems are primarily used in public facilities such as kindergartens, schools, hospitals, hotels and residential homes for the elderly. Modern door closers are normally used in these systems if they are required to close automatically.

Requirements for fire rated doors

- Fire and smoke protection doors are a statutory requirement
- Barriers must close and lock automatically in the event of fire
- Single or double-leaf doors in fire-resistance classes T-30 to T-90 must resist the spread of fire and smoke to other rooms for 30 minutes or even 90 minutes, depending on the version and approval
- A lock with latch and at least one handle lever on the "active leaf" on the "inner side" is prescribed. All passive leaves (even the smallest "inactive leaf") also require an automatically locking passive leaf lock (linkage)
- With two-leaf doors, a door-leaf coordinator (SRI) and carrier bar (MNK) must be installed

Omitting the use of carrier bars

If double-leaf doors are equipped with locking systems that ensure the active leaf always reaches the minimum waiting position, it is no longer necessary to install a carrier bar

- Active leaves and passive or inactive leaves require a door closer to EN 1154. The same applies if they are "secured" via a lever-operated shoot-bolt lock
- For **fire and smoke protection doors**, the installation method and installation position are strictly prescribed. This equipment must be approved by the German Institute of Building Engineering (DIBt). The verifications of suitability for the door and guidelines of the DIBt for hold-open systems must be observed in this case. Deviations from the guidelines represent non-compliance with the intended use

A hold-open system consists of the following components:

- A power supply unit which supplies power
- At least one fire detection element for detection of smoke or heat
- One triggering device to initiate the closing operation
- One hold-open device that holds the closing barrier in position during day-to-day operation

You can find solutions for the GU hold-open systems on pages 180 – 198.

Standard and statutory regulations/approvals

EN 1154, EN 1155 and EN 1158



Outstanding functional reliability when closing in the event of fire – compliance with the standards and test requirements

Fire or smoke protection doors must generally be self-closing. Only tested and certified door closer systems can be used for controlled closing. Certified systems with door leaf coordination are also prescribed for double-leaf fire or smoke protection doors. This ensures that the passive leaf is closed first, followed by the active leaf. Only in this case can the required barrier be ensured.

The generation of 7-series slide-rail closers have all been tested and approved to the relevant standards EN 1154, EN 1155 and EN 1158.

EN 1154

This standard sets out the requirements and test methods for door closing devices with controlled closing sequence. It always applies if it must be ensured that when a swing door is opened manually, it closes again automatically and the closing action is to be hydraulically damped.

The standard has been included in the Building Rules List B Part 1 and therefore anchored in German law since 2005. It requires that inspections (MPA (material testing office in Germany), VdS (independent safety institution in Germany) are carried out as well as regular annual monitoring.

All products tested in accordance with this standard are to be classified using a 6-digit code.

DIN 18263, part 1

Requirements for door closers with hydraulic damping.

EN 1155

This standard defines the testing requirements and conditions in relation to electrical hold-open devices for fire and smoke protection doors. The purpose of an electrically-controlled hold-open system is to ensure self-closing fire and smoke-protection doors are reliably held in the open position, yet can also be securely released as quickly as possible in the event of fire.

The required function of smoke and fire detectors differs from the standard use of fire detectors in fire alarm systems in the following respects

- If a false alarm occurs, this is of secondary importance
- The system actively minimises the risk of smoke and fire spreading
- Doors must close automatically in the event of fire
- The technology offers safety and protection to persons against dangerous smoke and fire

When the power supply is cut off, or if triggered electronically, doors equipped with a door closer must be forced shut.

EN 1158

- This standard defines the test requirements and conditions for coordination of double-leaf swing doors
- The test methods for separately installed door-leaf coordinators cover
 - Door-leaf coordinator mechanism in the door closer
 - Door-leaf coordinator mechanism integrated into the door closer with electrically-operated hold-open devices



CE	Gretsch-Unitas GmbH						14		
	Baubeschläge								
0432-CPR-00184-01		EN 1154:1996		4	8	3	1	1	4
		+A1:2002							
Dangerous substances: None									

Category of use

Grade 3:
door closing from 105°
Grade 4:
door closing from 180°

Durability

Grade 8: 500,000 test cycles

Size of door closer: (grade 1 – 6)

Suitability for use on fire and smoke protection doors

Grade 0: (unsuitable)
Grade 1: (suitable)

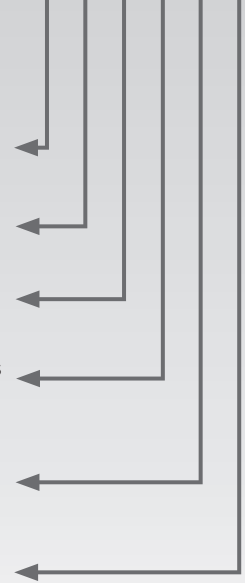
Safety

Grade 1: requirements with regard to safety in use

Corrosion resistance

Different grades 0 – 4 according to EN 1670

4 8 3 1 1 4



Closing force sizes

Sizes	Door leaf widths (in mm)
EN 1	to 750
EN 2	to 850
EN 3	to 950
EN 4	to 1100
EN 5	to 1250
EN 6	to 1400

Example for Germany

Hold-open systems require an approval. They set out and define the acceptance following installation, the monthly operator test and annual maintenance.

The number of detectors and corresponding arrangement is defined in the general building authority approval for the hold-open systems issued by the German Institute of Building Engineering (DIBt) depending on the installation position.

Construction Products Regulation (CPR)



You can download certificates and Declarations of Performance (DoP) for our products on our website at: www.g-u.com/en/services/construction-products-regulation.html.

Declaration of Performance

In July 2013, the Construction Products Regulation (CPR) replaced the Construction Products Directive (CPD) which had been valid since 1989. Construction products introduced to the market after 1 July 2013 must fulfil the requirements of the CPR. However, this change does not affect products that were already on the market at the time this regulation came into force.

Construction Products Regulation (CPR) 2013, Europe-wide binding uniform specifications

The CPR regulates the launching of construction products on the market. The regulation is designed to ensure that the drafting and execution of construction works do not endanger the safety of people or goods and do not harm the environment. To achieve these objectives, the regulation precisely defines important characteristics of construction products in harmonised standards. A Declaration of Performance must be prepared for products covered by a harmonised standard.

In contrast to the previous Construction Products Directive, the implementation of which was governed by national laws, the legal form now chosen was the ordinance which demands legal validity directly in all European member states of the European Union.

The CE marking is implemented Europe-wide in accordance with uniform requirements and prevents discrepancies arising as a result of national regulations. This further promotes, and at the same time increases transparency and creates more uniform structures Europe-wide in relation to the free movement of goods and the unrestricted use of construction products.

The Declaration of Performance (DoP) is the central document via which the manufacturer of the construction product assumes responsibility for conformity of his products with the declared performances. It is the basis for the CE marking and must be available for each construction product. The CE mark on the construction product signals compliance of the product with the declared performance.

We make all Declarations of Performance for GU Group construction products available on our website as "DoP" downloads: <http://www.g-u.com/en/services/construction-products-regulation.html>

When the CPR came into force, a market monitoring was introduced throughout Europe. In Germany, this has been implemented by the German Institute of Building Technology (DIBt). In the event of contraventions, fines and/or custodial sentences may be imposed.

With our products, we offer you certified outstanding quality at all times in accordance with EN ISO 9001.



Declarations of Performance

DoP No.	Standard	Product	Type
0017-CPR-GU-BKS-Ferco	EN 1154	Overhead door closers	OTS 735 OTS 735 BG
0026-CPR-GU-BKS-Ferco	EN 1154	Overhead door closers	OTS 736 OTS 736 BG
0027-CPR-GU-BKS-Ferco	EN 1154 EN 1155	Overhead door closers	OTS 736 FL OTS 736 FL BG
0028-CPR-GU-BKS-Ferco	EN 1155	Electromechanical hold-open device Slide rail set Hold-open system set	FE-OTS 73x GS FE-OTS 73x GS FER-OTS 73x
0029-CPR-GU-BKS-Ferco	EN 1158	Door-leaf coordinators Slide rail set	SRI-OTS 73x/SRI-OTS 73x BG GS SRI-OTS 73x/GS SRI-OTS 73x BG
0031-CPR-GU-BKS-Ferco	EN 1154	Concealed door closer	VTS 735
0032-CPR-GU-BKS-Ferco	EN 1154 EN 1155	Concealed door closer	VTS 735 FL
0033-CPR-GU-BKS-Ferco	EN 1155	Electromechanical hold-open device Slide rail set	FE-VTS 73x GS FE-VTS 73x
0034-CPR-GU-BKS-Ferco	EN 1158	Door-leaf coordinators Slide rail set	SRI-VTS 73x GS SRI-VTS 73x
0010-CPR-GU-BKS-Ferco	EN 1154	Overhead door closers	OTS 536 OTS 430
0015-CPR-GU-BKS-Ferco	EN 1158	Door-leaf coordinators	SRA

Barrier-free construction and easy access

CEN TR 15894 and DIN 18040



Barrier-free construction is nowadays absolutely indispensable. The intensive general social discourse is indicative of this. There is a particularly strong focus on finding suitable solutions for age-appropriate and disability-friendly construction. The relevance of these topics is reflected in current statistics: in 2020 around 30 percent of the population in Germany will be above the age of 60, for example. The number of persons with a disability is around 8.6 million, which is roughly one tenth of the population.

But who, when contemplating the topic of barrier freedom, thinks of parents with children's pushchairs, the shopper with heavy bags or athlete with leg in plaster? A door which is difficult to open also presents a real challenge for them, for example.

This is why a door which is easy to open is all the more important. And a high-quality door closer that also securely closes the open door with maximum comfort makes the perfect complement.

CEN TR 15894 (in Germany DIN SPEC 1104)

The aim of DIN SPEC 1104 is to allow children, elderly and disabled people to effortlessly pass through doors. DIN SPEC 1104 recommends the use of manually actuated locking systems whose opening torque drops away sharply, which means that the opening force reduces by around 40 percent in the door opening range of 2 to 60 degrees.

DIN 18040: barrier free construction – special part 1, section 4.3.3.3

- The objective of the standard is to allow disabled, elderly and ill persons and also children equal opportunities to participate in day-to-day life. This also includes the opening of doors without having to be assisted by another person
- The standard defines the maximum operating forces required to open doors that must be equipped with a door closer as a mandatory requirement
- The maximum opening torque is 47 Nm with a door opening angle of up to 60 degrees. This value corresponds to the maximum opening torque size 3 according to the table in EN 1154
- We recommend you only use door closers with adjustable closing force
- Providing the standards are complied with, a hold-open system and free-swing door closer are normally not required
- This standard does not apply for fire protection doors
- As greater closing forces are required for fire and smoke protection doors in the event of fire, hold-open systems, free-swing door closers or electromechanical hold-open magnets, for example, should normally be used in this case



Barrier-free construction with the OTS 73x series

The DIN 18040 standard for barrier-free construction which has already been published and will be legally binding in future defines a maximum opening torque of 47 Nm for doors to which door closers must be fitted as a mandatory requirement. High-quality door closers not only satisfy these requirements, they go one step further. This is because they also satisfy the recommendation of DIN SPEC 1104 which requires a sharply dropping opening torque of 40 percent with a door opening angle of between 2 and 60 degrees. They therefore allow the door to be opened easily, especially by children, older persons and persons with disabilities. This technology increases comfort when passing through doors in public buildings and also equally in private dwellings. In this regard, DIN SPEC 1104 does not constitute a standard and is instead a technical specification which, as opposed to the DIN standard, is non-binding in character.

Successful solutions in barrier-free construction respond to the individual needs and requirements of the relevant user(s). For example, it may be expedient to use electrical hold-open devices to keep doors open at all times. Door closers with so-called "free-swing" function allow users to pass through the door without having to apply additional force after it has been opened once, as electricity is supplied to the door closer to keep it in the pretensioned state. In the event of fire, the initial tension in the door closer is released thus ensuring the door closes automatically and safely.

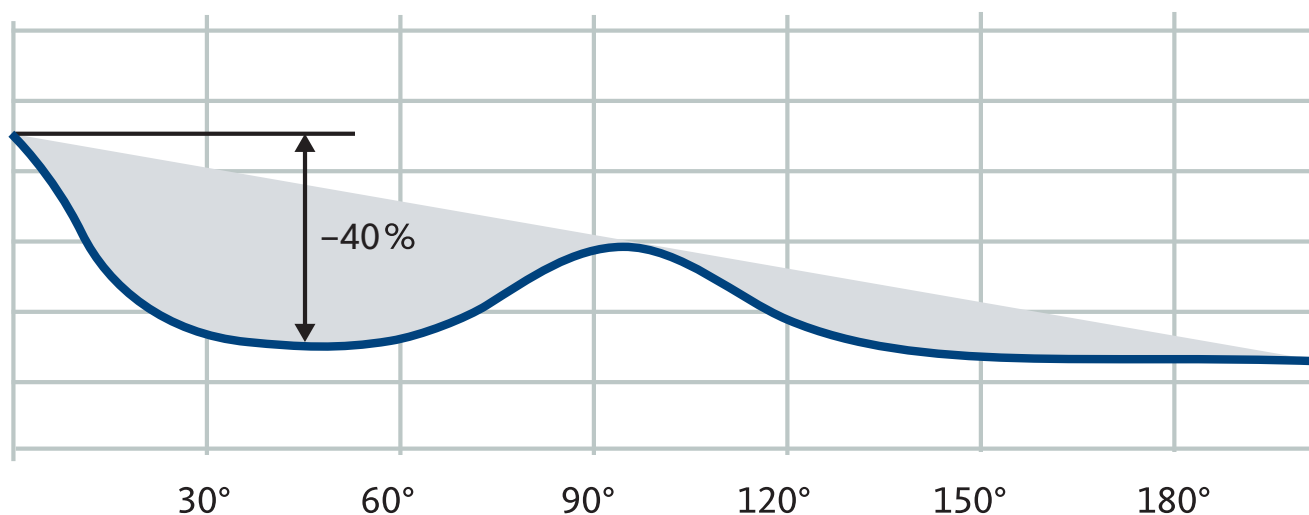
The closers are used at fire protection doors that have a conventional use on a daily basis, but must also close safely in the event of fire. They are therefore particularly suitable for projects such as hospitals, residential homes for the elderly and kindergartens.

The free-swing door closer

A door closer ensures that a door closes safely and automatically. To do this, it not only moves the door leaf into the door frame, it also ensures the latch of the lock engages reliably in the striker – even when encountering a gentle wind resistance. Doors must be closed in a controlled manner, especially in the event of fire. A range of door closer systems that are specially designed and tested for use in preventative fire protection is therefore available.

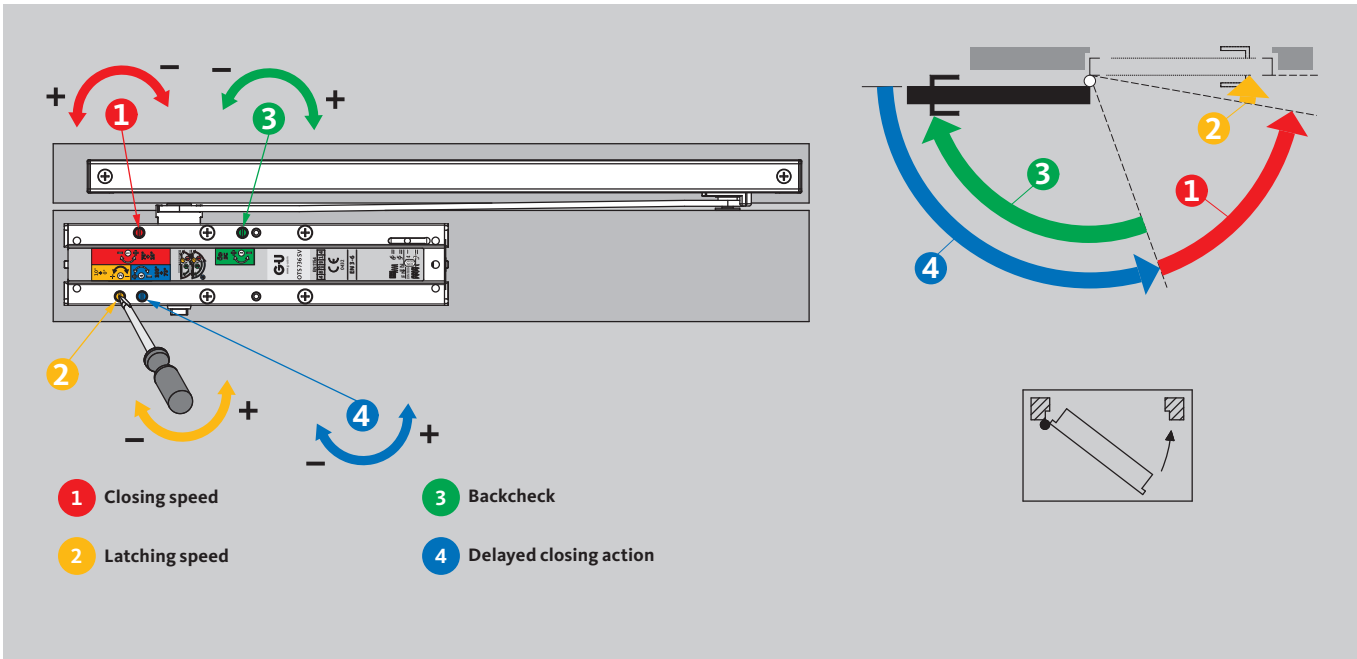
The free-swing door closer with slide rail – tested to EN 1155 – can always move freely and therefore allows users to pass through without offering resistance. It ensures through reactivation of the door closer function that fire and smoke protection doors always close safely in the event of fire or a power failure. The free-swing therefore helps fulfil all requirements for barrier-free construction.

Nm



Advantage: extremely easy and comfortable passage through door, ideal for children and also elderly persons or persons with physical disabilities.

Functions and definitions



Gretsch-Unitas doors closers can be perfectly adapted to individual requirements and circumstances by adjusting various parameters. This is particularly relevant for the adjustment of closing speed, latching speed and backcheck using clearly identified valves.

Closing speed

The speed at which the door shuts can be adjusted at the red valve (adjustment range between 10° and 180°).

Latching speed / latch action

The closing speed in the final 10° of door opening can be adjusted at the yellow valve. In this case, the door movement fundamentally accelerates in the last few degrees before closing in order to overcome closing resistances, such as air resistance.

Backcheck

The purpose of the green valve is to adjust the damping of the door opening speed. It reduces the speed of a door when thrown open with force with a selectable door opening of 60° to 90°. However, the backcheck cannot be a substitute for door stoppers or other construction measures that limit the opening angle separately, e.g. if the door is outwards opening and can be caught by the wind.

Adjustment of closing force size

The closing force is a parameter that references the closing momentum to the door leaf width and door weight. This function makes it possible to perfectly adjust the closing momentum of a door closer. The size of the closing force set at the closer corresponds to the door closer size according to EN 1154 and must be selected to match the width of the door. In this case, the standard specifies that the next size up must be selected if required by structural (door height, door weight) or local circumstances (effect of wind).

Delayed closing action

The delayed closing action can be adjusted steplessly via the blue valve. The closing speed of the door opening angle can be reduced to between 180° and 70°. The door then closes more slowly in this range which allows safe passage for persons with luggage, shopping, children's pushchairs or persons with restricted mobility. As soon as the door reaches an opening angle of 70°, it closes at the closing speed preset at the red valve.



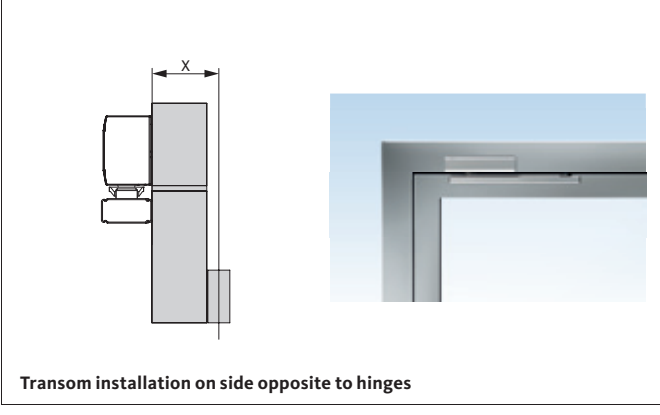
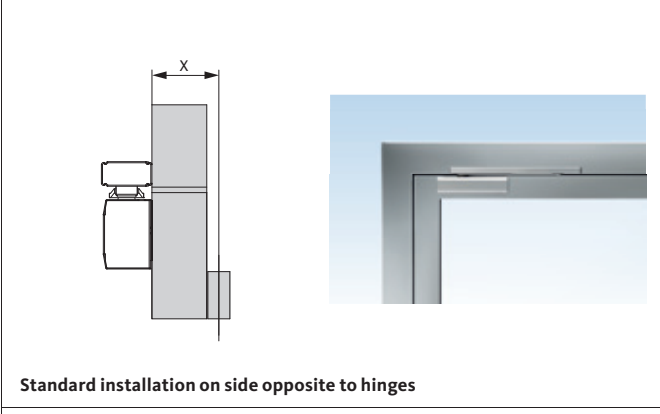
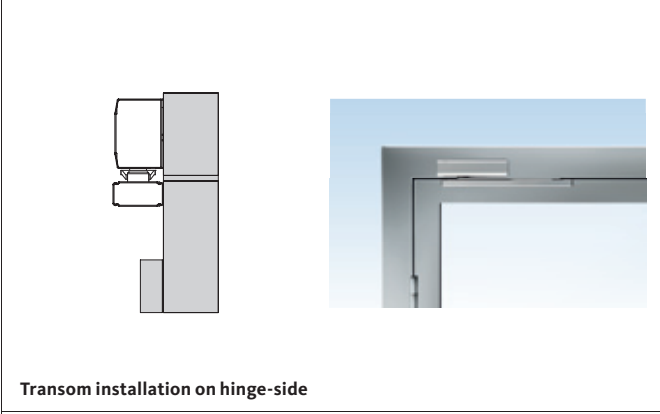
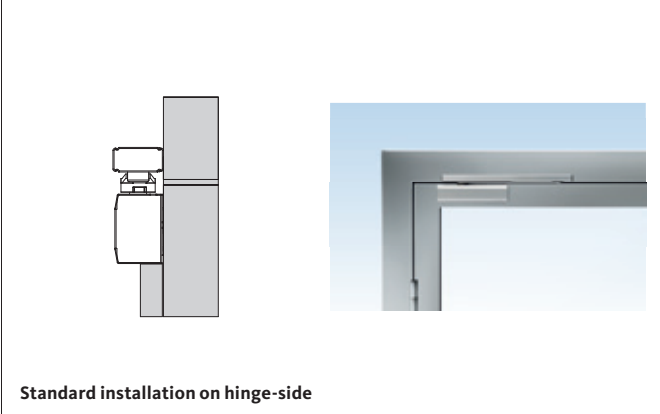
The type of fixing and installation of a door closer on the door leaf or door frame depends on

- The type of closer
- The type of door and material used: DIN drilling-hole patterns must be complied with at fire protection doors, for example
- The application type: whether the door opens inwards or outwards for example, and whether or not it is installed on the inside or on the outside (environmental effects)
- Adjacent walls and masonry projections affect the space requirements, for example

Important:

The X-dimension must be observed when installing on the side opposite the hinges because this decisively influences the maximum door opening angle. This maximum door opening angle **must not be exceeded**, which is why it must always be limited by an additional door stopper.

Max. door opening angle (α) depending on dimension X	
Dim. X	Max. door opening angle (α)
70 mm	125°
80 mm	121°
90 mm	117°
100 mm	113°
110 mm	110°



Surface-mounted overhead door closers with slide rail



Quickfinder

Surface-mounted overhead door closers of the OTS 73x series

1-leaf door solutions	24
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Modular system of the OTS 73x series

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Patent-pending technology meets simple control	28 – 29
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OTS 73x series – sets for 1-leaf doors

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OTS 73x series – accessories

80 – 85

OTS 73x series – installation situation

86 – 93

Quickfinder – 1-leaf door solutions

OTS 73x surface-mounted overhead door closers



Application range	Pages
Standard	
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With electromechanical hold-open device	
Slide rail set GS FE-OTS 73x	52 – 53
Hold-open system for fire rated doors, with door-leaf coordinator, electromechanical hold-open device and smoke switch module	
GS FER-OTS 73x hold-open system set	54 – 55
Hold-open systems for fire-rated doors with free-swing function	
OTS 73x FL / OTS 73x FL BG door closer set	56 – 63

Quickfinder 2-leaf door solutions

OTS 73x surface-mounted overhead door closers



Application range	Pages
Standard with SRI door-leaf coordinator	
GS SRI-OTS 73x slide rail set	64 – 67
With door-leaf coordinator and electromechanical hold-open	
GS FE-SRI-OTS 73x slide rail set	68 – 71
Hold-open system for fire rated doors, with door-leaf coordinator, electromechanical hold-open device and smoke switch module	
GS FER-SRI-OTS 73x hold-open system set	72 – 75

Modular system of the OTS 73x series

Compact and elegant design



A high level of convenience meets slim lines: the OTS 73x series

The comprehensive product range of the OTS 73x series sets standards due to an attractive design and high degree of opening comfort: with more compact dimensions and elegant aesthetics, the OTS 73x tried-and-tested door closer series with slide rail is still also easy and pleasant to operate.

The door closer bodies of the OTS 73x series 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 optics 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 closed surface of the OTS 73x series also leaves nothing to be desired. This is due to features such as the elegant slide rail cover and the rugged hood which is used instead of a slide-on cover. The covers and the slide arm are available in different materials and finishes. This means our customers can select suitable elements for the door and the surrounding architecture. The concealed mounting plate is the finishing touch to the attractive design.

The OTS 73x series also includes the concealed door closer VTS 735 which meets exceptionally high design and functional demands: mounted in the door leaf, the closer and slide rail are concealed when the door is closed.

The ingenious technology of the door closer lives up to its quality appearance, namely integrated double-heart curve technology and the optional free-swing function which ensure very convenient access.

Advantages at a glance

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



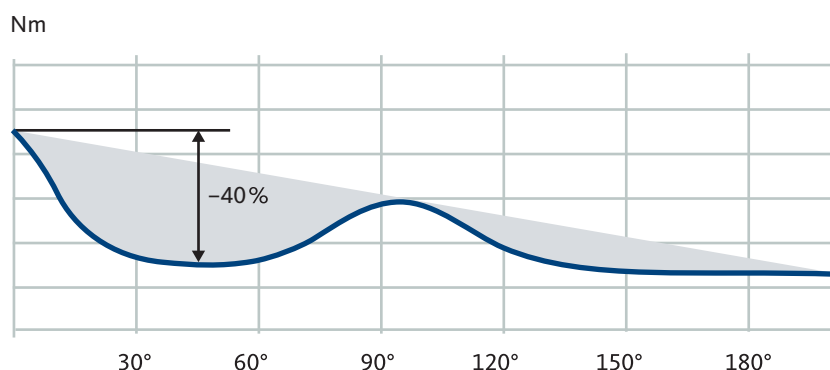
Modular system of the OTS 73x series

Patent-pending technology meets simple control



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. It therefore satisfies the requirements of DIN SPEC 1104 (CEN /TR 15894) which prescribes a 40% reduction in the opening force with 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

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.

The closing speed, latching speed and backcheck can also be individually adjusted to the building situation and the needs of users thanks to the colour-coded, full metal rugged control valves.

Advantages at a glance

- Patented double-heart curve technology for maximum comfort
- Opening and closing movement can be precisely controlled
- Colour-coded control valves ensure clarity of overview during adjustment



- 1 Closing force adjustment
- 2 Closing force display

For convenient closing force adjustment with only nine turns (from min. up to max. value) and visible display of the adjusted closing force.



- 3 Double-heart curve technology

Ensures optimum function of the closing shaft for smooth opening.



- Control valves
- 4 Closing speed
- 5 Latching speed
- 6 Backcheck
- 7 Delayed closing action

Steplessly adjustable and colour-coded – convenience and clarity during adjustment.

Modular system of the OTS 73x series

The modular system at a glance



The right solution for any application

School, hotel or airport? Single or double-leaf door? Installation on the hinge-side or the side opposite to hinges? When choosing a door closer, many different questions arise. Gretsch-Unitas solutions provide individually-tailored answers to these questions. This is because our door closers are versatile and can adapt to specific building situations and door variants. The innovative modular system of the OTS 73x series completely covers all requirements and thus makes planning and installation easier for all applications.

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.

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. 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.

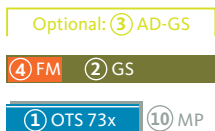
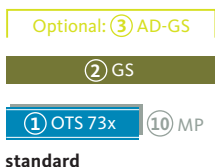
The advantage is obvious: we offer our customers components that are fully compatible with one another to cater for all requirements. The range of different components you need to keep in stock is lower and fewer fixing accessories are required – this increases efficiency and reduces costs.

Advantages at a glance

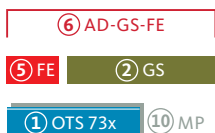
- One slide rail, one slide arm and one axle extension for all application and installation types
- Uniform mounting plate to EN 1154 for all application and installation types
- Uniform installation drilling pattern for all variants prevents confusion
- Fixing pins are integrated into the mounting plate to ensure reliable, fast installation and a stable fixing
- All types of hold-open devices (mechanical and electromechanical) can be opened beyond the hold-open angle

Choose the right solution for you from our modular system

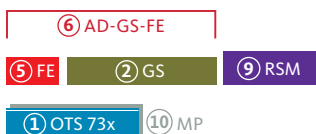
1-leaf solutions



with mechanical hold-open device

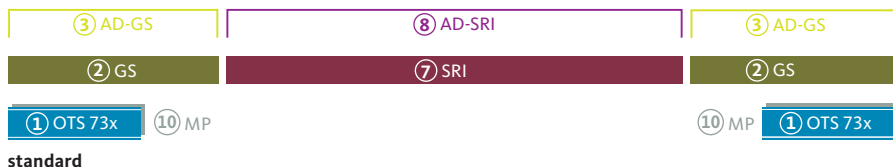


with electromechanical hold-open device



with electromechanical hold-open device and smoke switch module

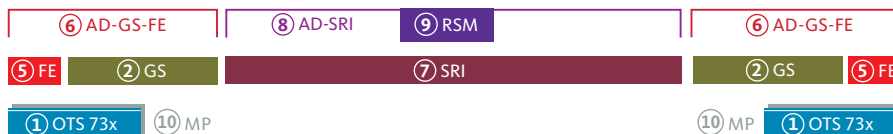
2-leaf solutions with SRI door-leaf coordinator



with mechanical hold-open device



with electromechanical hold-open device



with electromechanical hold-open device and smoke switch module

One slide rail for all applications



1-leaf – OTS 73x



2-leaf – OTS 73x SRI



Standard installation on hinge-side



Transom installation on hinge-side

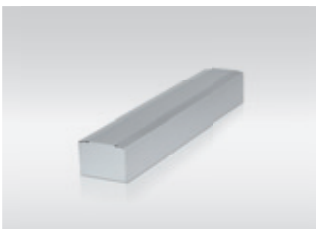


Standard installation on side opposite to hinges



Transom installation on side opposite to hinges

The modular system



1A Cover



1 OTS 73x / OTS 73x BG door closer

1BS OTS 73x closer body
1BG OTS 73x BG closer body



2 GS slide rail (with slide arm)



3 AD-GS slide rail cover



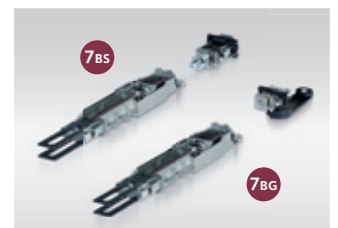
4 FM mechanical hold-open device with ÖB opening restrictor



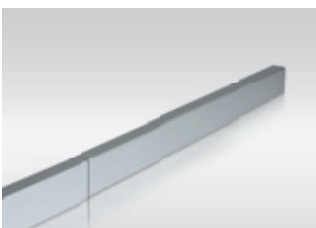
5 FE electromechanical hold-open device



6 AD-GS-FE cover for electromechanical hold-open device



7 SRI door-leaf coordinator
7BS SRI 7BG SRI-BG



8 AD-SRI cover for door-leaf coordinator



9 Smoke switch module (RSM)



10 MP mounting plate



11 ÖB opening restrictor

BS = Hinge side / BG = Side opposite to hinges

OTS 73x door closer

1 1BS 1BG



1BS 1BG OTS 73x / OTS 73x BG closer body

Product characteristics

- Tested and certified in accordance with EN 1154
- Double-heart curve technology allows the door to be opened and accessed very easily and comfortably.
- Suitable for barrier-free construction in compliance with DIN SPEC 1104 and DIN 18040
- Compact dimensions (L x H x D): 268 x 63 x 43 mm for all variants

Adjustment functions

- Closing speed
- Latching speed
- Backcheck ^[2]
- Delayed closing action (Type SV) ^[3]
- Closing force sizes / Variants
 - OTS 735/OTS 735 BG: EN 2-5 ^[1]
 - OTS 736/OTS 736 BG: EN 3-6 ^[1]
 - OTS 736 SV/OTS 736 BG SV: EN 3-6 ^{[1][3]}
- With closing force display
- Easy and safe closing force adjustment with just a few turns of the adjustment screw (max. 9 turns EN min. up to EN max.)
- Colour-coded control valves ensure clarity of overview during adjustment
- Thermomatic valves ensure a uniform closing speed in the event of temperature fluctuations
- Security valves in the closer protect against overloading

Order information

OTS 73x closer body – without cover – hinge-side

Designation	Order number	Modular system number
OTS 735 closer body	K-18343-00-0-1	1BS
OTS 736 closer body	K-18345-00-0-1	
OTS 736 SV closer body ^[3]	K-18347-00-0-1	

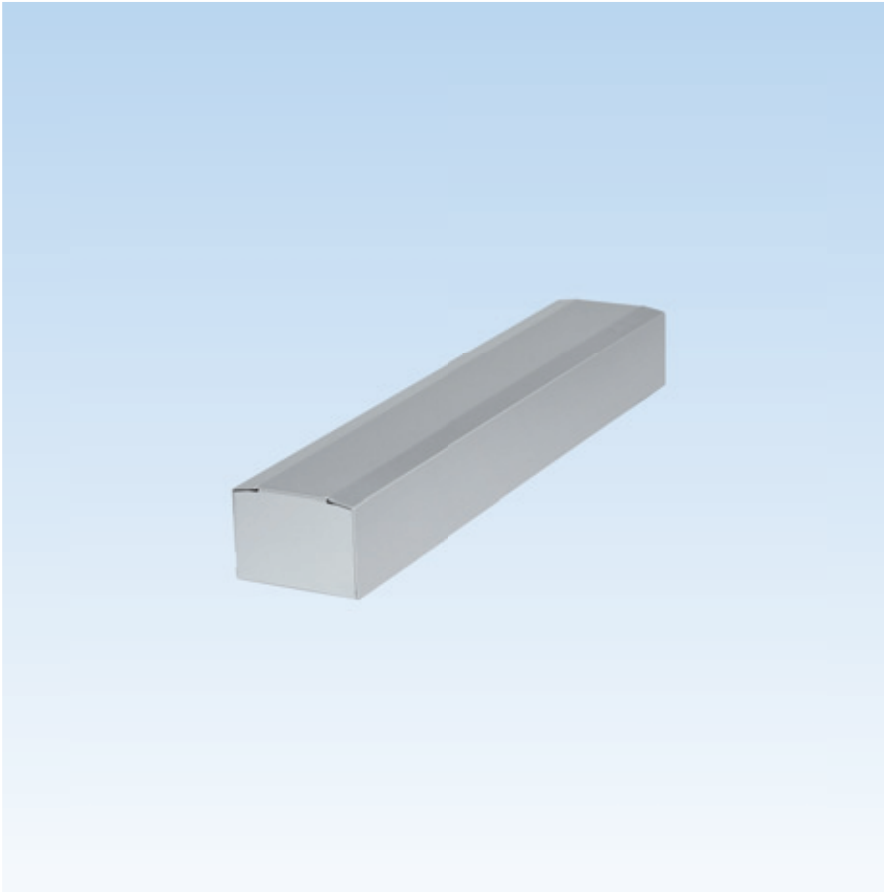
OTS 73x BG closer body – without cover – side opposite to hinges

Designation	Order number	Modular system number
OTS 735 BG closer body	K-18344-00-0-1	1BG
OTS 736 BG closer body	K-18346-00-0-1	
OTS 736 BG SV closer body ^[3]	K-18348-00-0-1	

Classification code in accordance with EN 1154						
OTS 735/OTS 735 BG	4	8	$\frac{2}{5}$	1	1	4
OTS 736/OTS 736 BG	4	8	$\frac{3}{6}$	1	1	4
OTS 736 SV/OTS 736 BG SV	4	8	$\frac{3}{6}$	0	1	4



[1] Factory condition size 4.
 [2] Not with transom installation on side opposite to hinges.
 [3] Not approved for fire and smoke protection doors.



Product characteristics

- Compatible with all OTS 73x / OTS 73x BG closer bodies
- Elegantly proportioned GU design
- Available in all materials and colours, also in stainless steel
- Theft-proof thanks to integrated hood lock

1A AD-OTS 73x cover

Order information

AD-OTS 73x cover			
Designation	Surface	Order number	Modular system number
AD-OTS 73x cover	silver	K-18338-00-0-1	1A
	black	K-18338-00-0-6	
	white (RAL 9016)	K-18338-00-0-7	
	stainless steel	K-18338-00-0-8	
	special colour	K-18338-00-0-9	

GS slide rail

2



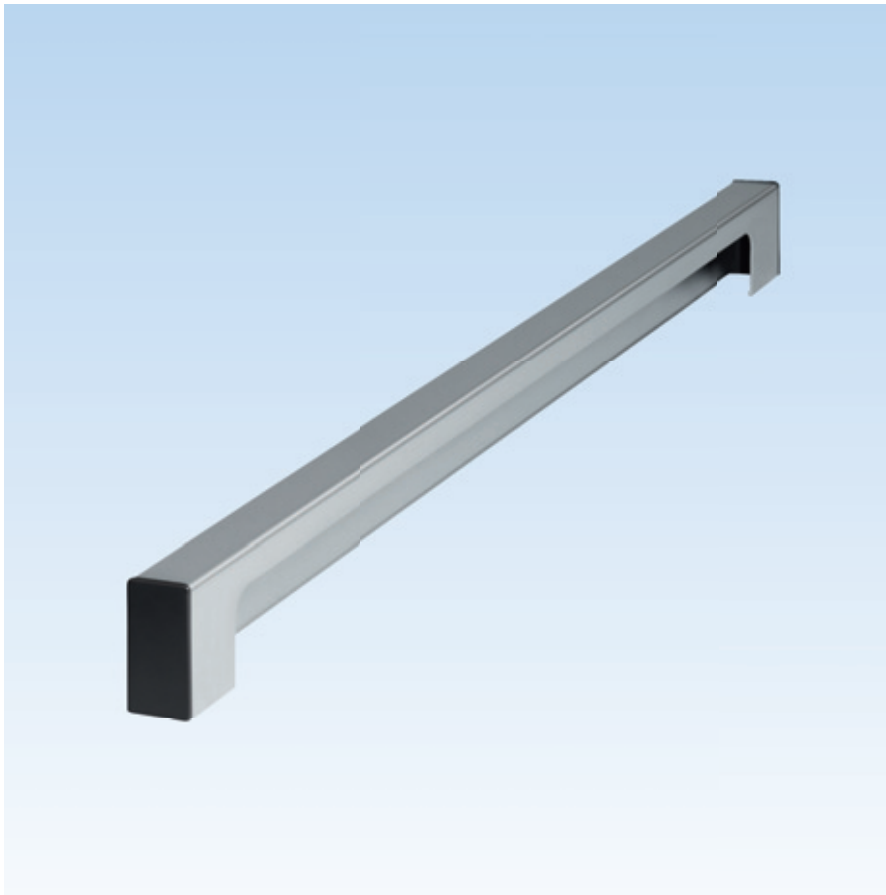
Product characteristics

- One slide rail, one slide arm and one axle extension for all application and installation types:
 - Hinge side and side opposite to hinges
 - Standard and transom installation
- DIN left and DIN right usable
- Slide rail installation height:
 - 22 mm standard (without cover)
 - 25 mm (with optional cover)
- Exceptionally easy installation as non-handed
- Straightforward, fast and can be flexibly extended to include further components such as:
 - FM mechanical hold-open device
 - FE electromechanical hold-open device
 - ÖB opening restrictor

2 GS slide rail

Order information

GS slide rail			
Designation	Surface	Order number	Modular system number
GS slide rail (with slide arm and axle top part)	silver	K-18351-00-0-1	2
	black	K-18351-00-0-6	
	white (RAL 9016)	K-18351-00-0-7	
	stainless steel colour	K-18351-00-0-8P	
	special colour	K-18351-00-0-9	



Product characteristics

- Usable for GS slide rail
- Optional cover that meets the highest expectations in terms of optics and design
- Available in all colours, also stainless steel
- DIN left and DIN right usable
- Fast straightforward installation and retrofitting, with no additional drill holes required
- Installation height: 25 mm

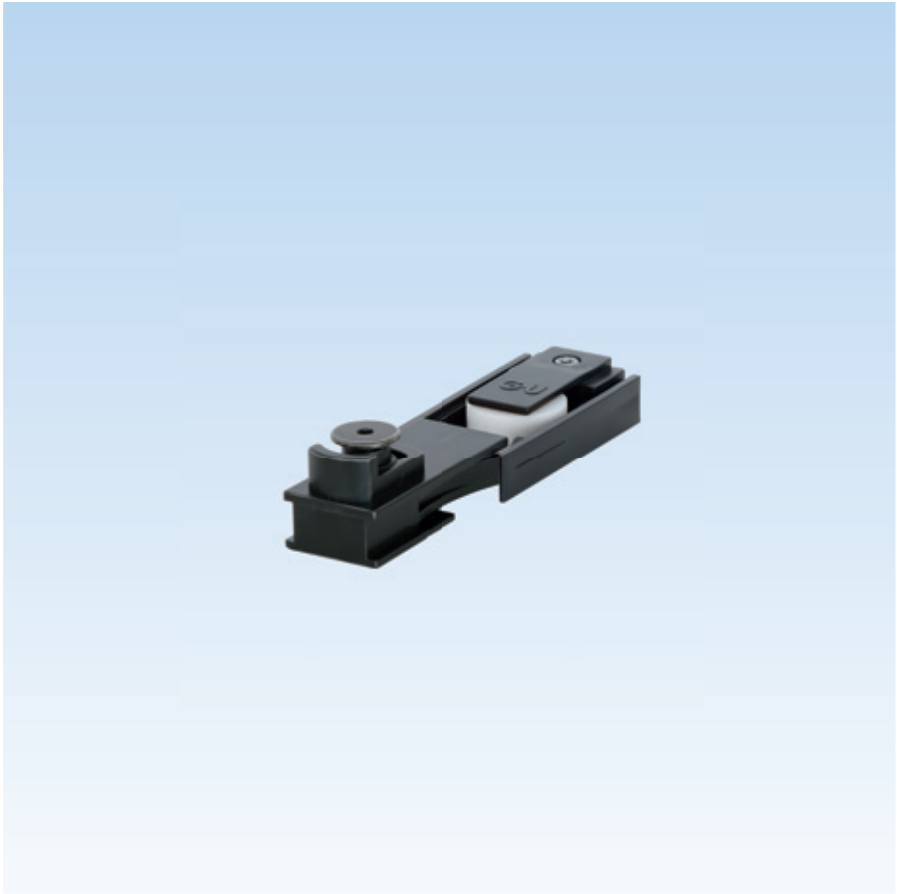
3 AD-GS slide rail cover

Order information

AD-GS slide rail cover			
Designation	Surface	Order number	Modular system number
AD-GS slide rail cover	silver	K-18364-00-0-1	3
	black	K-18364-00-0-6	
	white (RAL 9016)	K-18364-00-0-7	
	stainless steel	K-18364-00-0-8	
	special colour	K-18364-00-0-9	

FM mechanical hold-open device

4



Product characteristics

- Device that allows a door to be held open temporarily at a chosen angle until it is closed manually
- Simple and easy installation, integrated in the slide rail
- Retrofittable
- With integrated opening restriction
- When the integrated opening restriction is removed, the hold-open device can be opened beyond the hold-open angle
- Steplessly adjustable from 80°–140°
- Disengaging force adjustable in 3 steps

4 FM mechanical hold-open device with ÖB opening restrictor

Order information

FM mechanical hold-open device		
Designation	Order number	Modular system number
FM mechanical hold-open device	K-18369-00-0-6	4



Product characteristics

- Device that allows a door to be held open at a chosen angle until it is closed electrically
- The hold-open device can also be triggered manually at any time
- Tested and certified in accordance with EN 1155
- Tested and approved by DIBt (German Institute of Building Engineering)
- Fast straightforward installation, laterally on the slide rail, without additional drill hole
- Retrofittable, without additional drill hole
- Steplessly adjustable hold-open angle from 85°–140°
- Two different hold-open ranges can be preset at the same time
 - 1. Hold-open range: 80° – 110°
 - 2. Hold-open range: 110° – 140°
- Fully overridable, the door can therefore be opened up to the maximum opening angle of 180° if required
- **Technical data**
 - Operating voltage: 24 V DC
 - Power consumption: 1.9 W
 - Duty ratio: 100 %

5 FE electromechanical hold-open device

Order information

FE electromechanical hold-open device		
Designation	Order number	Modular system number
FE electromechanical hold-open device	K-18368-00-0-6	5



AD-GS-FE cover for electromechanical hold-open device

6



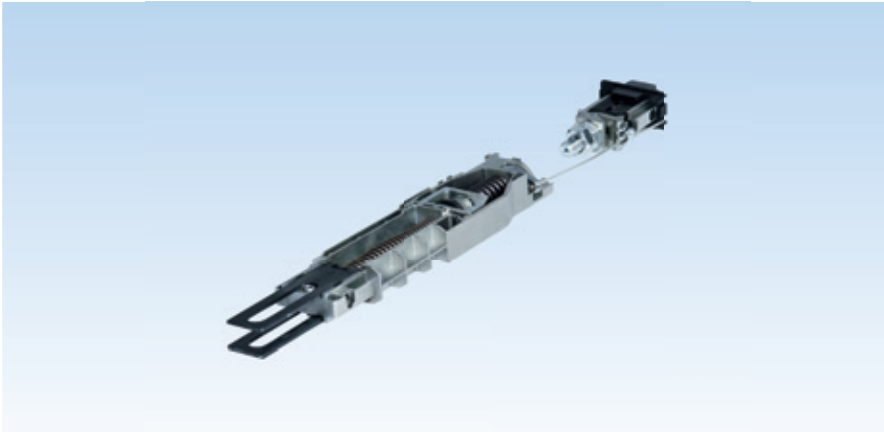
Product characteristics

- FE cover for electromechanical hold-open device
- Fulfils the highest expectations visual appearance and design expectations
- Available in all colours, also stainless steel
- Simple and fast installation
- Can be used at single and double-leaf doors, as well as well as DIN left and DIN right
- Installation height: 25 mm

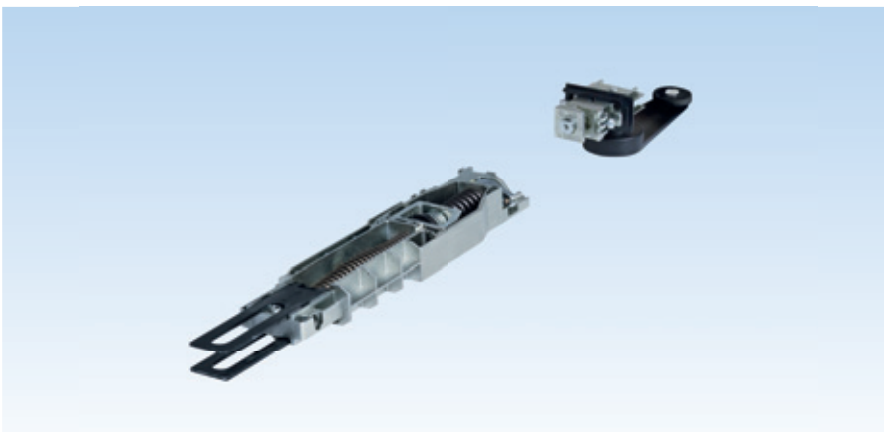
6 AD-GS-FE cover for electromechanical hold-open device

Order information

AD-GS-FE cover for electromechanical hold-open device			
Designation	Surface	Order number	Modular system number
AD-GS-FE cover for electromechanical hold-open device	silver	K-18365-00-0-1	6
	black	K-18365-00-0-6	
	white (RAL 9016)	K-18365-00-0-7	
	stainless steel	K-18365-00-0-8	
	special colour	K-18365-00-0-9	



7BS SRI door-leaf coordinator



7BG SRI-BG door-leaf coordinator

Product characteristics

- Used at double-leaf doors to ensure the doors always close in the correct sequence
- Tested and certified in accordance with EN 1158
- Fast straightforward installation, laterally on the slide rail
 - without additional drill holes
 - no subsequent adjustment necessary
- Retrofittable
- For hinge-side and side opposite to hinges
- SRI waiting position with load-limiting device prevents damages in case of mishandling
- With fixed stable cable
- Also available with optional integrated microswitch, especially when using the electromechanical hold-open device. This also makes it possible to trigger the hold-open device at the passive leaf automatically when the active leaf is manually triggered.

Order information

SRI door-leaf coordinator – hinge-side

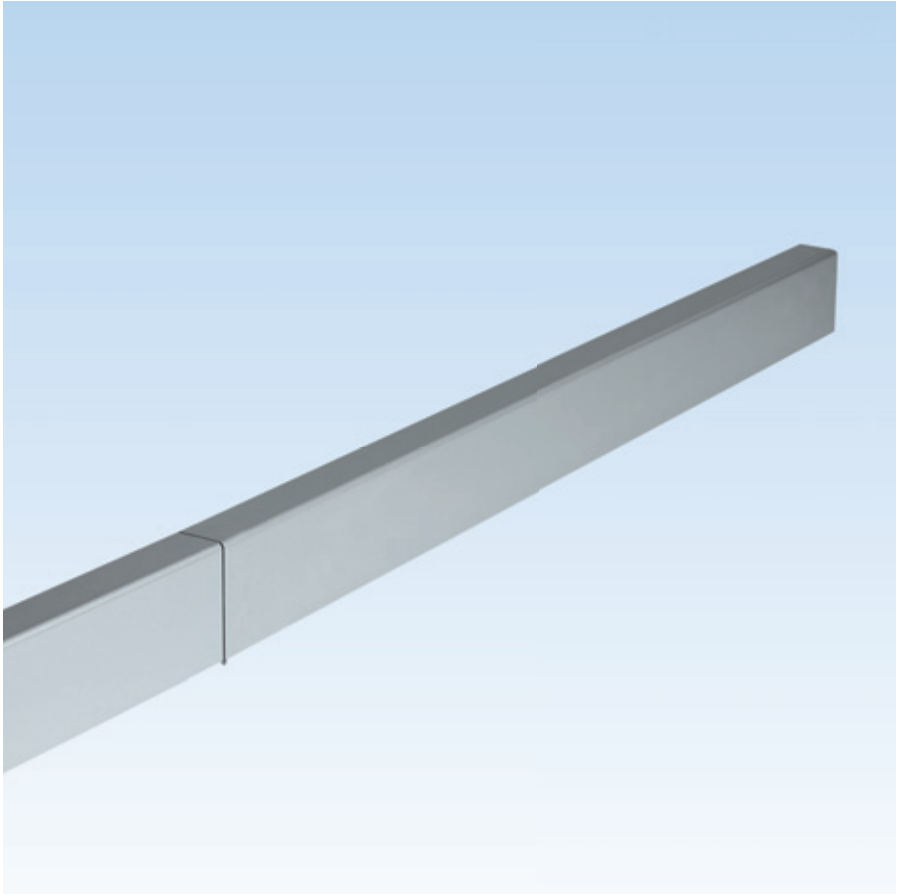
Designation	Description	Order number	Modular system number
SRI door-leaf coordinator	without microswitch	K-18370-00-0-1	
	with microswitch	K-18834-00-0-1	

SRI-BG door-leaf coordinator – side opposite to hinges

Designation	Description	Order number	Modular system number
SRI-BG door-leaf coordinator	without microswitch	K-18371-00-0-1	
	with microswitch	K-18835-00-0-1	

AD-SRI cover for door-leaf coordinator

8



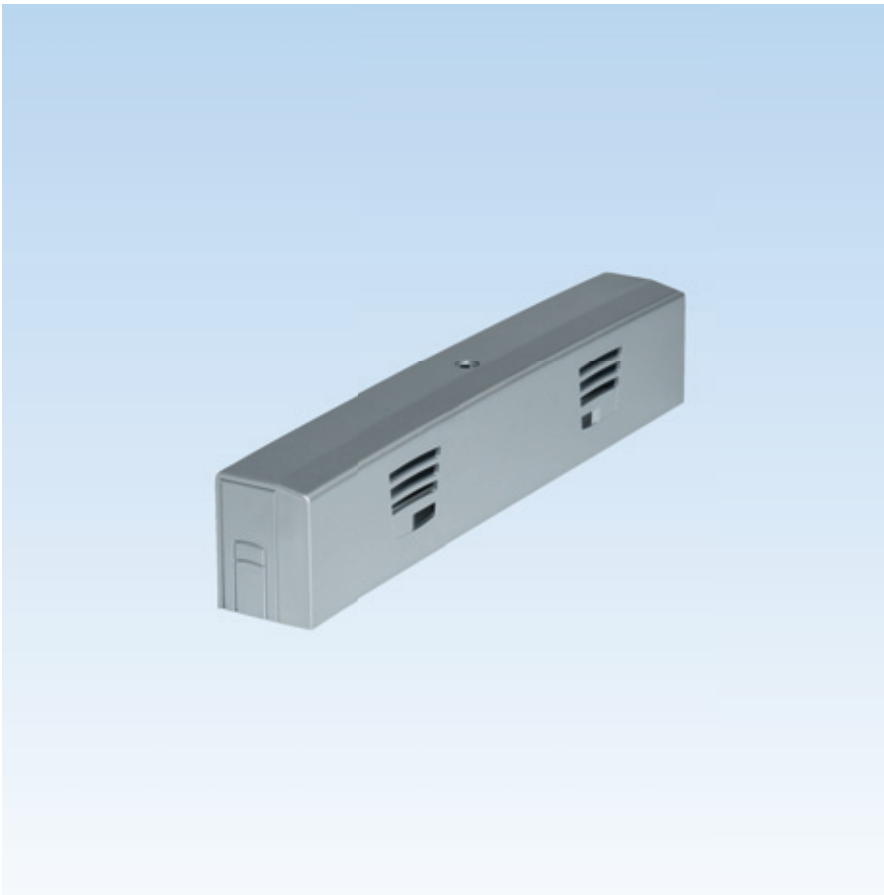
Product characteristics

- To cover the SRI / SRI-BG door-leaf coordinator
- Fulfils the highest expectations visual appearance and design expectations
- Simple and fast installation
- Available in all colours, also stainless steel
- Length: 1700 mm
- Installation height: 25 mm

8 AD-SRI cover for door-leaf coordinator

Order information

AD-SRI cover for door-leaf coordinator			
Designation	Surface	Order number	Modular system number
AD-SRI cover for door-leaf coordinator	silver	K-18367-00-0-1	8
	black	K-18367-00-0-6	
	white (RAL 9016)	K-18367-00-0-7	
	stainless steel	K-18367-00-0-8	
	special colour	K-18367-00-0-9	



Product characteristics

- Tested and approved by DIBt (German Institute of Building Engineering)
- For supplying electricity to all components of a hold-open system (hold-open device, electromechanical hold-open magnet, fire detector, smoke release push-button and other elements)
- With integrated power supply and release mechanism
- With integrated smoke switch
- With LED status indication
 - Operation/Alarm
 - Interference
 - Soiling
- Cover in GU design, in the same look as the AD-OTS 73x cover
- Installation on the frame/lintel
- Installation height: 36 mm
- For technical data refer to page 184

9 Smoke switch module (RSM)

Order information

Smoke switch module (RSM)			
Designation	Surface	Order number	Modular system number
Smoke switch module (RSM) (incl. power supply unit, release device and lintel-mounted smoke detector)	silver	K-19058-00-0-1	9
	black	K-19058-00-0-6	
	white (RAL 9016)	K-19058-00-0-7	
	stainless steel colour	K-19058-00-0-8P	
	special colour	K-19058-00-0-9	



MP mounting plate

10



Product characteristics

- For fixing of OTS 73x door closer body according to DIN drilling-hole pattern (EN 1154) at fire and smoke protection doors
- Allows a universal more stable fixing of the closer body to the door
- Symmetrical mounting plate for all door closer variants in the OTS 73x series (also for clearance)
- Can be used for all application and installation types
- With fixing pins for fast secure installation and stable fixing, and also for avoiding incorrect installation
- Concealed below the cover

10 MP mounting plate

Order information

MP mounting plate		
Designation	Order number	Modular system number
MP mounting plate	K-18280-00-0-1	10



Product characteristics

- Device that limits the opening angle of the door at a defined position. Its purpose is to prevent swing doors being thrown open uncontrollably and therefore damage to the slide rail, door, door frame, hinge, wall, etc.
- Can be integrated in the slide rail
- Retrofittable
- Steplessly adjustable limit angle up to 120°
- **Attention:** in many applications, the opening restriction is not a substitute for a doorstop!

11 ÖB opening restrictor

Order information

ÖB opening restrictor		
Designation	Order number	Modular system number
ÖB opening restrictor	K-18916-00-0-6	11

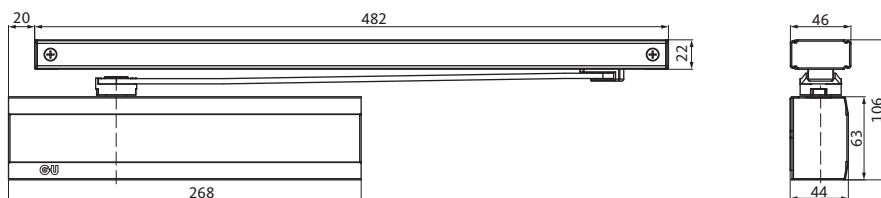
OTS 73x / OTS 73x BG door closer set

with GS slide rail



Product characteristics

- Solution for single-leaf doors with door leaf widths up to 1400 mm
- Tested and certified in accordance with EN 1154



Set consisting of:

Modular system For details of the individual modular components, refer to		Page
1BS 1BG	OTS 73x / OTS 73x BG closer body	32
1A	AD-OTS 73x cover	33
2	GS slide rail	34

Overview of variants

Type designation	OTS 735	OTS 735 BG	OTS 736	OTS 736 BG
Assembly	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

Applications

- 1-leaf fire and smoke protection doors
- 1-leaf swing doors
- Min. door leaf width 600 mm
- Max. door leaf widths
 - 1250 mm (OTS 735/OTS 735 BG)
 - 1400 mm (OTS 736/OTS 736 BG)
- DIN left and DIN right usable
- **BS variant:**
 - Standard installation on hinge-side (BS)
 - Transom installation on side opposite to hinges (BG)
- **BG variant:**
 - Standard installation on side opposite to hinges (BG)
 - Transom installation on hinge-side (BS)
- Max. door opening and closing angle
 - Standard installation on hinge-side: 180°
 - Standard installation on side opposite to hinges: 120° ^[1]
- Greater range of application with side opposite to hinges (BG) due to separate BG variant
 - e.g. opening angle of approx. 113° with an X-dimension of 100 ^[1] (see page 21)

[1] Depending on installation situation.
Position door stop for max. door opening angle.



Door closer sets OTS 73x – with slide rail

Hinge-side



③ AD-GS*

⑪ ÖB* ④ FM* ② GS

① OTS 73x ⑩ MP*

*Optional accessories

OTS 735 door closer set – EN 2–5 (= door leaf widths up to 1250 mm)

OTS 735 door closer with cover and slide rail

Set consisting of	Surface	Order number	consisting of module numbers
OTS 735 door closer AD-OTS 73x cover GS slide rail	silver	K-18360-00-0-1	1Bs 1A 2
	black	K-18360-00-0-6	
	white (RAL 9016)	K-18360-00-0-7	
	special colour	K-18360-00-0-9	

OTS 736 door closer set – EN 3–6 (= door leaf widths up to 1400 mm)

OTS 736 door closer with cover and slide rail

Set consisting of	Surface	Order number	consisting of module numbers
OTS 736 door closer AD-OTS 73x cover GS slide rail	silver	K-18362-00-0-1	1Bs 1A 2
	black	K-18362-00-0-6	
	white (RAL 9016)	K-18362-00-0-7	
	special colour	K-18362-00-0-9	

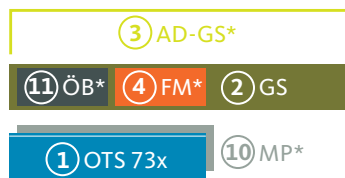
Accessories (optional)

Designation	Surface	Order number	Modular system number
AD-GS slide rail cover	silver	K-18364-00-0-1	3
	black	K-18364-00-0-6	
	white (RAL 9016)	K-18364-00-0-7	
	stainless steel	K-18364-00-0-8	
	special colour	K-18364-00-0-9	
FM mechanical hold-open device with ÖB opening restrictor	–	K-18369-00-0-6	4
MP mounting plate	–	K-18280-00-0-1	10
ÖB opening restrictor ^[1]	–	K-18916-00-0-6	11

[1] Not required if a FM (mechanical hold-open device) already exists.

OTS 73x BG door closer sets – with slide rail

Side opposite to hinges



*Optional accessories

OTS 735 BG door closer set – EN 2–5 (= door leaf widths up to 1250 mm)

OTS 735 BG door closer with cover and slide rail

Set consisting of	Surface	Order number	consisting of module numbers
OTS 735 BG door closer AD-OTS 73x cover GS slide rail	silver	K-18361-00-0-1	1BG 1A 2
	black	K-18361-00-0-6	
	white (RAL 9016)	K-18361-00-0-7	
	special colour	K-18361-00-0-9	

OTS 736 BG door closer set – EN 3–6 (= door leaf widths up to 1400 mm)

OTS 736 BG door closer with cover and slide rail

Set consisting of	Surface	Order number	consisting of module numbers
OTS 736 BG door closer AD-OTS 73x cover GS slide rail	silver	K-18363-00-0-1	1BG 1A 2
	black	K-18363-00-0-6	
	white (RAL 9016)	K-18363-00-0-7	
	special colour	K-18363-00-0-9	

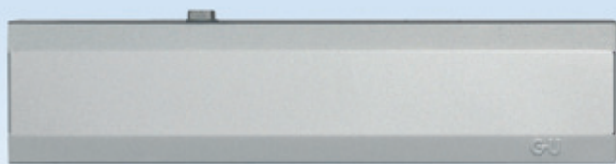
Accessories (optional)

Designation	Surface	Order number	Modular system number
AD-GS slide rail cover	silver	K-18364-00-0-1	3
	black	K-18364-00-0-6	
	white (RAL 9016)	K-18364-00-0-7	
	stainless steel	K-18364-00-0-8	
	special colour	K-18364-00-0-9	
FM mechanical hold-open device with ÖB opening restrictor	–	K-18369-00-0-6	4
MP mounting plate	–	K-18280-00-0-1	10
ÖB opening restrictor ^[1]	–	K-18916-00-0-6	11

[1] Not required if a FM (mechanical hold-open device) already exists.

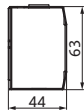
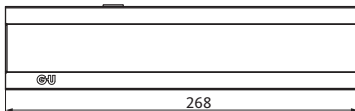
OTS 73x / OTS 73x BG door closer set

without GS slide rail



Product characteristics

- Solution for single-leaf doors with door leaf widths up to 1400 mm
- Tested and certified in accordance with EN 1154
- For combination with the slide rail and hold-open system sets



Set consisting of:

Modular system For details of the individual modular components, refer to		Page
1BS 1BG	OTS 73x / OTS 73x BG closer body	32
1A	AD-OTS 73x cover	33

Slide rail and hold-open system sets

- The OTS 73x series door closers can be combined with the following sets
 - GS FE-OTS 73x
 - GS FER-OTS 73x
- You can find relevant order information on pages
 - 52–53 (GS FE-OTS 73x)
 - 54–55 (GS FER-OTS 73x)

Overview of variants

Type designation	OTS 735	OTS 735 BG	OTS 736	OTS 736 BG	OTS 736 SV ^[2]	OTS 736 BG SV ^[2]
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

Applications

- 1-leaf fire and smoke protection doors
- 1-leaf swing doors
- Min. door leaf width 600 mm
- Max. door leaf widths
 - 1250 mm (OTS 735/OTS 735 BG)
 - 1400 mm (OTS 736/OTS 736 BG)
- DIN left and DIN right usable
- **BS variant:**
 - Standard installation on hinge-side (BS)
 - Transom installation on side opposite to hinges (BG)
- **BG variant:**
 - Standard installation on side opposite to hinges (BG)
 - Transom installation on hinge-side (BS)
- Max. door opening and closing angle
 - Standard installation on hinge-side: 180°
 - Standard installation on side opposite to hinges: 120° ^[1]
- Greater range of application with side opposite to hinges (BG) due to separate BG variant
 - e.g. opening angle of approx. 113° with an X-dimension of 100 ^[1] (see page 21)

[1] Depending on installation situation.
Position door stop for max. door opening angle.
[2] Not approved for fire and smoke protection doors.

OTS 73x door closer sets – without slide rail

Hinge-side



① OTS 73x

⑩ MP*

*Optional accessories

OTS 735 door closer set – EN 2–5 (= door leaf widths up to 1250 mm)

OTS 735 door closer with cover

Set consisting of	Surface	Order number	consisting of module numbers
OTS 735 door closer AD-OTS 73x cover	silver	K-18498-00-0-1	1B5 1A
	black	K-18498-00-0-6	
	white (RAL 9016)	K-18498-00-0-7	
	stainless steel	K-18498-00-0-8	
	special colour	K-18498-00-0-9	

OTS 736 door closer set – EN 3–6 (= door leaf widths up to 1400 mm)

OTS 736 door closer with cover

Set consisting of	Surface	Order number	consisting of module numbers
OTS 736 door closer AD-OTS 73x cover	silver	K-18500-00-0-1	1B5 1A
	black	K-18500-00-0-6	
	white (RAL 9016)	K-18500-00-0-7	
	stainless steel	K-18500-00-0-8	
	special colour	K-18500-00-0-9	

OTS 736 SV^[1] door closer set – EN 3–6 (= door leaf widths up to 1400 mm)

OTS 736 SV door closer with cover

Set consisting of	Surface	Order number	consisting of module numbers
OTS 736 SV door closer AD-OTS 73x cover	silver	K-18502-00-0-1	1B5 1A
	black	K-18502-00-0-6	
	white (RAL 9016)	K-18502-00-0-7	
	stainless steel	K-18502-00-0-8	
	special colour	K-18502-00-0-9	

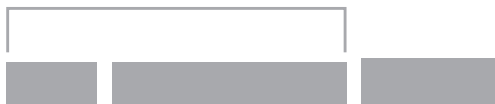
Accessories (optional)

Designation	Surface	Order number	Modular system number
MP mounting plate	–	K-18280-00-0-1	10

[1] Not approved for fire and smoke protection doors.

OTS 73x BG door closer sets – without slide rail

Side opposite to hinges



① OTS 73x ⑩ MP*

*Optional accessories

OTS 735 BG door closer set – EN 2–5 (= door leaf widths up to 1250 mm)

OTS 735 BG door closer with cover

Set consisting of	Surface	Order number	consisting of module numbers
OTS 735 BG door closer AD-OTS 73x cover	silver	K-18499-00-0-1	1BG 1A
	black	K-18499-00-0-6	
	white (RAL 9016)	K-18499-00-0-7	
	stainless steel	K-18499-00-0-8	
	special colour	K-18499-00-0-9	

OTS 736 BG door closer set – EN 3–6 (= door leaf widths up to 1400 mm)

OTS 736 BG door closer with cover

Set consisting of	Surface	Order number	consisting of module numbers
OTS 736 BG door closer AD-OTS 73x cover	silver	K-18501-00-0-1	1BG 1A
	black	K-18501-00-0-6	
	white (RAL 9016)	K-18501-00-0-7	
	stainless steel	K-18501-00-0-8	
	special colour	K-18501-00-0-9	

OTS 736 BG SV^[1] door closer set – EN 3–6 (= door leaf widths up to 1400 mm)

OTS 736 BG SV door closer with cover

Set consisting of	Surface	Order number	consisting of module numbers
OTS 736 BG SV door closer AD-OTS 73x cover	silver	K-18503-00-0-1	1BG 1A
	black	K-18503-00-0-6	
	white (RAL 9016)	K-18503-00-0-7	
	stainless steel	K-18503-00-0-8	
	special colour	K-18503-00-0-9	

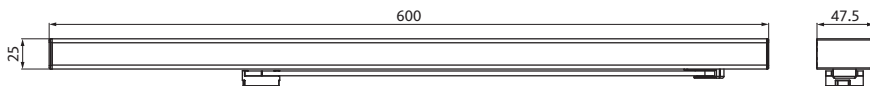
Accessories (optional)

Designation	Surface	Order number	Modular system number
MP mounting plate	–	K-18280-00-0-1	⑩

[1] Not approved for fire and smoke protection doors.

GS FE-OTS 73x slide rail set

with FE electromechanical hold-open device



Product characteristics

- Solution for single-leaf doors with door leaf widths up to 1400 mm
- Tested and certified in accordance with EN 1155
- Tested and approved by DIBt (German Institute of Building Engineering)

FE electromechanical hold-open device

Device that allows a door to be held open at a chosen angle until it is closed electrically

- Pre-mounted laterally on the slide rail
- With continuous slide rail cover
- **Technical data**
 - Operating voltage: 24 V DC
 - Power consumption: 1.9 W
 - Duty ratio: 100%

Set consisting of:

Modular system For details of the individual modular components, refer to		Page
2	GS slide rail	34
5	FE electromechanical hold-open device	37
6	AD-GS-FE cover for electromechanical hold-open device	38

OTS 73x series of door closers

- Door closers in the OTS 73x series **are not included in the scope of delivery of the slide rail set and must be ordered separately**
- You can find relevant order information on pages 48–51



OTS 73x door closer to be ordered separately

GS FE-OTS 73x slide rail set^[1]

Slide rail and electromechanical hold-open with cover

Set consisting of	Surface	Order number	Modular system number
GS slide rail FE electromechanical hold-open device AD-GS-FE cover for electromechanical hold-open device	silver	K-18352-00-0-1	2 5 6
	black	K-18352-00-0-6	
	white (RAL 9016)	K-18352-00-0-7	
	stainless steel	K-18352-00-0-8	
	special colour	K-18352-00-0-9	

Accessories (optional)

Designation	Surface	Order number	Modular system number
Log book for hold-open systems	-	K-18097-00-0-0	-
Test gas for smoke switch as part of functional test	-	K-17497-00-0-0	-

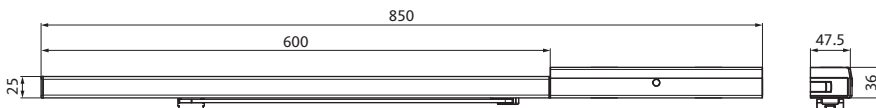
Applications

- 1-leaf fire and smoke protection doors
- 1-leaf swing doors
- Hold-open angle 85° – 140° steplessly adjustable
- Min. door leaf width 600 mm
- Max. door leaf widths
 - 1250 mm (OTS 735/OTS 735 BG)
 - 1400 mm (OTS 736/OTS 736 BG)
- DIN left and DIN right usable
- For use on hinge-side and side opposite to hinges

[1] Door closers must be ordered separately – for order information refer to pages 48 – 51.

GS FER-OTS 73x hold-open system set

Hold-open systems for single-leaf fire rated doors with electromechanical hold-open and smoke switch module



Set consisting of:

Modular system For details of the individual modular components, refer to		Page
2	GS slide rail	34
5	FE electromechanical hold-open device	37
6	AD-GS-FE cover for electromechanical hold-open device	38
9	Smoke switch module (RSM)	41

OTS 73x series of door closers

- Door closers in the OTS 73x series **are not included in the scope of delivery of the hold-open device set and must be ordered separately**
- You can find relevant order information on pages 48–51

Product characteristics

- Solution for single-leaf doors with door leaf widths up to 1400 mm
- Tested and certified in accordance with EN 1155
- Tested and approved by DIBt (German Institute of Building Engineering)

FE electromechanical hold-open device

Device that allows a door to be held open at a chosen angle until it is closed electrically

- Pre-mounted laterally on the slide rail
- **Technical data**
 - Operating voltage: 24 V DC
 - Power consumption: 1.9 W
 - Duty ratio: 100 %

Smoke switch module (RSM)

For supplying electricity to all components of a hold-open system (hold-open device, electromechanical hold-open magnet, fire detector, smoke release push-button and other elements)

- **Technical data**
 - Input voltage: 230 V AC, 50/60 Hz
 - Operating voltage: 24 V DC
 - Output current: max. 460 mA
 - Power consumption: 21 W
 - Power output: max. 11 W



OTS 73x door closer to be ordered separately

GS FER-OTS 73x hold-open system set^[1]

Slide rail, electromechanical hold-open device with cover and smoke switch module

Set consisting of	Surface	Order number	Modular system number
GS slide rail FE electromechanical hold-open device AD-GS-FE cover for electromechanical hold-open device Smoke switch module (RSM)	silver	K-18353-00-0-1	
	black	K-18353-00-0-6	
	white (RAL 9016)	K-18353-00-0-7	
	stainless steel	K-18353-00-0-8	
	special colour	K-18353-00-0-9	

Note: accessories for hold-open systems are listed on pages 180 – 198.

Applications

- 1-leaf fire and smoke protection doors
- 1-leaf swing doors
- Hold-open angle 85° – 140° steplessly adjustable
- Min. door leaf widths – 840/870 mm (BS/BG)
- Max. door leaf widths – 1250 mm (OTS 735/OTS 735 BG) – 1400 mm (OTS 736/OTS 736 BG)
- DIN left and DIN right usable
- For use on hinge-side and side opposite to hinges

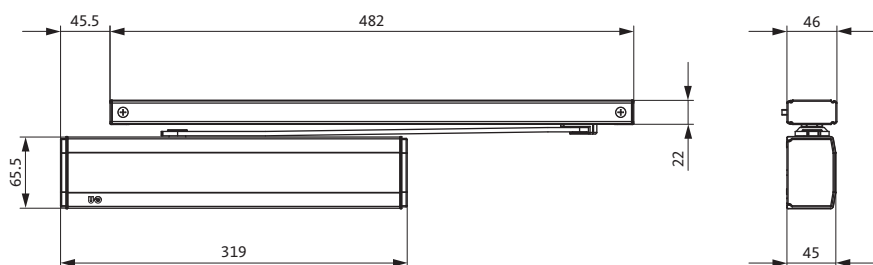
[1] Door closers must be ordered separately – for order information refer to pages 48 – 51.

OTS 73x FL / OTS 73x FL BG door closer set

Hold-open system for single-leaf fire rated doors with free-swing function



Ideal for barrier-free project solutions



The OTS 73x FL ensures barrier-free effortless passage through fire protection doors. The integrated electrical free-swing function can be activated from an opening angle of 0° and allows the door to move freely as if no door closer at all were fitted. Safe and reliable door locking is still ensured in the event of a fire. This makes OTS 73x FL door closers perfect for use on fire protection doors in kindergartens, schools, hospitals and residential homes for the elderly – standard-compliant for barrier-free construction in accordance with DIN SPEC 1104 and DIN 18040.

Product characteristics

- Solution for single-leaf doors with door leaf widths up to 1400 mm
- Also suitable for use at double-leaf doors together with the SRI door-leaf coordinator from the OTS 73x modular system
- Tested and certified in accordance with EN 1154 and EN 1155
- Tested and approved by DIBt (German Institute of Building Engineering)
- With electrically integrated free-swing function, can be activated from an opening angle of 0°
 - Operating voltage: 24 V DC
 - Power consumption: 2.4 W
 - Duty ratio: 100%
- Variant for hinge-side and side opposite to hinges
- Smallest dimensions:
 - OTS 73x FL closer body (L x H x D): 319 x 65.5 x 45 mm, including cover
 - GS slide rail (L x H x D): 482 x 46 x 22 mm
- Valve functions:
 - Closing speed
 - Latching speed
- No special components: all components of the modular system in the OTS 73x series can be used
- Uniform drilling-hole pattern with all door closers of the OTS 73x series
- Optional: opening restriction which can be integrated in the slide rail and is retrofittable

Classification code in accordance with EN 1154

OTS 735 FL/OTS 735 FL BG	4	8	5	1	1	4
OTS 736 FL/OTS 736 FL BG	4	8	6	1	1	4

Overview of variants

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

Applications

- 1-leaf fire and smoke protection doors
- 1-leaf swing doors
- Min. door leaf width 600 mm
- Max. door leaf width
 - 1250 mm (OTS 735 FL/OTS 735 FL BG)
 - 1400 mm (OTS 736 FL/OTS 736 FL BG)
- DIN left and DIN right usable
- Also suitable for use at 2-leaf doors together with the SRI door-leaf coordinator from the OTS 73x modular system
- Max. door opening and closing angle
 - Standard installation on hinge-side: 180°
 - Standard installation on side opposite to hinges: 120° ^[1]
- Max. free-swing angle approx. 120° – 125°
- **BS variant:**
 - Standard installation on hinge-side (BS)
 - Transom installation on side opposite to hinges (BG)
- **BG variant:**
 - Standard installation on side opposite to hinges (BG)
 - Transom installation on hinge-side (BS)

[1] Depending on installation situation.
Position door stop for max. door opening angle.

OTS 735 FL door closer sets

Hinge-side



OTS 735 FL door closer set – EN 5 (= door leaf widths up to 1250 mm) / hinge-side

OTS 735 FL door closer **with cover and slide rail**

Set consisting of	Surface	Order number	consisting of module numbers
OTS 735 FL door closer AD-OTS 73x FL cover GS slide rail	silver	K-19270-00-0-1	-
	black	K-19270-00-0-6	
	white (RAL 9016)	K-19270-00-0-7	
	special colour	K-19270-00-0-9	

OTS 735 FL door closer set – EN 5 (= door leaf widths up to 1250 mm) / hinge-side

OTS 735 FL door closer **with slide rail**

Set consisting of	Surface	Order number	consisting of module numbers
OTS 735 FL door closer AD-OTS 73x FL cover	silver	K-19268-00-0-1	-
	black	K-19268-00-0-6	
	white (RAL 9016)	K-19268-00-0-7	
	stainless steel	K-19268-00-0-8	
	special colour	K-19268-00-0-9	

OTS 735 FL door closer – EN 5 (= door leaf widths up to 1250 mm) / hinge-side

OTS 735 FL door closer **(without cover and slide rail)**

Designation	Surface	Order number	consisting of module numbers
OTS 735 FL door closer	silver	K-19266-00-0-1	-

OTS 735 FL BG door closer sets

Side opposite to hinges



OTS 735 FL BG door closer set – EN 5 (= door leaf widths up to 1250 mm) / side opposite to hinges

OTS 735 FL BG door closer **with cover and slide rail**

Set consisting of	Surface	Order number	consisting of module numbers
OTS 735 FL BG door closer AD-OTS 73x FL cover GS slide rail	silver	K-19271-00-0-1	-
	black	K-19271-00-0-6	
	white (RAL 9016)	K-19271-00-0-7	
	special colour	K-19271-00-0-9	

OTS 735 FL BG door closer set – EN 5 (= door leaf widths up to 1250 mm) / side opposite to hinges

OTS 735 FL BG door closer **with cover**

Set consisting of	Surface	Order number	consisting of module numbers
OTS 735 FL BG door closer AD-OTS 73x FL cover	silver	K-19269-00-0-1	-
	black	K-19269-00-0-6	
	white (RAL 9016)	K-19269-00-0-7	
	stainless steel	K-19269-00-0-8	
	special colour	K-19269-00-0-9	

OTS 735 FL BG door closer – EN 5 (= door leaf widths up to 1250 mm) / side opposite to hinges

OTS 735 FL BG door closer **(without cover and slide rail)**

Designation	Surface	Order number	consisting of module numbers
OTS 735 FL BG door closer	silver	K-19267-00-0-1	-

OTS 736 FL door closer sets

Hinge-side



OTS 736 FL door closer set – EN 6 (= door leaf widths up to 1400 mm) / hinge-side

OTS 736 FL door closer **with cover and slide rail**

Set consisting of	Surface	Order number	consisting of module numbers
OTS 736 FL door closer AD-OTS 73x FL cover GS slide rail	silver	K-18388-00-0-1	-
	black	K-18388-00-0-6	
	white (RAL 9016)	K-18388-00-0-7	
	special colour	K-18388-00-0-9	

OTS 736 FL door closer set – EN 6 (= door leaf widths up to 1400 mm) / hinge-side

OTS 736 FL door closer **with cover**

Set consisting of	Surface	Order number	consisting of module numbers
OTS 736 FL door closer AD-OTS 73x FL cover	silver	K-18504-00-0-1	-
	black	K-18504-00-0-6	
	white (RAL 9016)	K-18504-00-0-7	
	stainless steel	K-18504-00-0-8	
	special colour	K-18504-00-0-9	

OTS 736 FL door closer – EN 6 (= door leaf widths up to 1400 mm) / hinge-side

OTS 736 FL door closer **(without cover and slide rail)**

Designation	Surface	Order number	consisting of module numbers
OTS 736 FL door closer	silver	K-18349-00-0-1	-

OTS 736 FL BG door closer sets

Side opposite to hinges



OTS 736 FL BG door closer set – EN 6 (= door leaf widths up to 1400 mm) / side opposite to hinges

OTS 736 FL BG door closer **with cover and slide rail**

Set consisting of	Surface	Order number	consisting of module numbers
OTS 736 FL BG door closer AD-OTS 73x FL cover GS slide rail	silver	K-18389-00-0-1	-
	black	K-18389-00-0-6	
	white (RAL 9016)	K-18389-00-0-7	
	special colour	K-18389-00-0-9	

OTS 736 FL BG door closer set – EN 6 (= door leaf widths up to 1400 mm) / side opposite to hinges

OTS 736 FL BG door closer **with cover**

Set consisting of	Surface	Order number	consisting of module numbers
OTS 736 FL BG door closer AD-OTS 73x FL cover	silver	K-18505-00-0-1	-
	black	K-18505-00-0-6	
	white (RAL 9016)	K-18505-00-0-7	
	stainless steel	K-18505-00-0-8	
	special colour	K-18505-00-0-9	

OTS 736 FL BG door closer – EN 6 (= door leaf widths up to 1400 mm) / side opposite to hinges

OTS 736 FL BG door closer **(without cover and slide rail)**

Designation	Surface	Order number	consisting of module numbers
OTS 736 FL BG door closer	silver	K-18350-00-0-1	-

OTS 73x FL / OTS 73x FL BG door closer sets

Individual components



AD-OTS 73x FL cover

Designation	Surface	Order number	Modular system number
AD-OTS 73x FL cover	silver	K-18508-00-0-1	-
	black	K-18508-00-0-6	
	white (RAL 9016)	K-18508-00-0-7	
	stainless steel	K-18508-00-0-8	
	special colour	K-18508-00-0-9	

GS slide rail

Slide rail including slide arm and axle top part

Designation	Surface	Order number	Modular system number
GS slide rail	silver	K-18351-00-0-1	2
	black	K-18351-00-0-6	
	white (RAL 9016)	K-18351-00-0-7	
	stainless steel colour	K-18351-00-0-8P	
	special colour	K-18351-00-0-9	

AD-GS slide rail cover

Designation	Surface	Order number	Modular system number
AD-GS slide rail cover	silver	K-18364-00-0-1	3
	black	K-18364-00-0-6	
	white (RAL 9016)	K-18364-00-0-7	
	stainless steel	K-18364-00-0-8	
	special colour	K-18364-00-0-9	

Accessories / extensions (optional)			
Designation	Surface	Order number	Modular system number
Smoke switch module (RSM) (incl. power supply unit, release device and lintel-mounted smoke detector)	silver	K-19058-00-0-1	9
	black	K-19058-00-0-6	
	white (RAL 9016)	K-19058-00-0-7	
	stainless steel colour	K-19058-00-0-8P	
	special colour	K-19058-00-0-9	
MP mounting plate	–	K-18280-00-0-1	10
ÖB opening restrictor	–	K-18916-00-0-6	11
Manual release push-button, in-wall/on-wall	white (RAL 9016)	K-17492-00-0-7	–
Log book for hold-open systems	–	K-18097-00-0-0	–
Test gas for smoke switch as part of functional test	–	K-17497-00-0-0	–
Safety sticker/inspection sticker for hold-open systems	–	K-18529-00-0-0	–

Note: you can find matching cable links on pages 210 and 211.

GS SRI-OTS 73x slide rail set

with SRI door-leaf coordinator



Product characteristics

- Solution for double-leaf doors with total door leaf widths up to 2800 mm
- Tested and certified in accordance with EN 1158

SRI door-leaf coordinator

- Mechanical door-leaf coordinator (SRI) integrated into the slide rail to ensure doors are closed safely and in the correct sequence at all times

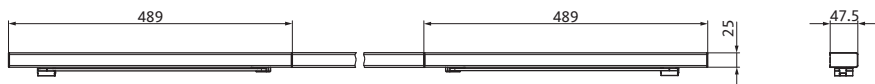
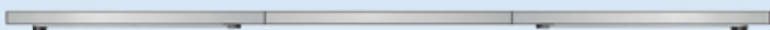


Illustration: GS SRI-OTS 73x slide rail set

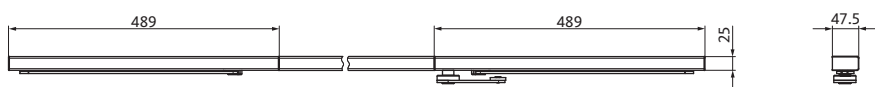


Illustration: GS SRI-OTS 73x BG slide rail set

Set consisting of:

Modular system For details of the individual modular components, refer to		Page
2 x	GS slide rails	34
2 x	AD-GS slide rail covers	35
1 x	SRI or SRI-BG door-leaf coordinator	39
1 x	SRI cover for door-leaf coordinator	40

OTS 73x door closer

- Door closers in the OTS 73x series are **not included in the scope of delivery of the slide rail set and must be ordered separately**
- When used in combination with the slide rail set, two OTS 73x door closers must always be ordered
- For relevant order information refer to pages 76–79

Applications

- 2-leaf fire and smoke protection doors
- 2-leaf swing doors
- Min. total door leaf widths:
 - 1430/1475 mm (BS/BG)
- Max. total door leaf widths:
 - 2500 mm (OTS 735/OTS 735 BG)
 - 2800 mm (OTS 736/OTS 736 BG)
- Min. single door leaf width of passive leaf: 400/600 mm (BS/BG)
- Standard installation on hinge-side and side opposite to hinges
- Max. door opening and closing angle
 - Standard installation on hinge-side: 180°
 - Standard installation on side opposite to hinges: 120° ^[1]
- Greater range of application with side opposite to hinges (BG) due to separate BG variant
 - e.g. opening angle of approx. 113° with an X-dimension of 100 mm ^[1] (see page 21)

SRI-OTS 73x door-leaf coordinator for use on double-leaf full-panic doors in escape and rescue routes

A suitable carrier bar must always be used with double-leaf full-panic doors installed in escape and rescue routes. This ensures that when the door is opened via the passive leaf (in emergency situations), the active leaf is carried at least as far as the beginning of the action range of the (SRI-OTS 73x) door-leaf coordinator.

For the corresponding application diagram and additional information on the carrier bar, refer to pages 206 – 209.

[1] Depending on installation situation.
Position door stop for max. door opening angle.

GS SRI-OTS 73x slide rail set

Hinge-side



OTS 73x door closer to be ordered separately

OTS 73x door closer to be ordered separately

*Optional accessories

GS SRI-OTS 73x slide rail set^[1]

Slide rails, door-leaf coordinators, covers

Set consisting of	Surface	Order number	consisting of module numbers
GS slide rails AD-GS slide rail covers SRI door-leaf coordinator (without microswitch) SRI cover for door-leaf coordinator	silver	K-18354-00-0-1	2 x 2
	black	K-18354-00-0-6	2 x 3
	white (RAL 9016)	K-18354-00-0-7	1 x 7BS
	stainless steel	K-18354-00-0-8	1 x 8
	special colour	K-18354-00-0-9	

Accessories (optional)

Designation	Surface	Order number	Modular system number
FM mechanical hold-open device with ÖB opening restrictor	–	K-18369-00-0-6	4
ÖB opening restrictor ^[2]	–	K-18916-00-0-6	11
Microswitch/connection board for SRI door-leaf coordinator	–	K-18239-00-0-0	–
GS-SRI-OTS 73x mounting plate 30 mm	silver	K-19502-12-0-1	–
	special colour	K-19502-12-0-9	–
GS-SRI-OTS 73x mounting plate 40 mm	silver	K-19502-23-0-1	–
	special colour	K-19502-23-0-9	–

[1] Door closers must be ordered separately – for order information refer to pages 76 – 79.

[2] Not required if a mechanical hold-open device (FM) is installed.

GS SRI-OTS 73x BG slide rail set

Side opposite to hinges



OTS 73x door closer to be ordered separately

OTS 73x door closer to be ordered separately

*Optional accessories

GS SRI-OTS 73x BG slide rail set ^[1]

Slide rails, door-leaf coordinators, covers

Set consisting of	Surface	Order number	consisting of module numbers
GS slide rails AD-GS slide rail covers SRI-BG door-leaf coordinator (without microswitch) SRI cover for door-leaf coordinator	silver	K-18357-00-0-1	2 x
	black	K-18357-00-0-6	2 x
	white (RAL 9016)	K-18357-00-0-7	1 x
	stainless steel	K-18357-00-0-8	1 x
	special colour	K-18357-00-0-9	

Accessories (optional)

Designation	Surface	Order number	Modular system number
FM mechanical hold-open device with ÖB opening restrictor	–	K-18369-00-0-6	
ÖB opening restrictor ^[2]	–	K-18916-00-0-6	
Microswitch/connection board for SRI door-leaf coordinator	–	K-18239-00-0-0	–
GS-SRI-OTS 73x mounting plate 30 mm	silver	K-19502-12-0-1	–
	special colour	K-19502-12-0-9	–
GS-SRI-OTS 73x mounting plate 40 mm	silver	K-19502-23-0-1	–
	special colour	K-19502-23-0-9	–

[1] Door closers must be ordered separately – for order information refer to pages 76 – 79.

[2] Not required if a mechanical hold-open device (FM) is installed.

GS FE-SRI-OTS 73x slide rail set

with SRI door-leaf coordinator and FE electromechanical hold-open device



Product characteristics

- Solution for double-leaf doors with total door leaf widths up to 2800 mm
- Tested and certified in accordance with EN 1155 and EN 1158
- Tested and approved by DIBt (German Institute of Building Engineering)

SRI door-leaf coordinator

- Mechanical door-leaf coordinator (SRI) integrated into the slide rail to ensure doors are closed safely and in the correct sequence at all times
- Microswitch in the active leaf supplied as standard: guarantees that the passive leaf closes if the active leaf is manually unlatched from the hold-open position

FE electromechanical hold-open device

- Device that is integrated and pre-mounted in the slide rail and allows a door to be held open at a chosen angle until it is closed electrically
- Set contains: 2 hold-open devices, electromechanical (FE); one for active and passive leaf respectively
- The active leaf can be held open independently of the passive leaf at any time

Cover

- Door leaf coordinator and electromechanical hold-open device integrated under continuous cover



Illustration: GS FE-SRI-OTS 73x slide rail set

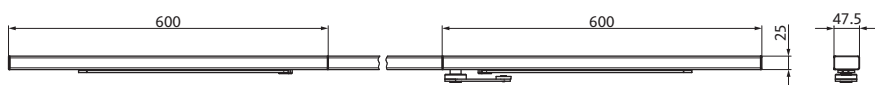


Illustration: GS FE-SRI-OTS 73x BG slide rail set

Set consisting of:

Modular system For details of the individual modular components, refer to		Page
2 x	GS slide rails	34
2 x	FE electromechanical hold-open device	37
2 x	AD-GS-FE cover for electromechanical hold-open device	38
1 x	SRI or SRI-BG door-leaf coordinator	39
1 x	SRI cover for door-leaf coordinator	40

OTS 73x door closer

- Door closers in the OTS 73x series are **not included in the scope of delivery of the slide rail set and must be ordered separately**
- When used in combination with the slide rail set, two OTS 73x door closers must always be ordered
- For relevant order information refer to pages 76 – 79

Applications

- 2-leaf fire and smoke protection doors
- Min. total door leaf widths:
 - 1430 mm/1475 mm (BS/BG)
- Max. total door leaf widths:
 - 2500 mm (OTS 735/OTS 735 BG)
 - 2800 mm (OTS 736/OTS 736 BG)
- Min. single door leaf width of passive leaf: 400/600 mm (BS/BG)
- Hold-open angle 85° – 140° steplessly adjustable^[1]
- Standard installation on hinge-side and side opposite to hinges
- Max. door opening and closing angle
 - Standard installation on hinge-side: 180°
 - Standard installation on side opposite to hinges: 120°^[1]
- Greater range of application with side opposite to hinges (BG) due to separate BG variant
 - e.g. opening angle of approx. 113° with an X-dimension of 100 mm^[1] (see page 21)

SRI-OTS 73x door-leaf coordinator for use on double-leaf full-panic doors in escape and rescue routes

A suitable carrier bar must always be used with double-leaf full-panic doors installed in escape and rescue routes. This ensures that when the door is opened via the passive leaf (in emergency situations), the active leaf is carried at least as far as the beginning of the action range of the (SRI-OTS 73x) door-leaf coordinator.

For the corresponding application diagram and additional information on the carrier bar, refer to pages 206 – 209.

[1] Depending on installation situation.
Position door stop for max. door opening angle.

GS FE-SRI-OTS 73x slide rail set

Hinge-side



OTS 73x door closer to be ordered separately

OTS 73x door closer to be ordered separately

GS FE-SRI-OTS 73x slide rail set^[1]

Slide rails, electromechanical hold-open devices, door-leaf coordinators, covers

Set consisting of	Surface	Order number	consisting of module numbers
GS slide rails FE electromechanical hold-open device AD-GS-FE cover for electromechanical hold-open device SRI door-leaf coordinator (with microswitch) SRI cover for door-leaf coordinator	silver	K-18355-00-0-1	
	black	K-18355-00-0-6	2 x 1 x
	white (RAL 9016)	K-18355-00-0-7	2 x 1 x
	stainless steel	K-18355-00-0-8	2 x
	special colour	K-18355-00-0-9	

Note: accessories for hold-open systems are listed on pages 180 – 198.

[1] Door closers must be ordered separately – for order information refer to pages 76 – 79.

GS FE-SRI-OTS 73x BG slide rail set

Side opposite to hinges



OTS 73x door closer to be ordered separately

OTS 73x door closer to be ordered separately

GS FE-SRI-OTS 73x BG slide rail set ^[1]

Slide rails, electromechanical hold-open devices, door-leaf coordinators, covers

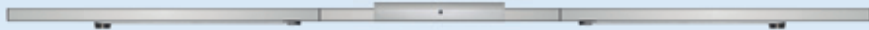
Set consisting of	Surface	Order number	consisting of module numbers
GS slide rails FE electromechanical hold-open device AD-GS-FE cover for electromechanical hold-open device SRI-BG door-leaf coordinator (with microswitch) SRI cover for door-leaf coordinator	silver	K-18358-00-0-1	
	black	K-18358-00-0-6	2 x 1 x
	white (RAL 9016)	K-18358-00-0-7	2 x 1 x
	stainless steel	K-18358-00-0-8	2 x
	special colour	K-18358-00-0-9	

Note: accessories for hold-open systems are listed on pages 180 – 198.

[1] Door closers must be ordered separately – for order information refer to pages 76 – 79.

GS FER-SRI-OTS 73x hold-open system set

Hold-open system for double-leaf fire rated doors, with door-leaf coordinator, electromechanical hold-open device and smoke switch module



Product characteristics

- Solution for double-leaf doors with total door leaf widths up to 2800 mm
- Tested and certified in accordance with EN 1155 and EN 1158
- Tested and approved by DIBt according to the guidelines for hold-open systems

SRI door-leaf coordinator

- Mechanical door-leaf coordinator (SRI) integrated into the slide rail to ensure doors are closed safely and in the correct sequence at all times
- Microswitch in the active leaf supplied as standard: guarantees that the passive leaf closes if the active leaf is manually unlatched from the hold-open position

FE electromechanical hold-open device

- Device that is integrated and pre-mounted in the slide rail and allows a door to be held open at a chosen angle until it is closed electrically
- Set contains: 2 hold-open devices, electromechanical (FE); one for active and passive leaf respectively
- The active leaf can be held open independently of the passive leaf at any time

Cover

- Door leaf coordinator and electromechanical hold-open device integrated under continuous cover

Smoke switch module (RSM)

- For supplying electricity to all components of a hold-open system (hold-open device, electromechanical hold-open magnet, fire detector, smoke release push-button and other elements)

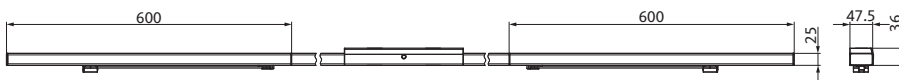


Illustration 1: GS FER-SRI-OTS 73x hold-open system set – smoke switch module (RSM) mounted centrally

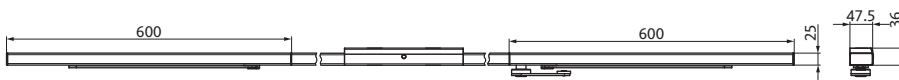


Illustration 1: GS FER-SRI-OTS 73x BG hold-open system set – smoke switch module (RSM) mounted centrally

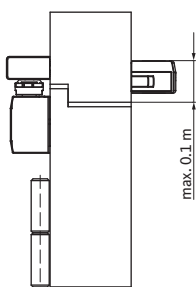


Illustration 2:
GS FER-SRI-OTS 73x hold-open system set
Smoke switch module (RSM)
mounted on opposite side
(on the side opposite the hinges
in this case)

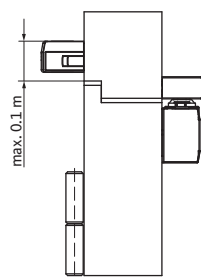


Illustration 2:
GS FER-SRI-OTS 73x BG hold-open system set
Smoke switch module (RSM)
mounted on opposite side
(on the hinge-side in this case)

Set consisting of:

Modular system For details of the individual modular components, refer to		Page
2 x	GS slide rails	34
2 x	FE electromechanical hold-open device	37
2 x	AD-GS-FE cover for electromechanical hold-open device	38
1 x	SRI or SRI-BG door-leaf coordinator	39
1 x	SRI cover for door-leaf coordinator	40
1 x	Smoke switch module (RSM)	41

OTS 73x door closer

- Door closers in the OTS 73x series are **not included in the scope of delivery of the hold-open device set and must be ordered separately**
- When used in combination with the hold-open system set, two OTS 73x door closers must always be ordered
- For relevant order information refer to pages 76 – 79

Applications

- 2-leaf fire and smoke protection doors
- Min. total door leaf widths:
 - **Illustration 1:**
1725 mm/1770 mm (BS/BG)
 - **Illustration 2:**
1430 mm/1475 mm (BS/BG)
- Max. total door leaf widths:
 - 2500 mm (OTS 735/OTS 735 BG)
 - 2800 mm (OTS 736/OTS 736 BG)
- Min. single door leaf width of passive leaf: 400/600 mm (BS/BG)
- Hold-open angle 85° – 140° steplessly adjustable^[1]
- Standard installation on hinge-side and side opposite to hinges
- Max. door opening and closing angle
 - Standard installation on hinge-side: 180°
 - Standard installation on side opposite to hinges: 120°^[1]
- Greater range of application with side opposite to hinges (BG) due to separate BG variant
 - e.g. opening angle of approx. 113° with an X-dimension of 100 mm^[1] (see page 21)

SRI-OTS 73x door-leaf coordinator for use on double-leaf full-panic doors in escape and rescue routes

A suitable carrier bar must always be used with double-leaf full-panic doors installed in escape and rescue routes. This ensures that when the door is opened via the passive leaf (in emergency situations), the active leaf is carried at least as far as the beginning of the action range of the (SRI-OTS 73x) door-leaf coordinator.

For the corresponding application diagram and additional information on the carrier bar, refer to pages 206 – 209.

[1] Depending on installation situation.
Position door stop for max. door opening angle.

GS FER-SRI-OTS 73x hold-open system set

Hinge-side



OTS 73x door closer to be ordered separately

OTS 73x door closer to be ordered separately

GS FER-SRI-OTS 73x hold-open system set^[1]

Slide rails, electromechanical hold-open devices, door-leaf coordinators, covers, smoke switch module

Set consisting of	Surface	Order number	consisting of module numbers
GS slide rails FE electromechanical hold-open device AD-GS-FE cover for electromechanical hold-open device SRI door-leaf coordinator (with microswitch) SRI cover for door-leaf coordinator Smoke switch module (RSM)	silver	K-18356-00-0-1	
	black	K-18356-00-0-6	2 x 1 x
	white (RAL 9016)	K-18356-00-0-7	2 x 1 x
	stainless steel	K-18356-00-0-8	2 x 1 x
	special colour	K-18356-00-0-9	

Note: accessories for hold-open systems are listed on pages 180 – 198.

[1] Door closers must be ordered separately – for order information refer to pages 76 – 79.

GS FER-SRI-OTS 73x BG hold-open system sets

Side opposite to hinges



OTS 73x door closer to be ordered separately

OTS 73x door closer to be ordered separately

GS FER-SRI-OTS 73x BG hold-open system set ^[1]

Slide rails, electromechanical hold-open devices, door-leaf coordinators, covers, smoke switch module

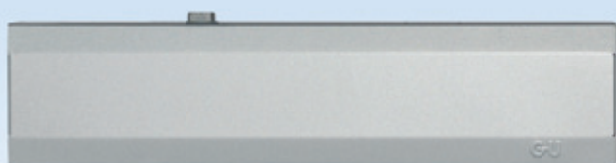
Set consisting of	Surface	Order number	consisting of module numbers
GS slide rails FE electromechanical hold-open device AD-GS-FE cover for electromechanical hold-open device SRI-BG door-leaf coordinator (with microswitch) SRI cover for door-leaf coordinator Smoke switch module (RSM)	silver	K-18359-00-0-1	
	black	K-18359-00-0-6	2 x 1 x
	white (RAL 9016)	K-18359-00-0-7	2 x 1 x
	stainless steel	K-18359-00-0-8	2 x 1 x
	special colour	K-18359-00-0-9	

Note: accessories for hold-open systems are listed on pages 180 – 198.

[1] Door closers must be ordered separately – for order information refer to pages 76 – 79.

OTS 73x / OTS 73x BG door closer set

without GS slide rail



Product characteristics

- Solution for double-leaf doors with total door leaf widths up to 2800 mm
- Tested and certified in accordance with EN 1154

Set consisting of:

Modular system For details of the individual modular components, refer to		Page
1BS 1BG	OTS 73x / OTS 73x BG closer body	32
1A	AD-OTS 73x cover	33

Slide rail and hold-open system sets

- The OTS 73x series door closers can be combined with the following sets
 - GS-SRI-OTS 73x
 - GS-FE-SRI OTS 73x
 - GS-FER-SRI OTS 73x
- When used with the sets, two OTS 73x door closers must be ordered in each case
- You can find relevant order information on pages
 - 64–67 (GS SRI-OTS 73x)
 - 68–71 (GS FE-SRI-OTS 73x)
 - 72–75 (GS FER-SRI-OTS 73x)

Overview of variants						
Type designation	OTS 735	OTS 735 BG	OTS 736	OTS 736 BG	OTS 736 SV ^[2]	OTS 736 BG SV ^[2]
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

Applications

- 2-leaf fire and smoke protection doors
- 2-leaf swing doors
- Max. total door leaf width
 - 2500 mm (OTS 735/OTS 735 BG)
 - 2800 mm (OTS 736/OTS 736 BG)
- DIN left and DIN right usable
- **BS variant:**
 - Standard installation on hinge-side (BS)
 - Transom installation on side opposite to hinges (BG)
- **BG variant:**
 - Standard installation on side opposite to hinges (BG)
 - Transom installation on hinge-side (BS)
- Max. door opening and closing angle
 - Standard installation on hinge-side: 180°
 - Standard installation on side opposite to hinges: 120°^[1]
- Greater range of application with side opposite to hinges (BG) due to separate BG variant
 - e.g. opening angle of approx. 113° with an X-dimension of 100 mm^[1] (see page 21)

[1] Depending on installation situation.
Position door stop for max. door opening angle.
[2] Not approved for fire and smoke protection doors.

OTS 73x door closer sets – without slide rail

Hinge-side



OTS 73x

MP*

MP*

OTS 73x

*Optional accessories

OTS 735 door closer set – EN 2–5 (= total door leaf widths up to 2500 mm)

OTS 735 door closer with cover

Set consisting of	Surface	PU ^[1]	Order number	consisting of module numbers
OTS 735 door closer AD-OTS 73x cover	silver	1	K-18498-00-0-1	
	black	1	K-18498-00-0-6	
	white (RAL 9016)	1	K-18498-00-0-7	
	stainless steel	1	K-18498-00-0-8	
	special colour	1	K-18498-00-0-9	

OTS 736 door closer set – EN 3–6 (= total door leaf widths up to 2800 mm)

OTS 736 door closer with cover

Set consisting of	Surface	PU ^[1]	Order number	consisting of module numbers
OTS 736 door closer AD-OTS 73x cover	silver	1	K-18500-00-0-1	
	black	1	K-18500-00-0-6	
	white (RAL 9016)	1	K-18500-00-0-7	
	stainless steel	1	K-18500-00-0-8	
	special colour	1	K-18500-00-0-9	

OTS 736 SV^[2] door closer set – EN 3–6 (= total door leaf widths up to 2800 mm)

OTS 736 SV door closer with cover

Set consisting of	Surface	PU ^[1]	Order number	consisting of module numbers
OTS 736 SV door closer AD-OTS 73x cover	silver	1	K-18502-00-0-1	
	black	1	K-18502-00-0-6	
	white (RAL 9016)	1	K-18502-00-0-7	
	stainless steel	1	K-18502-00-0-8	
	special colour	1	K-18502-00-0-9	

Accessories (optional)

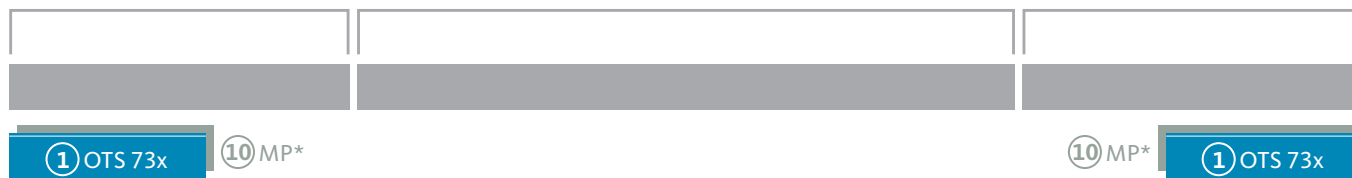
Designation	Surface	PU	Order number	Modular system number
MP mounting plate	–	1	K-18280-00-0-1	

[1] When used with the GS SRI-OTS 73x and GS FE-SRI-OTS 73x slide rail sets and the GS FER-SRI-OTS 73x hold-open system set, 2 OTS 73x door closers must be ordered in each case.

[2] Not approved for fire and smoke protection doors.

OTS 73x BG door closer sets – without slide rail

Side opposite to hinges



*Optional accessories

OTS 735 BG door closer set – EN 2–5 (= total door leaf widths up to 2500 mm)

OTS 735 BG door closer with cover

Set consisting of	Surface	PU ^[1]	Order number	consisting of module numbers
OTS 735 BG door closer AD-OTS 73x cover	silver	1	K-18499-00-0-1	1BG 1A
	black	1	K-18499-00-0-6	
	white (RAL 9016)	1	K-18499-00-0-7	
	stainless steel	1	K-18499-00-0-8	
	special colour	1	K-18499-00-0-9	

OTS 736 BG door closer set – EN 3–6 (= total door leaf widths up to 2800 mm)

OTS 736 BG door closer with cover

Set consisting of	Surface	PU ^[1]	Order number	consisting of module numbers
OTS 736 BG door closer AD-OTS 73x cover	silver	1	K-18501-00-0-1	1BG 1A
	black	1	K-18501-00-0-6	
	white (RAL 9016)	1	K-18501-00-0-7	
	stainless steel	1	K-18501-00-0-8	
	special colour	1	K-18501-00-0-9	

OTS 736 BG SV^[2] door closer set – EN 3–6 (= total door leaf widths up to 2800 mm)

OTS 736 BG SV door closer with cover

Set consisting of	Surface	PU ^[1]	Order number	consisting of module numbers
OTS 736 BG SV door closer AD-OTS 73x cover	silver	1	K-18503-00-0-1	1BG 1A
	black	1	K-18503-00-0-6	
	white (RAL 9016)	1	K-18503-00-0-7	
	stainless steel	1	K-18503-00-0-8	
	special colour	1	K-18503-00-0-9	

Accessories (optional)

Designation	Surface	PU	Order number	Modular system number
MP mounting plate	–	1	K-18280-00-0-1	10

[1] When used with the GS SRI-OTS 73x and GS FE-SRI-OTS 73x slide rail sets and the GS FER-SRI-OTS 73x hold-open system set, 2 OTS 73x door closers must be ordered in each case.

[2] Not approved for fire and smoke protection doors.

Accessories for OTS 73x

Mounting plates

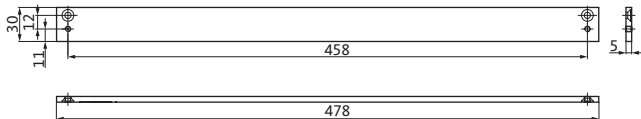
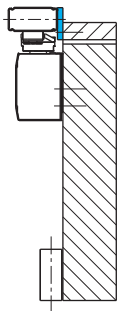


Fig.: Mounting plate 30 mm

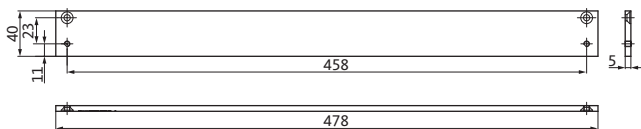
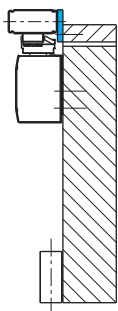


Fig.: Mounting plate 40 mm

GS-OTS 73x mounting plate

for installation of the GS slide rail

GS-OTS 73x mounting plate			
Designation	Height	Surface	Order number
GS-OTS 73x mounting plate	30 mm	silver	K-18524-00-0-1
		special colour	K-18524-00-0-9
	40 mm	silver	K-18524-23-0-1
		special colour	K-18524-23-0-9



GS-SRI-OTS 73x mounting plate

for mounting the SRI door-leaf coordinator with 2-leaf elements

GS-SRI-OTS 73x mounting plate			
Designation	Height	Surface	Order number
GS-SRI-OTS 73x mounting plate	30 mm	silver	K-19502-12-0-1
		special colour	K-19502-12-0-9
	40 mm	silver	K-19502-23-0-1
		special colour	K-19502-23-0-9

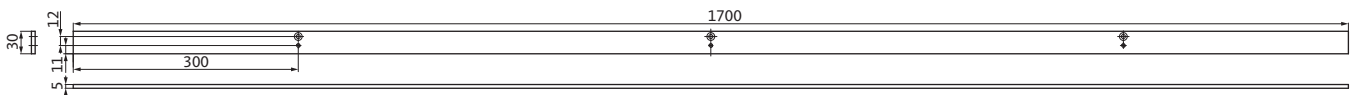


Fig.: Mounting plate 30 mm

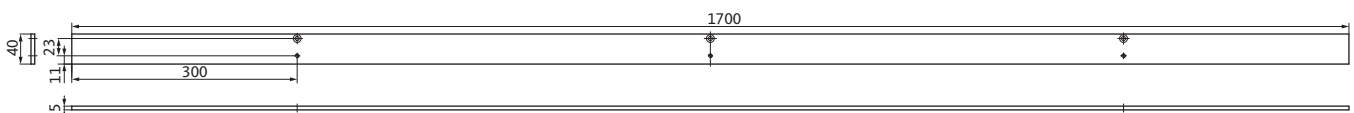
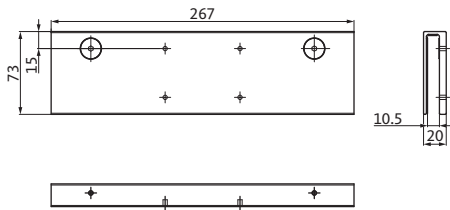
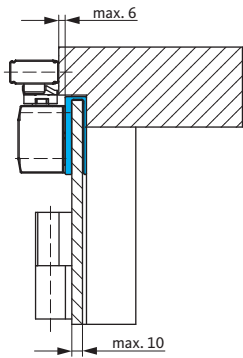


Fig.: Mounting plate 40 mm



Clamping plate for OTS 73x

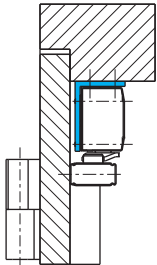
for installation of the OTS 73x door closer on all-glass doors up to 10 mm thick

Clamping plate for OTS 73x

Designation	Surface	Order number
Clamping plate for OTS 73x	silver	K-18526-00-0-1
	special colour	K-18526-00-0-9

Accessories for OTS 73x

Angular lintel bracket

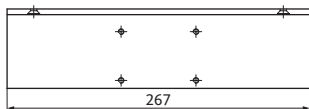
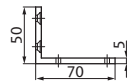
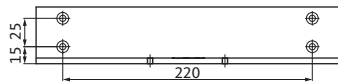


Angular lintel bracket for OTS 73x door closer

for fastening the OTS 73x door closer body on the hinge-side when installing on the lintel and on the side opposite to the hinges when installing on the transom with large reveal depths

Angular lintel bracket for OTS 73x door closer

Designation	Surface	Order number
Angular lintel bracket for OTS 73x door closer	silver	K-18528-00-0-1
	special colour	K-18528-00-0-9

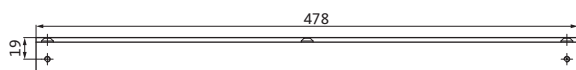
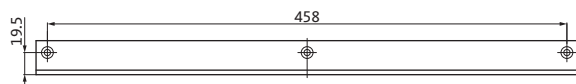
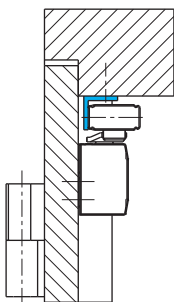


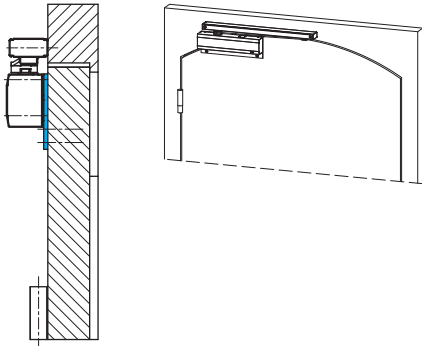
Angular lintel bracket GS-OTS 73x for slide rail

for fastening the GS slide rail on the side opposite to the hinges when installing on the lintel with large reveal depths

Angular lintel bracket GS-OTS 73x for slide rail

Designation	Surface	Order number
Angular lintel bracket for GS-OTS 73x slide rail	silver	K-18525-00-0-1
	special colour	K-18525-00-0-9



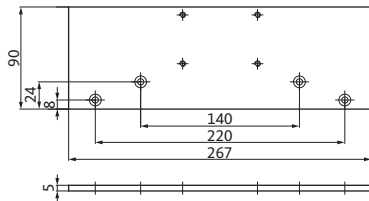


Flat plate for OTS 73x

for installation of the OTS 73x door closer on segmental arch head doors with segmental arch heads up to 130 mm

Flat plate for OTS 73x

Designation	Surface	Order number
Flat plate for OTS 73x	silver	K-18527-00-0-1
	special colour	K-18527-00-0-9



Accessories for OTS 73x

Axle extension, axle extension of sliding block

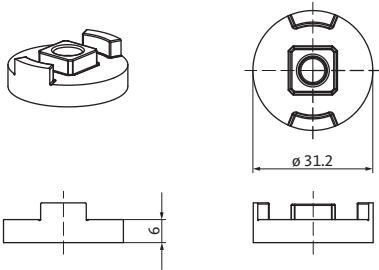


Illustration: 6 mm axle extension

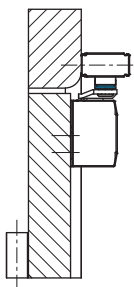
Axle extension

for increasing or evening out the distance between the door closer and slide rail for doors with a large rebate overlap

Product features:

- 8 or 6 mm high
- Consistent for all OTS 73x variants
- Stackable (only 8 mm variants)

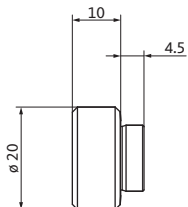
Axle extension		
Designation	Height [mm]	Order number
Axle extension between door closer axis and slide arm	6	K-18767-06-0-6
	8	K-18767-08-0-6

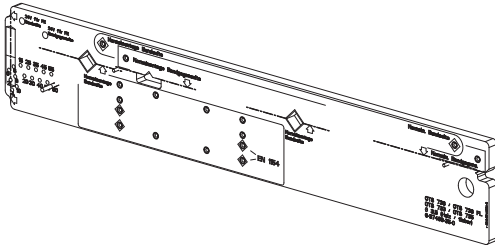


Axle extension of sliding block

to compensate for deviations from the specified dimensions at the slide rail when using slender door profiles

Axle extension of sliding block		
Designation	Height [mm]	Order number
Axle extension of sliding block	10	K-19088-10-0-6





Drilling jigs

- Assembly aid for drilling holes at the mounting points on the door leaf and door frame when installing the OTS 73x door closer (BS and BG)
- 4 variants

Drilling jigs

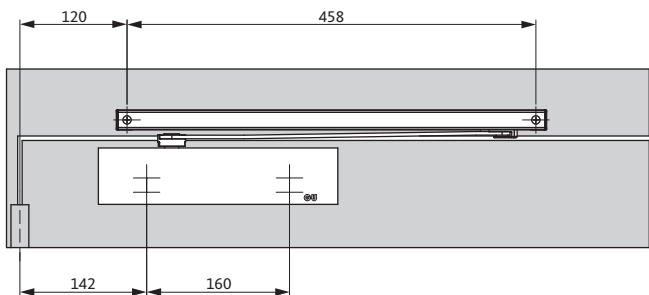
Installation method	Material	Order number
Standard installation (NM)	Timber	K-18937-35-0-0
Standard installation (NM)	Metal	K-18937-42-0-0
Transom installation (KM)	Timber	K-18938-35-0-0
Transom installation (KM)	Metal	K-18938-42-0-0

Installation situations for OTS 73x – 1-leaf elements

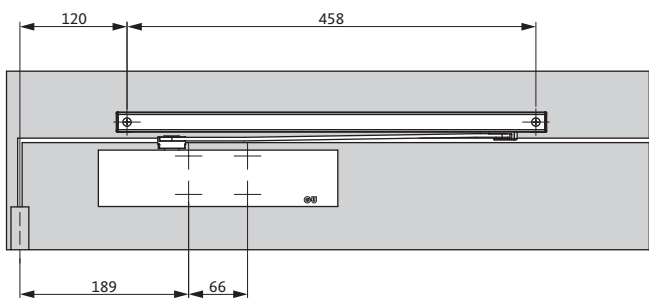
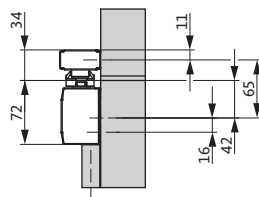
Flush doors / hinge-side and side opposite to hinges



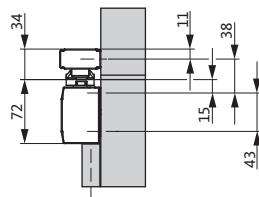
Standard mounting on hinge-side with OTS 73x



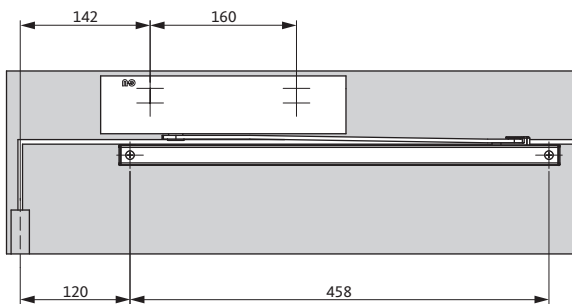
with mounting plate



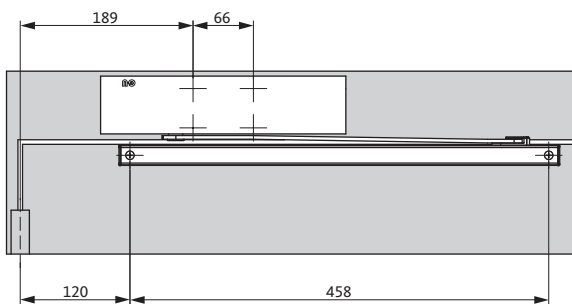
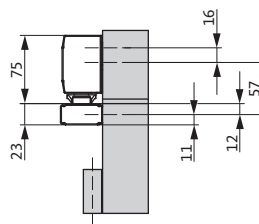
without mounting plate



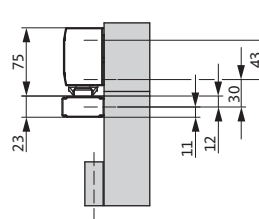
Transom installation on hinge-side with OTS 73x BG



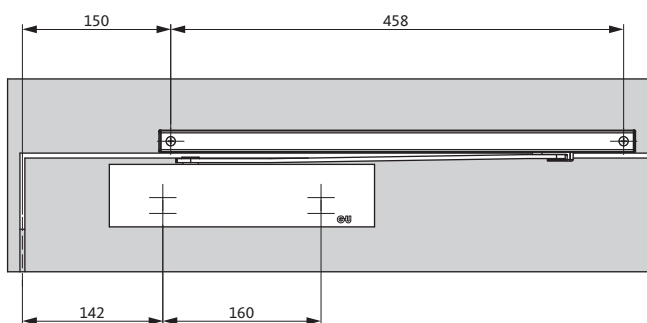
with mounting plate



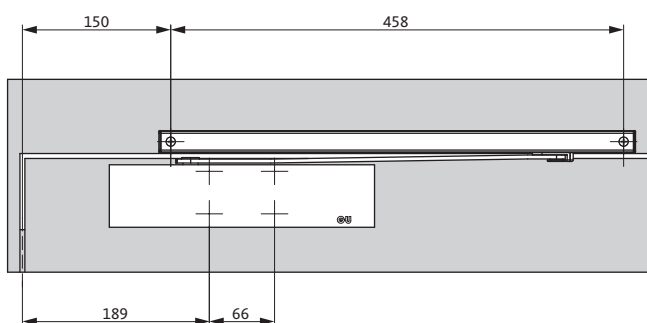
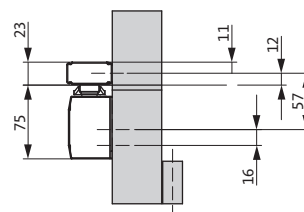
without mounting plate



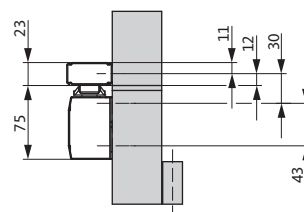
Standard installation on side opposite to hinges with OTS 73x BG



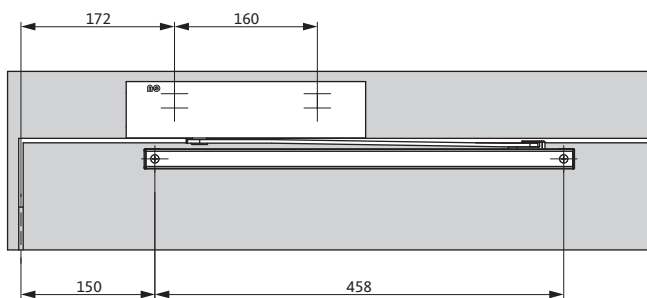
with mounting plate



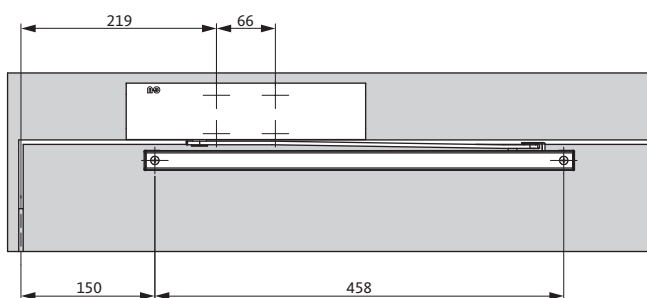
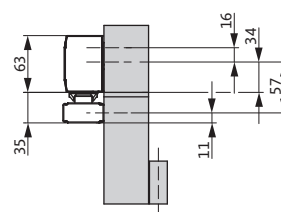
without mounting plate



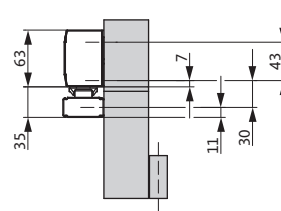
Transom installation on side opposite to hinges with OTS 73x



with mounting plate



without mounting plate

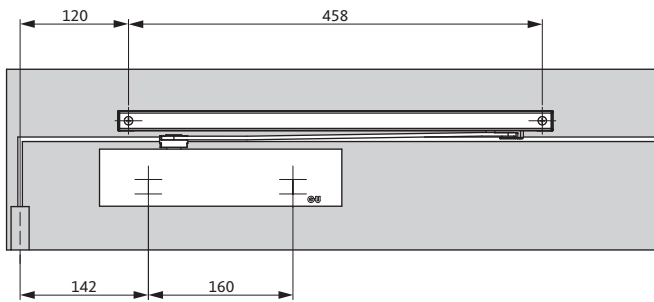


Installation situations for OTS 73x – 1-leaf elements

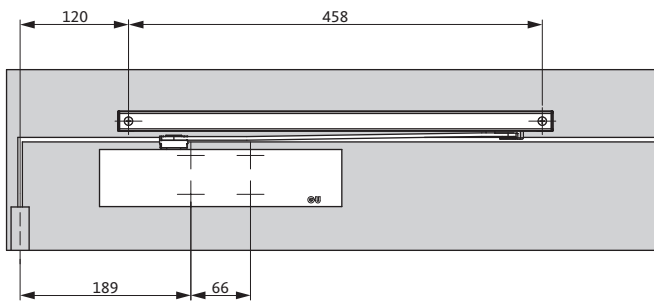
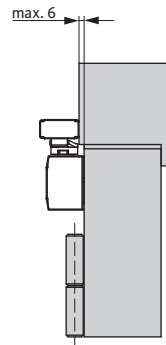
Rebated doors / hinge-side



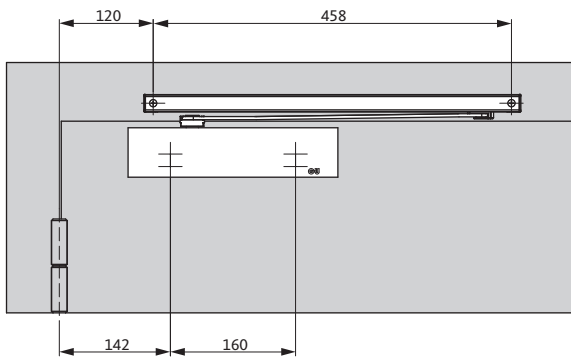
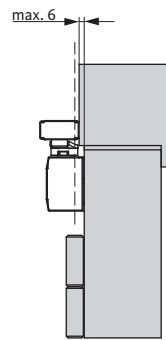
Standard mounting on hinge-side with OTS 73x



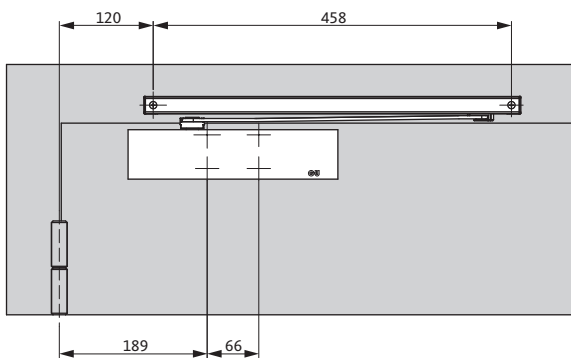
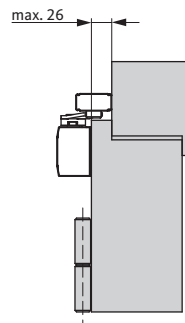
with mounting plate



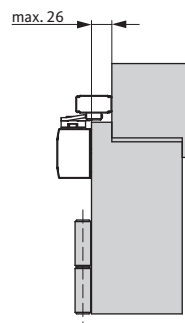
without mounting plate



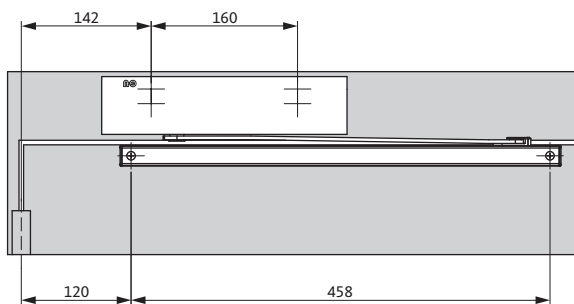
with mounting plate



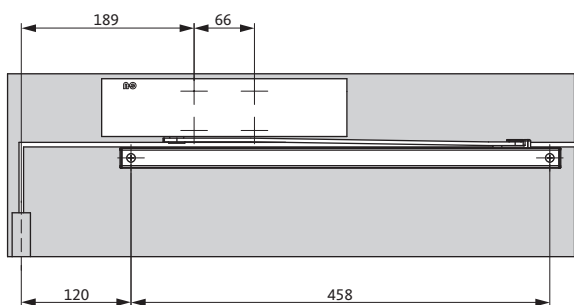
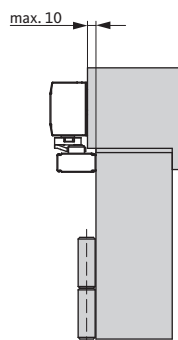
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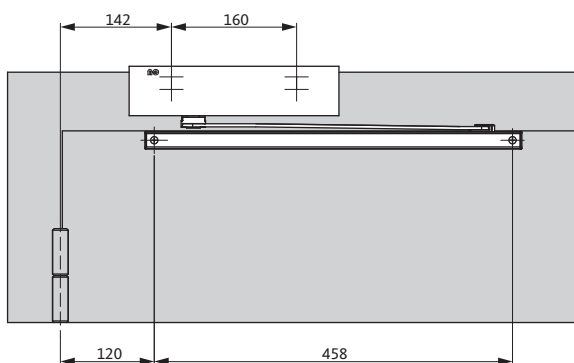
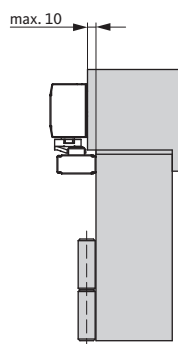
Transom installation on hinge-side with OTS 73x BG



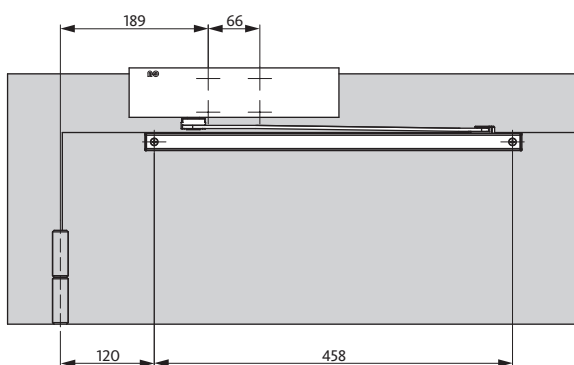
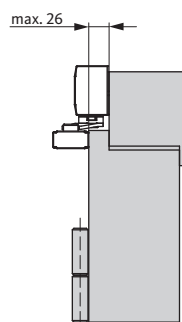
with mounting plate



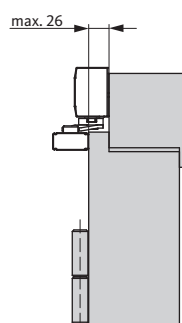
without mounting plate



with mounting plate



without mounting plate

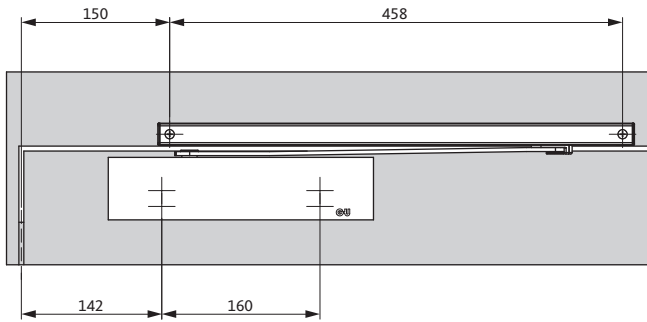


Installation situations for OTS 73x – 1-leaf elements

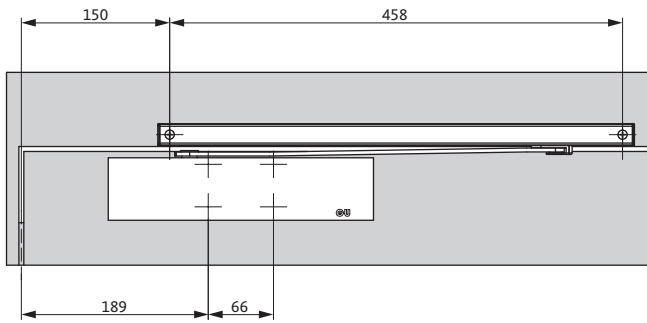
Rebated doors / side opposite to hinges



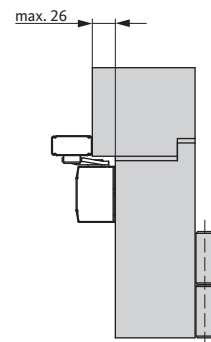
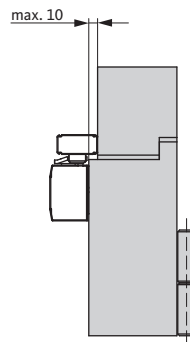
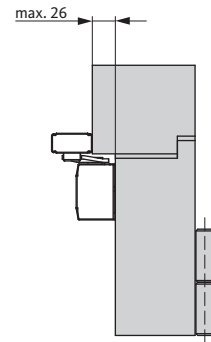
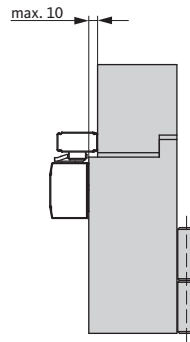
Standard installation on side opposite to hinges with OTS 73x BG



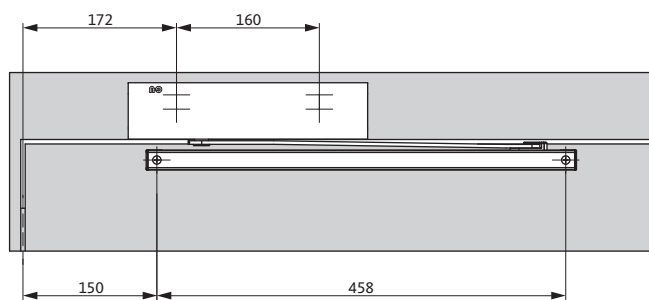
with mounting plate



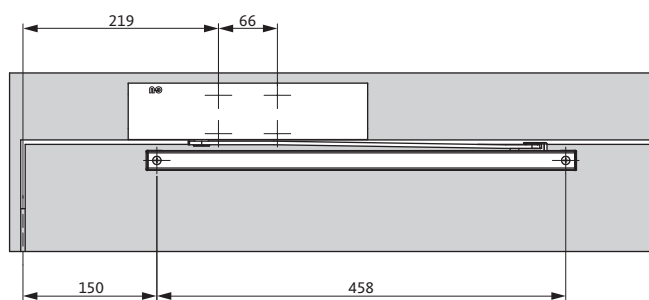
without mounting plate



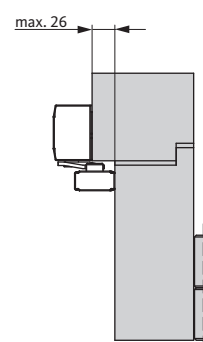
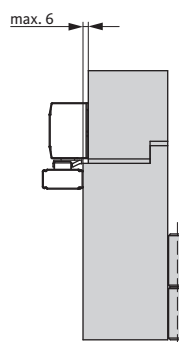
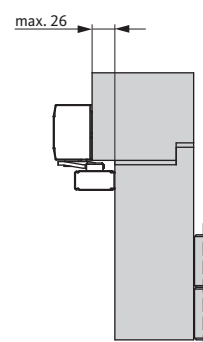
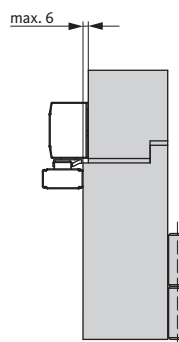
Transom installation on side opposite to hinges with OTS 73x



with mounting plate



without mounting plate

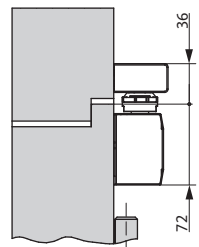
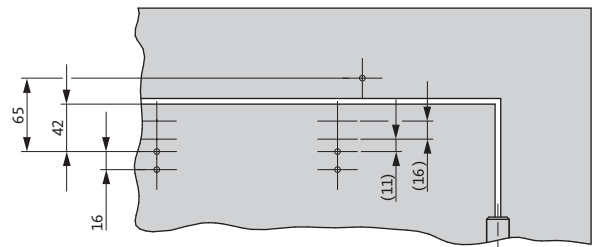
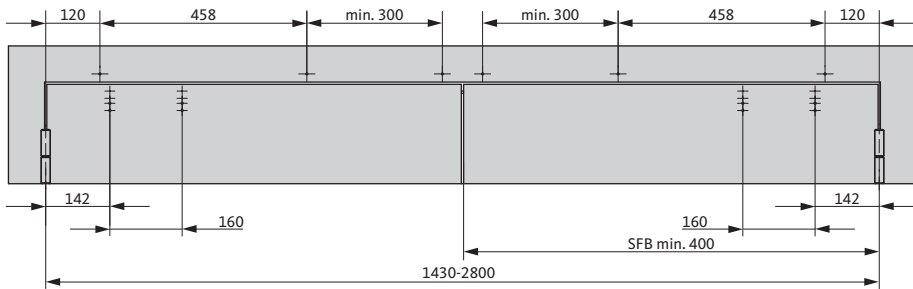


Installation situations for SRI-OTS 73x – 2-leaf elements

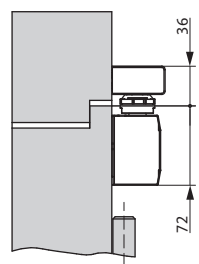
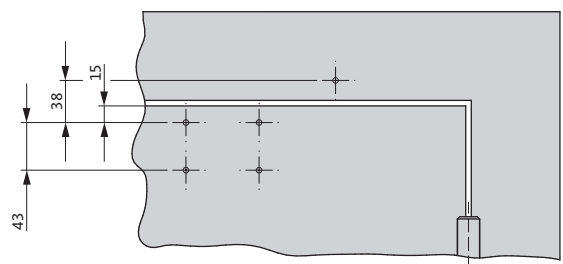
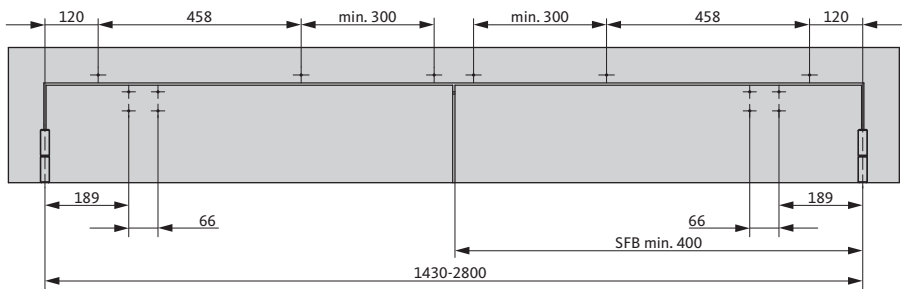
Hinge side and side opposite to hinges



Standard installation on hinge-side with mounting plate

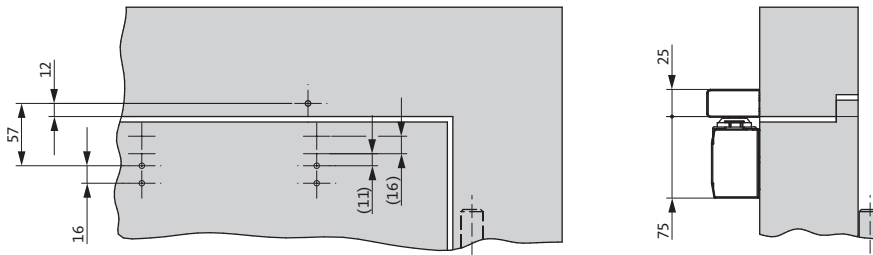
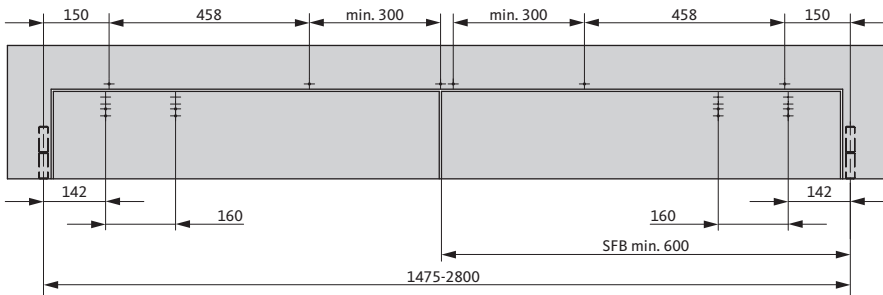


Standard installation on hinge-side without mounting plate

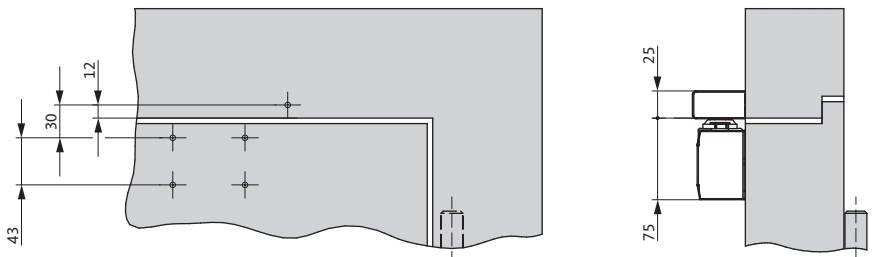
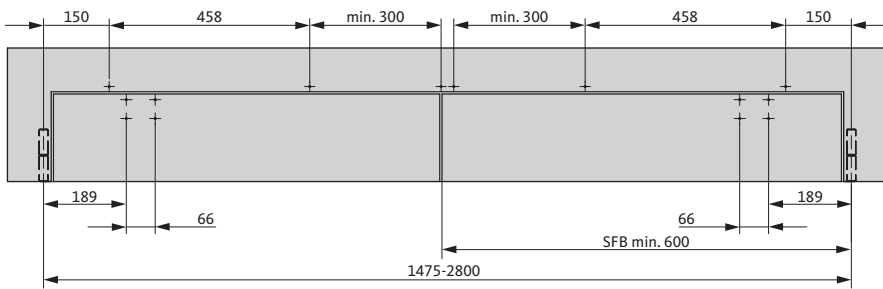


SFB = Passive leaf width

Standard installation on side opposite to hinges with mounting plate



Standard installation on side opposite to hinges without mounting plate



SFB = Passive leaf width

Concealed door closers



Quickfinder

Concealed door closer of VTS 73x series

1-leaf door solutions	96
2-leaf door solutions	97

VTS 73x series – modular system

Modular system of the VTS 73x series	98 – 99
--------------------------------------	---------

VTS 73x series – individual components

VTS 735 door closer	100
VTS 735/4 door closer	101
VTS 735 FL door closer with free-swing function	102
GS VTS 73x 20x12 standard slide rail	104
GS VTS 73x 26x32 functional slide rail	105
FM-VTS 73x 20x12 mechanical hold-open device	106
FM-VTS 73x 26x32 mechanical hold-open device	107
FE-VTS 73x 26x32 electromechanical hold-open device	108
SRI-VTS 73x 26x32 door-leaf coordinator	109
ÖB-VTS 73x 20x12 opening restrictor	110
ÖB-VTS 73x 26x32 opening restrictor	111
Smoke switch module (RSM)	103

VTS 73x series – sets for 1-leaf doors

VTS 735 door closer set with slide rail	112 – 113
VTS 735 FL door closer set with slide rail and free-swing function	114 – 115
GS FE-VTS 73x 26x32 door closer set	116 – 117

VTS 73x series – sets for 2-leaf doors

GS SRI-VTS 73x 26x32 slide rail set	118 – 119
GS FE SRI-VTS 73x 26x32 slide rail set	120 – 121

VTS 73x-series – accessories

122 – 123

VTS 73x series – installation situations

124 – 135

Rebate door closers

Rebate door closer 20	136 – 137
Rebate door closer 24	136 – 137

Quickfinder – 1-leaf door solutions

VTS 73x concealed door closers



Application range	Pages
Standard	
VTS 735 door closer set	112 – 113
Hold-open system for fire rated doors with free-swing function	
VTS 735 FL door closer set	114 – 115
With electromechanical hold-open device	
GS FE-VTS 73x 26x32 slide rail set	116 – 117



Application range	Pages
Standard with SRI door-leaf coordinator	
GS SRI-VTS 73x 26x32 slide rail set	118 – 119
With door-leaf coordinator and electromechanical hold-open	
GS FE SRI-VTS 73x 26x32 slide rail set	120 – 121

Modular system of VTS 73x series

The modular system at glance



Choose the right solution for you from our modular system

1-leaf solutions

GS VTS 73x 20x12

VTS 73x

standard
with standard slide rail

ÖB FM GS VTS 73x 20x12

VTS 73x

with mechanical hold-open device
with standard slide rail

FE GS VTS 73x 26x32

VTS 73x

with electromechanical hold-open device
with functional slide rail

FE GS VTS 73x 26x32 RSM

VTS 73x

with electromechanical hold-open device and smoke switch module
with functional slide rail

2-leaf solutions with SRI door-leaf coordinator

GS VTS 73x 26x32 SRI-VTS GS VTS 73x 26x32

VTS 73x VTS 73x

standard
with functional slide rail

ÖB FM GS VTS 73x 26x32 SRI-VTS GS VTS 73x 26x32 FM ÖB

VTS 73x VTS 73x

with mechanical hold-open device
with functional slide rail

FE GS VTS 73x 26x32 SRI-VTS GS VTS 73x 26x32 FE

VTS 73x VTS 73x

with electromechanical hold-open device
with functional slide rail

RSM

FE GS VTS 73x 26x32 SRI-VTS GS VTS 73x 26x32 FE

VTS 73x VTS 73x

with electromechanical hold-open device and smoke switch module
with functional slide rail

Modular components

Closer body



VTS 735 door closer



VTS 735/4 door closer



VTS 735 FL door closer

Standard slide rail 20x12 and accessories



GS VTS 73x 20x12
standard slide rail



FM-VTS 73x 20x12
mechanical hold-open device



ÖB-VTS 73x 20x12
opening restrictor

Functional slide rail 26x32 and accessories



GS VTS 73x26x32
functional slide rail



FM-VTS 73x 26x32
mechanical hold-open device



FE-VTS 73x26x32
electromechanical hold-open device



SRI-VTS 73x26x32
door-leaf coordinator



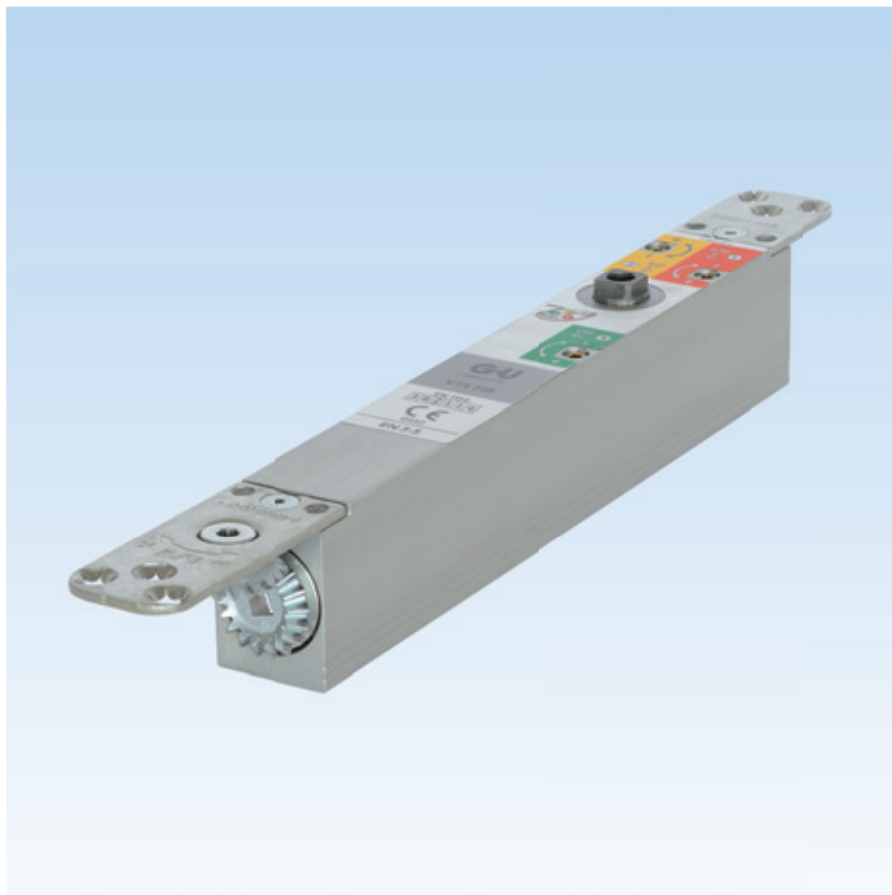
ÖB-VTS 73x26x32
opening restrictor



Smoke switch module (RSM)

VTS 735 concealed door closer

EN 3–5 for door leaf widths up to 1250 mm



VTS 735 closer body

Order information

VTS 735 closer body

Designation	Order number
VTS 735 door closer body (without slide rail)	K-18756-00-0-1

Product characteristics

- Tested and certified in accordance with EN 1154
- EN 3–5 for door leaf widths up to 1250 mm
- Heart curve technology allows the door to be opened and accessed very easily and comfortably
- Suitable for barrier-free construction in compliance with DIN SPEC 1104 and DIN 18040
- Compact dimensions (L x H x D): 240 x 45 x 32 mm

Adjustment functions

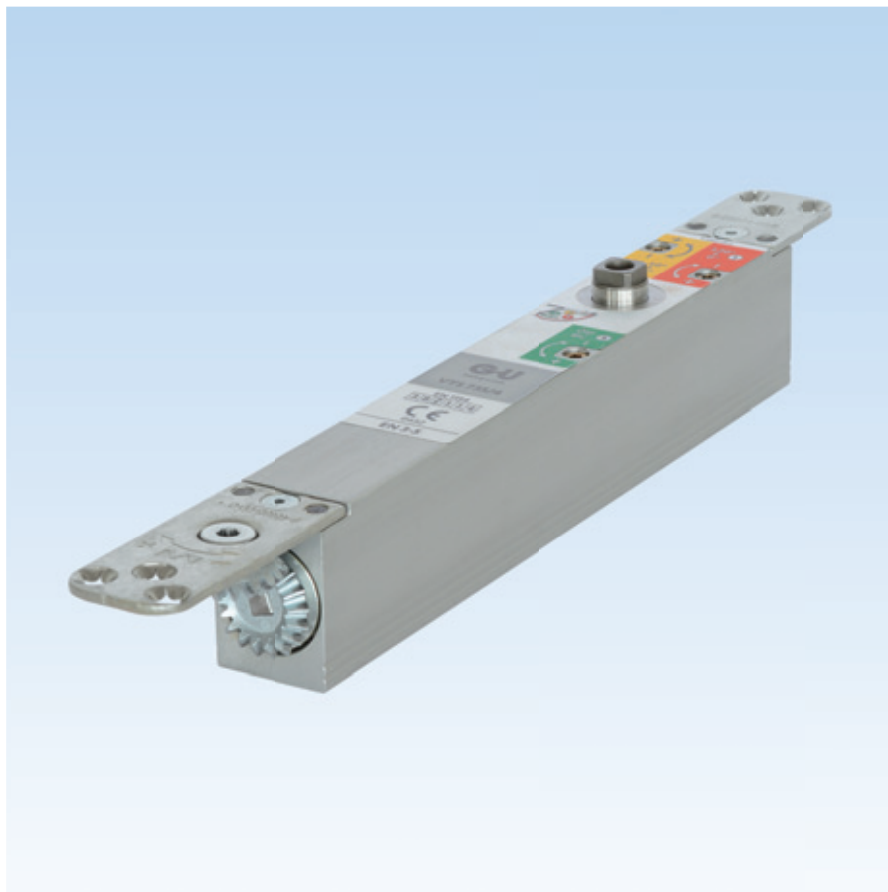
- Closing speed
- Latching speed
- Backcheck
- Colour-coded control valves ensure clarity of overview during adjustment
- Easy and safe closing force adjustment with just a few turns of the adjustment screw (nine revolutions from minimum to maximum value)
- Steplessly adjustable closing force sizes EN 3-5
- The valve functions can also be adjusted at any time when the equipment is installed
- Security valves in the closer protect against overloading



Classification code in accordance with EN 1154					
VTS 735	4	8	3/5	1	1 4

VTS 735/4 concealed door closer

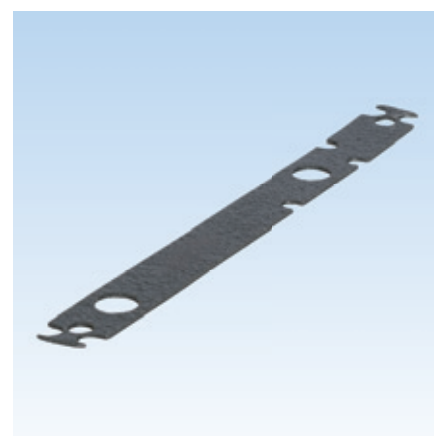
EN 3-5 for door leaf widths up to 1250 mm



VTS 735/4 closer body

Product characteristics

- Analogous to VTS 735
- With 4 mm longer axle for use with fire protection cover



Fire protection cover

Order information

VTS 735/4 closer body, fire protection cover	
Designation	Order number
VTS 735/4 closer body (without slide rail)	K-19453-00-0-1
Fire protection cover	K-19462-00-0-0



Classification code in accordance with EN 1154					
VTS 735/4	4	8	$\frac{3}{5}$	1	1 4

VTS 735 FL concealed door closer

With free-swing function

Availability on request



VTS 735 FL closer body

Product characteristics

- Tested and certified in accordance with EN 1155
- Tested and approved by DIBt (German Institute of Building Engineering)
- With electrically integrated free-swing function, can be activated from an opening angle of 0°
 - Operating voltage: 24 V DC
 - Power consumption: 2.4 W
 - Duty ratio: 100%
- Compact dimensions (L x H x D): 271 x 45 x 32 mm

Adjustment functions:

- Closing speed
- Latching speed
- Colour-coded control valves ensure clarity of overview during adjustment
- Fixed EN 5 closing force size
- All settings can also be made at any time when the equipment is installed

Order information

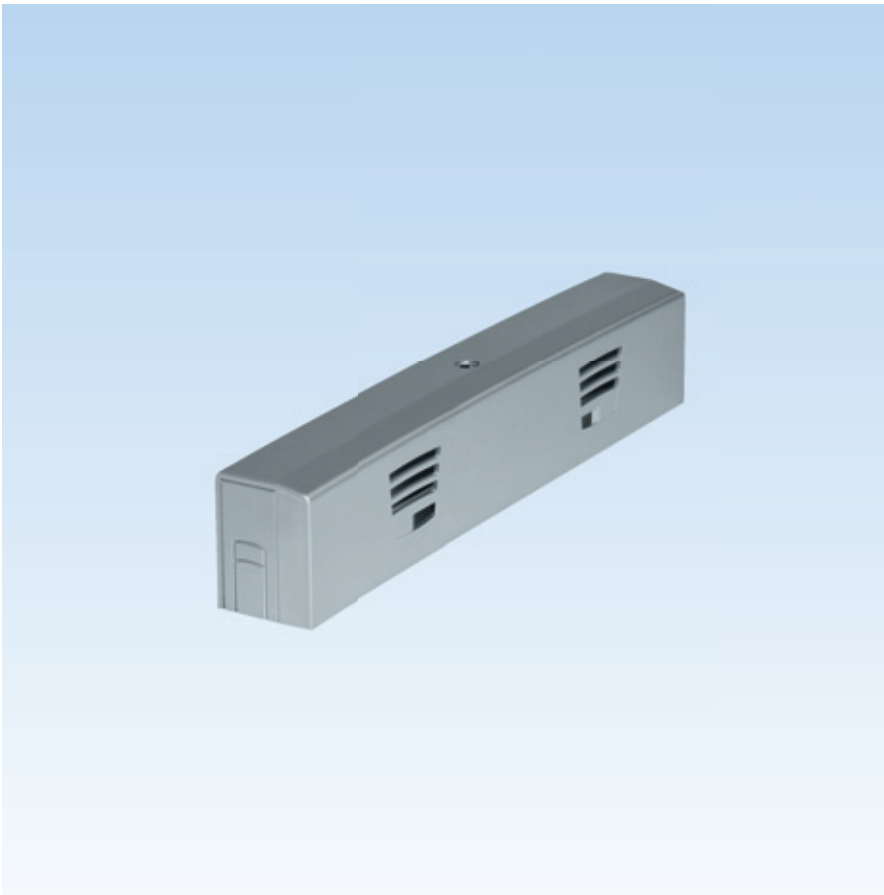
VTS 735 FL closer body

Designation	Order number
VTS 735 FL closer body (without slide rail)	K-19272-00-0-1



Classification code in accordance with EN 1154

VTS 735 FL	4	8	5	1	1	4
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Product characteristics

- Tested and approved by DIBt (German Institute of Building Engineering)
- For supplying electricity to all components of a hold-open system (for example, hold-open device, electromechanical hold-open magnet, fire detector, smoke triggering push-button and other elements)
- With integrated power supply and release mechanism
- With integrated smoke switch
- With LED status indication
 - Operation/Alarm
 - Interference
 - Soiling
- Cover in GU design, to match AD-OTS 73x cover
- Installation on the frame/lintel
- Installation height: 36 mm
- For technical data refer to page 184

Smoke switch module (RSM)

Order information

Smoke switch module (RSM)		
Designation	Surface	Order number
Smoke switch module (RSM) (incl. power supply unit, release device and lintel-mounted smoke detector)	silver	K-19058-00-0-1
	black	K-19058-00-0-6
	white (RAL 9016)	K-19058-00-0-7
	stainless steel colour	K-19058-00-0-8P
	special colour	K-19058-00-0-9

GS VTS 73x 20x12 standard slide rail



Product characteristics

- Compact dimensions (L x T x D):
440 x 20 x 12 mm
- Retrofittable and can be integrated in the slide rail as an option
 - FM-VTS 73x 20x12
mechanical hold-open device^[1]
 - ÖB-VTS 73x 20x12
opening restrictor

GS VTS 73x 20x12 slide rail

Order information

GS VTS 73x 20x12 slide rail

Designation	Surface	Order number
GS VTS 73x 20x12 slide rail	silver	K-18759-00-0-1

[1] Not approved for fire and smoke protection doors.



Product characteristics

- Dimensions (L x T x D):
460 x 26 x 32 mm
- Functional slide rail for
 - FE-VTS 73x26x32
electromechanical hold-open device
 - SRI-VTS 73x 26x32
integrated door leaf coordination
 - ÖB-VTS 73x26x32
opening restrictor

GS VTS 73x 26x32 slide rail

Order information

GS VTS 73x 26x32 slide rail		
Designation	Surface	Order number
GS VTS 73x 26x32 slide rail	silver	K-18760-00-0-1

FM-VTS 73x 20x12 mechanical hold-open device

can be integrated in the GS VTS 73x 20x12 standard slide rail



Product characteristics

- Device that allows a door to be held open temporarily at a chosen angle until it is closed manually
- Easy and simple installation, integrated in the GS VTS 73x 20x12 standard slide rail
- Retrofittable
- With integrated opening restriction
- Steplessly adjustable from approx. 80°

FM-VTS 73x 20x12 mechanical hold-open device

Order information

FM-VTS 73x 20x12 mechanical hold-open device

Designation	Order number
FM-VTS 73x 20x12 mechanical hold-open device ^[1]	K-18981-00-0-1

[1] Not approved for fire and smoke protection doors.

FM-VTS 73x 26x32 mechanical hold-open device

for integration in the GS VTS 73x 26x32 functional slide rail



Product characteristics

- Device that allows a door to be held open temporarily at a chosen angle until it is closed manually
- Easy and simple installation, integrated in the GS VTS 73x 26x32 functional slide rail
- Retrofittable
- With integrated opening restriction
- Steplessly adjustable from approx. 80°

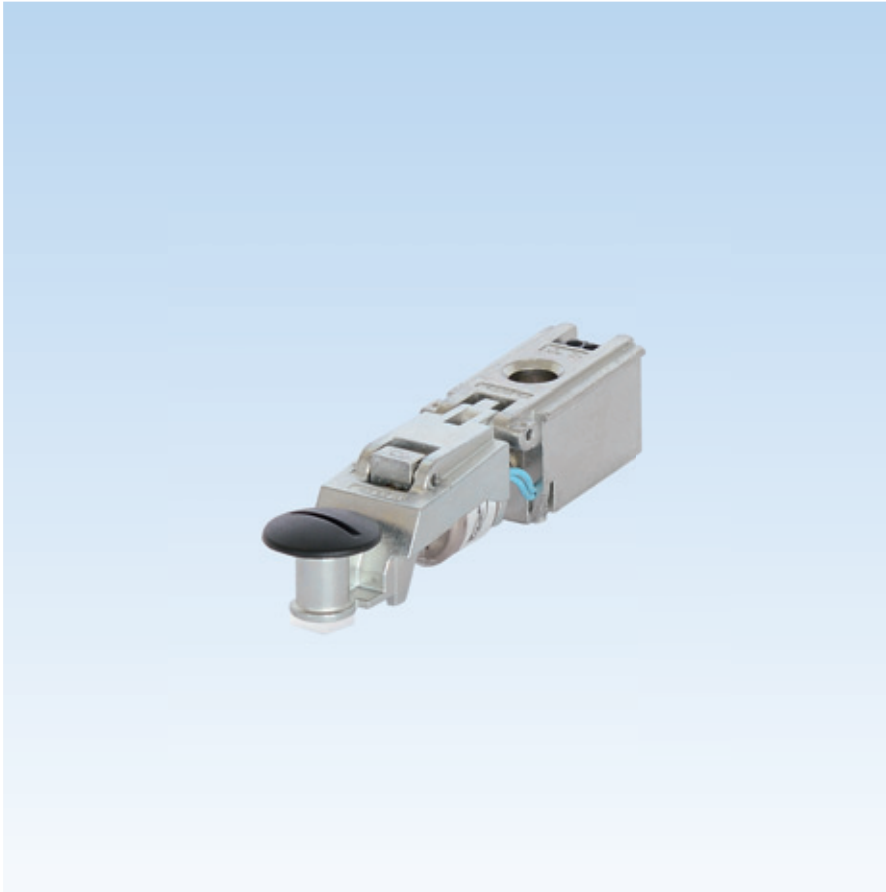
FM-VTS 73x 26x32 mechanical hold-open device

Order information

FM-VTS 73x 26x32 mechanical hold-open device	
Designation	Order number
FM-VTS 73x26x32 mechanical hold-open device ^[1]	K-18787-00-0-6

[1] Not approved for fire and smoke protection doors.

FE-VTS 73x26x32 electromechanical hold-open device



Product characteristics

- Device that allows a door to be held open at a chosen angle until it is closed electrically
- Easy and simple installation in the functional slide rail (GS VTS 73x 26x32)
- Retrofittable
- Hold-open angle steplessly adjustable from 80° – 120° ^{[1][2]}
- Steplessly adjustable tripping force
- Fully overridable, if required the door can therefore be opened up to the maximum opening angle
- Technical data
 - Operating voltage: 24 V DC
 - Power consumption: 1.9 W
 - Duty ratio: 100 %

FE-VTS 73x26x32 electromechanical hold-open device

Order information

FE-VTS 73x26x32 electromechanical hold-open device	
Designation	Order number
FE-VTS 73x26x32 electromechanical hold-open device	K-18786-00-0-1

[1] Depending on the door situation.

[2] Position door stop for max. door opening angle.





Product characteristics

- Used at double-leaf doors to ensure the doors always close in the correct sequence
- Fast straightforward installation, laterally on the functional slide rail (GS VTS 73x 26x32) – no subsequent adjustment necessary
- Retrofittable
- SRI waiting position with load-limiting device prevents damages in case of mishandling
- With fixed stable cable
- Also available with optional integrated microswitch, especially when using the electromechanical hold-open device. This also makes it possible to trigger the hold-open device at the passive leaf automatically when the active leaf is manually triggered.

SRI-VTS 73x26x32 door-leaf coordinator

Order information

SRI-VTS 73x26x32 door-leaf coordinator		
Designation	Description	Order number
SRI-VTS 73x26x32 door-leaf coordinator	without microswitch	K-18785-00-0-1
	with microswitch	K-19030-00-0-1

VTS 73x 20x12 ÖB opening restrictor

can be integrated in the GS VTS 73x 20x12 standard slide rail



Product characteristics

- Device that limits the opening angle of the door at a defined position. Its purpose is to prevent swing doors being thrown open uncontrollably, as this could damage the slide rail, door, door frame, hinge, wall and other components.
- Can be integrated in the GS VTS 73x 20x12 standard slide rail
- Retrofittable
- Steplessly adjustable limit angle up to 120°
- **Attention:** in many applications, the opening restriction is not a substitute for a doorstop!

ÖB-VTS 73x 20x12 opening restrictor

Order information

ÖB-VTS 73x 20x12 opening restrictor

Designation	Order number
ÖB-VTS 73x 20x12 opening restrictor	K-19201-00-0-6



Product characteristics

- Device that limits the opening angle of the door at a defined position. Its purpose is to prevent swing doors being thrown open uncontrollably, as this could damage the slide rail, door, door frame, hinge, wall and other components.
- Can be integrated in the GS VTS 73x 26x32 functional slide rail
- Retrofittable
- Steplessly adjustable limit angle up to 120°
- **Attention:** in many applications, the opening restriction is not a substitute for a doorstop!

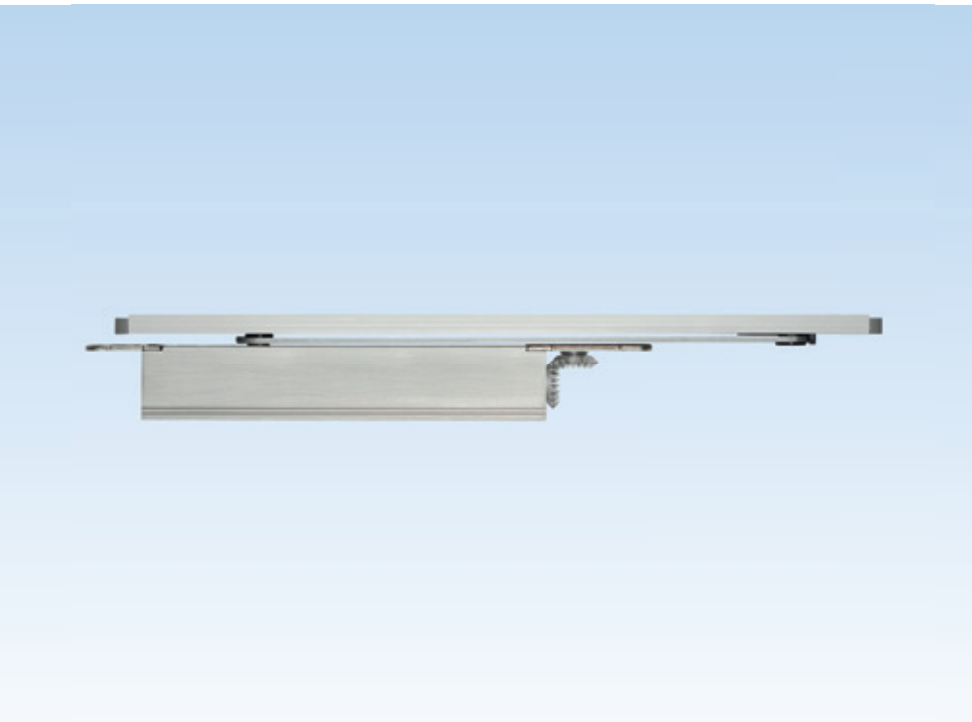
ÖB-VTS 73x26x32 opening restrictor

Order information

ÖB-VTS 73x26x32 opening restrictor	
Designation	Order number
ÖB-VTS 73x26x32 opening restrictor	K-19202-00-0-6

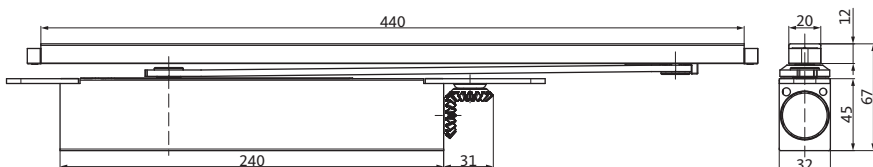
VTS 735, VTS 735/4 door closer set

with GS VTS 73x 20x12 standard slide rail



Product characteristics

- Door closer for single-leaf doors with door leaf widths up to 1250 mm concealed in door leaf
- Tested in accordance with EN 1154



Set consisting of:

Individual components For details of the individual components, refer to	Page
VTS 735 closer body	100
VTS 735/4 closer body	101
GS VTS 73x 20x12 standard slide rail	104

ÖB* FM* GS VTS 73x 20x12

VTS 735

*Optional accessories

VTS 735 door closer set – EN 3–5 (= door leaf widths up to 1250 mm)	
VTS 735 door closer with slide rail	
Set consisting of	Order number
VTS 735 door closer GS VTS 73x 20x12 standard slide rail	K-18758-00-0-1

VTS 735/4 door closer set – EN 3–5 (= door leaf widths up to 1250 mm)	
VTS 735/4 door closer with slide rail	
Set consisting of	Order number
Door closer VTS 735/4 ^[1] GS VTS 73x 20x12 standard slide rail	K-19455-00-0-1
[1] Only in combination with fire protection cover K-19462-00-0-0. Please order separately	

Accessories (optional)		
Designation	Order number	
FM-VTS 73x 20x12 mechanical hold-open device ^[1]	K-18981-00-0-1	
VTS 73x 20x12 ÖB opening restrictor ^[2]	K-19201-00-0-6	
AP-VTS 73x fixing plate	K-18558-00-0-1	
AV-VTS 73x axle extension	Height 6 mm	K-18767-06-0-6
	Height 8 mm	K-18767-08-0-6
MZ GS VTS 73x 20x12 fixing accessories	K-18766-00-0-1	

Applications

- 1-leaf fire and smoke protection doors
- 1-leaf swing doors
- Min. door leaf width 600 mm
- Max. door leaf width 1250 mm
- DIN left and DIN right usable
- Installation of the closer body in the door leaf, installation of the slide rail in the upper door frame
- Max. door opening and closing angle up to 120°^[3]
- Door leaf thicknesses from 40 mm
- Rebate clearance heights up to max. 22 mm
- Additional proof of suitability is required with fire protection doors

[1] Not approved for fire and smoke protection doors.

[2] Not required if a mechanical hold-open device (FM) is installed.

[3] Depending on the door situation. Position door stop for max. door opening angle.

VTS 735 FL door closer set

Hold-open system for single-leaf fire rated doors with free-swing function

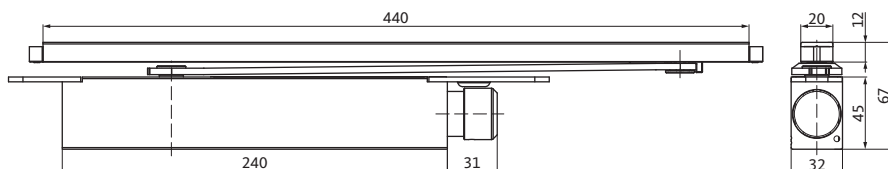


Ideal for barrier-free project solutions

The VTS 735 FL ensures barrier-free effortless passage through fire protection doors. The integrated electrical free-swing function can be activated from an opening angle of 0° and allows the door to move freely as if no door closer at all were fitted. Safe and reliable door locking is still ensured in the event of a fire. This makes VTS 735 FL door closers perfect for use on fire protection doors in kindergartens, schools, hospitals and residential homes for the elderly – standard-compliant for barrier-free construction in accordance with DIN SPEC 1104 and DIN 18040.

Product characteristics

- Door closer for single-leaf doors with door leaf widths up to 1250 mm concealed in door leaf
- Tested and certified in accordance with EN 1154 and EN 1155
- Tested and approved by DIBt (German Institute of Building Engineering)
- Optional: opening restriction which can be integrated in the slide rail and is retrofittable



Set consisting of:

Individual components For details of the individual components, refer to	Page
VTS 735 FL closer body	102
GS VTS 73x 20x12 standard slide rail	104

ÖB*	GS VTS 73x 20x12	RSM*
VTS 735 FL		

*Optional accessories

VTS 735 FL door closer set – EN 5 (= door leaf widths up to 1250 mm)	
VTS 735 FL door closer with slide rail	
Set consisting of	Order number
VTS 735 FL door closer GS VTS 73x 20x12 standard slide rail	K-19273-00-0-1

Accessories (optional)		
Designation	Surface	Order number
ÖB-VTS 73x 20x12 opening restrictor	–	K-19201-00-0-6
AP-VTS 73x fixing plate	–	K-18558-00-0-1
AV-VTS 73x axle extension	Height 6 mm	K-18767-06-0-6
AV-VTS 73x axle extension	Height 8 mm	K-18767-08-0-6
MZ GS VTS 73x 20x12 fixing accessories	–	K-18766-00-0-1
Smoke switch module (RSM) (including power supply unit, release device and lintel-mounted smoke detector)	silver	K-19058-00-0-1
	black	K-19058-00-0-6
	white (RAL 9016)	K-19058-00-0-7
	stainless steel colour	K-19058-00-0-8P
	special colour	K-19058-00-0-9
Manual release push-button, in-wall/on-wall	white (RAL 9016)	K-17492-00-0-7
Log book for hold-open systems	–	K-18097-00-0-0
Test gas for smoke switch as part of functional test	–	K-17497-00-0-0
Safety sticker/inspection sticker for hold-open systems	–	K-18529-00-0-0

Note: you can find matching cable links on pages 210 and 211.

Applications

- 1-leaf fire and smoke protection doors
- 1-leaf swing doors
- Min. door leaf width 600 mm
- Max. door leaf width 1250 mm
- DIN left and DIN right usable
- Installation of the closer body in the door leaf, installation of the slide rail in the upper door frame
- Max. door opening and closing angle up to 120°^[1]
- Installation with a door leaf thickness from 40 mm
- Rebate clearance heights up to max. 22 mm
- Additional proof of suitability is required with fire protection doors

[1] Depending on the door situation.
Position door stop for max. door opening angle.

GS FE-VTS 73x 26x32 slide rail set

with FE-VTS 73x 26x32 electromechanical hold-open device

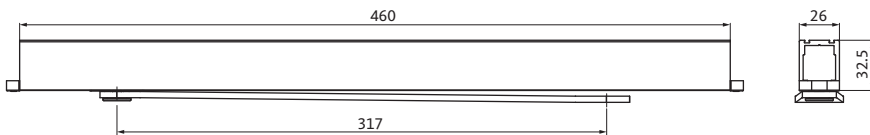


Product characteristics

- Solution for single-leaf doors with door leaf widths up to 1250 mm
- Tested in accordance with EN 1155
- Tested and approved by DIBt (German Institute of Building Engineering)

FE-VTS 73x26x32 electromechanical hold-open device

- Device that is integrated and pre-mounted in the slide rail and allows a door to be held open at a chosen angle until it is closed electrically



Set consisting of:

Individual components For details of the individual components, refer to	Page
GS VTS 73x26x32 functional slide rail	105
FE-VTS 73x26x32 electromechanical hold-open device	108

Door closers of series VTS 73x

- Door closers in the VTS 73x series **are not included in the scope of delivery of the slide rail set and must be ordered separately**
- For relevant order information and further product features refer to pages 100 – 102

FE
GS VTS 73x 26x32


Door closer VTS 73x to be ordered separately

GS FE-VTS 73x 26x32 slide rail set ^[1] Functional slide rail and electromechanical hold-open device	
Set consisting of	Order number
GS VTS 73x26x32 functional slide rail FE-VTS 73x26x32 electromechanical hold-open device	K-18761-00-0-1

Accessories (optional)	
Designation	Order number
MZ GS VTS 73x 26x32 fixing accessories	K-19034-00-0-1

Applications

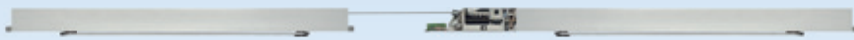
- 1-leaf fire and smoke protection doors
- 1-leaf swing doors
- Min. door leaf width 600 mm
- Max. door leaf width 1250 mm
- DIN left and DIN right usable
- Installation of the closer body in the door leaf, installation of the slide rail in the upper door frame
- Max. door opening and closing angle up to 120°^[2]
- Rebate clearance heights up to max. 22 mm
- Additional proof of suitability is required with fire protection doors

[1] Door closers must be ordered separately – for order information refer to pages 100 – 102.

[2] Depending of the door situation. Position door stop for max. door opening angle.

GS SRI-VTS 73x 26x32 slide rail set

with SRI-VTS 73x 26x32 door-leaf coordinator

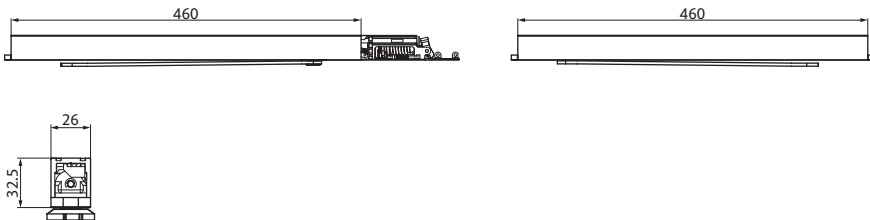


Product characteristics

- Solution for double-leaf doors with total door leaf widths up to 2500 mm
- Tested and certified in accordance with EN 1158

SRI-VTS 73x26x32 door-leaf coordinator

- Mechanical door-leaf coordinator (SRI) integrated into the slide rail to ensure doors are closed safely and in the correct sequence at all times

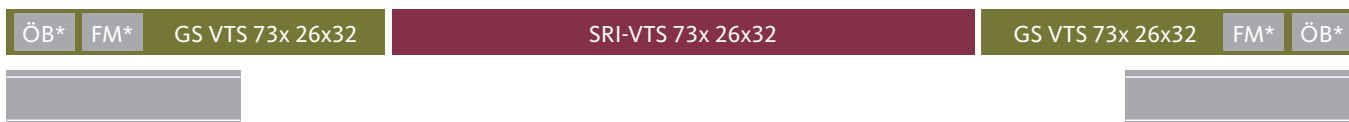


Set consisting of:

Individual components For details of the individual components, refer to	Page
GS VTS 73x26x32 functional slide rail	105
SRI-VTS 73x26x32 door-leaf coordinator	109

Door closers of series VTS 73x

- Door closers in the VTS 73x series **are not included in the scope of delivery of the slide rail set and must be ordered separately**
- When used in combination with the slide rail set, 2 VTS 73x door closers must always be ordered
- For relevant order information and further product features refer to pages 100 – 102



Door closer VTS 73x to be ordered separately

Door closer VTS 73x to be ordered separately

*Optional accessories

GS SRI-VTS 73x 26x32 slide rail set ^[1]	
Slide rails, door-leaf coordinators	
Set consisting of	Order number
2 x GS VTS 73x 26x32 functional slide rails 1 x SRI-VTS 73x 26x32 door-leaf coordinator (without microswitch)	K-18762-00-0-1

Accessories (optional)	
Designation	Order number
FM-VTS 73x 26x32 mechanical hold-open device ^[2]	K-18787-00-0-6
ÖB-VTS 73x 26x32 opening restriction ^[3]	K-19202-00-0-6
MZ GS VTS 73x 26x32 fixing accessories	K-19034-00-0-1

Applications

- 2-leaf fire and smoke protection doors
- 2-leaf swing doors
- Max. total door leaf width: 2500 mm
- Min. single-leaf width of passive leaf: 600 mm
- DIN left and DIN right usable
- Installation of the closer body in the door leaf, installation of the slide rail in the upper door frame
- Max. door opening and closing angle up to 120°^[4]
- Installation with a door leaf thickness from 40 mm
- Rebate clearance heights up to max. 22 mm
- Additional proof of suitability is required with fire protection doors

SRI-VTS 73x door-leaf coordinator for use on double-leaf full-panic doors in escape and rescue routes

A suitable carrier bar must always be used with double-leaf full-panic doors installed in escape and rescue routes. This ensures that when the door is opened via the passive leaf (in emergency situations), the active leaf is carried at least as far as the beginning of the action range of the (SRI-VTS 73x) door-leaf coordinator.

For the corresponding application diagram and additional information on the carrier bar, refer to pages 206 – 209.

[1] Door closers must be ordered separately – for order information refer to pages 100 – 102.

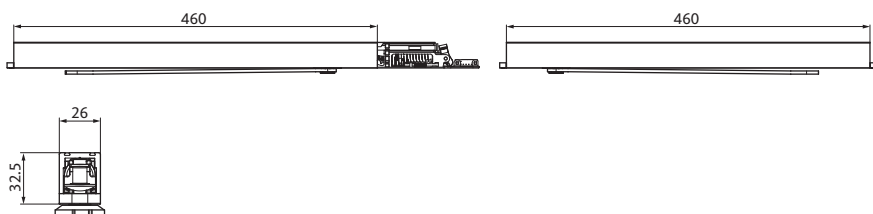
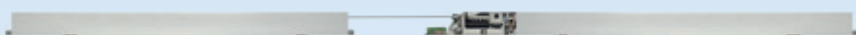
[2] Not approved for fire and smoke protection doors.

[3] Not required if a mechanical hold-open device (FM) is installed.

[4] Depending on the door situation. Position door stop for max. door opening angle.

GS FE SRI-VTS 73x 26x32 slide rail set

with SRI-VTS 73x 26x32 door-leaf coordinator
and FE-VTS 73x 26x32 electromechanical hold-open device



Product characteristics

- Solution for double-leaf doors with total door leaf widths up to 2500 mm
- Tested and certified in accordance with EN 1155 and EN 1158
- Tested and approved by DIBt according to the guidelines for hold-open systems

SRI-VTS 73x26x32 door-leaf coordinator

- Mechanical door-leaf coordinator (SRI) integrated into the slide rail to ensure doors are closed safely and in the correct sequence at all times
- Microswitch in the active leaf supplied as standard: guarantees that the passive leaf closes if the active leaf is manually unlatched from the hold-open position

FE-VTS 73x26x32 electromechanical hold-open device

- Device that is integrated and pre-mounted in the slide rail and allows a door to be held open at a chosen angle until it is closed electrically
- The active leaf can be held open independently of the passive leaf at any time

Set consisting of:

Individual components For details of the individual components, refer to	Page
GS VTS 73x26x32 functional slide rail	105
FE-VTS 73x26x32 electromechanical hold-open device	108
SRI-VTS 73x26x32 door-leaf coordinator	109

Door closers of series VTS 73x

- Door closers in the VTS 73x series **are not included in the scope of delivery of the slide rail set and must be ordered separately**
- When used in combination with the slide rail set, 2 VTS 73x door closers must always be ordered
- For relevant order information and further product features refer to pages 100 – 102

RSM

Please order smoke switch module (RSM) separately

FE	GS VTS 73x 26x32	SRI-VTS 73x 26x32	GS VTS 73x 26x32	FE
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Door closer VTS 73x to be ordered separately



Door closer VTS 73x to be ordered separately

GS FE SRI-VTS 73x 26x32 slide rail set^[1]

Slide rails, electromechanical hold-open devices, door-leaf coordinator

Set consisting of	Order number
2 x GS VTS 73x 26x32 functional slide rails 2 x FE-VTS 73x 26x32 electromechanical hold-open devices 1 x SRI-VTS 73x 26x32 door-leaf coordinator (with microswitch)	K-18763-00-0-1

Accessories (optional)

Designation	Order number
MZ GS VTS 73x 26x32 fixing accessories	K-19034-00-0-1

Applications

- 2-leaf fire and smoke protection doors
- 2-leaf swing doors
- Max. total door leaf width: 2500 mm
- Min. single-leaf width of passive leaf: 600 mm^[2]
- DIN left and DIN right usable
- Installation of the closer body in the door leaf, installation of the slide rail in the upper door frame
- Max. door opening and closing angle up to 120°^[3]
- Installation with a door leaf thickness from 40 mm
- Rebate clearance heights up to max. 22 mm
- Additional proof of suitability is required with fire protection doors

SRI-VTS 73x door-leaf coordinator for use on double-leaf full-panic doors in escape and rescue routes

A suitable carrier bar must always be used with double-leaf full-panic doors installed in escape and rescue routes. This ensures that when the door is opened via the passive leaf (in emergency situations), the active leaf is carried at least as far as the beginning of the action range of the (SRI-VTS 73x) door-leaf coordinator.

For the corresponding application diagram and additional information on the carrier bar, refer to pages 206 – 209.

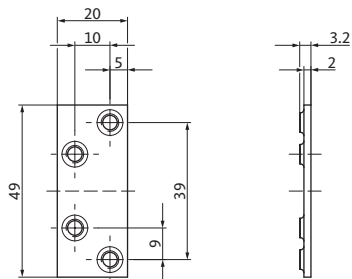
[1] Door closers must be ordered separately – for order information refer to pages 100 – 102.

[2] Depending on the position of the vertical rod.

[3] Depending on the door situation. Position door stop for max. door opening angle.

Accessories for VTS 73x

Fixing plate, axle extension

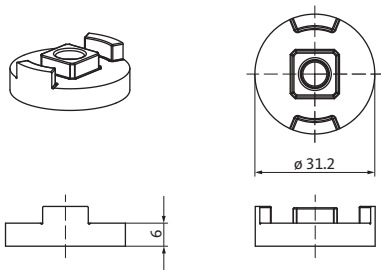


AP-VTS 73x fixing plate

for fastening the closer body to aluminium profiles

AP-VTS 73x fixing plate

Designation	Surface	Order number
AP-VTS 73x fixing plate	silver	K-18558-00-0-1



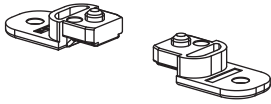
AV-VTS 73x axle extension

between closer axis and slide arm

AV-VTS 73x axle extension

Designation	Height [mm]	Order number
AV-VTS 73x axle extension	6	K-18767-06-0-6
	8	K-18767-08-0-6

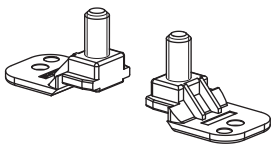
Illustration: 6 mm axle extension



MZ GS VTS 73x 20x12 fixing accessories

for fastening the standard slide rail to aluminium profiles

MZ GS VTS 73x 20x12 fixing accessories		
Designation	Surface	Order number
MZ GS VTS 73x 20x12 fixing accessories	silver	K-18766-00-0-1



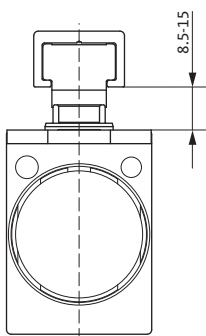
MZ GS VTS 73x 26x32 fixing accessories

for fastening the function slide rail to aluminium profiles

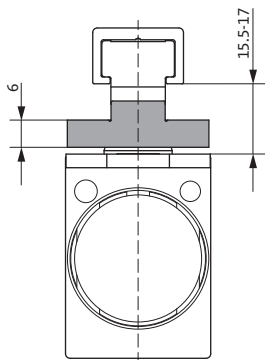
MZ GS VTS 73x 26x32 fixing accessories		
Designation	Surface	Order number
MZ GS VTS 73x 26x32 fixing accessories	silver	K-19034-00-0-1

Mounting and installation situations for VTS 735

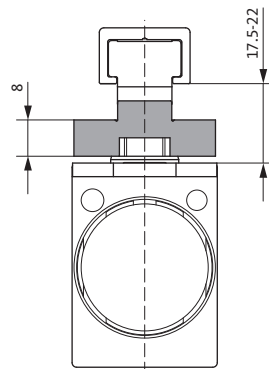
with standard slide rail 20x12



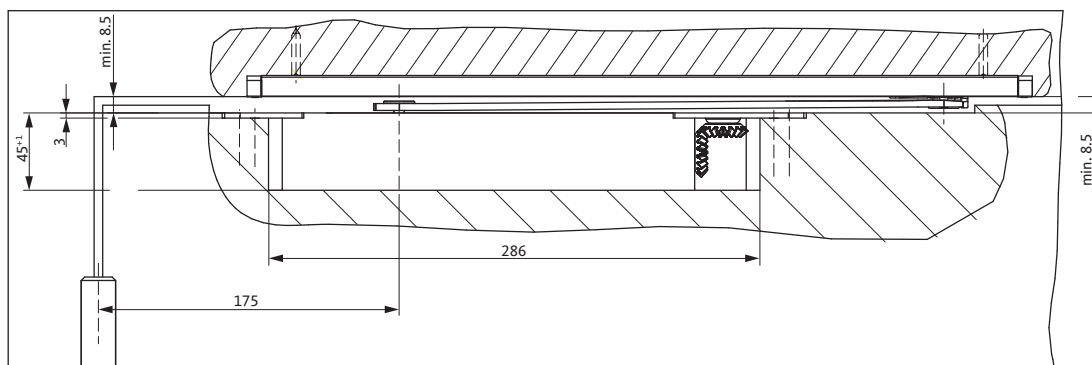
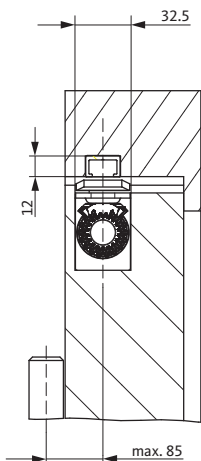
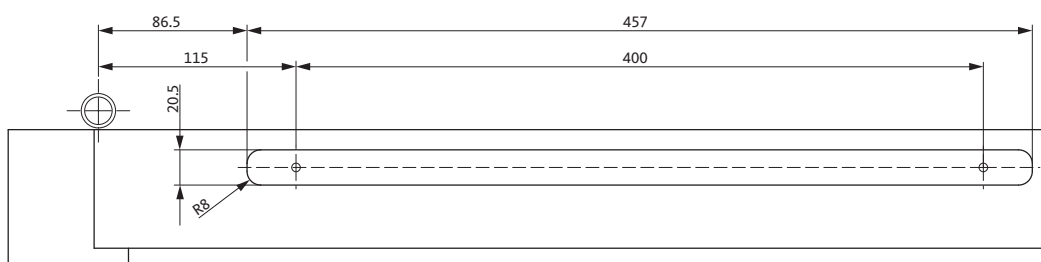
Installation without axle extension
for 8.5 – 15 mm rebate clearance



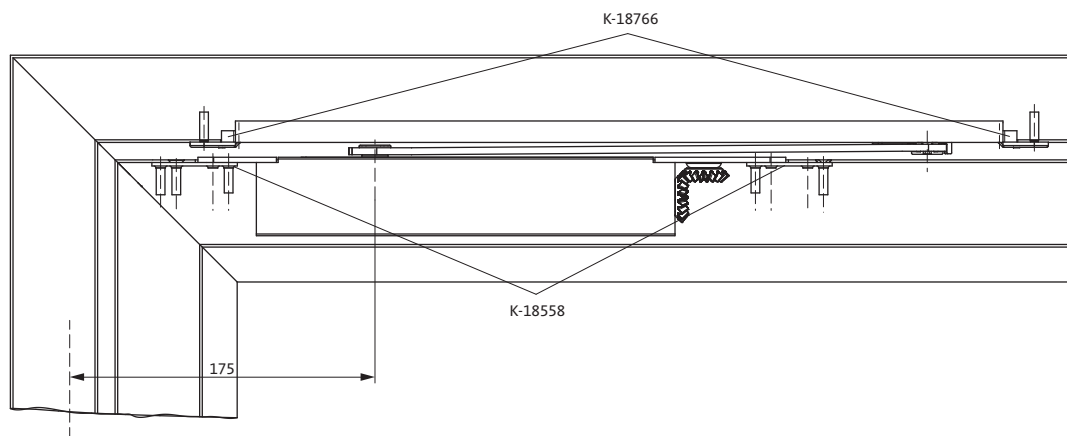
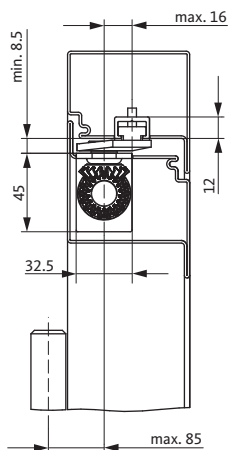
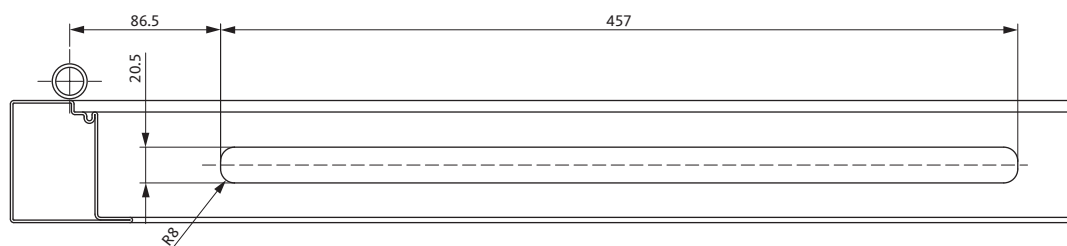
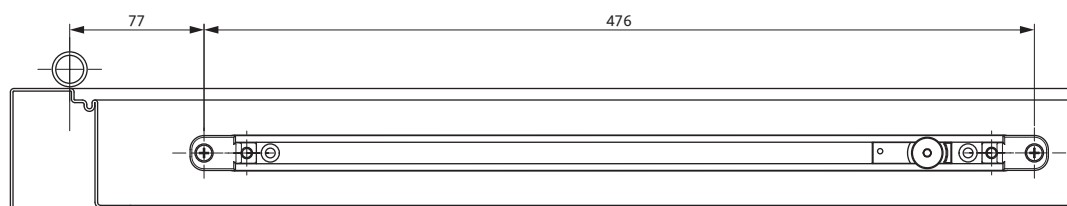
Installation with 6 mm axle extension
for 15.5 – 17 mm rebate clearance



Installation with 8 mm axle extension
for 17.5 – 22 mm rebate clearance



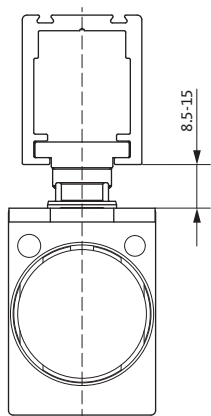
Installation situation: timber



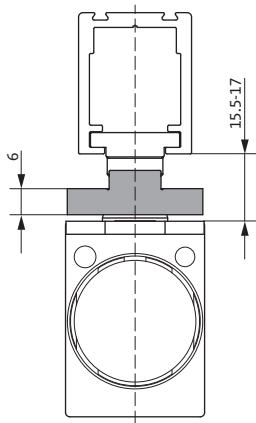
Installation situation: metal

Mounting and installation situations for VTS 735

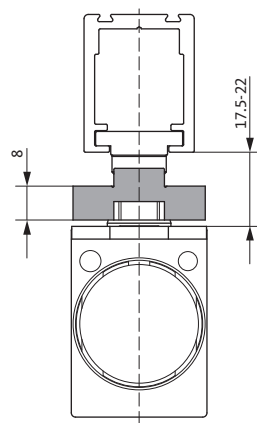
with functional slide rail 26x32



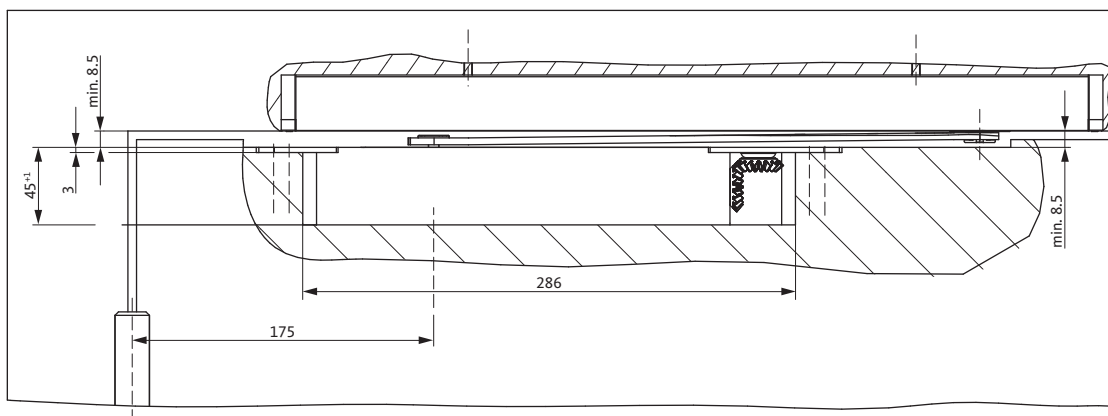
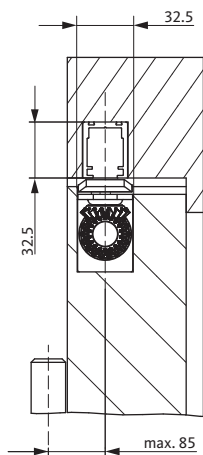
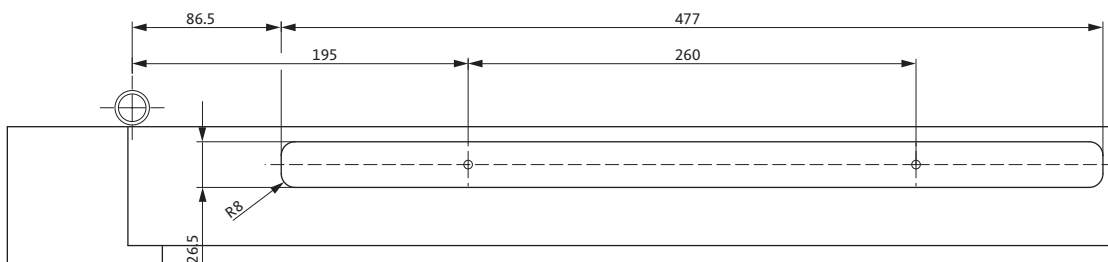
Installation without axle extension
for 8.5 – 15 mm rebate clearance



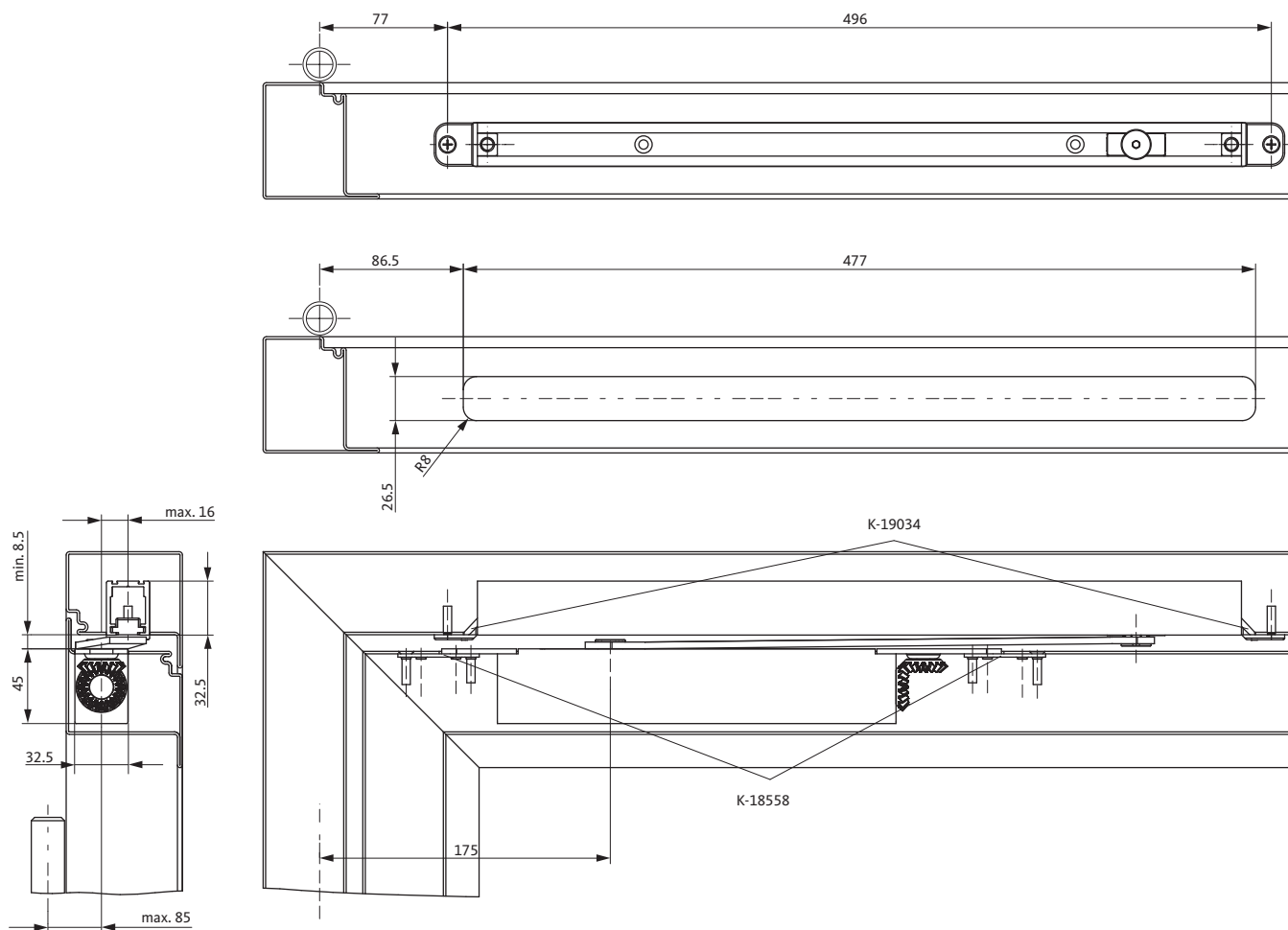
Installation with 6 mm axle extension
for 15.5 – 17 mm rebate clearance



Installation with 8 mm axle extension
for 17.5 – 22 mm rebate clearance



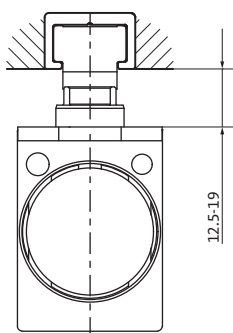
Installation situation: timber



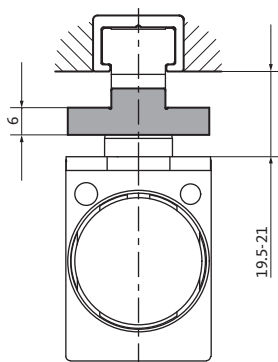
Installation situation: metal

Mounting and installation situations for VTS 735/4

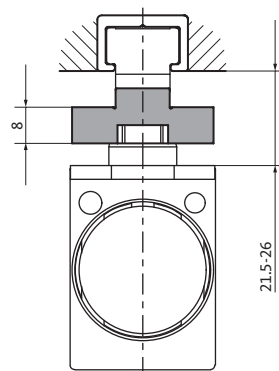
with standard slide rail 20x12



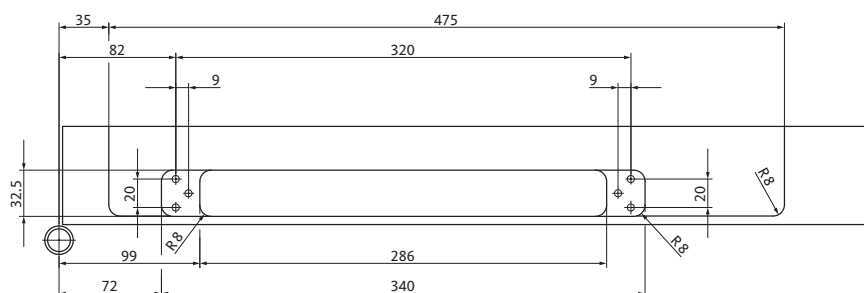
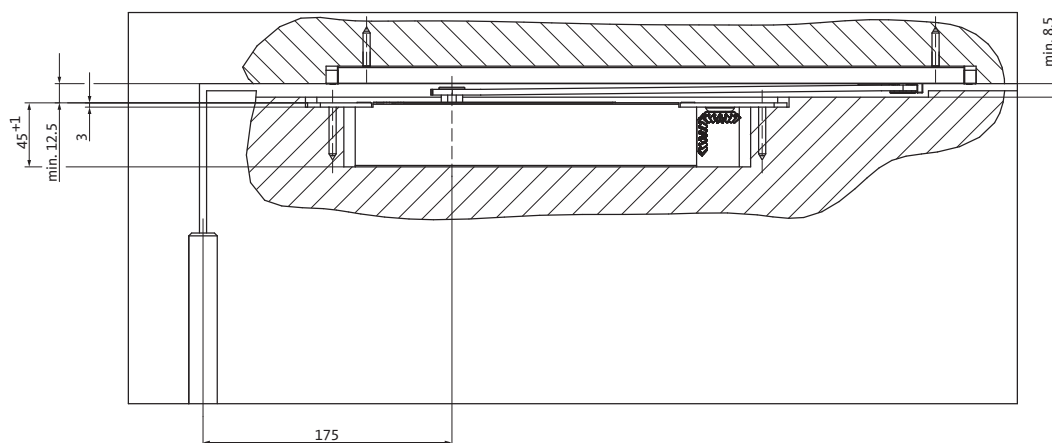
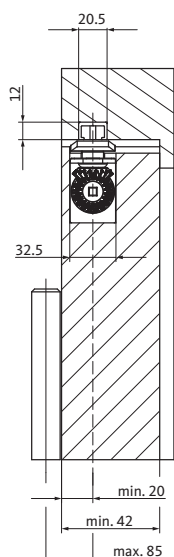
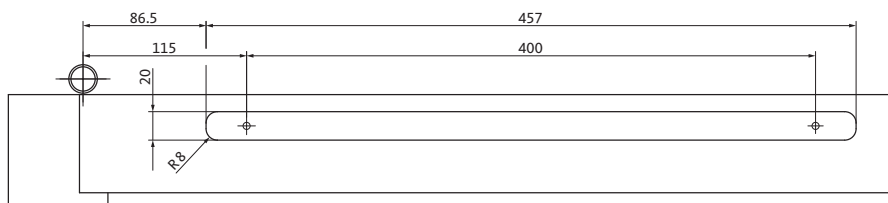
Installation without axle extension
for 12.5 – 19 mm rebate clearance



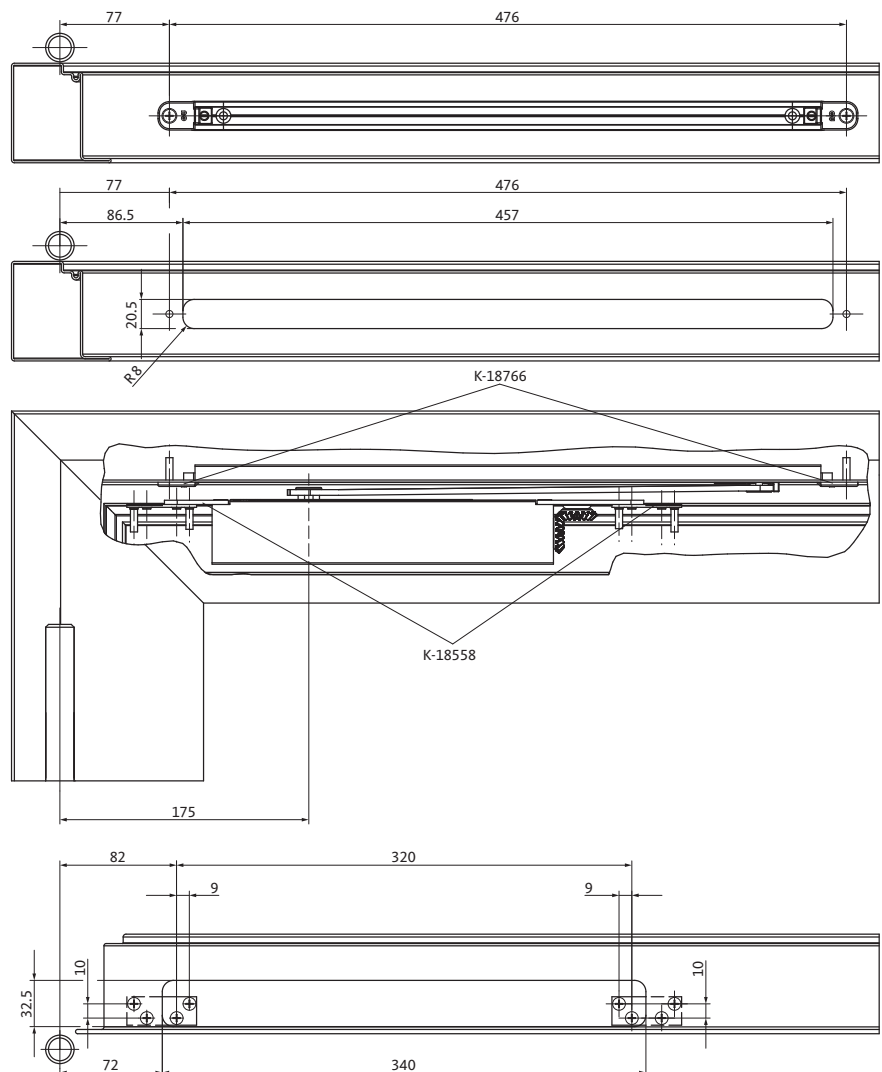
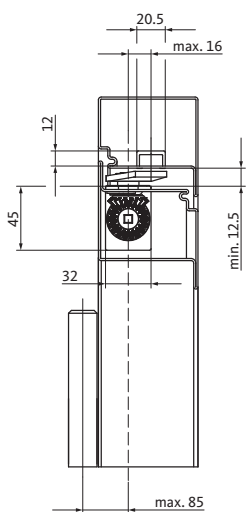
Installation with 6 mm axle extension
for 19.5 – 21 mm rebate clearance



Installation with 8 mm axle extension
for 21.5 – 26 mm rebate clearance



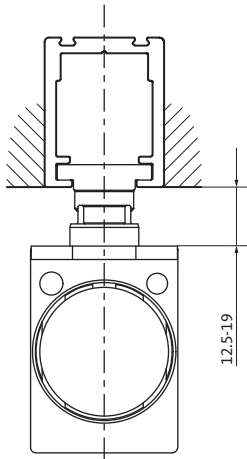
Installation situation: timber



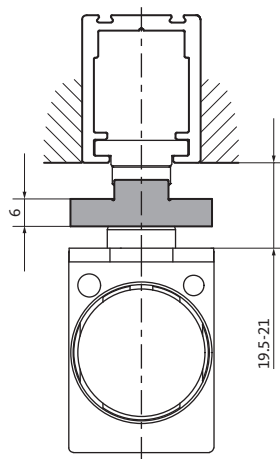
Installation situation: metal

Mounting and installation situations for VTS 735/4

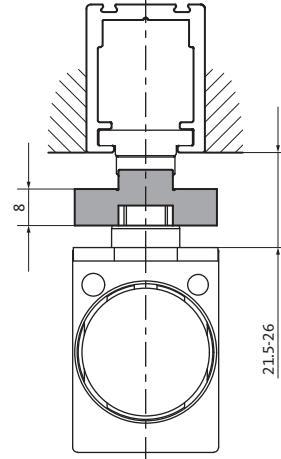
with functional slide rail 26x32



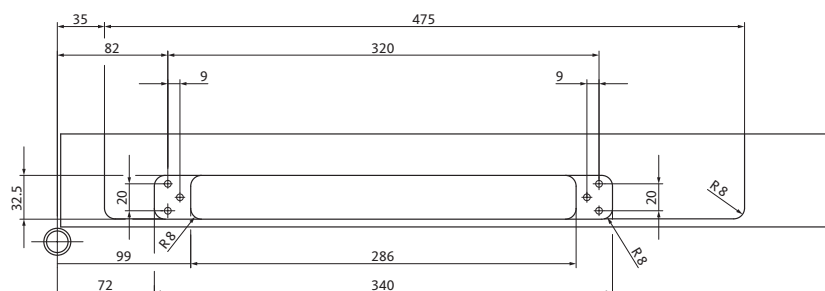
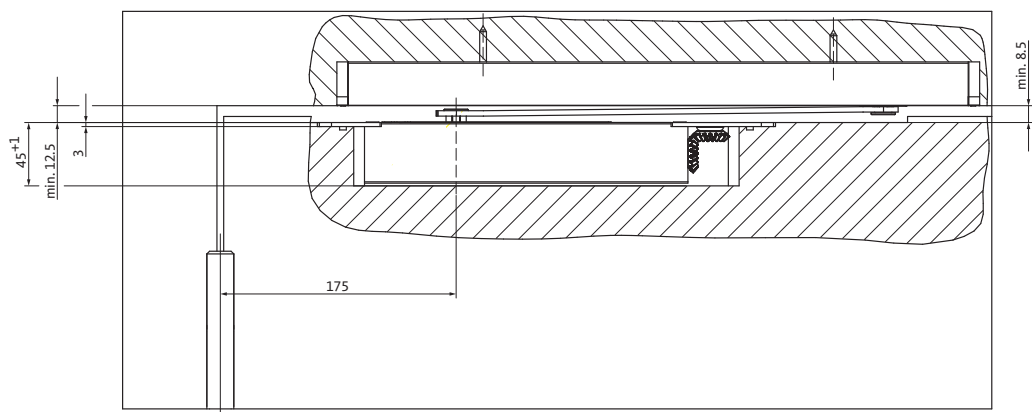
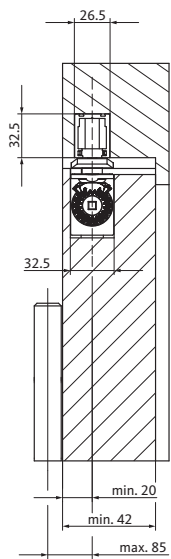
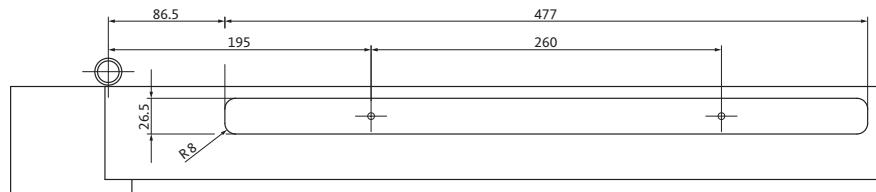
Installation without axle extension
for 12.5 – 19 mm rebate clearance



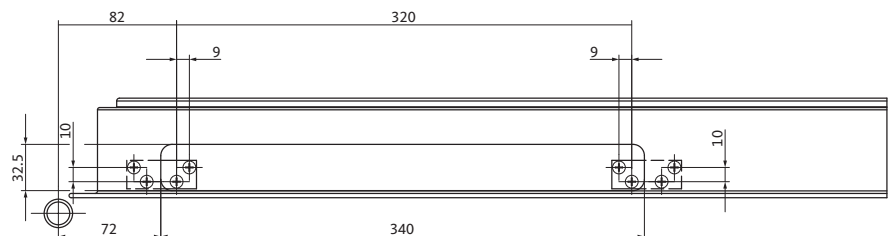
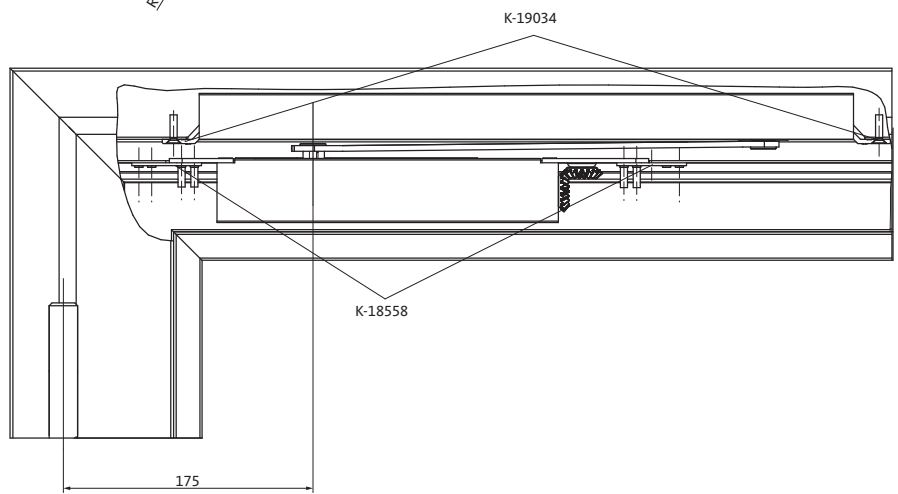
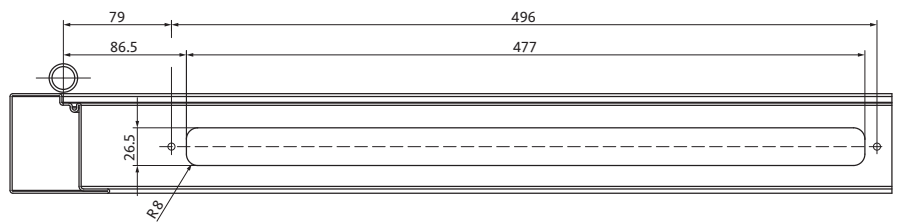
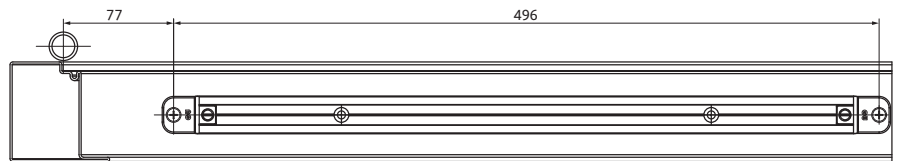
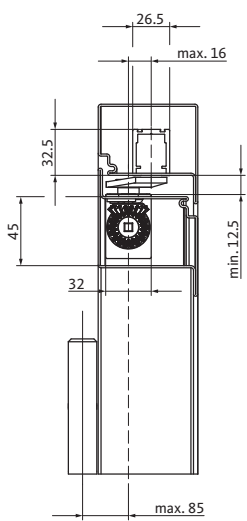
Installation with 6 mm axle extension
for 19.5 – 21 mm rebate clearance



Installation with 8 mm axle extension
for 21.5 – 26 mm rebate clearance



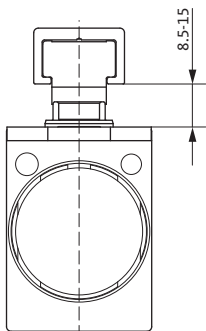
Installation situation: timber



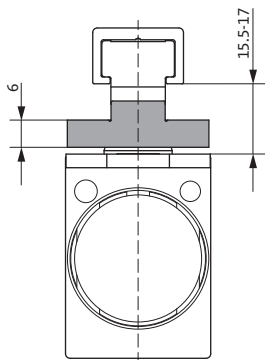
Installation situation: metal

Mounting and installation situations for VTS 735 FL

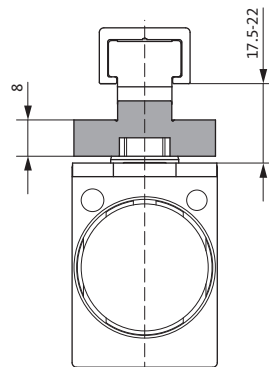
with standard slide rail 20x12



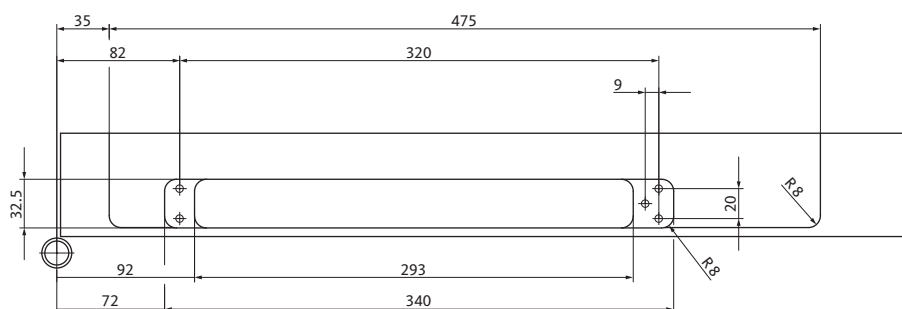
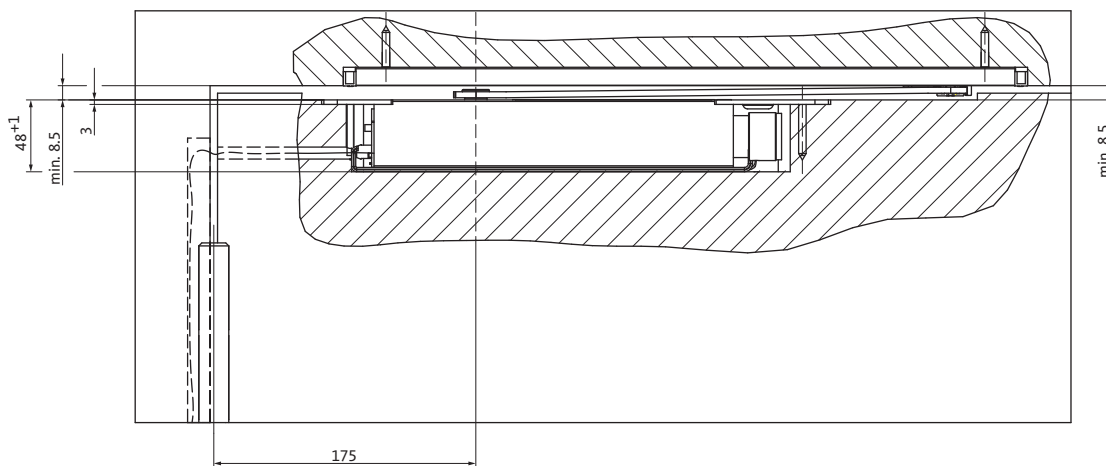
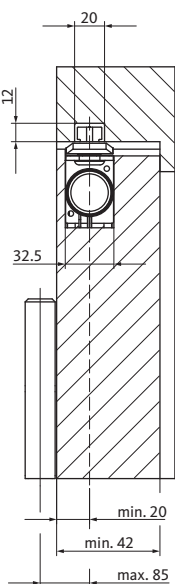
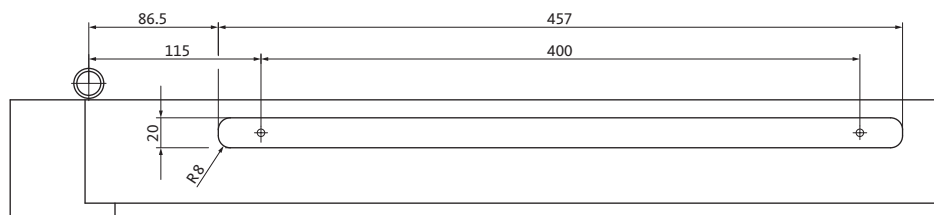
Installation without axle extension
for 8.5 – 15 mm rebate clearance



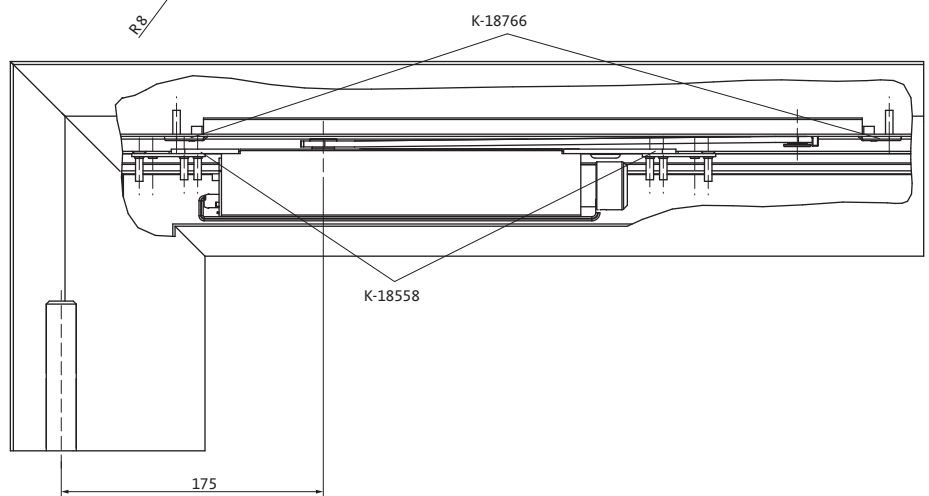
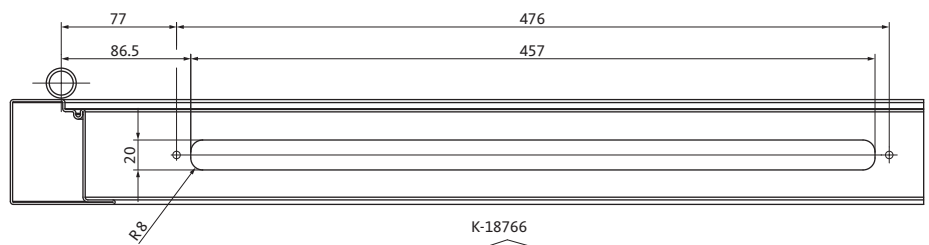
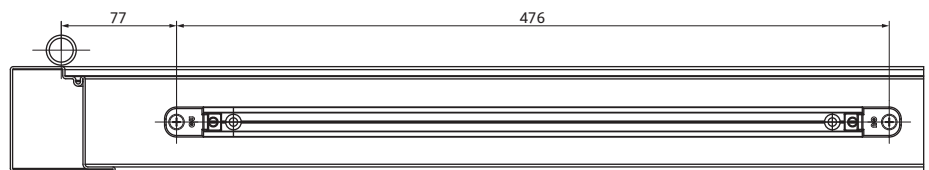
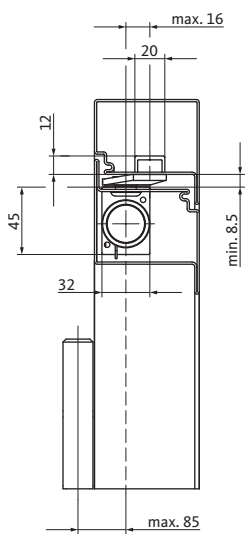
Installation with 6 mm axle extension
for 15.5 – 17 mm rebate clearance



Installation with 8 mm axle extension
for 17.5 – 22 mm rebate clearance



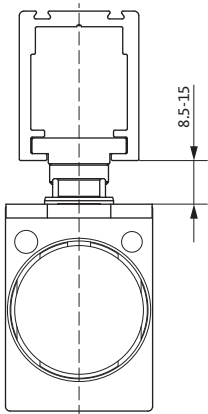
Installation situation: timber



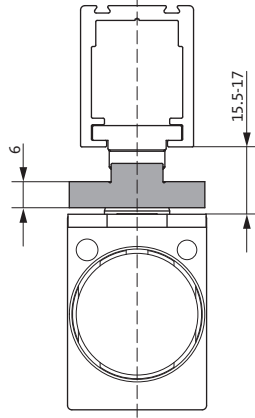
Installation situation: metal

Mounting and installation situations for VTS 735 FL

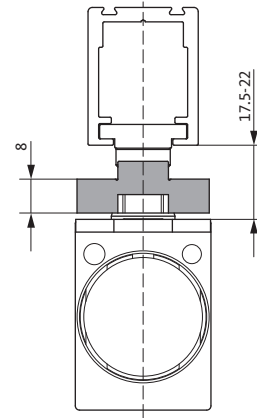
with functional slide rail 26x32



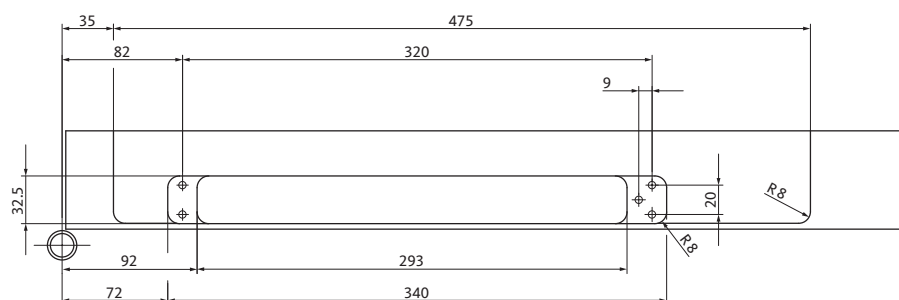
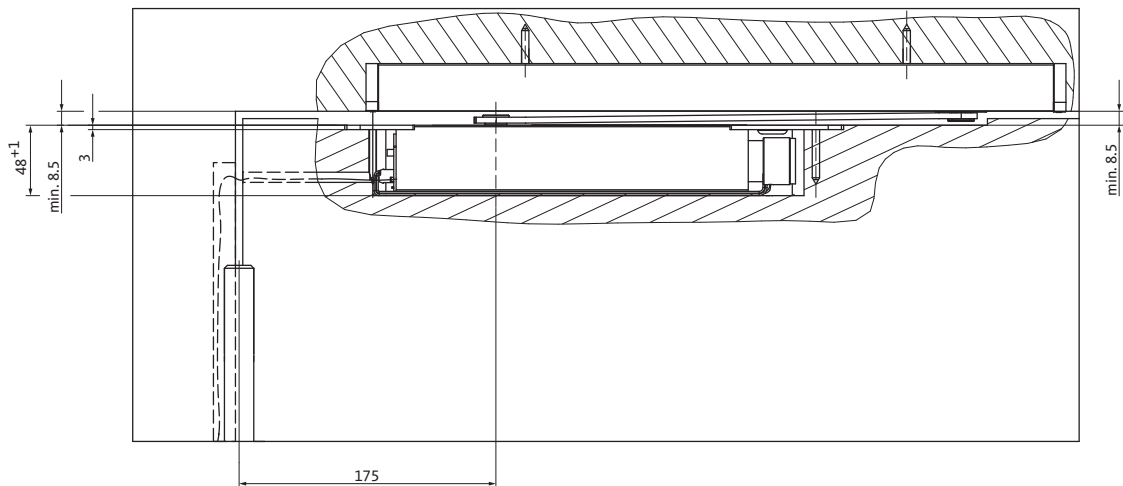
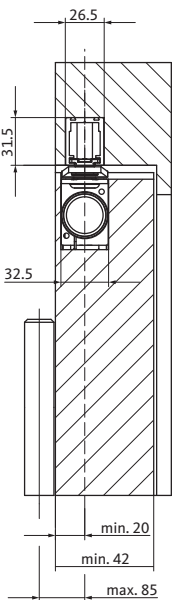
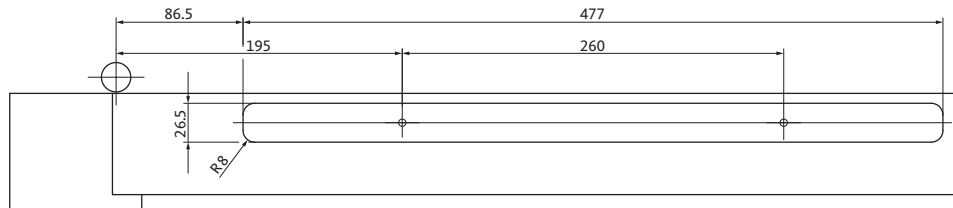
Installation without axle extension
for 8.5 – 15 mm rebate clearance



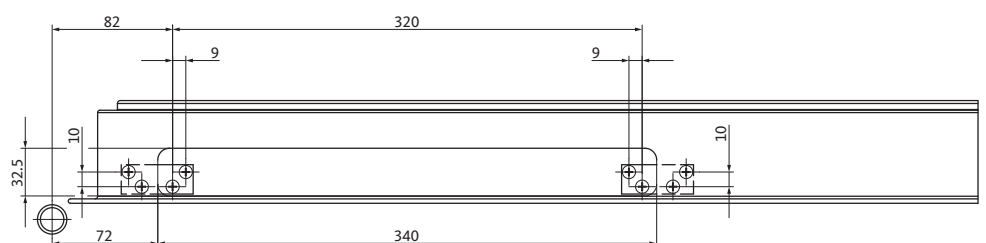
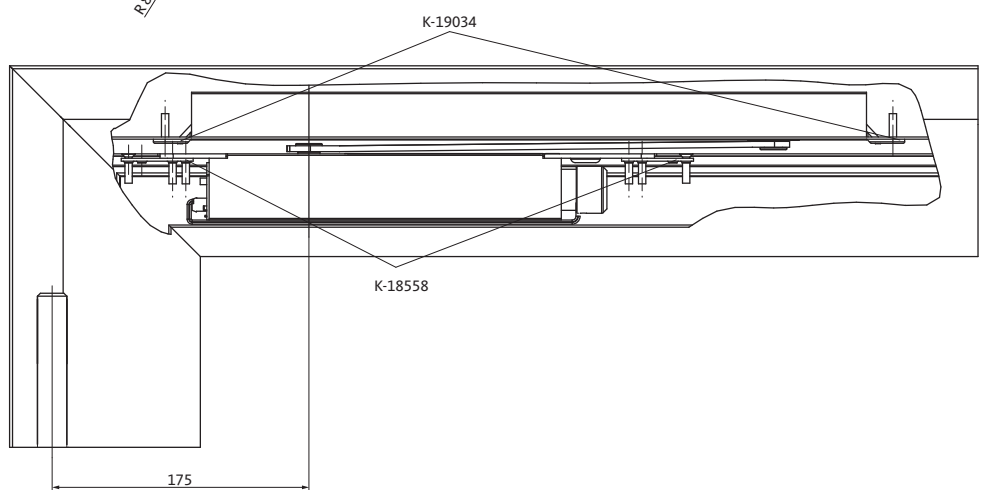
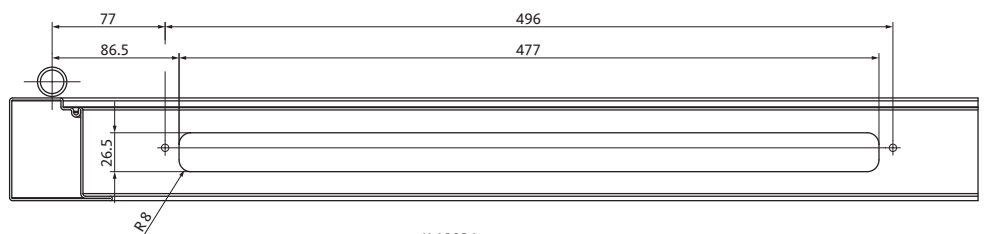
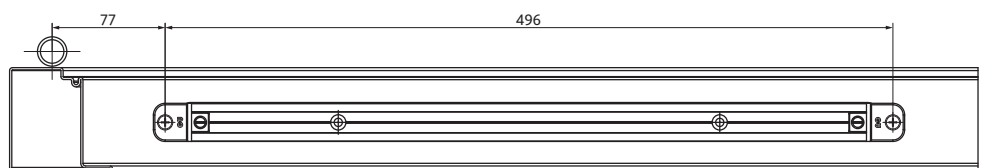
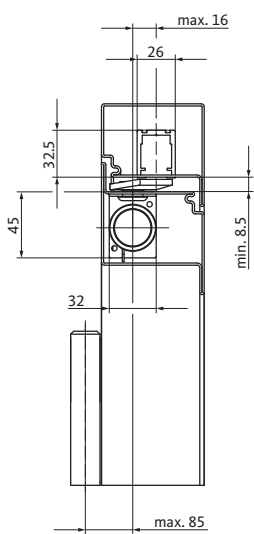
Installation with 6 mm axle extension
for 15.5 – 17 mm rebate clearance



Installation with 8 mm axle extension
for 17.5 – 22 mm rebate clearance



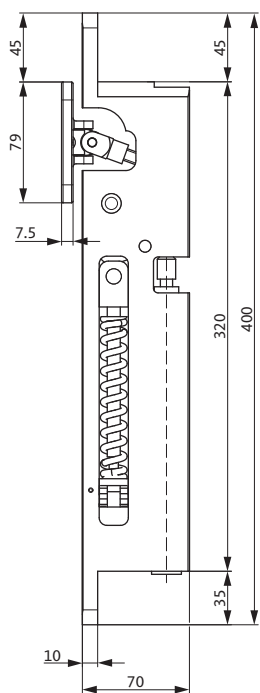
Installation situation: timber



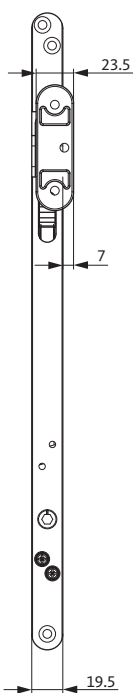
Installation situation: metal

Rebate door closer 20/24

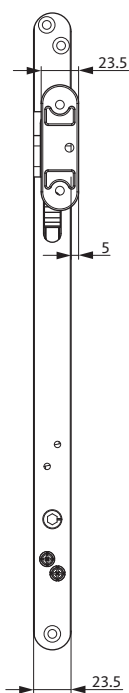
for concealed installation in the vertical door rebate of interior doors



Rebate door closer 20 and 24



Rebate door closer 20



Rebate door closer 24

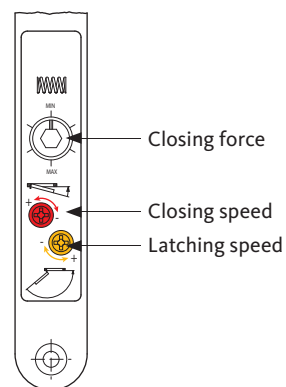
Product characteristics

- Door closer for single-leaf doors with door leaf widths up to 1000 mm concealed in vertical door rebate

Adjustment functions

- Adjustable door closing force
 - Rebate door closer 20 = EN 1-2
 - Rebate door closer 24 = EN 2-3
- Stepless adjustment of the valve functions:
 - Closing speed
 - Latching speed
- All valves are colour-coded and can be adjusted from the front
- Thermomatic valves ensure a uniform closing speed in the event of temperature fluctuations
- Security valves in the closer protect against overloading
- Controlled closing from an opening angle of approx. 90°
- High closing pressure in the lock position
- The door can be opened easily due to decreasing opening resistance
- Compact anodised aluminium housing

Adjustment functions



Classification code in accordance with EN 1154

Rebate door closer 20	4	8	$\frac{1}{2}$	0	1	4
Rebate door closer 24	4	8	$\frac{2}{3}$	0	1	4

Rebate door closer 20 – EN 1–2 (= door leaf widths up to 900 mm)

Designation	Closing force size according to EN 1154	Surface	Order number
Rebate door closer 20	1–2	silver	K-15144-00-0-0

Rebate door closer 24 – EN 2–3 (= door leaf widths up to 1000 mm)

Designation	Closing force size according to EN 1154	Surface	Order number
Rebate door closer 24	2–3	silver	K-15145-00-0-0

Note: only to be used in combination with surface-mounted door hinges.

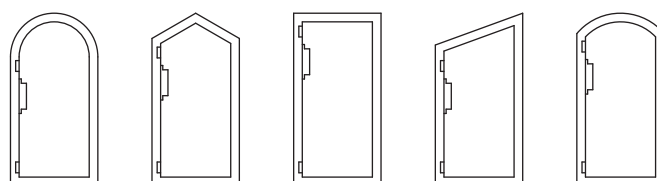
Applications

- For flush or rebated 1-leaf interior swing doors (not exposed to wind load) made from timber, PVC, aluminium and steel
- Universally adjustable for all types of door, particularly for round, segmental and lancet arched doors
- DIN left and DIN right usable
- Max. door opening angle 140° ^{[1][2]}

Limitations

Rebate door closers	Door weight [kg]		Min. door leaf thickness [mm]	Max. door leaf width [mm]
	min.	max.		
20	35	80	30	900
24	50	140	40	1000

Door shapes



[1] Position door stop for max. door opening angle.

[2] Opening angle depends on installation dimensions.

Surface-mounted overhead door closers with scissor-action arm



OTS 536

OTS 536 overhead door closer	140 – 141
OTS 536 overhead door closer – Accessories	142 – <ÜS>
OTS 536 overhead door closer – Installation situations	146 – 149

OTS 430

OTS 430 overhead door closer	150 – 151
OTS 430 overhead door closer – Accessories	152 – 155
OTS 430 overhead door closer – Installation situations	156 – 159

OTS 210

OTS 210 overhead door closer	160 – 161
OTS 210 overhead door closer – Accessories	162 – 165
OTS 210 overhead door closer – Installation situations	166 – 169

OTS 8x series

OTS 81 crank closer	170 – 171
OTS 81 crank closer – Accessories	172 – 175
OTS 80 crank closer	176 – 177
OTS 80 crank closer – Accessories	178 – 179

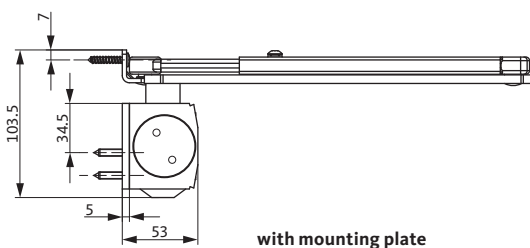
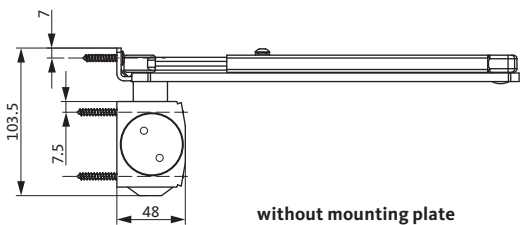
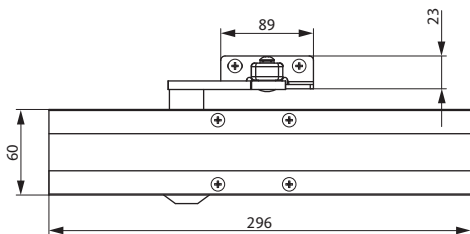
OTS 536 overhead door closer

Closing force sizes EN 2–6 – for door leaf widths up to 1400 mm



Product characteristics

- Door closer for single-leaf doors with door leaf widths up to 1400 mm
- Tested and certified in accordance with EN 1154
- Steplessly horizontally adjustable closing force size EN 2–6 ^[1]
- Valve functions which can be steplessly adjusted from the front:
 - Closing speed
 - Latching speed
 - Backcheck
- Thermomatic valves ensure smooth closing function in the event of temperature fluctuations
- Security valves in the closer protect against overloading
- Max. door opening and closing angle 180° ^[2]
- Controlled closing from every opening angle
- Compact aluminium housing with contemporary GU design
- **Optional**
 - Mechanical hold-open arm, adjustable for door openings between 70° and 150°; can be switched on and off ^[3]
 - Extended scissor-action arm for soffit depths up to 149 mm
 - Delayed closing action (type OTS 536 SV) ^[3]



Classification code in accordance with EN 1154					
OTS 536	4	8	2/6	1	1 3

OTS 536 overhead door closer – EN 2–6 (= door leaf widths up to 1400 mm)			
Designation	Description	Surface	Order number
OTS 536 overhead door closer	without scissor-action arm	silver	K-17920-00-0-1
		dark bronze	K-17920-00-0-5
		white (RAL 9016)	K-17920-00-0-7
	with standard arm	silver	K-17729-00-0-1
		dark bronze	K-17729-00-0-5
		white (RAL 9016)	K-17729-00-0-7
OTS 536 SV overhead door closer ^[3]	without scissor-action arm with delayed closing action	silver	K-17921-00-0-1
		dark bronze	K-17921-00-0-5
		white (RAL 9016)	K-17921-00-0-7

Applications

- 1-leaf fire and smoke protection doors
- 1-leaf swing doors
- Door leaf widths up to 1400 mm
- DIN left and DIN right usable
- Standard installation on hinge-side
- Transom installation on side opposite to hinges^[4]
- Use on fire and smoke protection doors is only permitted when using the mounting plate.

[1] Factory setting size 4.

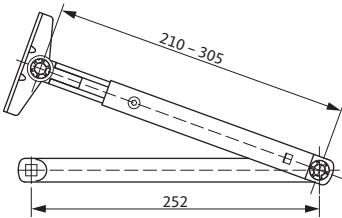
[2] Standard mounting on hinge-side.

[3] Not approved for fire and smoke protection doors.

[4] Opening angle dependent on door conditions.

Accessories for OTS 536

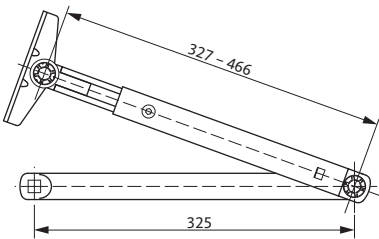
Standard arm, extended scissor-action arm, hold-open arm



Standard arm

Versions/Order numbers

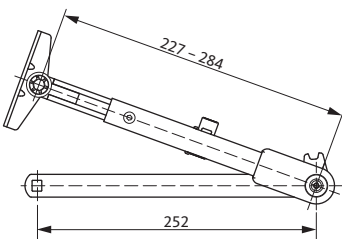
Designation	Surface	Order number
Standard arm	silver	K-17922-04-0-1
	dark bronze	K-17922-04-0-5
	white (RAL 9016)	K-17922-04-0-7



Extended scissor-action arm

Versions/Order numbers

Designation	Surface	Order number
Extended scissor-action arm	silver	K-17922-14-0-1
	dark bronze	K-17922-14-0-5
	white (RAL 9016)	K-17922-14-0-7



Mechanical hold-open arm E/A^[1]

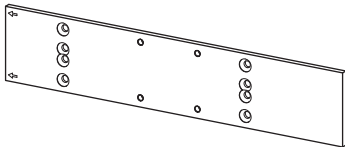
Versions/Order numbers

Designation	Surface	Order number
Mechanical hold-open arm E/A, on/off switchable	silver	K-17923-00-0-1
	dark bronze	K-17923-00-0-5
	white (RAL 9016)	K-17923-00-0-7

[1] Not approved for fire and smoke protection doors.

Accessories for OTS 536

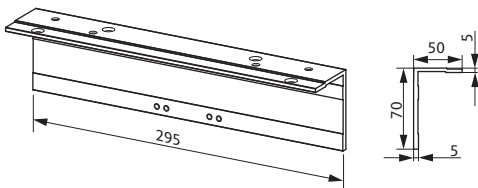
Mounting plate, combined angular bracket, clamping plate



Mounting plate

Versions/Order numbers

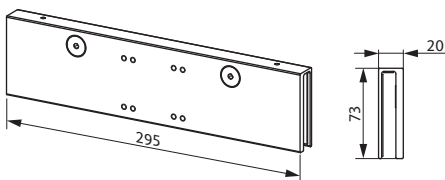
Designation	Surface	Order number
Mounting plate	silver	K-17578-00-0-1
	dark bronze	K-17578-00-0-5
	white (RAL 9016)	K-17578-00-0-7



Combined angular bracket

Versions/Order numbers

Designation	Surface	Order number
Combined angular bracket	silver	K-17932-00-0-1
	dark bronze	K-17932-00-0-5
	white (RAL 9016)	K-17932-00-0-7



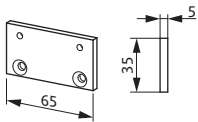
Clamping plate for all-glass doors

Versions/Order numbers

Designation	Surface	Order number
Clamping plate for all-glass doors	silver	K-17933-00-0-1
	dark bronze	K-17933-00-0-5
	white (RAL 9016)	K-17933-00-0-7

Accessories for OTS 536

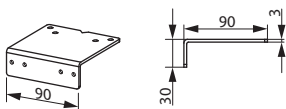
Bearing plate, angular bracket, axle extension



Bearing plate for linkage support

Versions/Order numbers

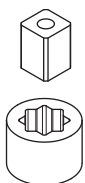
Designation	Surface	Order number
Bearing plate for linkage support	silver	K-14215-00-0-1
	dark bronze	K-14215-00-0-5
	white (RAL 9016)	K-14215-00-0-7



Angular bracket for parallel arm assembly

Versions/Order numbers

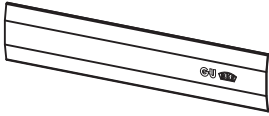
Designation	Surface	Order number
Angular bracket for parallel arm assembly	silver	K-17709-00-0-1
	dark bronze	K-17709-00-0-5
	white (RAL 9016)	K-17709-00-0-7



Axle extension

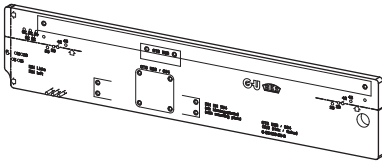
Versions/Order numbers

Designation	Surface	Order number
Axle extension 16 mm	silver	K-17738-00-0-1



Sliding cover

Versions/Order numbers		
Designation	Surface	Order number
Sliding cover	silver	K-18407-00-0-1
	dark bronze	K-18407-00-0-5
	white (RAL 9016)	K-18407-00-0-7



Drilling jigs

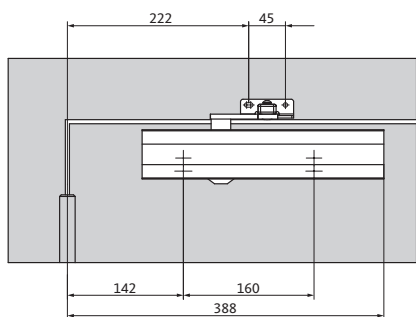
Versions/Order numbers		
Designation	Drill hole ø	Order number
Drilling jigs	Timber Drill hole ø 3.5 mm	K-17975-35-0-0
	Metal Drill hole ø 4.2 mm	K-17975-42-0-0

Installation situations for OTS 536

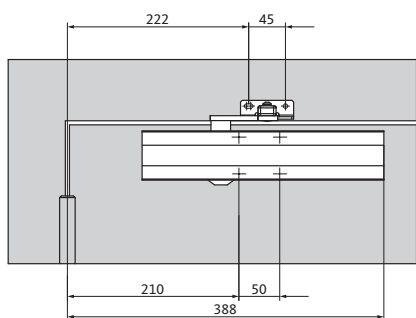
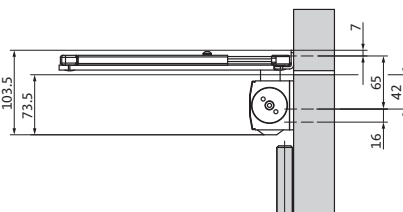
Flush doors / hinge-side



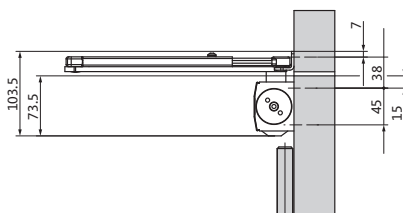
Standard mounting on hinge-side with OTS 536



with mounting plate



without mounting plate

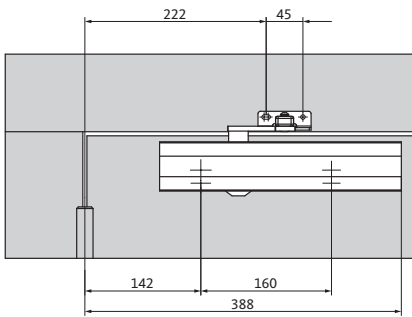


Installation situations for OTS 536

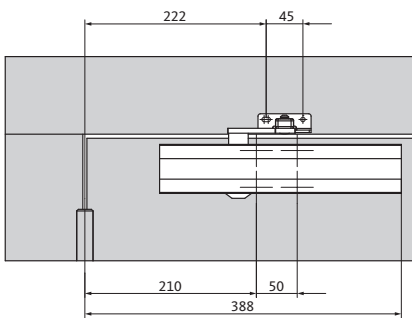
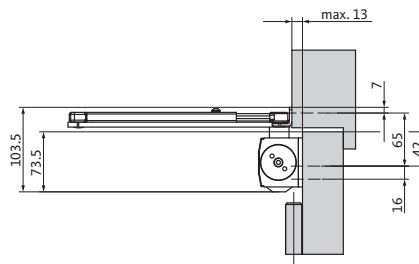
Rebated doors / hinge-side



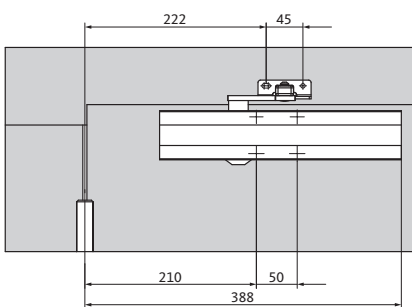
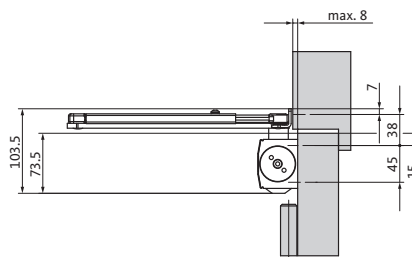
Standard mounting on hinge-side with OTS 536



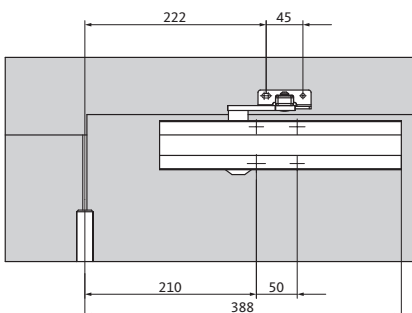
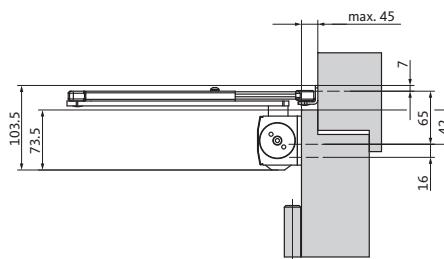
with mounting plate



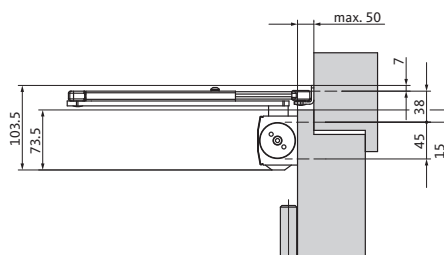
without mounting plate



with mounting plate



without mounting plate

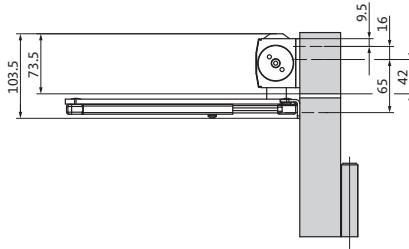
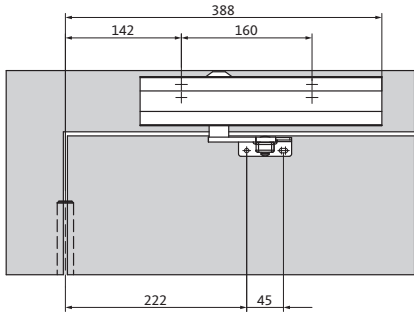


Installation situations for OTS 536

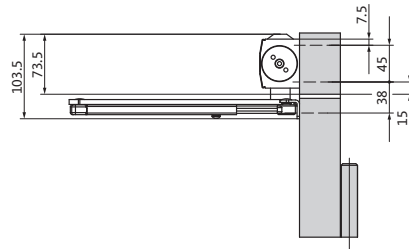
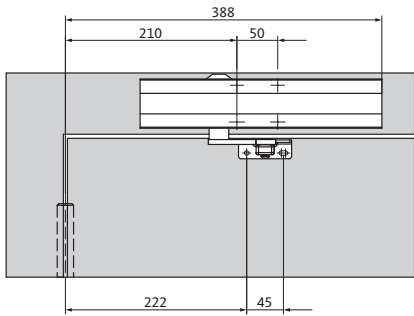
Flush doors / side opposite to hinges



Transom installation on side opposite to hinges with OTS 536



with mounting plate



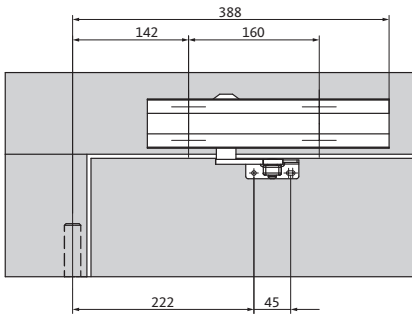
without mounting plate

Installation situations for OTS 536

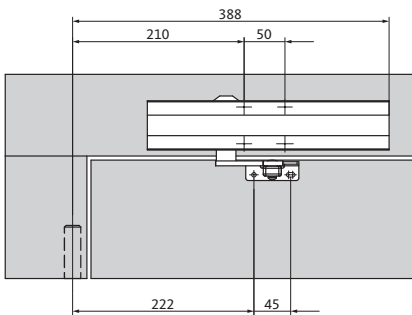
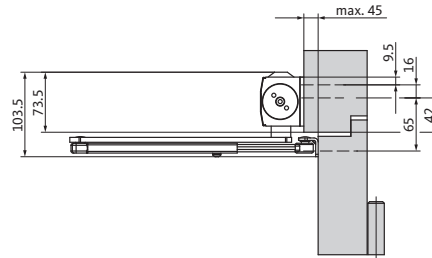
Rebated doors / side opposite to hinges



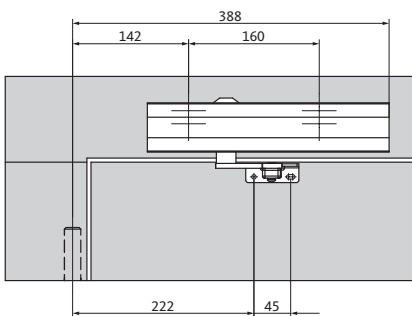
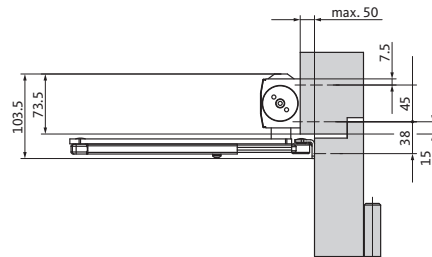
Transom installation on side opposite to hinges with OTS 536



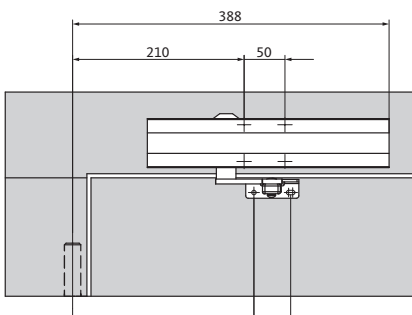
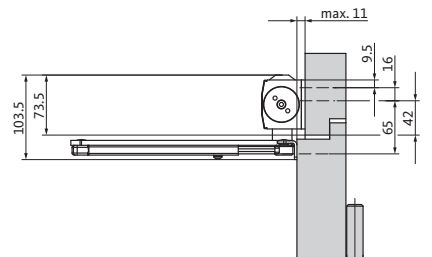
with mounting plate



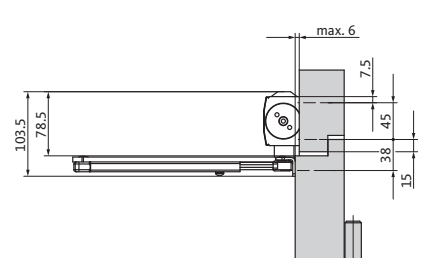
without mounting plate



with mounting plate



without mounting plate



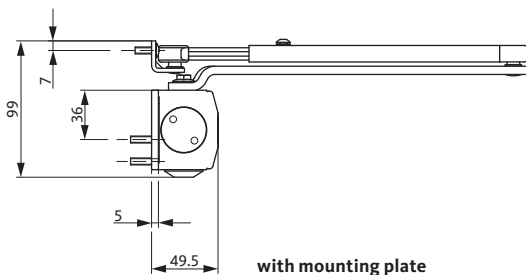
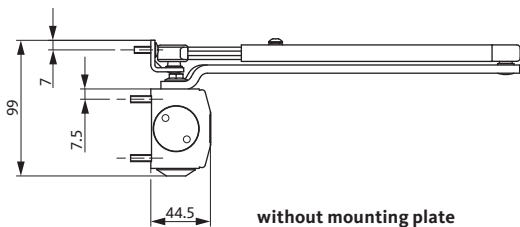
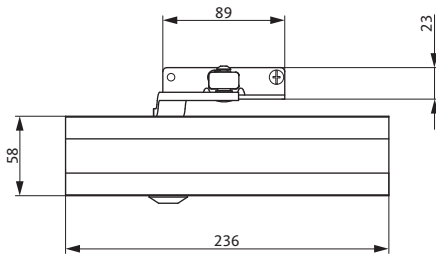
OTS 430 overhead door closer

Closing force sizes EN 2–5 – for door leaf widths up to 1250 mm



Product characteristics

- Door closer for single-leaf doors with door leaf widths up to 1250 mm
- Tested and certified in accordance with EN 1154
- Steplessly horizontally adjustable closing force size EN 2–5^[1]
- Valve functions which can be steplessly adjusted from the front:
 - Closing speed
 - Latching speed
- Thermomatic valves ensure a uniform closing speed in the event of temperature fluctuations
- Security valves in the closer protect against overloading
- Max. door opening and closing angle 180°^[2]
- Controlled closing from every opening angle
- Compact aluminium housing with contemporary GU design
- **Optional**
 - Mechanical hold-open arm, adjustable for door openings between 70° and 150°; can be switched on and off^[3]
 - Steplessly adjustable backcheck tested in accordance with EN 1154 (type OTS 430 BC)



Classification code in accordance with EN 1154					
OTS 430	4	8	2/5	1	4

OTS 430 overhead door closer – EN 2–5 (= door leaf widths up to 1250 mm)			
Designation	Description	Surface	Order number
OTS 430 overhead door closer	without scissor-action arm	silver	K-17983-00-0-1
		dark bronze	K-17983-00-0-5
		white (RAL 9016)	K-17983-00-0-7
	with standard arm	silver	K-17051-00-0-1
		dark bronze	K-17051-00-0-5
		white (RAL 9016)	K-17051-00-0-7
OTS 430 BC overhead door closer	without scissor-action arm with backcheck	silver	K-17982-00-0-1
		dark bronze	K-17982-00-0-5
		white (RAL 9016)	K-17982-00-0-7

Applications

- 1-leaf fire and smoke protection doors
- 1-leaf swing doors
- Door leaf widths up to 1250 mm
- DIN left and DIN right usable
- Standard installation on hinge-side
- Transom installation on side opposite to hinges ^[4]
- Use on fire and smoke protection doors is only permitted when using the mounting plate.

[1] Factory condition size 3.

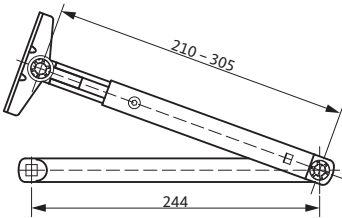
[2] Standard mounting on hinge-side.

[3] Not approved for fire and smoke protection doors.

[4] Opening angle dependent on door conditions.

Accessories for OTS 430

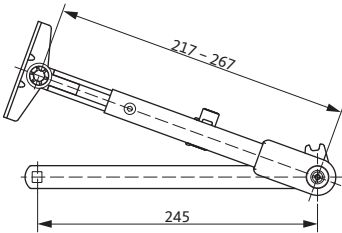
Standard arm, hold-open arm, mounting plate



Standard arm

Versions/Order numbers

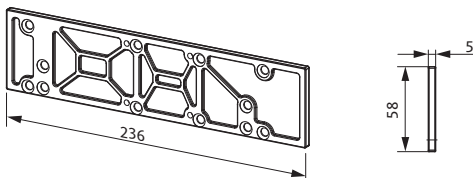
Designation	Surface	Order number
Standard arm	silver	K-16571-00-0-1
	dark bronze	K-16571-00-0-5
	white (RAL 9016)	K-16571-00-0-7



Mechanical hold-open arm E/A ^[1]

Versions/Order numbers

Designation	Surface	Order number
Mechanical hold-open arm E/A, on/off switchable	silver	K-17456-00-0-1
	dark bronze	K-17456-00-0-5
	white (RAL 9016)	K-17456-00-0-7



Mounting plate

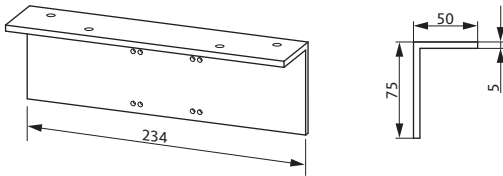
Versions/Order numbers

Designation	Surface	Order number
Mounting plate	silver	K-16547-00-0-1
	dark bronze	K-16547-00-0-5
	white (RAL 9016)	K-16547-00-0-7

[1] Not approved for fire and smoke protection doors.

Accessories for OTS 430

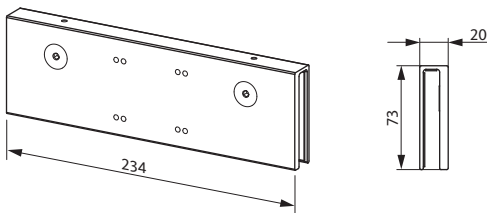
Angular lintel bracket, clamping plate, flat plate



Angular lintel bracket

Versions/Order numbers

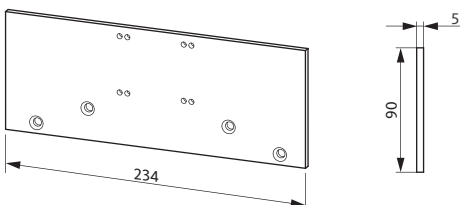
Designation	Surface	Order number
Angular lintel bracket	silver	K-16551-00-0-1
	dark bronze	K-16551-00-0-5
	white (RAL 9016)	K-16551-00-0-7



Clamping plate for all-glass doors

Versions/Order numbers

Designation	Surface	Order number
Clamping plate for all-glass doors	silver	K-16553-00-0-1
	dark bronze	K-16553-00-0-5
	white (RAL 9016)	K-16553-00-0-7



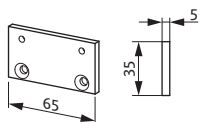
Flat plate for segmental arch head doors

Versions/Order numbers

Designation	Surface	Order number
Flat plate for segmental arch head doors	silver	K-16549-00-0-1
	dark bronze	K-16549-00-0-5
	white (RAL 9016)	K-16549-00-0-7

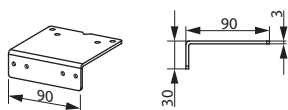
Accessories for OTS 430

Bearing plate, angular bracket



Bearing plate

Versions/Order numbers		
Designation	Surface	Order number
Bearing plate	silver	K-14215-00-0-1
	dark bronze	K-14215-00-0-5
	white (RAL 9016)	K-14215-00-0-7

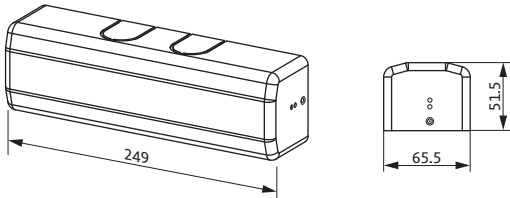


Angular bracket for parallel arm assembly

Versions/Order numbers		
Designation	Surface	Order number
Angular bracket for parallel arm assembly	silver	K-17709-00-0-1
	dark bronze	K-17709-00-0-5
	white (RAL 9016)	K-17709-00-0-7

Accessories for OTS 430

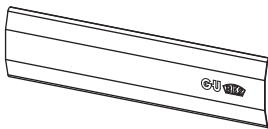
Cover, sliding cover, drilling jigs



Cover

Versions/Order numbers

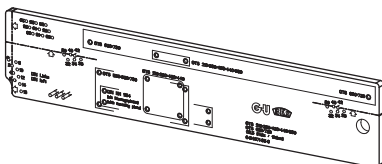
Designation	Surface	Order number
Cover	stainless steel	K-17387-02-0-8



Sliding cover

Versions/Order numbers

Designation	Surface	Order number
Sliding cover	silver	K-18406-00-0-1
	dark bronze	K-18406-00-0-5
	white (RAL 9016)	K-18406-00-0-7



Drilling jigs

Versions/Order numbers

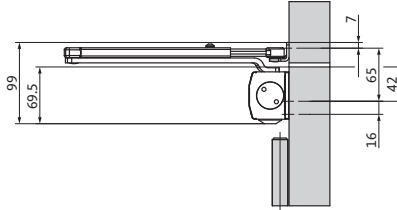
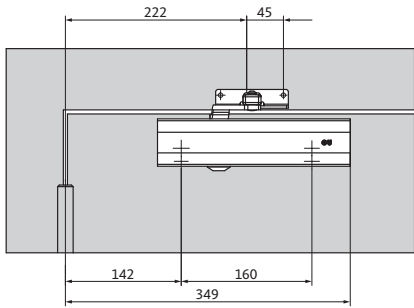
Designation	Drill hole \varnothing	Order number
Drilling jigs	Timber Drill hole \varnothing 3.5 mm	K-17805-35-0-0
	Metal Drill hole \varnothing 4.2 mm	K-17805-42-0-0

Installation situations for OTS 430

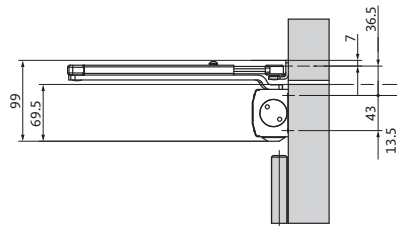
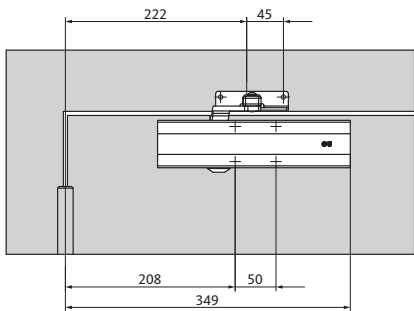
Flush doors / hinge-side



Standard installation on hinge-side with OTS 430



with mounting plate



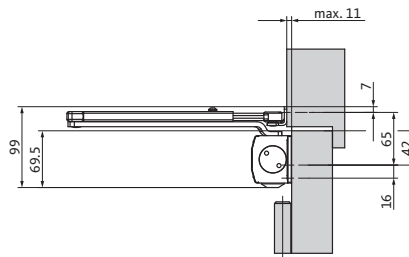
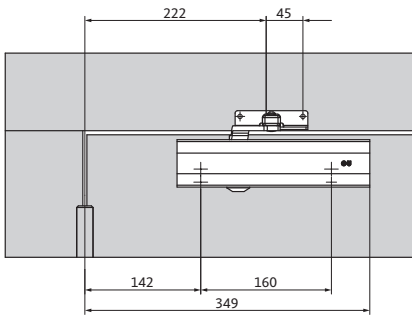
without mounting plate

Installation situations for OTS 430

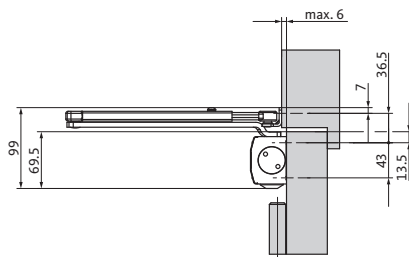
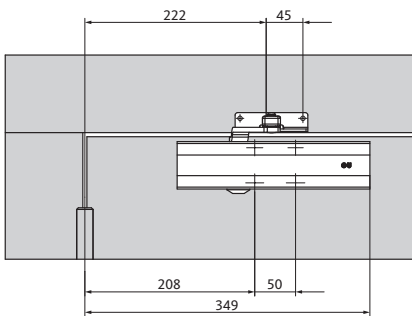
Rebated doors / hinge-side



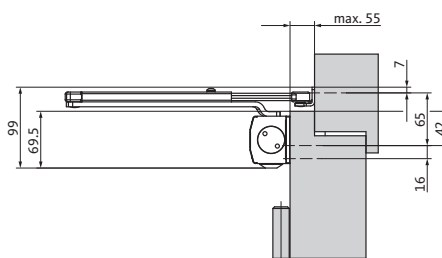
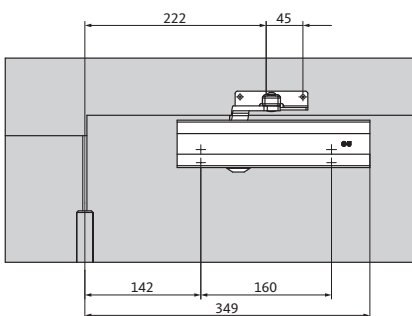
Standard installation on hinge-side with OTS 430



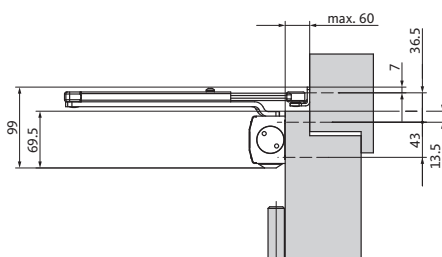
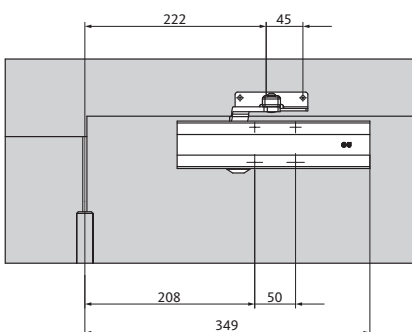
with mounting plate



without mounting plate



with mounting plate



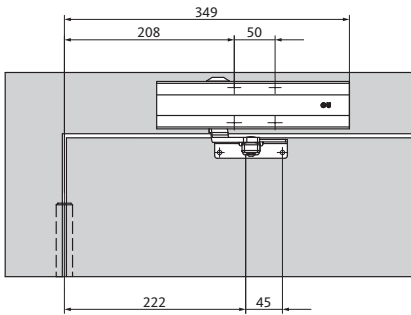
without mounting plate

Installation situations for OTS 430

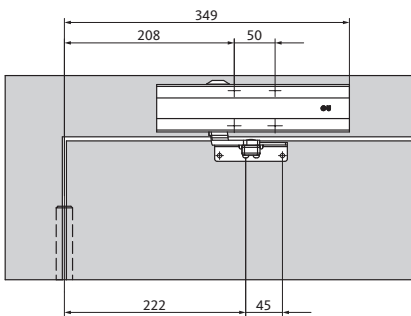
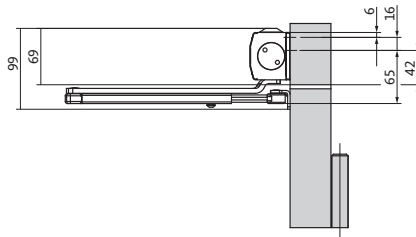
Flush doors / side opposite to hinges



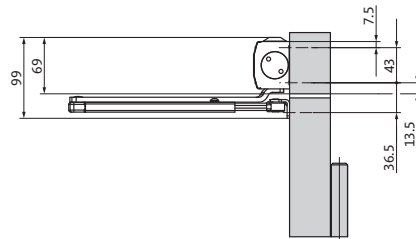
Transom installation on side opposite to hinges with OTS 430



with mounting plate



without mounting plate

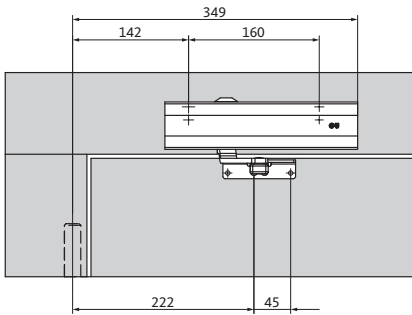


Installation situations for OTS 430

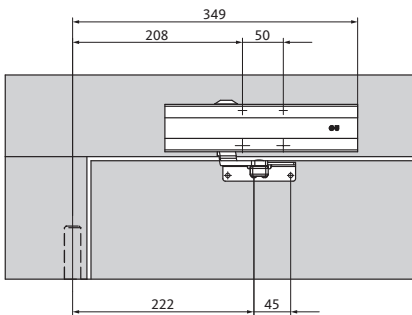
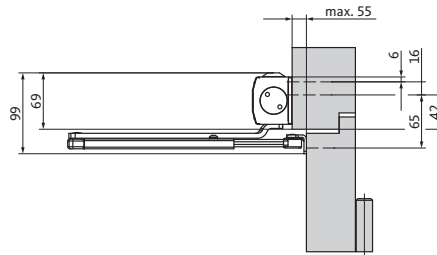
Rebated doors / side opposite to hinges



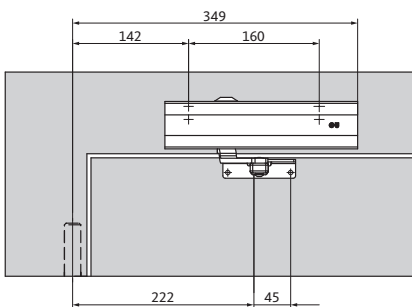
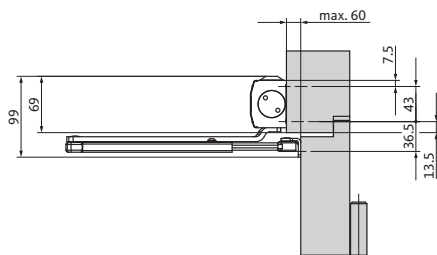
Transom installation on side opposite to hinges with OTS 430



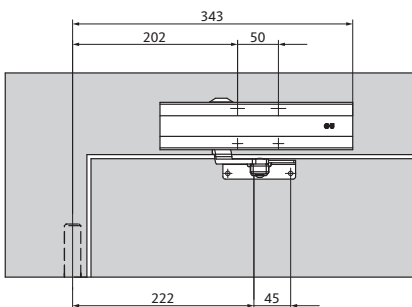
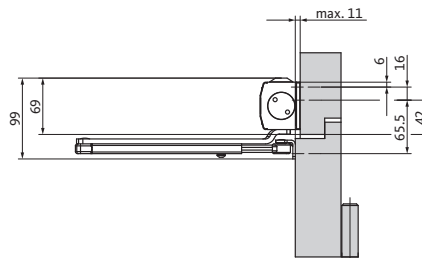
with mounting plate



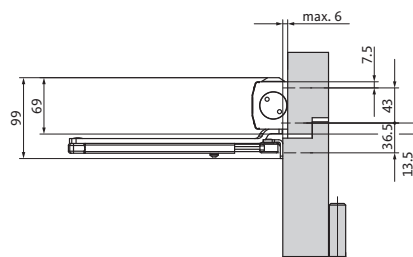
without mounting plate



with mounting plate

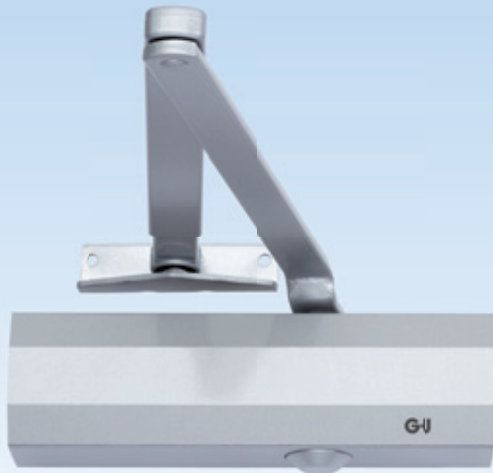


without mounting plate



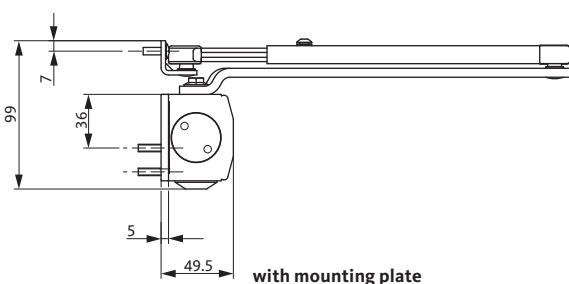
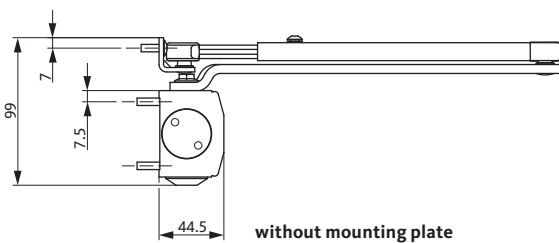
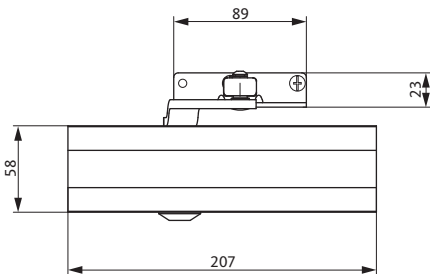
OTS 210 overhead door closer

Closing force size EN 2/3/4 – for door leaf widths up to 1100 mm



Product characteristics

- Door closer for single-leaf doors with door leaf widths up to 1100 mm
- Closing force sizes 2/3/4; sizes can be adjusted by moving the closer
- Valve functions which can be steplessly adjusted from the front:
 - Closing speed
 - Latching speed
- Thermomatic valves ensure a uniform closing speed in the event of temperature fluctuations
- Security valves in the closer protect against overloading
- Max. door opening and closing angle 180° [1]
- Controlled closing from every opening angle
- Compact aluminium housing with contemporary GU design
- Optional: mechanical hold-open arm, adjustable for door openings between 70° and 150°; can be switched on and off



Classification code in accordance with EN 1154						
OTS 210	4	8	2 4	0	1	3

OTS 210 overhead door closer – EN 2/3/4 (= door leaf widths up to 1100 mm)			
Designation	Description	Surface	Order number
OTS 210 overhead door closer	without scissor-action arm	silver	K-15710-01-0-1
		dark bronze	K-15710-01-0-5
		white (RAL 9016)	K-15710-01-0-7
	with standard arm	silver	K-15710-00-0-1
		dark bronze	K-15710-00-0-5
		white (RAL 9016)	K-15710-00-0-7

Applications

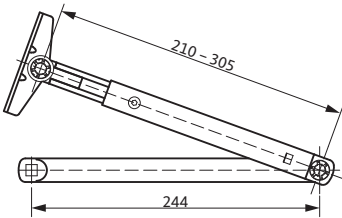
- 1-leaf swing doors
- For door leaf widths up to 1100 mm
- DIN left and DIN right usable
- Standard installation on hinge-side
- Transom installation on side opposite to hinges ^[2]

[1] Standard mounting on hinge-side.

[2] Opening angle dependent on door conditions.

Accessories for OTS 210

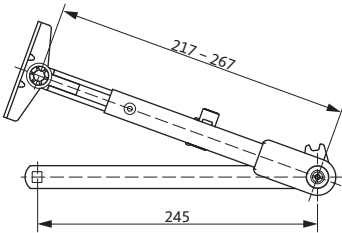
Standard arm, hold-open arm, mounting plate



Standard arm

Versions/Order numbers

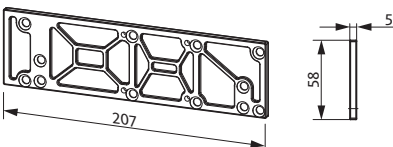
Designation	Surface	Order number
Standard arm	silver	K-16571-00-0-1
	dark bronze	K-16571-00-0-5
	white (RAL 9016)	K-16571-00-0-7



Mechanical hold-open arm E/A

Versions/Order numbers

Designation	Surface	Order number
Mechanical hold-open arm E/A, on/off switchable	silver	K-17456-00-0-1
	dark bronze	K-17456-00-0-5
	white (RAL 9016)	K-17456-00-0-7



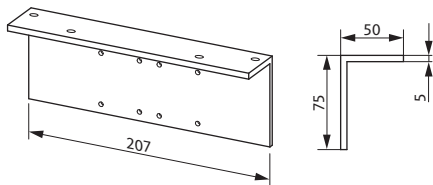
Mounting plate

Versions/Order numbers

Designation	Surface	Order number
Mounting plate	silver	K-15714-00-0-1
	dark bronze	K-15714-00-0-5
	white (RAL 9016)	K-15714-00-0-7

Accessories for OTS 210

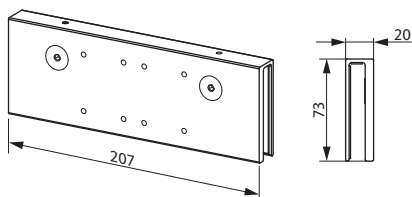
Angular lintel bracket, clamping plate, flat plate



Angular lintel bracket

Versions/Order numbers

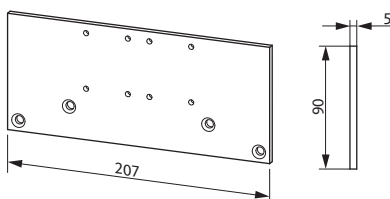
Designation	Surface	Order number
Angular lintel bracket	silver	K-16550-00-0-1
	dark bronze	K-16550-00-0-5
	white (RAL 9016)	K-16550-00-0-7



Clamping plate for all-glass doors

Versions/Order numbers

Designation	Surface	Order number
Clamping plate for all-glass doors	silver	K-16552-00-0-1
	dark bronze	K-16552-00-0-5
	white (RAL 9016)	K-16552-00-0-7



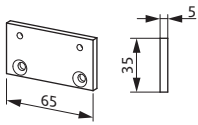
Flat plate for segmental arch head doors

Versions/Order numbers

Designation	Surface	Order number
Flat plate for segmental arch head doors	silver	K-16548-00-0-1
	dark bronze	K-16548-00-0-5
	white (RAL 9016)	K-16548-00-0-7

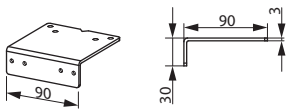
Accessories for OTS 210

Bearing plate, angular bracket



Bearing plate

Versions/Order numbers		
Designation	Surface	Order number
Bearing plate	silver	K-14215-00-0-1
	dark bronze	K-14215-00-0-5
	white (RAL 9016)	K-14215-00-0-7

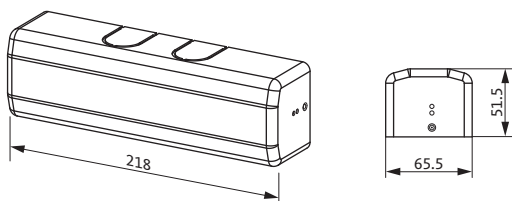


Angular bracket for parallel arm assembly

Versions/Order numbers		
Designation	Surface	Order number
Angular bracket for parallel arm assembly	silver	K-17709-00-0-1
	dark bronze	K-17709-00-0-5
	white (RAL 9016)	K-17709-00-0-7

Accessories for OTS 210

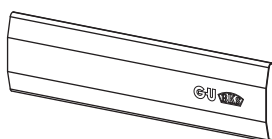
Cover, sliding cover, drilling jigs



Cover

Versions/Order numbers

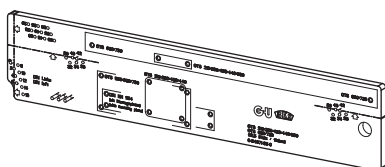
Designation	Surface	Order number
Cover	stainless steel	K-17387-01-0-8



Sliding cover

Versions/Order numbers

Designation	Surface	Order number
Sliding cover	silver	K-18405-00-0-1
	dark bronze	K-18405-00-0-5
	white (RAL 9016)	K-18405-00-0-7



Drilling jigs

Versions/Order numbers

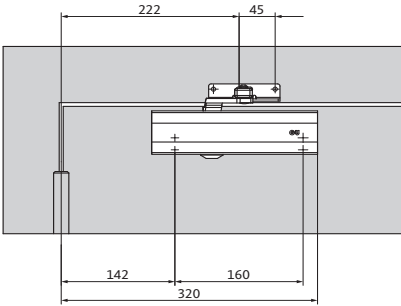
Designation	Drill hole \varnothing	Order number
Drilling jigs	Timber Drill hole \varnothing 3.5 mm	K-17805-35-0-0
	Metal Drill hole \varnothing 4.2 mm	K-17805-42-0-0

Installation situations for OTS 210

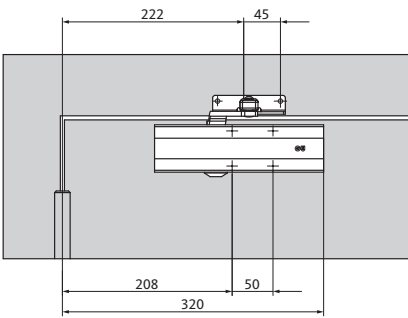
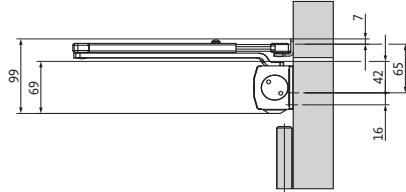
Flush doors / hinge-side



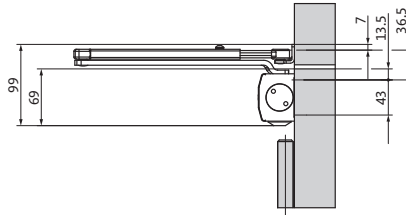
Standard installation on hinge-side with OTS 210



with mounting plate



without mounting plate

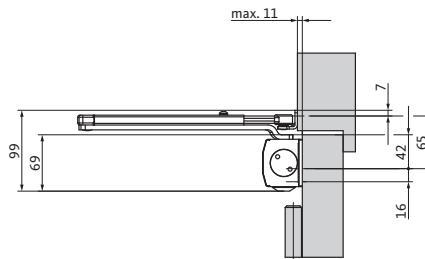
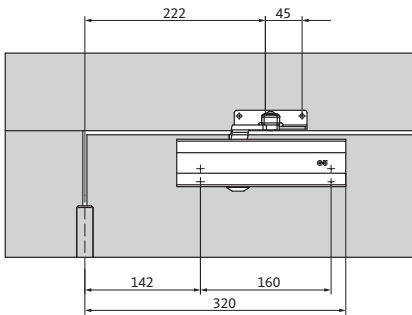


Installation situations for OTS 210

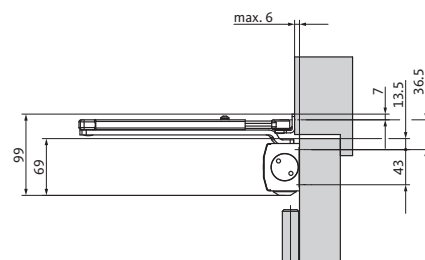
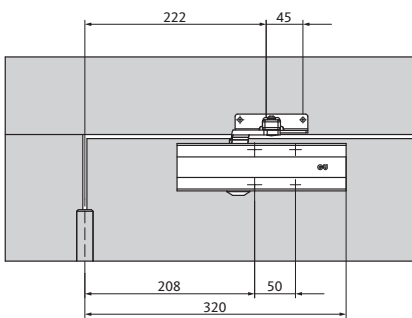
Rebated doors / hinge-side



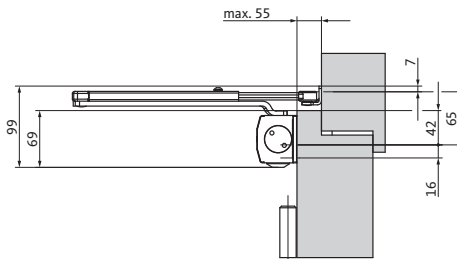
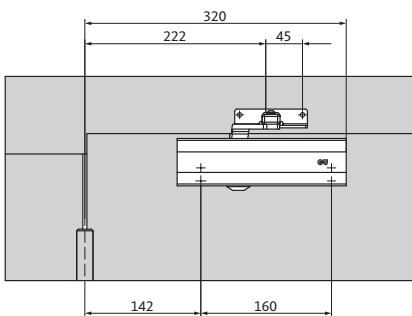
Standard installation on hinge-side with OTS 210



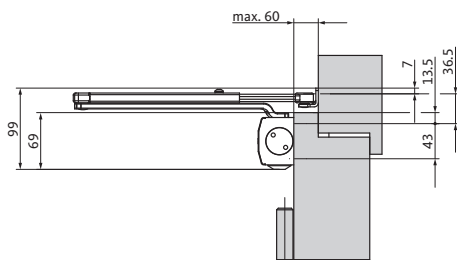
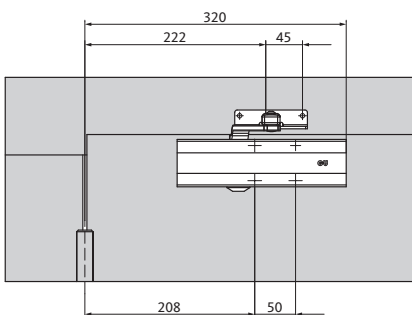
with mounting plate



without mounting plate



with mounting plate



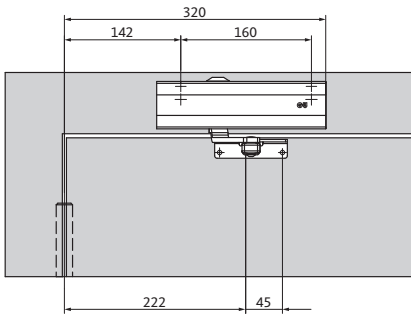
without mounting plate

Installation situations for OTS 210

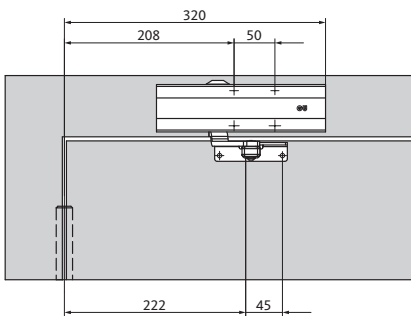
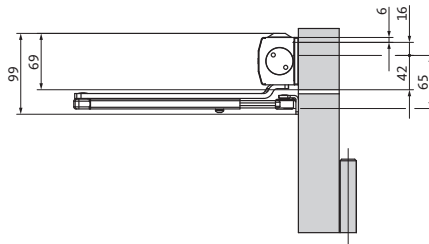
Flush doors / side opposite to hinges



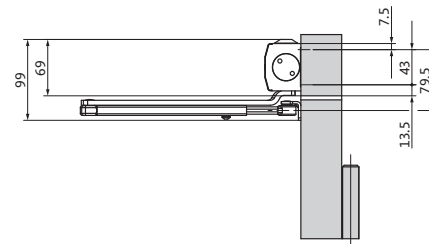
Transom installation on side opposite to hinges with OTS 210



with mounting plate



without mounting plate

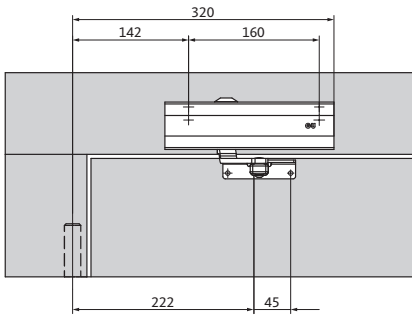


Installation situations for OTS 210

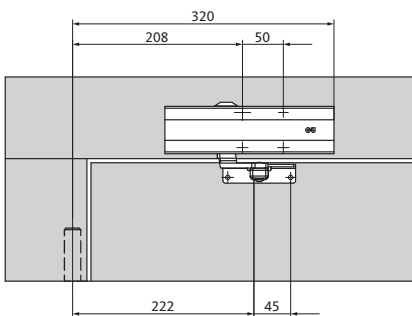
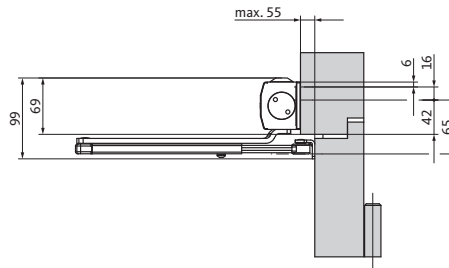
Rebated doors / side opposite to hinges



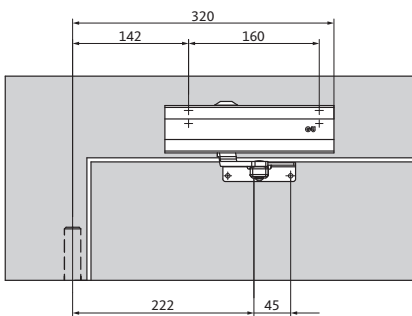
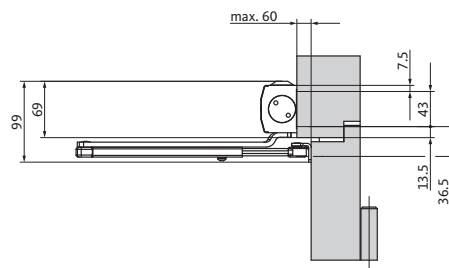
Transom installation on side opposite to hinges with OTS 210



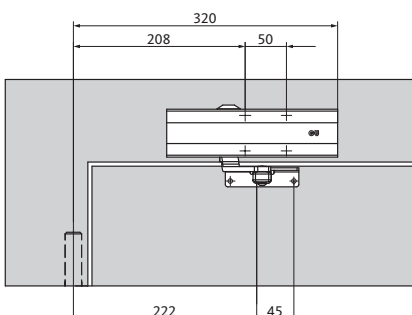
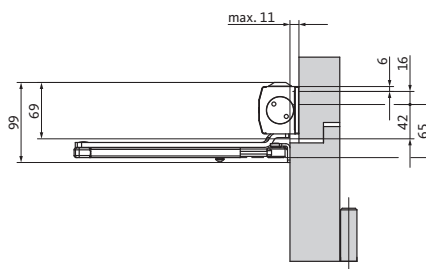
with mounting plate



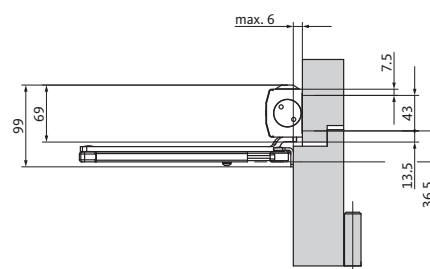
without mounting plate



with mounting plate

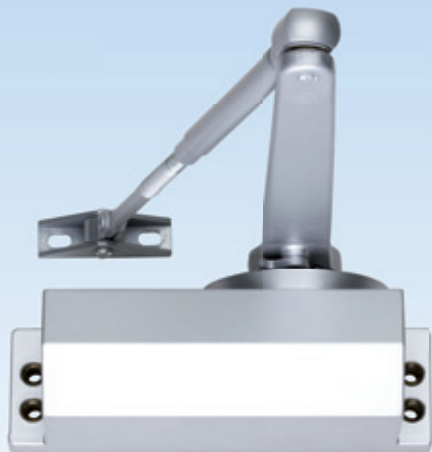


without mounting plate



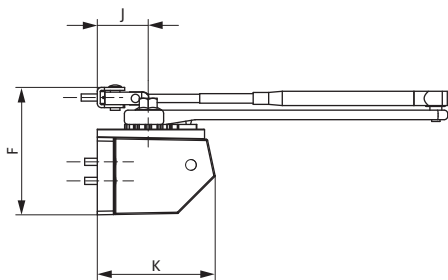
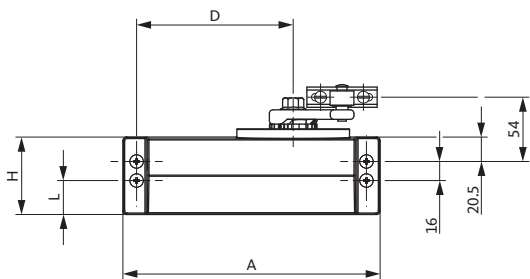
OTS 81 crank closer

Closing force sizes 2–5 – for door leaf widths up to 1280 mm



Product characteristics

- Retro door closer with crank drive for single-leaf doors with door leaf widths up to 1280 mm
- Tested and certified in accordance with DIN 18263-1
- Closing force sizes 2–5 ^[1]
- Steplessly adjustable, temperature-independent closing speed
- The latching speed can be adjusted via the scissor-action arm
- High degree of efficiency
- Low installation height of the bearing plate
- Max. door opening angle 90° or with extended scissor-action arm 180° ^[2]
- Controlled closing from a door opening angle of 45°
- Optional with hold-open arm



Dimensions with reference to closing force size

Closing force size in accordance with DIN 18263-1	Dimensions [mm]						
	A	D	F	H	J	K	L
2/3	184.0	112.5	95.0	53.0	39.0	86.0	11.5
4	184.0	112.5	95.0	53.0	39.0	86.0	16.5
5	216.0	134.0	107.0	65.0	43.5	99.5	28.5

OTS 81 crank closer – 2–5 (= door leaf widths up to 1280 mm)

Designation	Description	Size	Finish*	Order number
OTS 81 crank closer	with standard arm DIN left	2	silver	B 8121 0000
		3	silver	B 8131 0000
		4	silver	B 8141 0000
		5	silver	B 8151 0000
	with standard arm DIN right	2	silver	B 8122 0000
		3	silver	B 8132 0000
		4	silver	B 8142 0000
		5	silver	B 8152 0000
	with hold-open arm DIN left ^[3]	2	silver	B 8121 0200
		3	silver	B 8131 0200
		4	silver	B 8141 0200
		5	silver	B 8151 0200
	with hold-open arm DIN right ^[3]	2	silver	B 8122 0200
		3	silver	B 8132 0200
		4	silver	B 8142 0200
		5	silver	B 8152 0200

* dark bronze and white (RAL 9016) surfaces are available on request

Applications

- 1-leaf fire and smoke protection doors
- 1-leaf swing doors
- Door leaf widths up to 1280 mm
- Standard installation on hinge-side
- Transom installation on side opposite to hinges^[4]

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[1] According to DIN 18263, part 1.

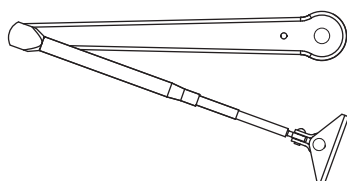
[2] Note: closing force reduction.

[3] Not approved for fire and smoke protection doors.

[4] Opening angle dependent on door conditions.

Accessories for OTS 81

Standard arm, extended scissor-action arm, hold-open arm

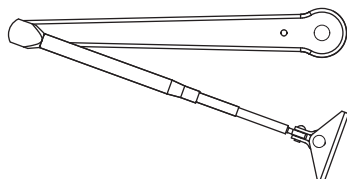


Standard arm

Versions/Order numbers

Designation	Size	Finish*	Order number
Standard arm	2 to 4	silver	B 8083 0020
	5	silver	B 8085 0020

* dark bronze and white (RAL 9016) surfaces are available on request

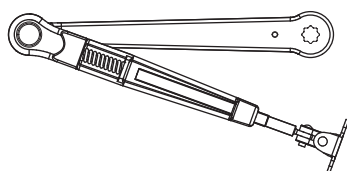


Extended scissor-action arm

Versions/Order numbers

Designation	Size	Finish*	Order number
Extended scissor-action arm	2 to 4	silver	B 8183 0000
	5	silver	B 8185 0000

* dark bronze and white (RAL 9016) surfaces are available on request



Hold-open arm^[1]

Versions/Order numbers

Designation	Size	Finish*	Order number
Hold-open arm	2 to 3	silver	B 8183 0200
	4	silver	B 8184 0200
	5	silver	B 8185 0200

* dark bronze and white (RAL 9016) surfaces are available on request

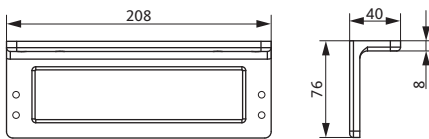
[1] Not approved for fire and smoke protection doors.



Replacement spring

Versions/Order numbers

Designation	Size	Order number
Replacement spring	2	B 8110 0002
	3	B 8110 0003
	4	B 8110 0004
	5	B 8110 0005

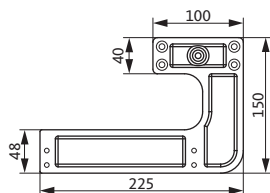


Angular lintel bracket

Versions/Order numbers

Designation	Size	Finish*	Order number
Angular lintel bracket	2 to 4	silver	B 8170 0000
	5	silver	B 8170 0100

* dark bronze and white (RAL 9016) surfaces are available on request



Flat bracket

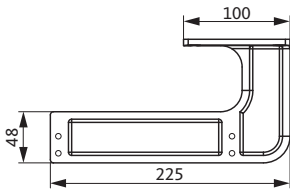
Versions/Order numbers

Designation	Size	Finish*	Order number
Flat bracket	2 to 4	silver	B 8171 0000
	5	silver	B 8171 0100

* dark bronze and white (RAL 9016) surfaces are available on request

Accessories for OTS 81

Lintel bracket, angular bracket, bearing plate

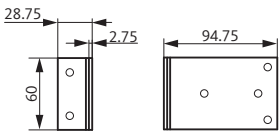


Lintel bracket

Versions/Order numbers

Designation	Size	Finish*	Order number
Lintel bracket	2 to 4	silver	B 8172 0000

* dark bronze and white (RAL 9016) surfaces are available on request

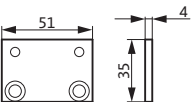


Angular bracket for parallel arm assembly

Versions/Order numbers

Designation	Size	Finish*	Order number
Angular bracket for parallel arm assembly	2 to 5	silver	B 8174 0000

* dark bronze and white (RAL 9016) surfaces are available on request

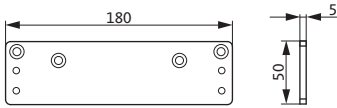


Bearing plate

Versions/Order numbers

Designation	Size	Finish*	Order number
Bearing plate	2 to 5	silver	B 8177 0000

* dark bronze and white (RAL 9016) surfaces are available on request

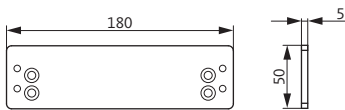


Mounting plate

Versions/Order numbers

Designation	Size	Finish*	Order number
Mounting plate	2 to 4	silver	B 8173 0000

* dark bronze and white (RAL 9016) surfaces are available on request



Mounting plate

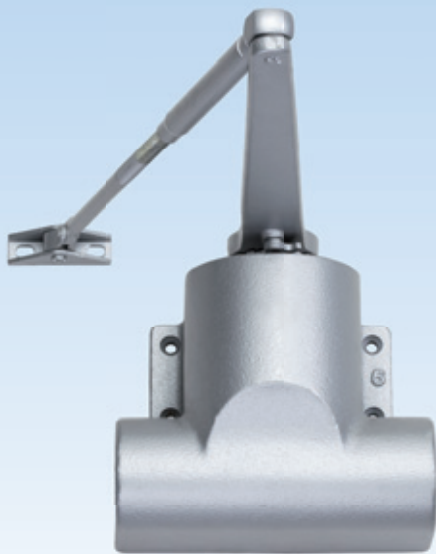
Versions/Order numbers

Designation	Size	Finish*	Order number
Mounting plate	3 to 4	silver	B 8178 0000
	5	silver	B 8178 0100

* dark bronze and white (RAL 9016) surfaces are available on request

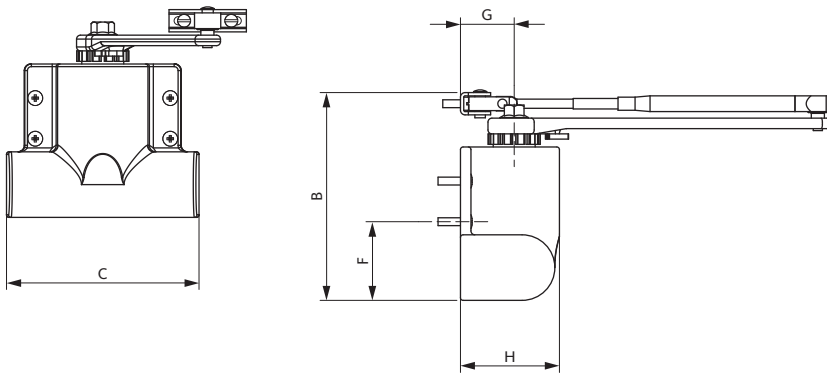
OTS 80 crank closer

Closing force sizes 2–6 – for door leaf widths up to 1600 mm



Product characteristics

- Retro door closer with crank drive for single-leaf doors with door leaf widths up to 1600 mm
- Closing force sizes 2–6 ^[1]
- Steplessly adjustable, temperature-independent closing speed
- The latching speed can be adjusted via the scissor-action arm
- High degree of efficiency
- Low installation height of the bearing plate
- Max. door opening angle 90°
– for door opening angles >110° the door closer must be moved in the direction of the door hinge ^[2]
- Controlled closing from a door opening angle of 45°
- With optional hold-open arm, hold-open range at any desired angle up to 150°



Dimensions with reference to closing force size

Closing force size in accordance with DIN 18263-1	Dimensions [mm]				
	B	C	F	G	H
2	157.0	147.0	62.0	186.0	186.0
3	161.0	147.0	62.0	175.0	175.0
4	161.0	147.0	62.0	76.0	76.0
5	186.0	175.0	45.0	52.0	52.0
6	186.0	175.0	88.5	101.0	101.0

OTS 80 crank closer – 2–6 (=door leaf widths up to 1600 mm)

Designation	Description	Size	Finish*	Order number
OTS 80 crank closer	with standard arm DIN left	2	silver	B 8021 0000
		3	silver	B 8031 0000
		4	silver	B 8041 0000
		5	silver	B 8051 0000
		6	silver	B 8061 0000
	with standard arm DIN right	2	silver	B 8022 0000
		3	silver	B 8032 0000
		4	silver	B 8042 0000
		5	silver	B 8052 0000
		6	silver	B 8062 0000
	with hold-open arm DIN left	2	silver	B 8021 0200
		3	silver	B 8031 0200
		4	silver	B 8041 0200
		5	silver	B 8051 0200
		6	silver	B 8061 0200
	with hold-open arm DIN right	2	silver	B 8022 0200
		3	silver	B 8032 0200
		4	silver	B 8042 0200
		5	silver	B 8052 0200
		6	silver	B 8062 0200

* dark bronze surface available on request

Applications

- 1-leaf swing doors
- For door leaf widths up to 1600 mm
- Standard installation on hinge-side
- Transom mounting on side opposite to hinges^[3]

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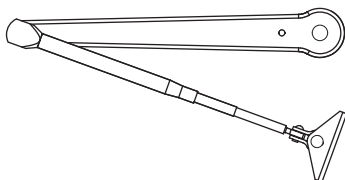
[1] According to DIN 18263, part 1.

[2] Note: closing force reduction.

[3] Opening angle dependent on door conditions.

Accessories for OTS 80

Standard arm, replacement spring



Standard arm

Versions/Order numbers

Designation	Size	Finish*	Order number
Standard arm	2	silver	B 8082 0020
	3+4	silver	B 8083 0020
	5	silver	B 8085 0020
	6	silver	B 8086 0020

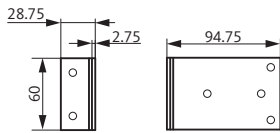
* dark bronze surface available on request



Replacement spring

Versions/Order numbers

Designation	Size	Order number
Replacement spring	2	B 8010 0002
	3	B 8010 0003
	4	B 8010 0004
	5	B 8010 0005
	6	B 8010 0006

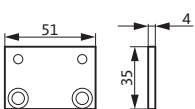


Angular bracket for parallel arm assembly

Versions/Order numbers

Designation	Size	Finish*	Order number
Angular bracket for parallel arm assembly	2 to 6	silver	B 8174 0000

* dark bronze surface available on request



Bearing plate

Versions/Order numbers

Designation	Size	Finish*	Order number
Bearing plate	2 to 6	silver	B 8177 0000

* dark bronze surface available on request

Hold-open systems



Hold-open systems in accordance with EN 1155

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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 legally-prescribed 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 protection switch triggers the system and the door closes automatically thus preventing the spread of smoke gases and fire to adjacent rooms and buildings.

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 the above tested and approved individual components can be approved. If non-approved components are subsequently installed, the testing must be carried out again.

Acceptance, testing and maintenance

According to the DIBt guideline, a hold-open system must be tested once it has been installed and is ready to use and before it is brought into operation for the first time at the place of use to ensure it is in perfect working order and has been installed as specified in the instructions (=acceptance test). The acceptance test must only be carried out by an expert or authorised qualified person acting on behalf of the manufacturer of the tripping and/or hold-open devices.

The acceptance test must be arranged by the operator. It is also the duty of the operator to ensure that the hold-open system remains operational at all times. To do so, the operator must check the hold-open system at least once a month to ensure it is working properly and must carry out maintenance at least once a year. The scope, result and timing of periodic monitoring must be recorded.

These checks as well as maintenance and repairs may only be carried out by an authorised qualified person acting on behalf of the manufacturer.



Fig. above:
Hold-open system
during daily operations



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

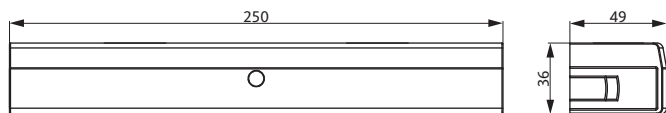
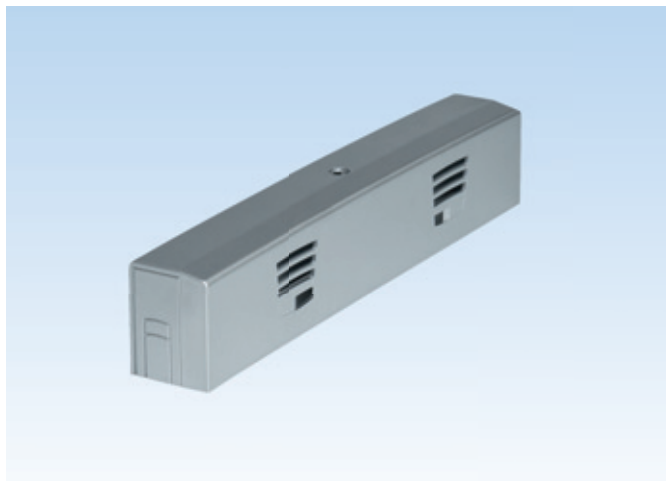
System structure

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 NAG 03 power supply and tripping unit, for example **3**
- a tripping unit to initiate the closing operation, the NAG 03 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 or FE-VTS 735) **4** or
 - an integrated hold-open system (OTS 73x FL or VTS 735 FL) **4** or
 - a hold-open magnet (electromagnetic) **5**
- an on-wall/in-wall manual release push-button as switch **6**

Smoke switch module (RSM)

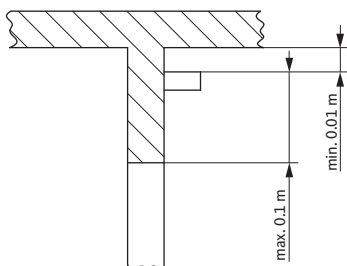
with integrated power supply, release mechanism and smoke switch



Product characteristics

- Tested and approved by DIBt (German Institute of Building Engineering)
- For supplying electricity to all components of a hold-open system (hold-open device, electromechanical hold-open magnet, fire detector, smoke release push-button and other elements)
- With integrated power supply and release mechanism
- With integrated smoke switch
- With LED status indication
 - Operation/Alarm
 - Interference
 - Soiling
- Cover in GU design, to match AD-OTS 73x cover
- Installation on the frame/lintel
- Installation height: 36 mm

Installation position



Technical data

Designation	Smoke switch module (RSM)
Input voltage	230 V AC, 50/60 Hz
Operating voltage	24 V DC
Output current	max. 460 mA
Power consumption	21 W
Power output	max. 11 W
Ambient temperature	+5 up to +40 °C
Protection type	IP40
Protection class	II

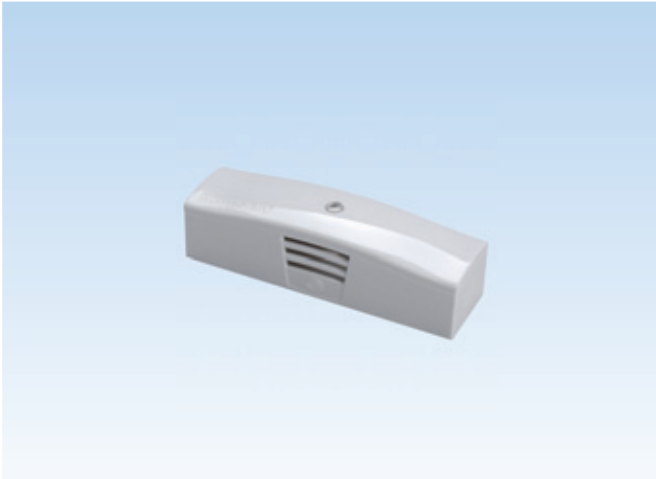
Versions/Order numbers

Designation	Surface	Order number
Smoke switch module (RSM) (incl. power supply unit, release device and lintel-mounted smoke detector)	silver	K-19058-00-0-1
	black	K-19058-00-0-6
	white (RAL 9016)	K-19058-00-0-7
	stainless steel colour	K-19058-00-0-8P
	special colour	K-19058-00-0-9



ORS 142 W optical smoke switch

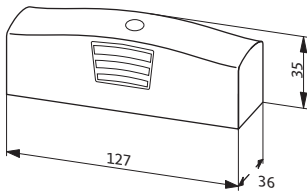
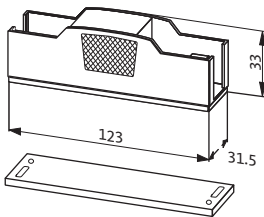
for wall mounting



Product characteristics

Suited for the early detection of smoldering fire and naked flames with smoke emission

- Smoke detection according to EN 54, part 7
- Component of a hold-open system
- Officially approved by DIBt (German Institute of Building Engineering)
- As lintel-mounted smoke detector for wall mounting
- With alarm threshold tracking and contamination indicator



Technical data

Designation	ORS 142 W
Operating voltage	18 – 28 V DC
Current consumption (at 28 V DC): rest	22 mA
Current consumption (at 28 V DC): alarm	11 mA
Current consumption (at 28 V DC): interference	16 mA
Ambient temperature	-20 up to +75 °C
Protection type (with housing top part)	IP40

Versions/Order numbers

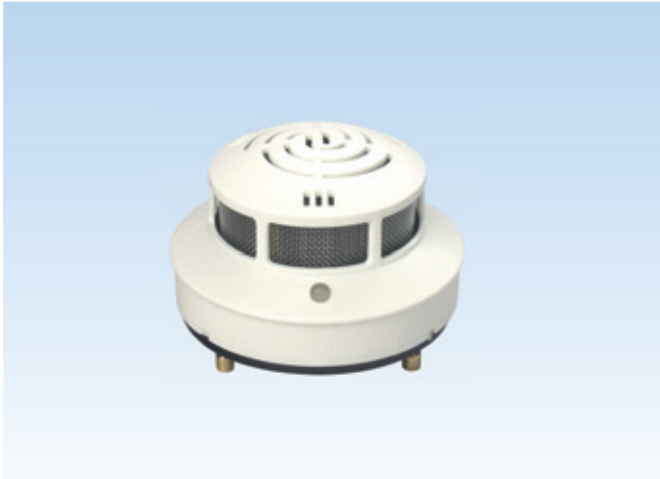
Designation	Surface	Order number
ORS 142 W optical smoke switch ^[1]	silver	K-17495-00-0-1
	dark bronze	K-17495-00-0-5
	white	K-17495-00-0-7

[1] Observe the DIBt application directives.



ORS 142 optical smoke switch

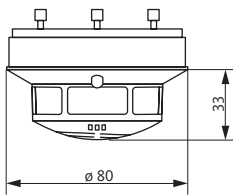
for ceiling mounting



Product characteristics

Suited for the early detection of smoldering fire and naked flames with smoke emission

- Smoke detection according to EN 54, part 7
- Component of a hold-open system
- Officially approved by DIBt (German Institute of Building Engineering)
- For ceiling and wall mounting
- With alarm threshold tracking and contamination indicator
- With integrated line monitoring according to EN 14637
- Sensing chamber monitoring



Technical data

Designation	ORS 142
Operating voltage	18 – 28 V DC
Current consumption (at 28 V DC): rest	22 mA
Current consumption (at 28 V DC): alarm	11 mA
Current consumption (at 28 V DC): interference	16 mA
Ambient temperature	-20 up to +60 °C
Protection type	IP42

Versions/Order numbers

Designation	Surface	Order number
ORS 142 optical smoke switch ^[1]	white	K-17727-00-0-7

[1] Observe the DIBt application directives.





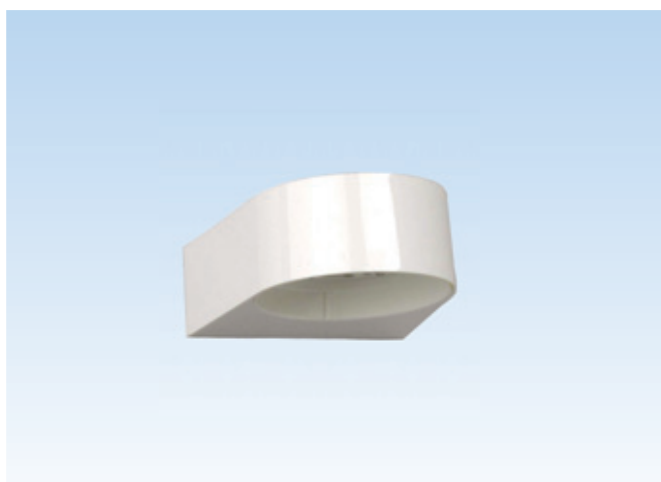
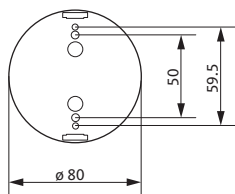
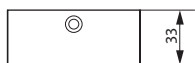
ORS 143 A surface-mounted base

Surface-mounted base for ORS 142 optical smoke switch

Suitable for ceiling mounting in dry rooms

Versions/Order numbers

Designation	Surface	Order number
ORS 143 A surface-mounted base	white	K-17728-00-0-7



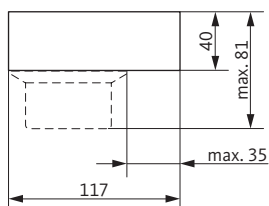
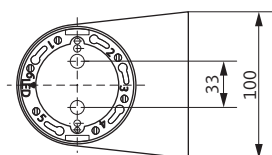
ORS 143 W mounting base

Mounting bases for ORS 142 optical smoke switch

Suitable for wall mounting in dry rooms in conjunction with ORS 143 A mounting base

Versions/Order numbers

Designation	Surface	Order number
ORS 143 W mounting base	white	K-17494-00-0-7



Optical smoke switch

Mounting base



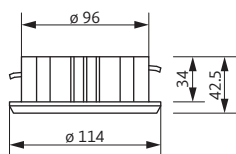
ORS 143 UH mounting base

Mounting base for ORS 142 optical smoke switch

Suitable for ceiling mounting in dry rooms with lowered ceilings

Versions/Order numbers

Designation	Surface	Order number
ORS 143 UH mounting base	white	K-17496-00-0-7





Log book for hold-open systems

The test log book contains:

- Inspection sticker
- Safety sticker for fire and smoke protection doors
- Acceptance report and certificate
- Checklists for periodic monitoring

Versions/Order numbers

Designation	Order number
Log book for hold-open systems	K-18097-00-0-0
Safety sticker/inspection sticker for hold-open systems	K-18529-00-0-0



Test gas

- To perform a quick functional test on smoke switches
- To spray directly in the smoke chamber
- Non-inflammable
- Storage life: 3 years
- Content: 250 ml

Versions/Order numbers

Designation	Order number
Test gas for smoke switches	K-17497-00-0-0

Manual release push-button

in accordance with EN 1155



General product information

It must be possible to release each hold-open device by hand without the release function being affected.

This manual release mechanism must be situated in the immediate vicinity of the connection without being concealed by the door leaf as it is held open.

It is imperative to use a manual release push-button for hold-open systems with door holding magnets and hold-open systems with swing-free devices.



Manual release push-button

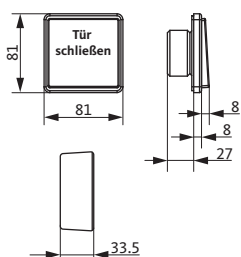
For the manual release of hold-open devices (door holding magnets, electromechanical hold-open devices) in accordance with the directives of the German Institute of Building Engineering (DIBt)

- Technical data
 - Contact type: opener
 - Switching voltage: 30 V DC
 - Switching current: 1 A
 - Protection type IP44

- For surface and flush mounting

Versions/Order numbers

Designation	Order number
Manual release push-buttons	K-17492-00-0-7

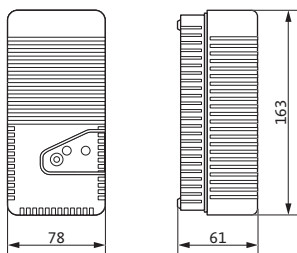




NAG 03 power supply unit

Trigger power supply unit for voltage supply to smoke switch systems

- Component of a hold-open system
- Officially approved by DIBt (German Institute of Building Engineering)
- Highly efficient switched-mode power supply
- Terminal clamps for all external devices



Technical data	
Designation	NAG 03 power supply unit
Input voltage	230 V AC
Nominal voltage	24 V DC
Power consumption	46 W
Output voltage	24 V DC
Output current	900 mA
Power output	21 W
Residual ripple	$\leq 120 \text{ mV}_{ss}$
Relay contact	1 potential-free transfer contact
Protection type	IP30
Ambient temperature	+5 up to +40 °C

Versions/Order numbers		
Designation	Surface	Order number
NAG 03 power supply unit	white	K-17493-00-0-7

Hold-open magnets

in accordance with EN 1155



General product information

Hold-open magnets are electrical hold-open devices which hold fire and smoke protection doors open as part of a hold-open system. Hold-open magnets operate according to the closed-circuit principle; this means that if fire breaks out, the power is cut off via smoke protection switches or manual release push-buttons. The hold-open magnet is therefore de-energised and the door is safely closed by the door closer.

■ Technical data (for all subsequent variants)

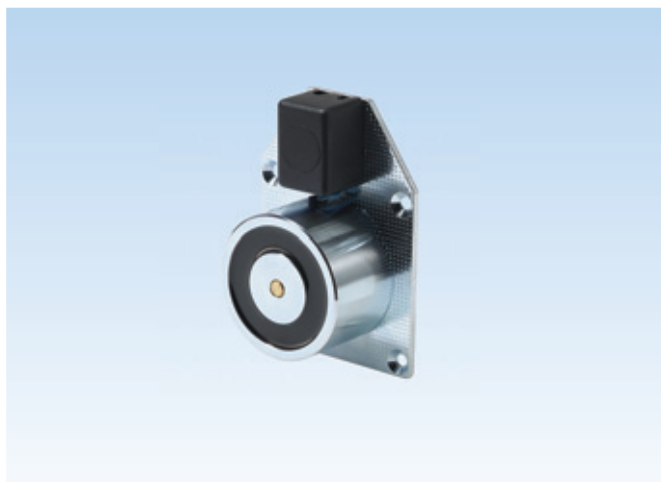
- Operating voltage: 24 V DC
- Current consumption: 63 mA
- Holding force: 490 N
- Power consumption: 1.5 W
- Protection type: IP20

■ Officially approved by the German Institute of Building Engineering (DIBt) according to the directives for hold-open systems

■ Depending on the application, mounting on the wall, floor or ceiling behind the door is carried out

■ Each magnetic clamp has a corresponding armature plate mounted on the door leaf

■ Hold-open magnets are controlled and monitored by the smoke switch module (RSM)



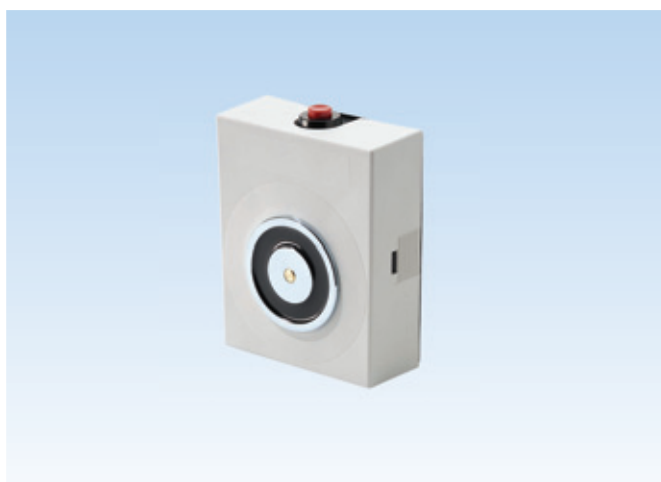
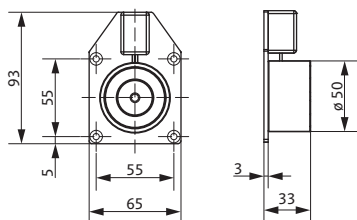
Hold-open magnet

Standard variant with steel base plate

- Surface-mounted version
- Wall mounting
- With concealed terminal clamp
- Holding force 490 N

Versions/Order numbers

Designation	Order number
Hold-open magnet	K-17483-00-0-0

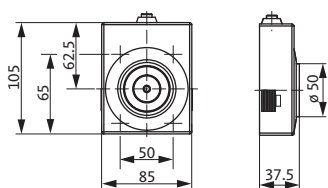


Hold-open magnet

- Surface-mounted version
- Wall mounting
- With housing and interrupter
- Holding force 490 N

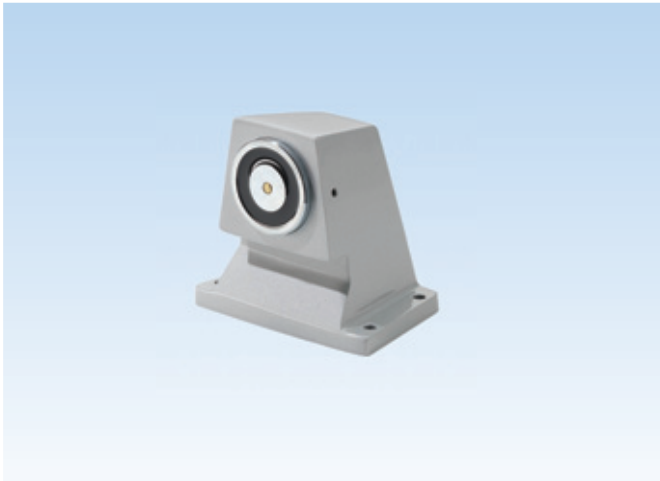
Versions/Order numbers

Designation	Order number
Hold-open magnet	K-17485-00-0-0



Hold-open magnets

in accordance with EN 1155

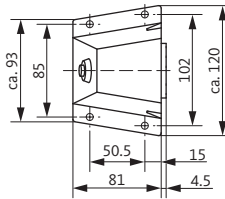
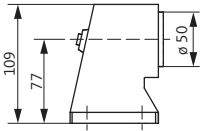


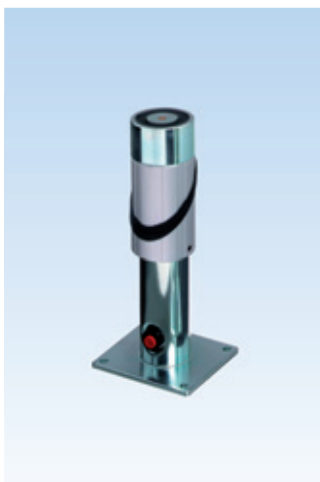
Hold-open magnet

- Floor mounting
- Aluminium housing
- With interrupter
- Holding force 490 N

Versions/Order numbers

Designation	Order number
Hold-open magnet	K-17487-00-0-0





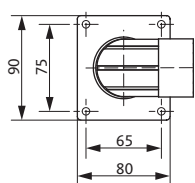
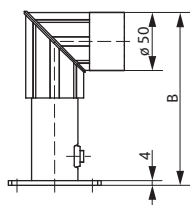
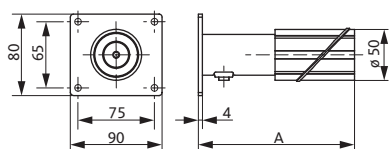
Hold-open magnet

with aluminium swivel head

- Surface-mounted version
- Wall and floor mounting
- With spacer, switch and pivotable magnetic head (90°)
- Holding force 490 N

Versions/Order numbers

Designation	Dimension A	Dimension B	Order number
Hold-open magnet	185	150	K-17486-00-0-0
	335	300	K-17486-01-0-0



Armature plates

in accordance with EN 1155



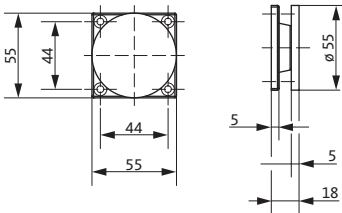
Armature plate

Standard model

- Mounted on mounting plate
- Spring-loaded to ensure a planar contact to the door holding magnet

Versions/Order numbers

Designation	Order number
Armature plate	K-17488-00-0-0



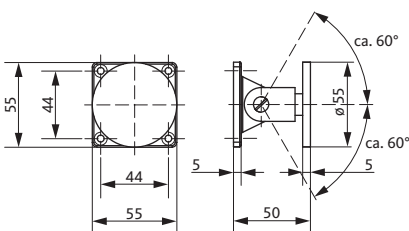
Armature plate

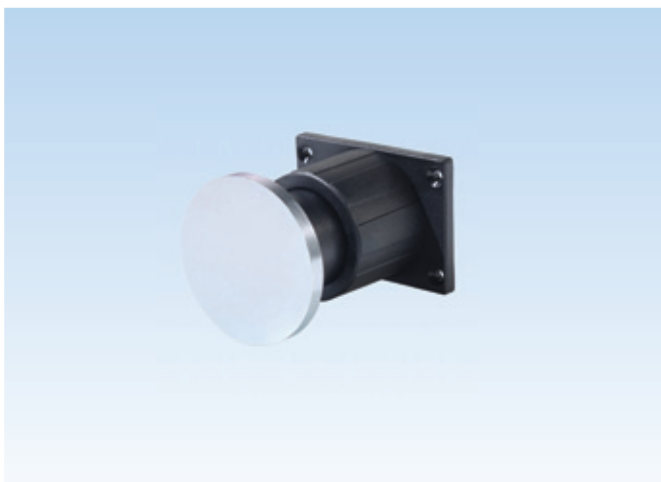
with joint

- Mounted on mounting plate
- With angle adjustment, pivoting area approx. 2 x 60°

Versions/Order numbers

Designation	Order number
Armature plate	K-17489-00-0-0





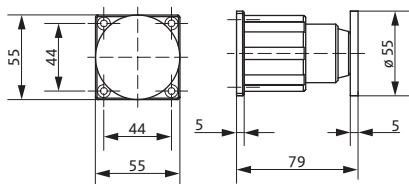
Armature plate

with spring

- Mounted on mounting housing
- With cushion spring to create a soft, spring loaded stop for heavy doors

Versions/Order numbers

Designation	Order number
Armature plate	K-17490-00-0-0



Acceptance test

of hold-open systems for fire protection doors



1. General information

The manufacturer must observe all currently valid regulations, directives, standards, laws and the corresponding approval notices.

DIN EN 14637, DIN EN 14677, "Directives for hold-open systems" and comments, German Institute of Building Technology. DIN 18650, EN 179, EN 1125, EltVTR (German directive for electrical locking systems on escape route doors), among others.

2. Information for the installer

After a hold-open system has been installed at its location of use and is ready for operation, an acceptance test is carried out to ensure that it functions correctly and has been properly installed.

The acceptance test may be carried out only by skilled employees of the manufacturer of release and/or hold-open devices, by specialists who have been authorised by the manufacturer, or by specialists from a designated testing centre.

"Specialists who have been authorised by the manufacturer" are those who have been named and authorised by the manufacturer to competently put hold-open systems into operation or to perform tests and maintenance.

We can support you with our unique know-how to ensure a professional start-up. Further information about expert seminars is available from <http://www.g-u.com>

After the acceptance test has been successfully completed, the following documents must be handed over to the operator:

- Acceptance certificate / log book with checklists
- Installation instructions / operating instructions

The expert is also obliged to inform the operator with regard to the following issues:

- Monthly performance testing
- Annual testing
- Annual maintenance
- Documentation requirements
- Warranty that ensures system remains operational at all times
- Retention requirements for the documents

3. Information for the operator

The operator must ensure that the hold-open system is always kept in good working order and test the hold-open system **at least once a month** to make sure that it is **working correctly**.

The operator is also obliged to carry out or arrange tests to ensure that **all devices interact correctly and without faults** and to carry out **maintenance** on an **annual basis** unless a shorter term is specified in the approval notice.

During this testing and maintenance, the detectors are checked and maintenance of all devices, also the hold-open devices, is carried out.

These tests and maintenance may only be carried out by a specialist or qualified person.

The scope, result and timing of periodic monitoring must be recorded. This applies both for monthly monitoring and also for annual inspection and maintenance. All records must be stored at the operator's premises as they are required as evidence for the authorities, in the event of fire inspections and possibly when assessing damage caused by remote action, for example.

The following documents must be kept by the operator:

- Acceptance certificate / log book

The following points must be observed by the operator:

- Monthly performance testing
- Annual testing
- Annual maintenance
- Documentation requirements
- Warranty that ensures system remains operational at all times
- Retention requirements for the documents

Accessories



OTS 73x Turn-Only hinge	202 – 203
Door-leaf coordinator, face-fixed (SRA)	204 – 205
Carrier bar (MNK)	206 – 209
Cable links	210 – 211
Door holders	212 – 213
Wall- and floor-mounted doors stops	214 – 215

OTS 73x Turn-Only hinge



Product characteristics

- Free-swing Turn-Only hinge – without valve functions, spring assembly, oil

Versions/Order numbers

Designation	Order number
OTS 73x Turn-Only hinge	K-19051-00-0-1

Note: supplied without covers.

Applications

At double-leaf doors in combination with a swing-door drive, when also using the SRI-OTS 73x/SRI-OTS 73x BG door-leaf coordinator

- Mounting of swing-door drive on active leaf
- Mounting of Turn-Only hinge on the active leaf on the side opposite the swing-door drive
- Mounting of the OTS 73x door closer on the passive leaf

Alternative solution: with single-leaf doors, if a doorstop cannot be used, in escape routes for example (tripping hazard)

- Use as opening restriction without door closer function for light swing doors
- Combination with ÖB opening restrictor and standard slide rail (GS)

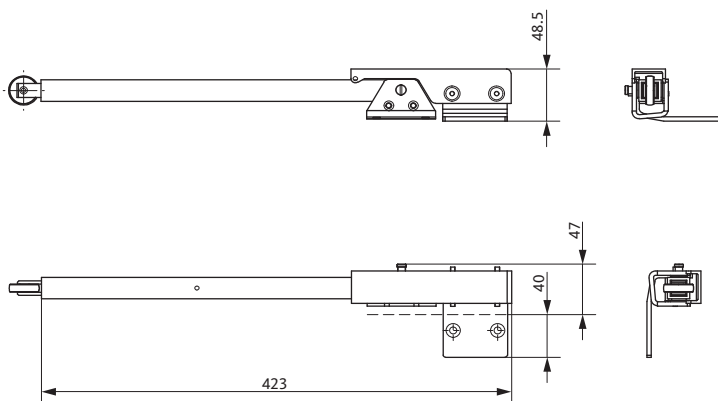
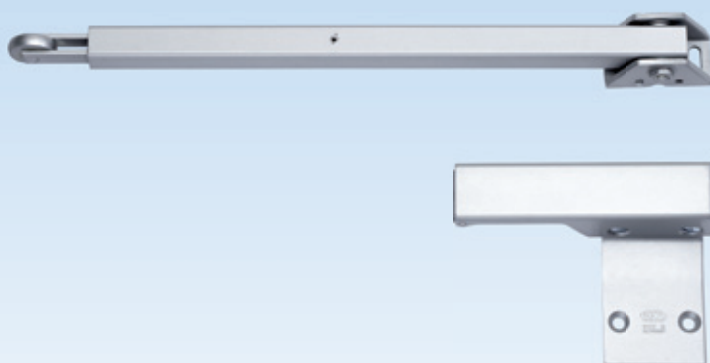
Please note: in many application situations, high loads for example, this solution cannot replace the function of the door stopper!

Components – Application: Turn-Only hinge in combination with swing-door drive	from page
OTS 73x Turn-Only hinge	202
OTS 73x door closer	32
AD-OTS 73x cover	33
GS SRI-OTS 73x or GS SRI-OTS 73x BG slide rail set	64
MP mounting plate	42

Components – Application: pivot block as opening restriction	from page
OTS 73x Turn-Only hinge	202
AD-OTS 73x cover	33
GS slide rail	34
ÖB opening restrictor	43
MP mounting plate	42

Door leaf coordinator, face-fixed (SRA)

tested in accordance with EN 1158



Product characteristics

- For use on double-leaf doors
- The mechanical door-leaf coordinator ensures the correct closing sequence of active and passive door leaves, even if the user does not close them in the correct sequence
- **Function:** the arm of the door-leaf coordinator automatically moves forward as the passive leaf opens. When closing, the active leaf is held open until the passive leaf pushes the arm into its initial position thus allowing the active leaf to close.
- The door-leaf coordinator can be used in fire and smoke protection doors if it is listed in the approval notice or test certificate
- Elegant design due to short control arm and cover
- Easy to install as only two elements must be fixed
- Function is sound damping and material-friendly

Versions/Order numbers			
Designation	Description	Order number / Finish	
		silver	dark bronze
Door-leaf coordinator (SRA)	For use on timber and steel doors	B 8641 0000	B 8641 0005
	Use in narrow stile doors (T 30)	B 8641 0100	B 8641 0105

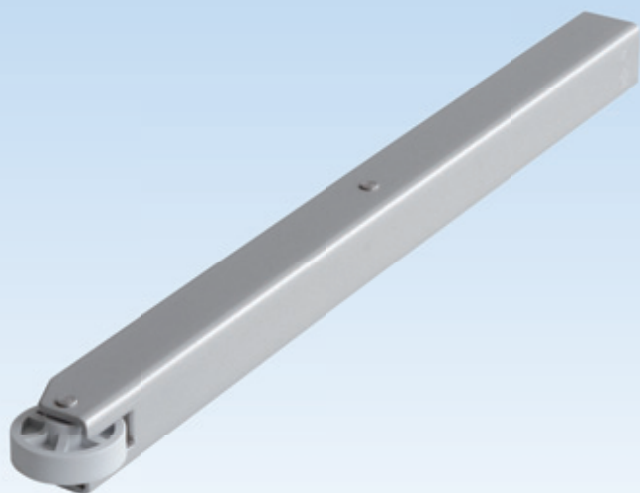
Applications

- 2-leaf fire and smoke protection doors
- 2-leaf swing doors
- Active leaf widths of 700 mm up to 1500 mm ^[1]
- Any passive leaf widths
- DIN left and DIN right usable
- Standard mounting on the hinge-side

[1] Depending on door leaf thickness.

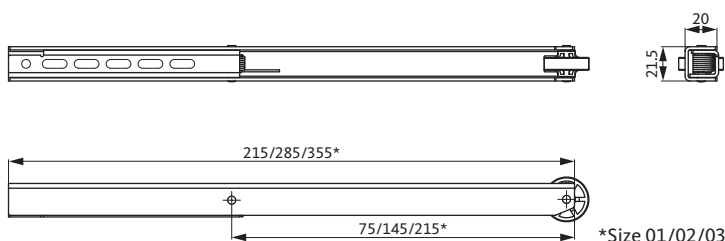
Carrier bar (MNK) 8642

for double-leaf doors in escape and rescue routes / fire protection doors

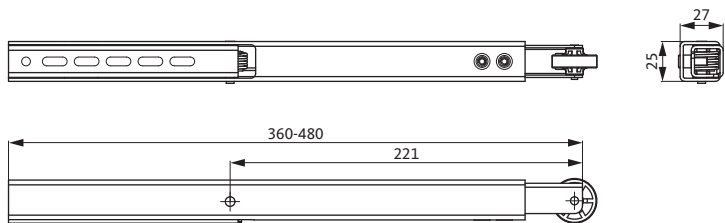


Product characteristics

- **Function:** the carrier bar ensures that when the door is opened via the passive leaf (in emergency situations), the active leaf is carried at least as far as the beginning of the action range of the door-leaf coordinator (SRI/SRA)
- Face-fixed mounting on passive leaf
- With folding arm, folding mechanism concealed
- Roller buffers made of stable PVC
- Available in three sizes and also as steplessly adjustable variant^[1]



Carrier bar (MNK) 8642 – K-17897-XX-0-X



Carrier bar (MNK) 8642, adjustable – K-19057-00-0-X

Versions/Order numbers			
Designation	Size	Surface	Order number
Carrier bar (MNK) 8642	01 length = 215 mm	silver galvanised	K-17897-01-0-1R
		silver	K-17897-01-0-1
		black	K-17897-01-0-6
		white (RAL 9016)	K-17897-01-0-7
		special colour	K-17897-01-0-9
	02 length = 285 mm	silver galvanised	K-17897-02-0-1R
		silver	K-17897-02-0-1
		black	K-17897-02-0-6
		white (RAL 9016)	K-17897-02-0-7
		special colour	K-17897-02-0-9
	03 length = 355 mm	silver galvanised	K-17897-03-0-1R
		silver	K-17897-03-0-1
		black	K-17897-03-0-6
		white (RAL 9016)	K-17897-03-0-7
		special colour	K-17897-03-0-9
Carrier bar (MNK) 8642, adjustable	adjustable length 360 – 480 mm	silver galvanised	K-19057-00-0-1R
		silver	K-19057-00-0-1
		black	K-19057-00-0-6
		white (RAL 9016)	K-19057-00-0-7
		special colour	K-19057-00-0-9

Run-up block for carrier bar			
For supporting the opening function of the carrier bar with special profiles and for avoiding restraint of the active and passive leaf			
Designation	Size	Surface	Order number
Run-up block for carrier bar height = 20 mm	00	silver	K-18871-00-0-1
		black	K-18871-00-0-6
		white (RAL 9016)	K-18871-00-0-7
Run-up block for carrier bar height = 37 mm	37	silver	K-18871-37-0-1
		black	K-18871-37-0-6
		white (RAL 9016)	K-18871-37-0-7

Applications

- 2-leaf rebated fire and smoke protection doors if the carrier bar is listed in the approval notice or test certificate
- 2-leaf doors in escape and rescue routes (escape doors)
- DIN left and DIN right usable

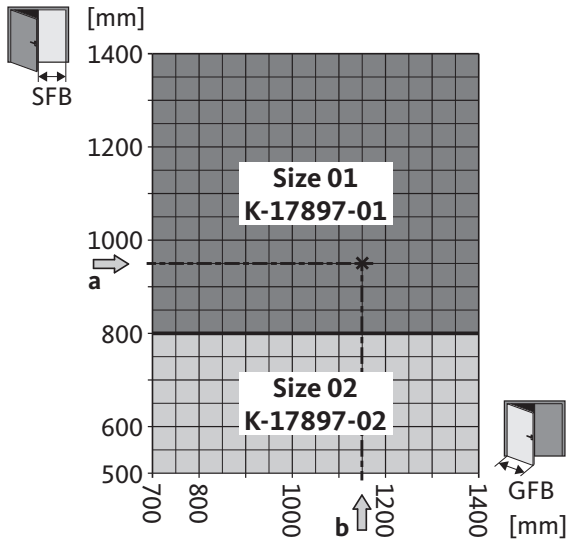
[1] Depending on door width and chosen door-leaf coordinator (SRA/SRI).

Carrier bar (MNK) 8642

Application diagrams when combined with door-leaf coordinator (SRA)



Application diagram when combined with door-leaf coordinator (face-fixed) (SRA)



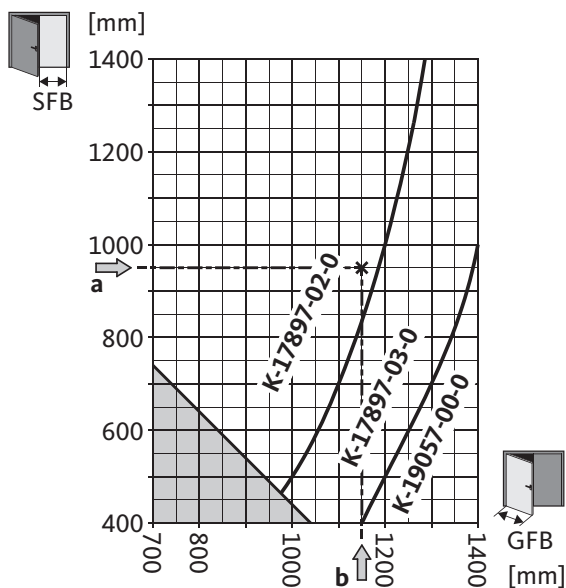
Case study:

- Passive leaf width (SFB) = 950 mm (a)
- Active leaf width (GFB) = 1150 mm (b)

Carrier bar (MNK) 8642 size 01
K-17897-01-0-X

Application diagrams when combined with SRI-OTS 73x door-leaf coordinator

Hinge-side

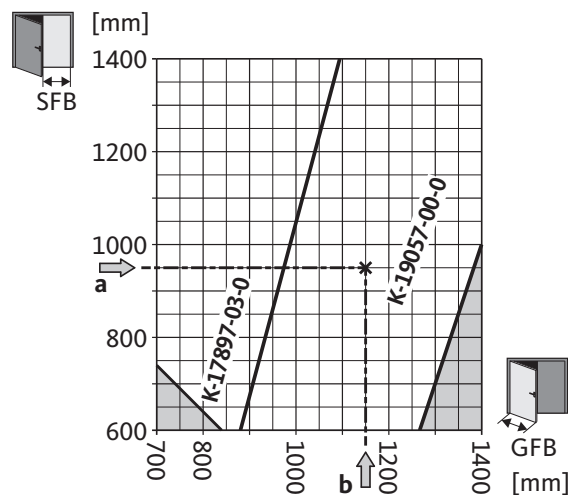


Case study:

- Passive leaf width (SFB) = 950 mm (a)
- Active leaf width (GFB) = 1150 mm (b)

Carrier bar (MNK) 8642 size 02
K-17897-02-0-X

Side opposite to hinges

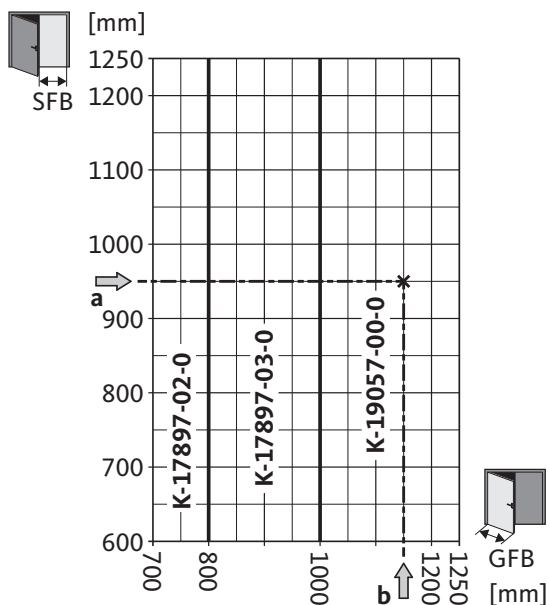


Case study:

- Passive leaf width (SFB) = 950 mm (a)
- Active leaf width (GFB) = 1150 mm (b)

Carrier bar (MNK) 8642, adjustable
K-19057-00-0-X

Application diagram when combined with SRI-VTS 73x door-leaf coordinator



Case study:

- Passive leaf width (SFB) = 950 mm (a)
- Active leaf width (GFB) = 1150 mm (b)

Carrier bar (MNK) 8642, adjustable
K-19057-00-0-X

Cable links, face-fixed



Cable links, face-fixed

Versions/Order numbers

Designation	Length [mm]	Surface	Order number
Cable links, face-fixed	approx. 600	black	K-18984-00-0-6

Versions/Order numbers

Designation	Length [mm]	Surface	Order number
Cable links, face-fixed (not shown)	approx. 500	white	B 5527 0100



Cable link, concealed

Versions/Order numbers

Designation	Dimensions [mm]	Inner diameter [mm]	Opening [°]	Order number
Cable link, concealed, installation channel on one side	24 x 260 x 17	10	up to 100	6-29854-00-0-0
	24 x 280 x 17	10	up to 180	6-29942-00-0-0
	24 x 350 x 15	8	up to 180	6-30809-00-0-0
Cable link, concealed, without installation channel	flexible length = 370	10	up to 180	9-39237-00-0-0
	flexible length = 241	8	up to 180	9-41419-00-0-0

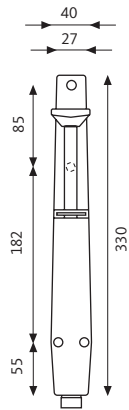


Cable link, detachable, concealed

Versions/Order numbers

Designation	Dimensions [mm]	Order number
Cable link, concealed, installation channel on one side, 10-pin	24 x 519 x 17.5	6-35194-00-0-8
Cable link, concealed, without installation channel, 10-pin	24 x 490 x 18.5	6-35193-00-0-8

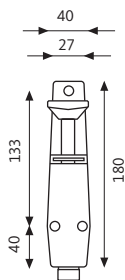
Door holders



B 3934 door holder, large

Versions/Order numbers

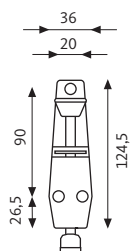
Designation	Travel	Surface	Order number
B 3934 door holder, large	100	Aluminium F1	B 3934 0109
		Aluminium UC 5	B 3934 0115
		Aluminium white	B 3934 0117



B 3934 door holder, medium

Versions/Order numbers

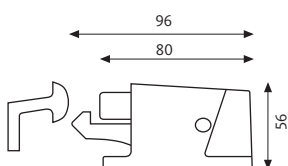
Designation	Travel	Surface	Order number
B 3934 door holder, medium	30	Aluminium F1	B 3934 0101
		Aluminium UC 5	B 3934 0137
		Aluminium white	B 3934 0139



B 3933 door holder, small

Versions/Order numbers

Designation	Travel	Surface	Order number
B 3933 door holder, small	30	Aluminium F1	B 3933 0101
		Aluminium UC 5	B 3933 0137
		Aluminium white	B 3933 0139

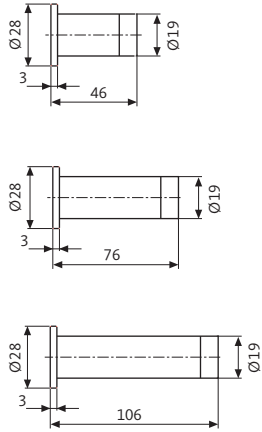


B 6944 door holder

Versions/Order numbers

Designation	Surface	Order number
B 6944 door holder	Aluminium F1	B 6944 0007
	Aluminium F2	B 6944 0004
	Aluminium UC 5	B 6944 0009

Wall- and floor-mounted door stop

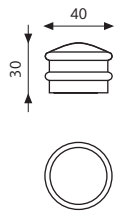


B 7122 wall-mounted door stop

stainless steel, including fixing accessories

Versions/Order numbers

Designation	Dimensions [mm]	Order number
B 7122 wall-mounted door stop	19 x 46	B 7122 0005
	19 x 76	B 7122 0006
	19 x 106	B 7122 0007

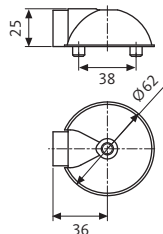


B 7122 floor-mounted door stop I

stainless steel, including fixing accessories

Versions/Order numbers

Designation	Dimensions [mm]	Order number
B 7122 floor-mounted door stop I	40 x 30	B 7122 0040

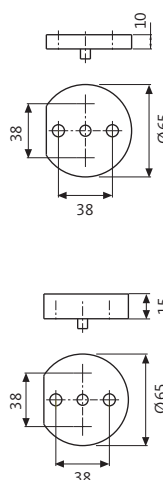


B 7122 floor-mounted door stop II

stainless steel, including fixing accessories

Versions/Order numbers

Designation	Order number
B 7122 floor-mounted door stop II	B 7122 0000



Packer for B 7122 floor-mounted door stop II

(optional)

Versions/Order numbers

Designation	Thickness [mm]	Order number
Distance plate for B 7122 floor-mounted door stop II	10	B 7122 0001
	15	B 7122 0002



Collection Photographer's Choice RF / Getty Images

Service	218 – 219
Product information	220 – 221

Service



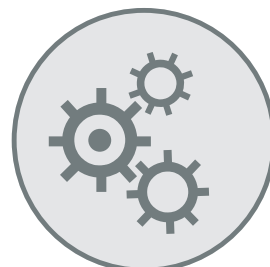
Service and maintenance

Competent service, tailored to individual requirements and available directly on site: we are on hand during all project phases to provide advice and assistance. This applies to the area of safety and also equally to the topics of fire protection and barrier freedom. Trained experts of the Gretsch-Unitas Group with a wide range of knowledge of all relevant standards and regulations provide support for the project from the design planning phase, to mounting and installation, all the way through to routine system maintenance.



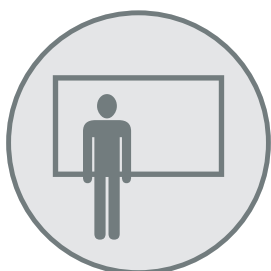
Building project consulting

We make your everyday work easier: building project consulting assists architects and planners; for example by preparing project-specific drawings and door schedules, cable diagrams and tender specifications or conceptual designs with functional descriptions. Our well thought-out and coordinated system solutions guarantee optimum functionality and also compliance with the required standards and directives.



Door engineering

Step by step to the right door solution: the GU Group door engineering concept is the last word in efficiency when it comes to configuration of individual doors. Solutions are developed based on experimental models that cleverly overlap the various trades. The documentation ensures maximum planning reliability based on clearly laid-out door configuration lists.



Seminars and training courses

Practical knowledge based on first-hand experience: with around 160 events annually, the GU group offers an extremely wide range of seminars and training courses. The programme includes product innovations and their applications, current architectural trends and standards and directives. Several seminars and training courses are certified and recognised as advanced training courses by the chamber of architects and civil engineers in Germany.



CE-certified products

Safety in black and white: all overhead door closers in the OTS 73x series are CE-certified. This is how the GU Group reassures its customers that these products meet the requirements of the European Union. In addition, by using CE marking, we take responsibility for the fact that the products fulfil all the characteristics defined in the Declaration of Performance.



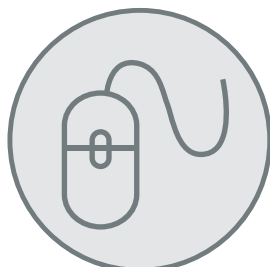
Quality in black and white

You can rely on this: virtually all variants of our range of door closers are tested and certified to meet the relevant EN 1154, EN 1155 and EN 1158 standards. And all GU Group hold-open systems are approved by DIBt (German Institute of Building Engineering).



Tender-Text-Manager

Comprehensive, legally sound and technically up-to-date: with the Tender-Text-Manager, we are offering architects and planners a convenient and effective online tool that allows them to effortlessly compile technical specifications and complete tender specifications – for all GU group products.



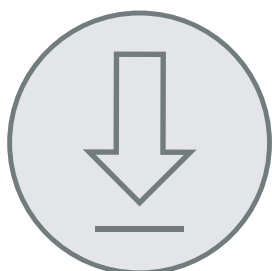
Customer Information System

Available at the click of a mouse: the Customer Information System (CIS) is an ordering and information system for all GU group products. You can use the online platform 24 hours a day 7 days a week to access important information: from preparing a quotation through to performing an availability check in real time, from placing the order to order tracking.



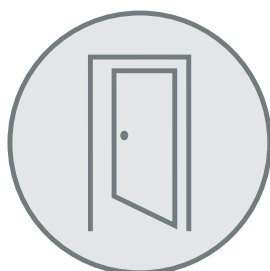
confiGUrator

The right products in the right quantity: the practical confiGUrator is an online platform where part lists and hardware sets can be precisely determined. Based on the specifications for the particular project, a technically correct part list is generated within seconds. The data is determined based on current conditions and fundamental technical principles.



Free download

Planning made simple: a wide range of information on the products and applications is available to download from our company website to the local hard drive quickly, conveniently and free of charge: from product documents and installation drawings to Declarations of Performance through to software solutions.



Provision of samples

Impressive not just for builders: quality and functionality are best experienced live on site. GU group therefore organises the provision of samples for the project from start to finish and can also present a range of variants and functions if required. As an alternative, the GU group offers visits to reference projects worldwide.

Product information



This product information is intended for door fabricators and building operators and must be delivered to the end user.



In accordance with the manufacturer's liability for his products as defined in the German "Product Liability Act" (§4 of the Product Liability Act), the following information about door closers for swing doors must be observed. Non-compliance with this information releases the manufacturer from its liability.

1. Product information and intended use



Door closers and floor springs are within the meaning of this definition designed to close swing doors again after they have been opened manually. The closing action is hydraulically damped, and is adjustable. The required closing force in relation to door leaf width and weight is defined in the standard EN 1154.

Function preconditions



The doors can only work correctly if they are installed in a vertical position and can move smoothly, and if the door closer is mounted properly. It is therefore necessary that both installation and adjustment of the various functions should be carried out by specialist companies only, and these companies must observe the manufacturer's specifications for the product concerned also taking the structural conditions into account.

A **fixed open position** of swing doors can only be achieved with additional hardware (hold-open device) or with integral constructional components. Unfavourable local conditions (e.g. effect of wind) require the use of door closers with enhanced closing momentum. Especially on outward opening swing doors it is necessary to use door closer types with the backcheck feature which, however, do not restrict the door opening angle.



For **fire and smoke protection doors**, the installation method and installation position are strictly prescribed. These assemblies must be licensed by the German Institute of Civil Engineering (proof of the door's suitability must be observed). Likewise, the DiBt's directives for hold-open systems shall be observed. Deviations from the directives are not in accordance with the intended use.



Special door closer versions are required for swing doors on damp rooms, for unprotected external mounting and for use in an environment with aggressive corrosive air contents, as well as for doors exposed to extremely high or low temperatures.

Floor boxes for **floor springs** must be protected against soiling after installation. If floor springs are exposed to ingress of water, e.g. in damp rooms or on entrance doors without protection against rain, the space between the cement case and door closer housing must be filled with a suitable pourable sealing compound.

2. Misuse

Non-compliance with the intended use of swing door closers exists particularly when:

- Door closers are used for purposes other than the closing of doors
- The size of the door closer chosen does not correspond to the manufacturer's recommendations
- The installation and/or adjustment was/were carried out incorrectly or inexpertly
- The closing operation is impeded by obstacles in the closing area, when the door leaf drags on the floor or is jammed in the frame, and when the closing operation is impeded by stuck gaskets, wooden wedges and other elements.
- Door hinges interfere with the locking operation because they are not aligned correctly or do not run smoothly
- Foreseeable local conditions, such as wind or temperatures (over 40°C or under -15°C), exceed or fall below the manufacturer's specifications
- Non-approved door closers are used in fire and smoke protection doors

3. Product performance / standards

All performance requirements going beyond the scope of the catalogue specifications are to be clarified with the manufacturer.

The following **standards** are to be used as guidance:

- **DIN 18263 part 1** "Door closers with crank drive" and
- **EN 1154:1996** Requirements and test methods for "Door closers with controlled closing action"
- **EN 1155:1997** Requirements and test methods for "Electrically powered hold-open devices"
- **EN 1158:1997** Requirements and test methods for "Door-leaf coordinators"

4. Product maintenance

The door closer or door assembly must only be serviced by specialists of the GU group or by authorised agents. If maintenance is neglected, improper functioning (closing force and speed) may not be recognised early enough and therefore cause hazards.

Depending on requirements, door closers must be regularly checked for tight attachment and for wear. Fixing screws must be tightened up and defective parts exchanged.

Moreover, the following maintenance work has to be carried out at least **once a year**, or more frequently depending on the type and use of the swing doors:

- All moving parts on the scissor-action arm must be greased
- The setting of the closer, the closing speed for example, must be checked
- The smooth running of the door must be checked
- In the case of door closers with special functions (hold-open devices / hold-open systems), it is necessary that monitoring and maintenance procedures, as well as the legal controls, are carried out.
- Door closers and/or defective components must be replaced immediately if correct function can no longer be guaranteed.
- Only lubricants and cleaning detergents not containing corrosive and/or destructive ingredients may be used for maintenance

5. Duty to inform and to instruct

For compliance with the duty to inform and to instruct, the following material is made available:

- Catalogues, brochures, tender specifications, quotation documents
- Hardware installation and operating instructions, installation drawings
- Standards according to the corresponding product performance (exclusive distribution of German editions by Beuth-Verlag GmbH, Berlin)
- Consultancy by the group's field staff

To ensure correct use, functioning, service and maintenance of swing door closers, it is necessary to request and observe the appropriate product information, and to pass it on to fabricators and building operators. This applies particularly to operating and maintenance instructions, and to acceptance tests prescribed by the law.

6. Liability

The entire hardware set (door closer) in each case may only consist of Gretschnitas Group hardware components. No liability is accepted if the door closer is incorrectly installed or maintained and/or if non-original accessory components and/or non-factory-approved accessory components are used.

7. Safety guidelines for building operators



Important!

Misuse may result in personal injury and in material damage on doors, walls and furnishings.

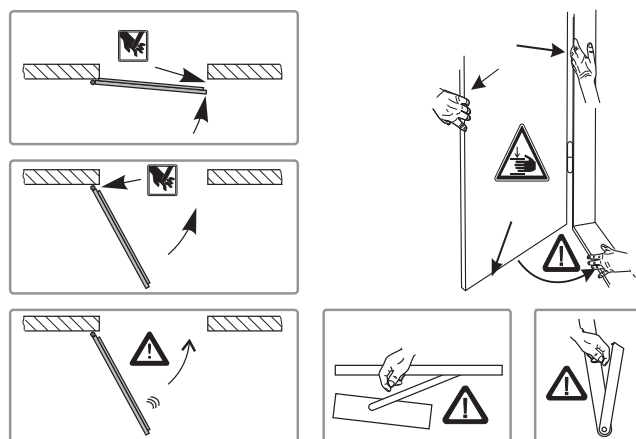


Danger!

There is a risk of injury caused by lack of attention. This applies especially to the elderly and handicapped, and to children (see sketches, view from above):

- **Trapping of fingers** between door leaf and main closing edge (lock side)
- **Crushing of fingers** due to large forces on the hinge-side
- **Striking** of persons due to excessively high speed of closing door leaf, caused by:
 - defective door closer
 - incorrect setting of the door closer size by the adjusting screw
 - incorrect setting of closing speed
- (children's) feet or fingers **getting trapped between door leaf and floor** if the gap is wider than usual – **keep children at a safe distance!**
- **Doors and windows are not suitable for children to play with**
- **Crushing of fingers** in the linkage or slide rail of the door closer if operated during maintenance or cleaning, **the door should therefore be secured in a fixed position beforehand**

Do not adjust or replace a door closer without having any special knowledge !



8. Disposal

The national regulations must be observed. Door closers contain a small quantity of hydraulic oil that is not subject to the hazardous substances regulation.



Do not open the door closer because of the pre-stressed springs inside! Dispose of the whole door closer as recycling material (scrap).



Exclusion of liability

The information provided in this publication consists of product descriptions. This is general information based on our experience and tests and therefore does not take any specific application into account. No claims for compensation can be made on the basis of the product descriptions.

Although we have made every attempt to ensure the information provided here is accurate, it is non-binding. It should be adapted to the respective construction projects, usage and specific on-site demands.

The publication has been compiled to the best of our knowledge. The Gretsch-Unitas Group accepts no liability for any errors. The document is subject to modifications during the course of technical developments.

The product images shown in the publication may differ from the actual product.

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Running businessman with image of clock and newspaper, CG, composition, blurred motion, toned image kindly provided by Getty Images,

Folded newspapers and laptop, high angle view, close up, toned image kindly provided by Getty Images,

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Page 24 Image of person: Little girl running provided by Getty Images

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