

5

HÄFELE

DOOR CLOSERS





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Classification of door closers in compliance with EN 1154:1996 + A1:2002

The requirements and test procedures for door closers are defined in European standard EN 1154:1996 + A1:2002 "Locks and Architectural Hardware – Controlled door closing devices". The requirements are classified using an six-digit designation system.

6-digit classification key in accordance with EN 1154:1996 + A1:2002

Position	2	3	4	5	6
1	2	3	4	5	6
Category of use	Durability	Door closer size	Suitability for use on fire resistant/smoke control doors	Safety	Corrosion resistance

Meaning of individual positions in classification key:

Position	Possible grades	Meaning
1 Category of use ¹	3–4	3 = closing of door from opening angle > 105° 4 = closing of door from opening angle 180°
2 Durability	8	8 = 500,000 test cycles
3 Door closer size ²	1–7	1 = door width: Max. 750 mm; test door weight: 20 kg 2 = door width: Max. 850 mm; test door weight: 40 kg 3 = door width: Max. 950 mm; test door weight: 60 kg 4 = door width: Max. 1100 mm; test door weight: 80 kg 5 = door width: Max. 1250 mm; test door weight: 100 kg 6 = door width: Max. 1400 mm; test door weight: 120 kg 7 = door width: Max. 1600 mm; test door weight: 160 kg
4 Suitability for use on fire resistant/smoke control doors	0–1	0 = not suitable for use on fire resistant and smoke control doors 1 = suitable for use on fire resistant and smoke control doors 1996 + A1:2002: A prerequisite is that the fire safety certificate of the fire test on typical fire resistant and smoke control doors confirms that the door closer does not adversely affect the fire resistance properties of the door. This verification management is outside the scope of application of this European standard
5 Safety	1	1 = all door closers must meet the substantial safe usage requirements. For this reason, only grade 1 has been defined.
6 Corrosion resistance	0–5	0 = no defined corrosion resistance 1 = low corrosion resistance 2 = medium corrosion resistance 3 = high corrosion resistance 4 = extremely high corrosion resistance 5 = extraordinarily high corrosion resistance

1996 + A1:2002:

¹ For all interior and external doors in public and other buildings where persons have little inclination to take care and are likely to use the door incorrectly.

Note 1: Classification in compliance with grade 4 requires standard installation in accordance with the manufacturer's specifications.

Note 2: For applications, where heavy duty use is expected, or with specially limited door opening angles the use of door closers with backcheck is recommended, or where the use of door stops is recommended.

² Where a door closer provides a range of closing force sizes both the minimum and maximum size must be identified (also see following table).



The definition of individual door closer sizes:

Door closer size	Recommended max. door width mm	Test door weight kg	Closing moment Nm				Opening moment Nm between 0° and 60° max.	Door closer efficiency % between 0° and 4° min.
			between 0° and 4° min.	max.	between 88° and 92° min.	at any other opening angle min.		
1	750	20	9	13	3	2	26	50
2	850	40	13	18	4	3	36	50
3	950	60	18	26	6	4	47	55
4	1100	80	26	37	9	6	62	60
5	1250	100	37	54	12	8	83	65
6	1400	120	54	87	18	11	134	65
7	1600	160	87	140	29	18	215	65

Example: "DCL 94" certified in compliance with EN 1154:1996 + A1:2002

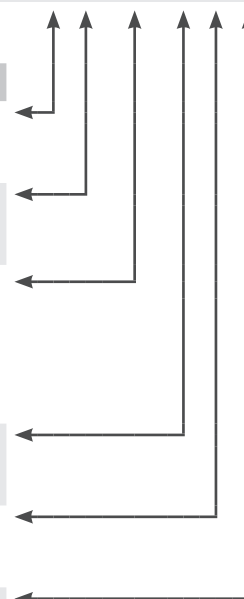
5



• Classification code:

4 8 2-5 1 1 4

Position	Meaning
1 Category of use	Grade 4: Closing of door from opening angle 180°
2 Durability	Grade 8: 500,000 cycles
3 Door closer size	Grade 2–5: Door width: Max. 850 mm; test door weight: 40 kg (grade 2) Door width: Max. 950 mm; test door weight: 60 kg (grade 3) Door width: Max. 1,100 mm; test door weight: 80 kg (grade 4) Door width: Max. 1,250 mm; test door weight: 100 kg (grade 5)
4 Suitability for use on fire resistant/smoke control doors	Grade 1: Suitable for use on fire resistant and smoke control doors
5 Safety	Grade 1: All door closers must meet the substantial safe usage requirements.
6 Corrosion resistance	Grade 4: Very high corrosion resistance



Door Closers

The door closers in this catalogue are subdivided into the following groups:

- > Overhead door closers with guide rail, arm assembly or as concealed version
- > Floor springs

Accessories for the closer systems can be found directly after the individual closer systems. General accessories for all closer systems can be found at the end of the product group.

Correct purpose of use

Door closers must be used only to close pivot or hinged doors made of wood, metal, plastic or glass after these have been opened manually. Individual floor springs and concealed overhead door closers can also be used for double action doors.

Door closers need to be replaced when a satisfactory and securely functioning closing action is no longer guaranteed.

Abuse of the equipment:

- > Use of the door closer for applications other than closing of doors
- > Obstruction of the closing action for example by scraping doors, catching seals or stiff locks
- > Incorrect or inappropriate installation and settings such as banging doors
- Incorrect selection of the closer size or closing force

Installation and start-up

The following points must be observed during the installation and start-up of door closers:

- > Before the installation and start-up of door closers, including additional equipment and accessories, the relevant legal regulations need to be observed.
- > Door closers must be installed and adjusted correctly by qualified personnel.
- > Product information must be observed and has to be passed on to the clients and end users.
- > Door closers in hold-open systems are subject to legal controls, monitoring and maintenance procedures.
- > In case of particularly unfavourable local conditions (i.e. influence of wind), door closers with a higher closing force must be used.
- > If, due to the structural circumstances of the door and surrounds, it cannot be avoided that the door leaf knocks against the door frame near the door pivot point, a door stop must be used, which will limit the maximum opening angle of the door closer.
- > If a floor spring is in contact with water (i.e. external doors), the space between the cement casing and the housing must be filled with a suitable sealing compound.

Maintenance and repair

Carry out the following maintenance works regularly:

- > Check the safety relevant components for their sturdy positioning and for their wear and tear
- > Re-tighten the fixing screws and exchange defective components
- > Test the settings (i.e. closing speed) and easy movement of the door
- > If necessary, lubricate the moving components (i.e. arm assembly)

Repairs must be carried out by authorized qualified personnel.

Only cleaning agents which do not contain corrosion promoting elements and damaging components may be used.

Barrier-free in compliance with DIN 18040-2 – door opening and closing requirements

The max. permissible force that is necessary to open a door is defined in DIN 18040.

If door closers are installed, then these must be adjusted so that they do not exceed the opening moment of size 3 (max. 47 Nm) in compliance with DIN EN 1154, otherwise automatic door systems must be used.

DIN SPEC 1104

The DIN SPEC 1104 requires a considerable drop in the opening moment of 40 % for door opening angles of 2° to 60°.

This makes doors in public buildings and private residences easier to open and more comfortable to use, particularly for children, the elderly and people with disabilities; convenient accessibility is significantly increased.

Fire resistance and smoke control

The construction of fire resistant doors (steel doors T30-1) is subject to the clearly defined regulations of DIN 18082.

The regulations of smoke control doors are listed in DIN 18095. Furthermore the EN 1634 standard applies.

Fire resistant and smoke control doors which have been approved by the building inspector must not be modified. The installation of a door closer or hold-open systems may require a certificate of suitability in conjunction with the fire resistant and smoke control door, a final check, authorisation or approval.

F Door closers which have been tested for fire resistant and smoke control doors are marked with a fire resistant symbol.

Accessories for certain closer systems for fire resistant and smoke control doors are central smoke alarm systems, smoke alarms, electric or adhesive door magnets and anchor or adhesive counterplates, and can be found in this catalogue.

General door closer functions

Closing force

The closing force depends on the width of the door leaf. With most door closers, it can be set and adjusted exactly to the respective door situation. In case of particularly unfavourable local conditions (i.e. strong influence of wind), door closers with a higher closing force must be used.

Door closer size	Recommended max. door width (mm)	Test door weight (kg)
1	750	20
2	850	40
3	950	60
4	1100	80
5	1250	100
6	1400	120
7	1600	160

The recommended door widths apply to standard installation. In case of particularly high and heavy doors, extreme draught conditions or special mounting, door closers with a higher closing force must be used.

The weight specifications in the table apply only to the test procedure. The given values do not correspond to the max. values for the installation.

Door co-ordination

In case of 2-leaf doors, the door co-ordinator ensures the correct closing sequence of both door leaves (inactive leaf before active leaf).

Hold-open device

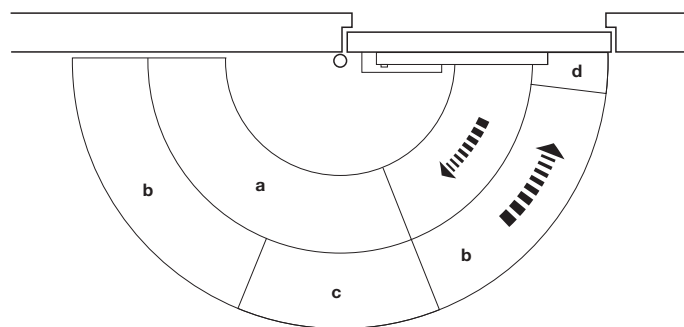
Fixed hold open position can be achieved with additional special fittings, e.g. interlocking hold-open arm, or with integrated construction elements, e.g. interlocking hold-open device.

Door closers with interlocking hold-open arm or interlocking hold-open insert are not suitable for fire resistant and smoke control doors.

Free-swing arm

With a free-swing arm, the doors remain freely movable (comparable with a door without closing function), however, the door closes securely in case of a fire.

Door closer functions in the door pivot range



a, Backcheck

With the backcheck, the swing of a forcefully opened door (manually or for example by gusts of wind) is reduced. Damage to the door or wall are therefore minimised or eliminated by the backcheck.

b, Closing speed

The exact setting of the closing speed guarantees a controlled closing of the door leaf.

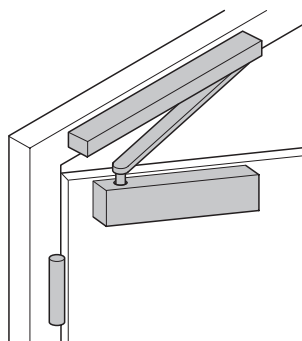
c, Delayed closing action

The delayed closing action increases the closing time so that, for example, persons carrying luggage or bulky items or mothers with prams, have sufficient time to walk through the door.

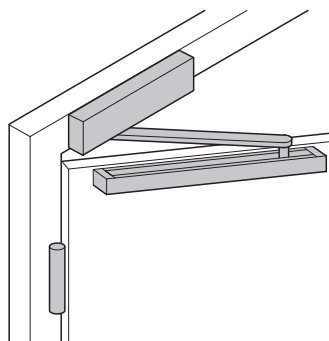
d, Latching action

The latching action controls the closing of the door and ensures, that the lock closes reliably. It can be adjusted with most door closer models.

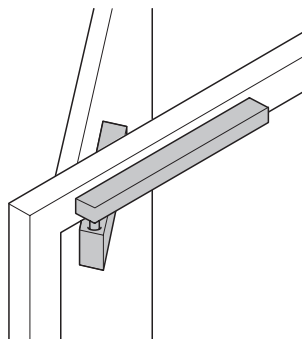
Installation types



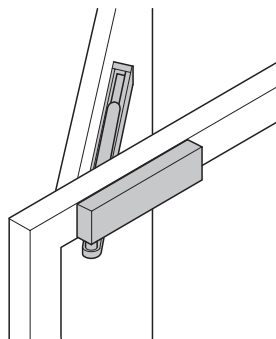
Standard installation
(door leaf installation) on pull side



Overhead installation
(transom fixing) on pull side

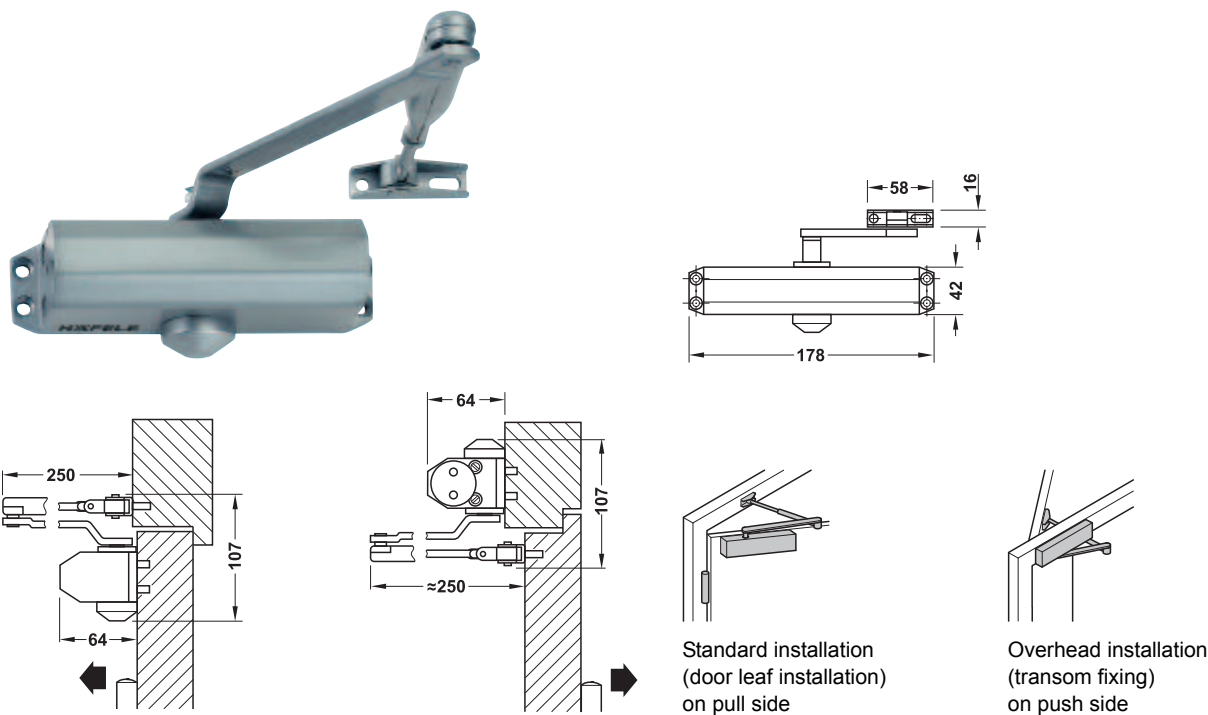


Standard installation
(door leaf installation) on push side



Overhead installation
(transom fixing) on push side

DCL 11, DCL 12
EN 3



Fire resistance and smoke control

F Tested for fire resistant and smoke control doors.

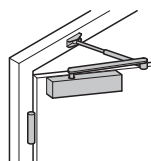
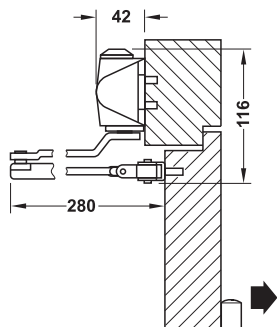
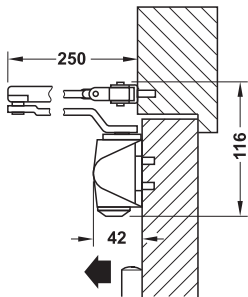
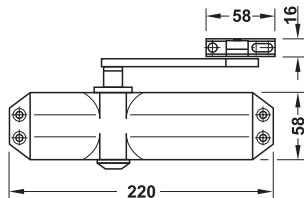
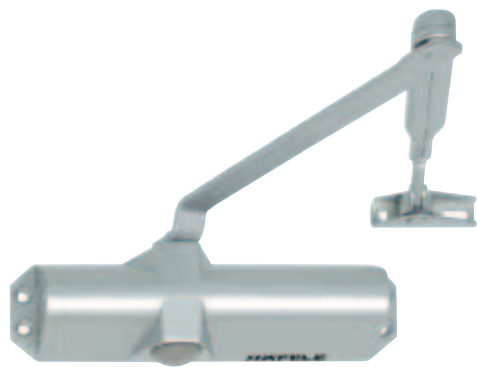
> Version:	With standard arm or interlocking hold-open arm (optional)						
> Installation:	Suitable for standard installation on pull side and overhead installation on push side						
> Adjustment facility:	Closing speed continuously adjustable, latching action continuously adjustable						
> Closing force:	3						
> Door width:	850–950 mm						
> Door weight:	≤60 kg						
> Opening angle:	≤180°						
> Hold-open angle:	≤145°						
> Mounting:	For DIN left and DIN right hand use						
> Standard:	Certified in compliance with EN 1154:1996/A1:2002						
> Class:	<table><tr><td>4</td><td>8</td><td>3</td><td>0/1</td><td>1</td><td>3</td></tr></table>	4	8	3	0/1	1	3
4	8	3	0/1	1	3		

Supplied with

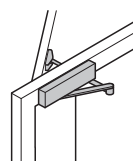
Door closer complete with arm assembly

		Silver coloured
DCL 11 Set		
1 DCL 11 with standard arm	F	931.84.649
DCL 12 Set		
1 DCL 12 with hold-open arm	–	931.84.659

DCL 110
EN 3



Standard installation
(door leaf installation)
on pull side



Overhead installation
(transom fixing)
on push side

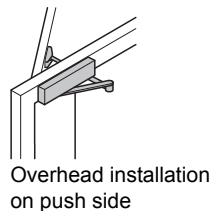
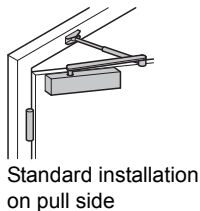
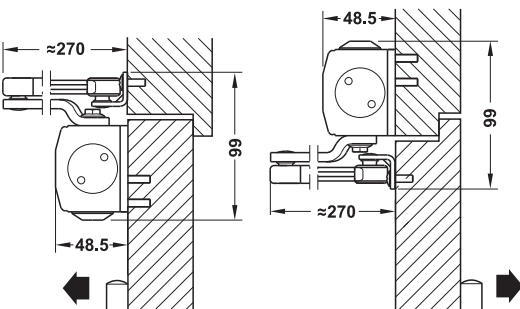
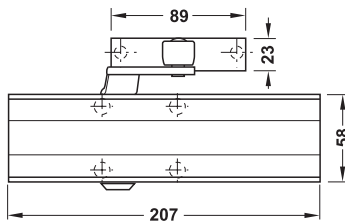
> Version:	With standard arm or interlocking hold-open arm (optional)						
> Installation:	Suitable for standard installation on pull side and overhead installation on push side						
> Adjustment facility:	Closing speed continuously adjustable, backcheck adjustable, latching action continuously adjustable						
> Closing force:	3						
> Door width:	850–950 mm						
> Door weight:	≤60 kg						
> Opening angle:	≤180°						
> Hold-open angle:	≤145°						
> Mounting:	For DIN left and DIN right hand use						
> Standard:	Certified in compliance with EN 1154:1996/A1:2002						
> Class:	<table><tr><td>4</td><td>8</td><td>3</td><td>0/1</td><td>1</td><td>3</td></tr></table>	4	8	3	0/1	1	3
4	8	3	0/1	1	3		

Supplied with

Door closer complete with arm assembly

		Silver coloured
DCL 110 Set		
DCL 110 with standard arm		931.84.229
DCL 110 with interlocking hold-open arm		931.84.239

DCL 80
EN 2, 3, 4



Fire resistance and smoke control

F Tested for fire resistant and smoke control doors.

> Version:	Safety valve against overloading, with standard arm or hold-open arm (optional)						
> Adjustment facility:	Closing force, closing speed and latching action adjustable, closing speed and latching action continuously adjustable from the front						
> Installation:	Standard installation (door leaf installation) on pull side and overhead installation (transom fixing) on push side						
> Closing force:	2, 3, 4 in compliance with EN 1154						
> Door width:	≤1,100 mm						
> Opening angle:	≤180°						
> Hold-open angle:	Approx. 70–150°						
> Mounting:	For DIN left and DIN right hand use						
> Standard:	Certified in compliance with EN 1154:1996/A1:2002						
> Class:	<table><tr><td>4</td><td>8</td><td>2/3/4</td><td>0/1</td><td>1</td><td>4</td></tr></table>	4	8	2/3/4	0/1	1	4
4	8	2/3/4	0/1	1	4		

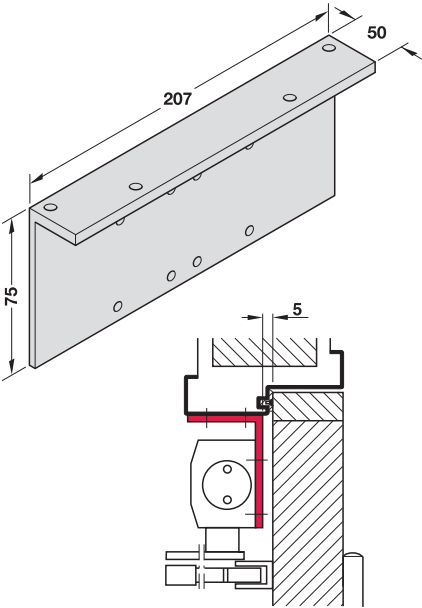
		Silver colour lacquered
DCL 80 Set with standard arm		
1 DCL 80 with standard arm	F	931.26.309
1 basic closer	–	931.26.009
1 standard arm	–	931.26.109
DCL 80 Set with hold-open arm		
1 DCL 80 with hold-open arm	–	931.26.319
1 basic closer	–	931.26.009
1 hold-open arm	–	931.26.119

Accessories

► AH 5.11

Soffit fixing bracket

For DCL 80

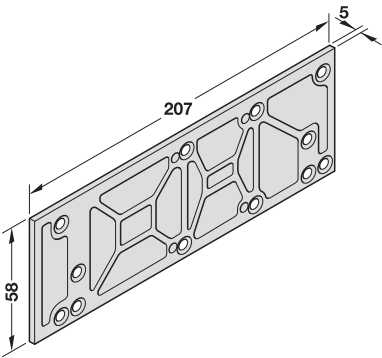


> Area of application: For overhead installation of door closer to push side

	Silver colour lacquered
Soffit fixing bracket	931.26.419

Mounting plate

For DCL 80

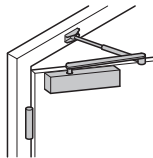
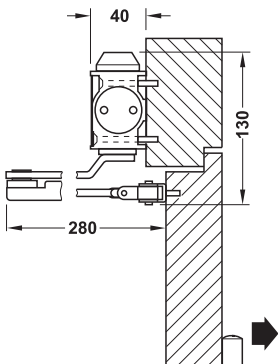
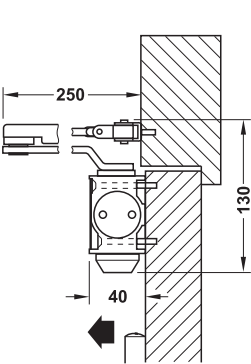
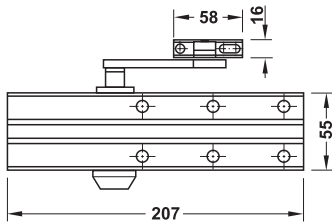


> Area of application: For mounting door closer on doors where direct fixing is not possible

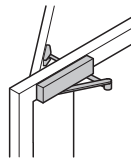
	Silver colour lacquered
Mounting plate	931.26.409



DCL 15, DCL 16
EN 2-4



Standard installation
(door leaf installation)
on pull side



Overhead installation
(transom fixing)
on push side

Fire resistance and smoke control

F Tested for fire resistant and smoke control doors.

> Version:	With standard arm or interlocking hold-open arm (optional)						
> Installation:	Standard installation on pull side and overhead installation on push side						
> Adjustment facility:	Closing speed, latching action adjustable						
> Closing force:	2–4						
> Door width:	≤1,100 mm						
> Door weight:	≤80 kg						
> Opening angle:	≤180°						
> Hold-open angle:	≤145°						
> Mounting:	For DIN left and DIN right hand use						
> Standard:	Certified in compliance with EN 1154:1996/A1:2002						
> Class:	<table><tr><td>4</td><td>8</td><td>2 – 4</td><td>0/1</td><td>1</td><td>3</td></tr></table>	4	8	2 – 4	0/1	1	3
4	8	2 – 4	0/1	1	3		

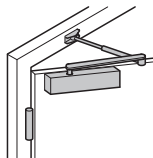
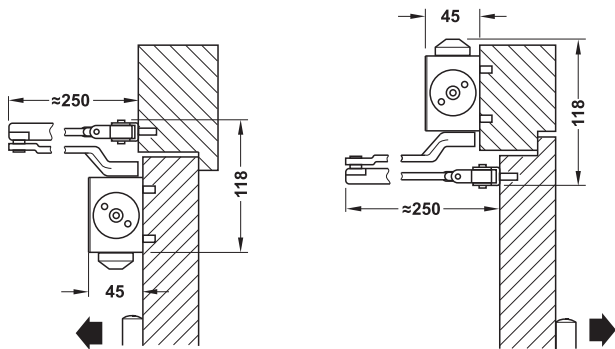
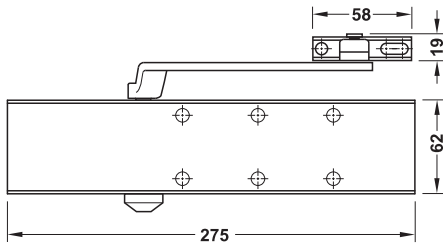
Supplied with

Door closer complete with arm assembly

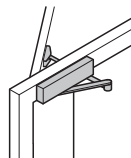
		Silver colour lacquered
DCL 15 Set		
1 DCL 15 with standard arm	F	931.84.629
DCL 16 Set		
1 DCL 16 with hold-open arm	—	931.84.639

DGH-B-INT 2019, HDE-en, 12/18; Dimensional data not binding. We reserve the right to alter specifications without notice.

DCL 55
EN 2–6



Standard installation
(door leaf installation)
on pull side



Overhead installation
(transom fixing)
on push side

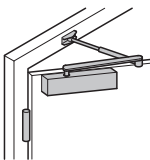
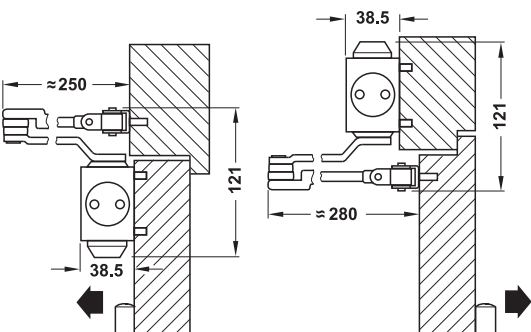
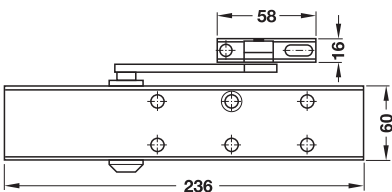
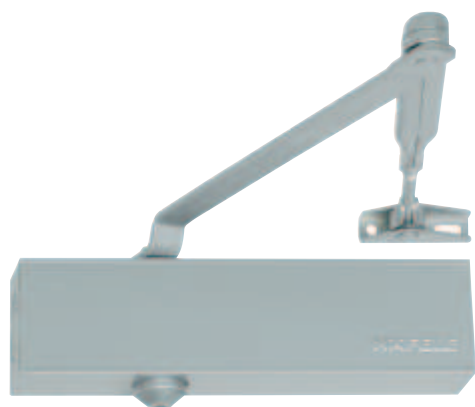
Fire resistance and smoke control

F Tested for fire resistant and smoke control doors.

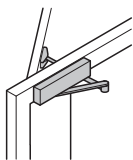
> Version:	With standard arm or hold-open arm (optional)						
> Installation:	Standard installation on pull side and overhead installation on push side						
> Adjustment facility:	Closing speed, backcheck and latching action adjustable						
> Closing force:	2–6						
> Door width:	≤1,400 mm						
> Door weight:	≤150 kg						
> Opening angle:	≤180°						
> Hold-open angle:	≤150°						
> Mounting:	For DIN left and DIN right hand use						
> Standard:	Certified in compliance with EN 1154:1996/A1:2002						
> Class:	<table><tr><td>4</td><td>8</td><td>2 – 6</td><td>0/1</td><td>1</td><td>3</td></tr></table>	4	8	2 – 6	0/1	1	3
4	8	2 – 6	0/1	1	3		

		Silver colour lacquered
DCL 55 Set		
1 DCL 55 with standard arm	F	931.84.769
1 DCL 55 with interlocking hold-open arm	–	931.84.819

DCL 51
EN 2–5



Standard installation
(door leaf installation)
on pull side



Overhead installation
(transom fixing)
on push side

Fire resistance and smoke control

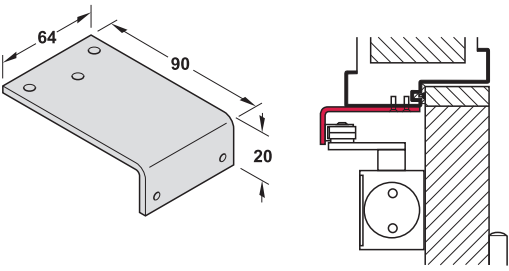
F Tested for fire resistant and smoke control doors.

> Version:	With standard arm or hold-open arm (optional)						
> Installation:	Standard installation on pull side and overhead installation on push side						
> Adjustment facility:	Closing speed, backcheck and latching action adjustable						
> Closing force:	2–5						
> Door width:	≤1,250 mm						
> Door weight:	≤100 kg						
> Opening angle:	≤180°						
> Hold-open angle:	≤150°						
> Mounting:	For DIN left and DIN right hand use						
> Standard:	Certified in compliance with EN 1154:1996/A1:2002						
> Class:	<table><tr><td>4</td><td>8</td><td>2–5</td><td>0/1</td><td>1</td><td>3</td></tr></table>	4	8	2–5	0/1	1	3
4	8	2–5	0/1	1	3		

		Silver colour lacquered	Satin stainless steel	Brass Polished	Matt black
DCL 51 Set with standard arm					
1 DCL 51 with standard arm	F	931.84.829	931.84.820	931.84.828	931.84.823
DCL 51 Set with hold-open arm					
1 DCL 51 with hold-open arm	–	931.84.669	931.84.660	931.84.668	931.84.663

Mounting bracket for parallel arm installation

For DCL door closer



- > Area of application:
- For mounting arm parallel to door frame
- > Colour:
- Silver coloured

Note
The closing speed is reduced by approx. 20 % when using a bracket for parallel arm assembly.

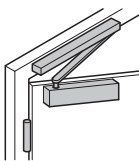
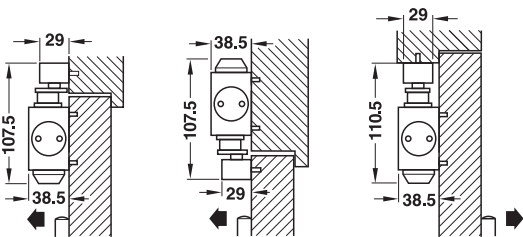
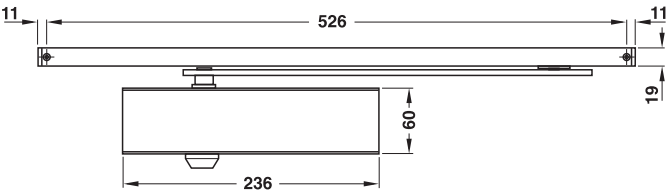
Closing forces with parallel arm installation

Model	Tested to	Closing force
DCL 11	EN1154:1996/A1:2002	3
DCL 15	EN1154:1996/A1:2002	3
DCL 51	EN1154:1996/A1:2002	2–4

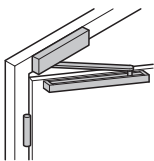
Please note the different closing forces with parallel arm installation compared to standard installation.

	Cat. No.
Mounting bracket for parallel arm installation	931.84.900

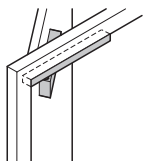
DCL 61
EN 2–4



Standard installation
(door leaf installation)
on pull side



Overhead installation
(transom fixing)
on pull side



Transom fixing
on push side

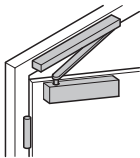
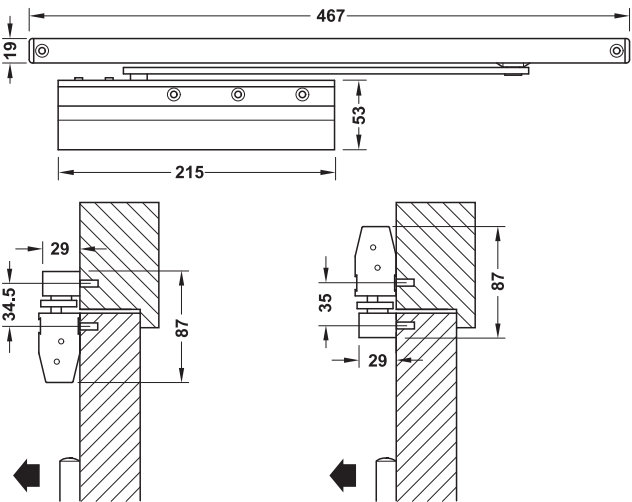


5

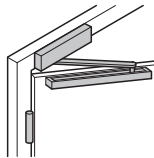
- > Version: With hold-open function (optional)
- > Installation: Suitable for standard or overhead installation on pull side and soffit installation on push side
- > Adjustment facility: Closing speed continuously adjustable, backcheck adjustable, latching action continuously adjustable
- > Door width: $\leq 1,100$ mm
- > Opening angle: $\leq 120^\circ$
- > Hold-open angle: $\leq 115^\circ$
- > Mounting: For DIN left and DIN right hand use

	Silver colour lacquered	Polished brass
DCL 61 Set		
1 overhead door closer with guide rail, without hold-open function	931.84.139	931.84.138
1 overhead door closer with guide rail and hold-open function	931.84.119	931.84.118

DCL 84
EN 3



Standard installation
(door leaf installation)
on pull side



Overhead installation
(transom fixing)
on pull side

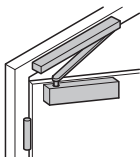
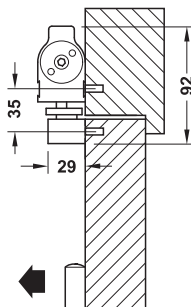
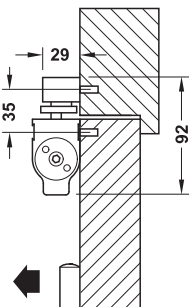
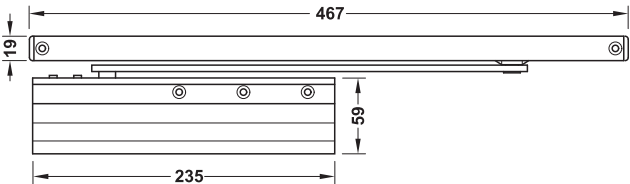
Fire resistance and smoke control

F Tested for fire resistant and smoke control doors.

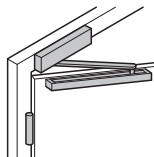
> Version:	With hold-open function (optional)						
> Installation:	Standard installation and overhead installation on pull side						
> Adjustment facility:	Closing speed continuously adjustable, latching action continuously adjustable						
> Closing force:	3						
> Door width:	≤950 mm						
> Opening angle:	≤120°						
> Hold-open angle:	≤115°						
> Mounting:	For DIN left and DIN right hand use						
> Standard:	Certified in compliance with EN 1154:1996/A1:2002						
> Class:	<table><tr><td>3</td><td>8</td><td>3</td><td>0/1</td><td>1</td><td>3</td></tr></table>	3	8	3	0/1	1	3
3	8	3	0/1	1	3		

		Silver coloured	Polished brass	Matt black
DCL 84 Set				
1 DCL 84 without hold-open function	F	931.84.319	931.84.318	931.84.313
1 DCL 84 with hold-open function	—	931.84.329	931.84.328	931.84.323

DCL 83
EN 2-4



Standard installation
(door leaf installation)
on pull side



Overhead installation
(transom fixing)
on pull side

Fire resistance and smoke control

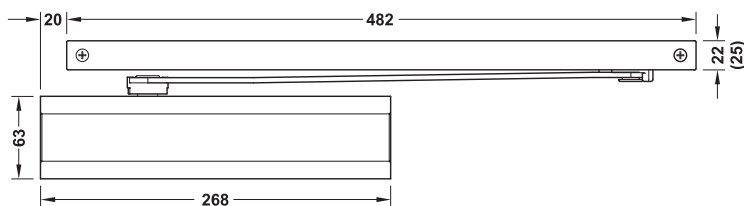
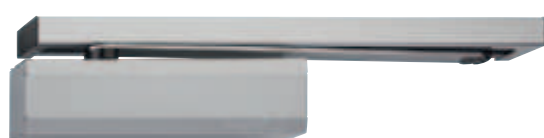
F Tested for fire resistant and smoke control doors.

> Version:	With hold-open function (optional)						
> Installation:	Standard installation and overhead installation on pull side						
> Adjustment facility:	Closing speed continuously adjustable, latching action continuously adjustable						
> Closing force:	2–4						
> Door width:	≤1,100 mm						
> Door weight:	≤80 kg						
> Opening angle:	≤115°						
> Hold-open angle:	≤115°						
> Mounting:	For DIN left and DIN right hand use						
> Standard:	Certified in compliance with EN 1154:1996/A1:2002						
> Class:	<table><tr><td>3</td><td>8</td><td>2–4</td><td>0/1</td><td>1</td><td>3</td></tr></table>	3	8	2–4	0/1	1	3
3	8	2–4	0/1	1	3		

		Silver coloured
DCL 83 Set		
1 DCL 83 without hold-open function	F	931.84.289
1 DCL 83 with hold-open function	-	931.84.299

DCL 94

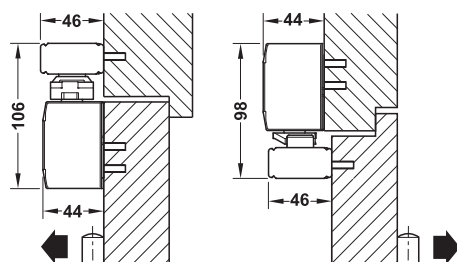
EN 2–5



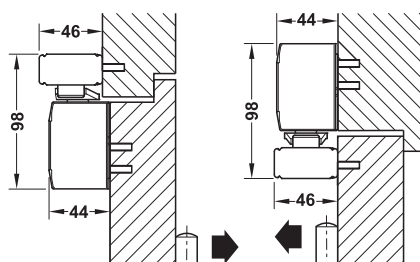
- > Barrier-free in compliance with DIN 18040
- > Meets the requirements of DIN SPEC 1104



Dim. in brackets includes cover



DCL 94



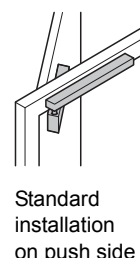
DCL 94 BG



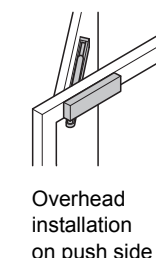
Standard installation on pull side



Overhead installation on pull side



Standard installation on push side



Overhead installation on push side

Fire resistance and smoke control

- F** Tested for fire resistant and smoke control doors. When mounting to the transom or push side, a certificate of suitability in combination with the respective fire resistant and smoke control door is required.

> Version:	Mounting bracket with universal hole system
> Adjustment facility:	Closing speed, latching action and backcheck continuously adjustable
> Installation:	DCL 94 standard installation on pull side, overhead installation on push side, DCL 94 BG standard installation on push side, overhead installation on pull side
> Closing force:	2–5 in compliance with EN 1154
> Door width:	≤1,250 mm
> Opening angle:	≤180°
> Mounting:	For DIN left and DIN right hand use
> Standard:	Certified in compliance with EN 1154:1996/A1:2002
> Class:	4 8 2–5 1 1 4

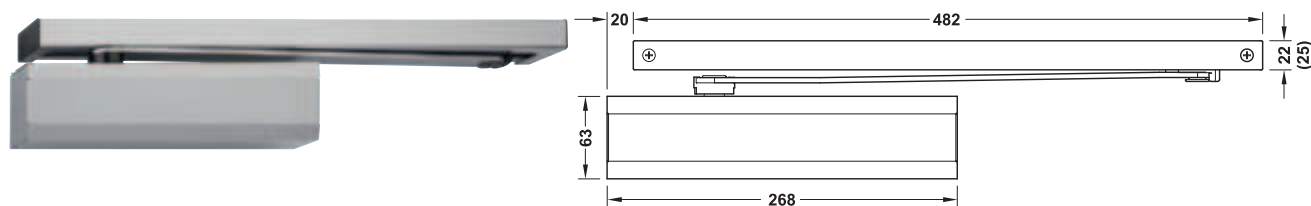
		Silver colour lacquered	Satin stainless steel
DCL 94 Set			
1 overhead door closer with guide rail	F	931.21.009	931.21.000
1 basic closer	–	931.20.800	931.20.800
1 DCL 94 cover cap	–	931.20.819	931.20.810
1 guide rail	–	931.20.829	931.20.820
1 guide rail cover	–	–	931.20.830
DCL 94 BG Set			
1 overhead door closer with guide rail	F	931.21.019	931.21.010
1 BG basic closer	–	931.20.801	931.20.801
1 DCL 94 cover cap	–	931.20.819	931.20.810
1 guide rail	–	931.20.829	931.20.820
1 guide rail cover	–	–	931.20.830

Accessories

► AH 5.27

DCL 94

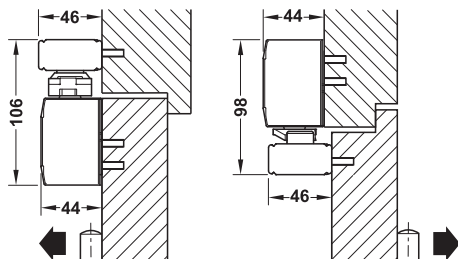
EN 3–6



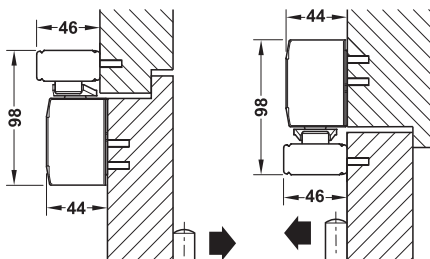
- > Barrier-free in compliance with DIN 18040
- > Meets the requirements of DIN SPEC 1104



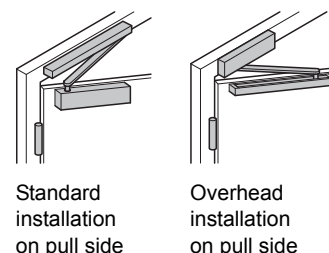
Dim. in brackets includes cover



DCL 94

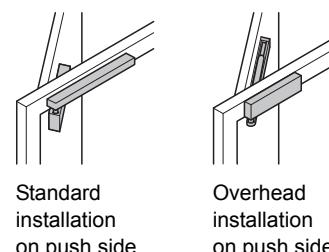


DCL 94 BG



Standard installation on pull side

Overhead installation on pull side



Standard installation on push side

Overhead installation on push side

Fire resistance and smoke control

- F** Tested for fire resistant and smoke control doors. When mounting on the transom or push side, a certificate of suitability in combination with the respective fire resistant and smoke control door is required.

- > Version: Mounting bracket with universal hole system
- > Adjustment facility: Closing speed, latching action and backcheck continuously adjustable
- > Installation: DCL 94 standard installation on pull side, overhead installation on push side, DCL 94 BG standard installation on push side, overhead installation on pull side
- > Closing force: 3–6 in compliance with EN 1154
- > Door width: ≤1,400 mm
- > Opening angle: ≤180°
- > Mounting: For DIN left and DIN right hand use
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class:

4	8	3–6	1	1	4
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		Silver colour lacquered	Satin stainless steel
DCL 94 Set			
1 overhead door closer with guide rail	F	931.21.049	931.21.040
1 basic closer	–	931.20.802	931.20.802
1 DCL 94 cover cap	–	931.20.819	931.20.810
1 guide rail	–	931.20.829	931.20.820
1 guide rail cover	–	–	931.20.830
DCL 94 BG Set			
1 overhead door closer with guide rail	F	931.21.059	931.21.050
1 BG basic closer	–	931.20.803	931.20.803
1 DCL 94 cover cap	–	931.20.819	931.20.810
1 guide rail	–	931.20.829	931.20.820
1 guide rail cover	–	–	931.20.830

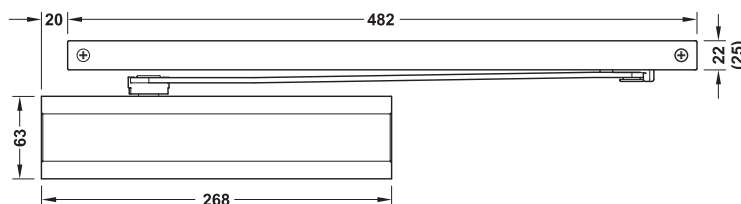
Accessories

► AH 5.27

DGH-B-INT 2019, HDE-en, 12/18; Dimensional data not binding. We reserve the right to alter specifications without notice.

DCL 94 FE

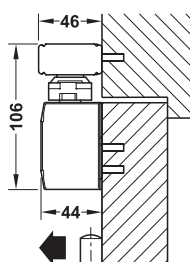
EN 2–5



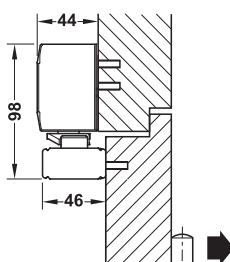
- > Barrier-free in compliance with DIN 18040
- > Meets the requirements of DIN SPEC 1104



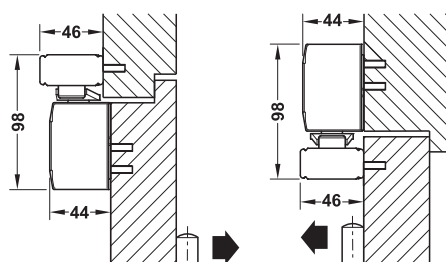
Dim. in brackets includes cover



DCL 94



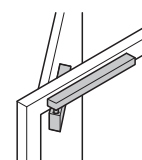
DCL 94 BG



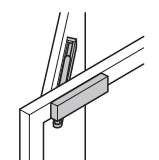
Standard installation on pull side



Overhead installation on pull side



Standard installation on push side



Overhead installation on push side

- > Version: With hold-open insert (FE), mounting bracket with universal hole system
- > Adjustment facility: Closing speed, latching action and backcheck continuously adjustable
- > Installation: DCL 94 FE standard installation on pull side, overhead installation on push side, DCL 94 BG FE standard installation on push side, overhead installation on pull side
- > Closing force: 2–5 in compliance with EN 1154
- > Door width: ≤1,250 mm
- > Opening angle: ≤180°
- > Hold-open angle: 80°–140°
- > Mounting: For DIN left and DIN right hand use
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class:

4	8	2–5	0	1	4
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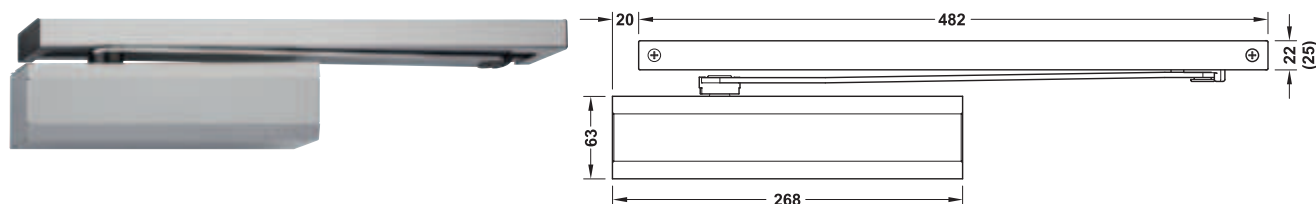
	Silver colour lacquered	Satin stainless steel
DCL 94 Set with hold-open insert		
1 overhead door closer with guide rail and hold-open insert	931.21.029	931.21.020
1 basic closer	931.20.800	931.20.800
1 DCL 94 cover cap	931.20.819	931.20.810
1 guide rail	931.20.829	931.20.820
1 guide rail cover	–	931.20.830
1 hold-open insert	931.20.873	931.20.873
DCL 94 BG Set with hold-open insert		
1 overhead door closer with guide rail and hold-open insert	931.21.039	931.21.030
1 BG basic closer	931.20.801	931.20.801
1 DCL 94 cover cap	931.20.819	931.20.810
1 guide rail	931.20.829	931.20.820
1 guide rail cover	–	931.20.830
1 hold-open insert	931.20.873	931.20.873

Accessories

► AH 5.27

DCL 94 FE

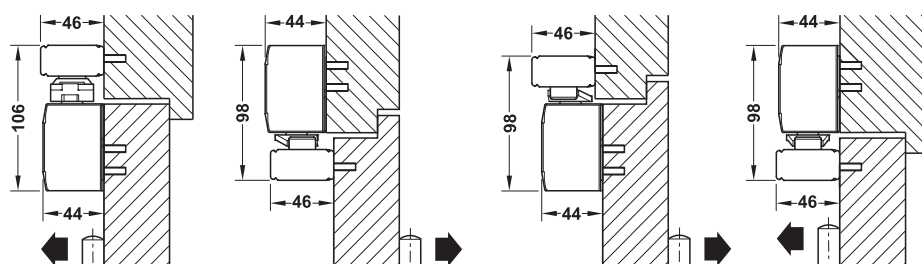
EN 3–6



- > Barrier-free in compliance with DIN 18040
- > Meets the requirements of DIN SPEC 1104

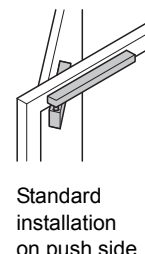
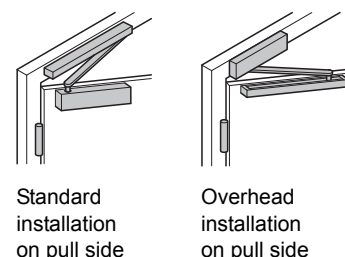


Dim. in brackets includes cover



DCL 94

DCL 94 BG



- > Version: With hold-open insert (FE), mounting bracket with universal hole system
- > Adjustment facility: Closing speed, latching action and backcheck continuously adjustable
- > Installation: DCL 94 FE standard installation on pull side, overhead installation on push side, DCL 94 BG FE standard installation on push side, overhead installation on pull side
- > Closing force: 3–6 in compliance with EN 1154
- > Door width: ≤1,400 mm
- > Opening angle: ≤180°
- > Hold-open angle: 80°–140°
- > Mounting: For DIN left and DIN right hand use
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class:

4	8	3–6	0	1	4
---	---	-----	---	---	---

	Silver colour lacquered	Satin stainless steel
DCL 94 Set with hold-open insert		
1 overhead door closer with guide rail and hold-open insert	931.21.069	931.21.060
1 basic closer	931.20.802	931.20.802
1 DCL 94 cover cap	931.20.819	931.20.810
1 guide rail	931.20.829	931.20.820
1 guide rail cover	–	931.20.830
1 hold-open insert	931.20.873	931.20.873
DCL 94 BG Set with hold-open insert		
1 overhead door closer with guide rail and hold-open insert	931.21.079	931.21.070
1 BG basic closer	931.20.803	931.20.803
1 DCL 94 cover cap	931.20.819	931.20.810
1 guide rail	931.20.829	931.20.820
1 guide rail cover	–	931.20.830
1 hold-open insert	931.20.873	931.20.873

Accessories

► AH 5.27

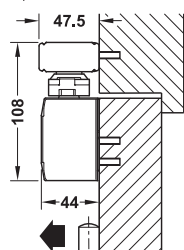
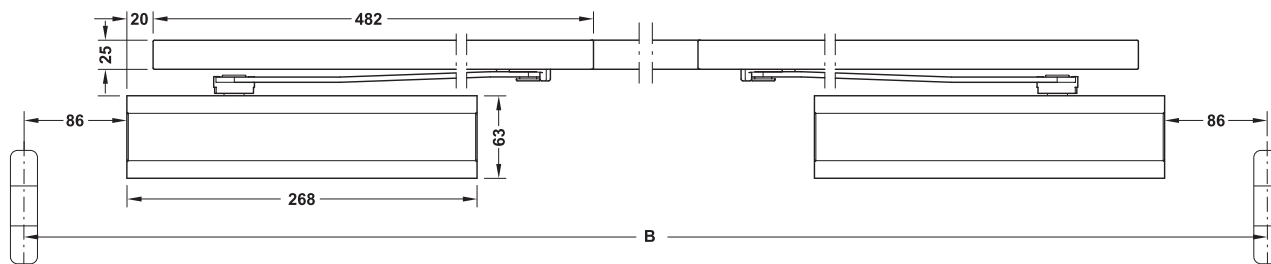
DGH-B-INT 2019, HDE-en, 12/18; Dimensional data not binding. We reserve the right to alter specifications without notice.

DCL 94 SR

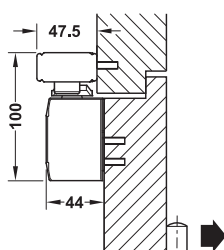
EN 2–5



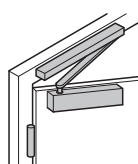
- > Barrier-free in compliance with DIN 18040
- > Meets the requirements of DIN SPEC 1104



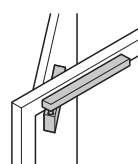
DCL 94



DCL 94 BG



Standard installation
pull side



Standard installation
push side

Fire resistance and smoke control

F Tested for fire resistant and smoke control doors. When mounting on the push side, a certificate of suitability in combination with the respective fire resistant and smoke control door is required.

- > Area of application: For double doors
- > Version: Integrated door co-ordinator (SR) that ensures the correct closing sequence of both doors
- > Adjustment facility: Closing speed, latching action and backcheck continuously adjustable
- > Installation: DCL 94 SR standard installation on pull side
- > Closing force: 2–5 in compliance with EN 1154
- > For door width: B: 1,430–2,500 mm, B (BG): 1,475–2,500 mm
- > Opening angle: ≤180°
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class:

3	8	2–5	1	1	4
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		Silver colour lacquered	Satin stainless steel
DCL 94 SR Set			
1 overhead door closer with guide rails and cover set	F	931.21.189	931.21.180
2 basic closers	–	931.20.800	931.20.800
2 DCL 94 cover caps	–	931.20.819	931.20.810
2 guide rails	–	931.20.829	931.20.820
2 guide rail covers	–	931.20.839	931.20.830
1 door co-ordinator	–	931.20.840	931.20.840
1 door co-ordinator cover	–	931.20.859	931.20.850
DCL 94 BG SR Set			
1 overhead door closer with guide rails and cover set	F	931.21.089	931.21.080
2 BG basic closers	–	931.20.801	931.20.801
2 DCL 94 cover caps	–	931.20.819	931.20.810
2 guide rails	–	931.20.829	931.20.820
2 guide rail covers	–	931.20.839	931.20.830
1 BG door co-ordinator	–	931.20.842	931.20.842
1 door co-ordinator cover	–	931.20.859	931.20.850

Accessories

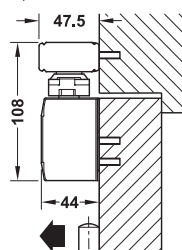
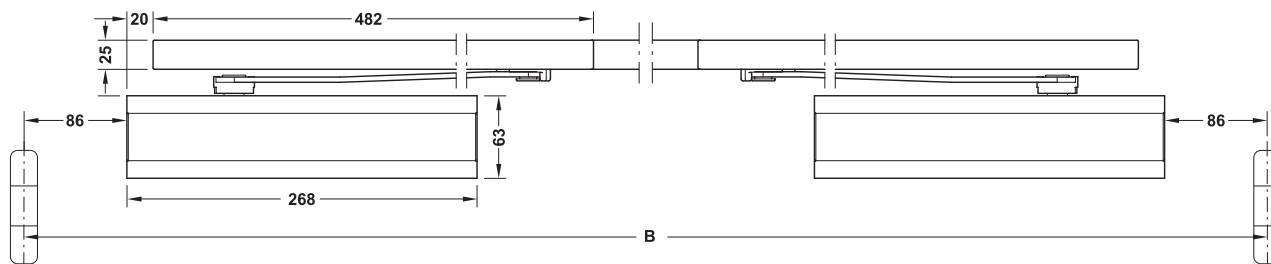
► AH 5.27

DCL 94 SR

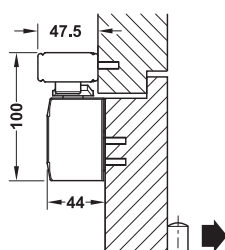
EN 3–6



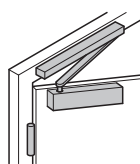
- > Barrier-free in compliance with DIN 18040
- > Meets the requirements of DIN SPEC 1104



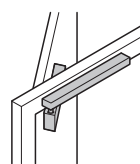
DCL 94



DCL 94 BG



Standard installation
pull side



Standard installation
push side

Fire resistance and smoke control

F Tested for fire resistant and smoke control doors. When mounting on the push side, a certificate of suitability in combination with the respective fire resistant and smoke control door is required.

- > Area of application: For double doors
- > Version: Integrated door co-ordinator (SR) that ensures the correct closing sequence of both doors
- > Adjustment facility: Closing speed, latching action and backcheck continuously adjustable
- > Installation: DCL 94 SR standard installation on pull side, DCL 94 BG SR standard installation on push side
- > Closing force: 3–6 in compliance with EN 1154
- > For door width: B: 1,430–2,800 mm, B (BG): 1,475–2,800 mm
- > Opening angle: ≤180°
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class:

3	8	3–6	1	1	4
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		Silver colour lacquered	Satin stainless steel
DCL 94 SR Set			
1 overhead door closer with guide rails and cover set	F	931.21.199	931.21.190
2 basic closers	–	931.20.802	931.20.802
2 DCL 94 cover caps	–	931.20.819	931.20.810
2 guide rails	–	931.20.829	931.20.820
2 guide rail covers	–	931.20.839	931.20.830
1 door co-ordinator	–	931.20.840	931.20.840
1 door co-ordinator cover	–	931.20.859	931.20.850
DCL 94 BG SR Set			
1 overhead door closer with guide rails and cover set	F	931.21.099	931.21.090
2 BG basic closers	–	931.20.803	931.20.803
2 DCL 94 cover caps	–	931.20.819	931.20.810
2 guide rails	–	931.20.829	931.20.820
2 guide rail covers	–	931.20.839	931.20.830
1 BG door co-ordinator	–	931.20.842	931.20.842
1 door co-ordinator cover	–	931.20.859	931.20.850

Accessories

► AH 5.27

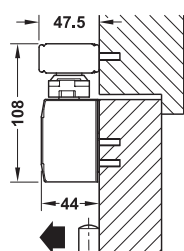
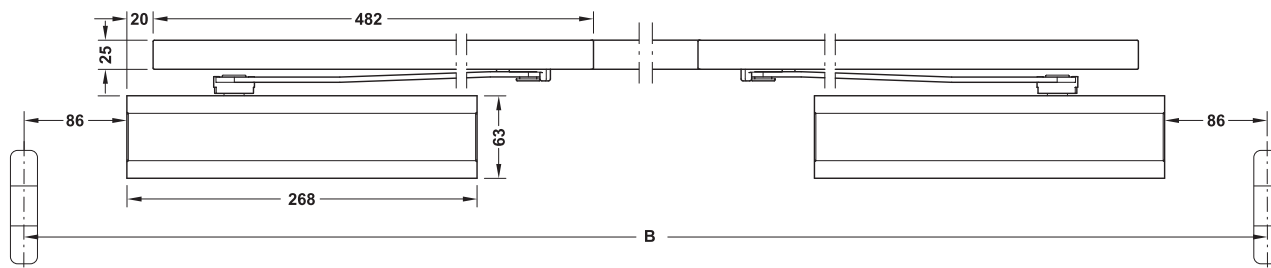
DGH-B-INT 2019, HDE-en, 12/18; Dimensional data not binding. We reserve the right to alter specifications without notice.

DCL 94 SR FE

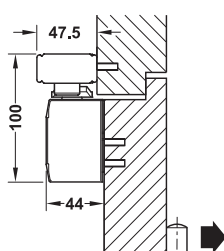
EN 2–5



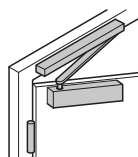
- > Barrier-free in compliance with DIN 18040
- > Meets the requirements of DIN SPEC 1104



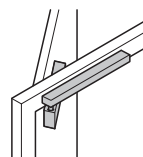
DCL 94



DCL 94 BG



Standard installation
pull side



Standard installation
push side

- > Area of application: For double doors
- > Version: Integrated door co-ordinator (SR) that ensures the correct closing sequence of both doors, with hold-open insert (FE)
- > Adjustment facility: Closing speed, latching action and backcheck continuously adjustable
- > Installation: DCL 94 SR FE standard installation on pull side, DCL 94 BG SR FE standard installation on push side
- > Closing force: 2–5 in compliance with EN 1154
- > For door width: B: 1,430–2,500 mm, B (BG): 1,475–2,500 mm
- > Opening angle: $\leq 180^\circ$
- > Hold-open angle: 80° – 140°
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class:

3	8	2–5	0	1	4
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	Silver colour lacquered	Satin stainless steel
DCL 94 SR FE Set		
1 overhead door closer with guide rails and cover set	931.21.209	931.21.200
2 basic closers	931.20.800	931.20.800
2 DCL 94 cover caps	931.20.819	931.20.810
2 guide rails	931.20.829	931.20.820
2 guide rail covers	931.20.839	931.20.830
1 door co-ordinator	931.20.840	931.20.840
1 door co-ordinator cover	931.20.859	931.20.850
2 hold-open inserts	931.20.873	931.20.873
DCL 94 BG SR FE Set		
1 overhead door closer with guide rails and cover set	931.21.219	931.21.210
2 BG basic closers	931.20.801	931.20.801
2 DCL 94 cover caps	931.20.819	931.20.810
2 guide rails	931.20.829	931.20.820
2 guide rail covers	931.20.839	931.20.830
1 BG door co-ordinator	931.20.842	931.20.842
1 door co-ordinator cover	931.20.859	931.20.850
2 hold-open inserts	931.20.873	931.20.873

Accessories

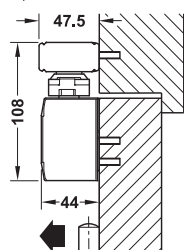
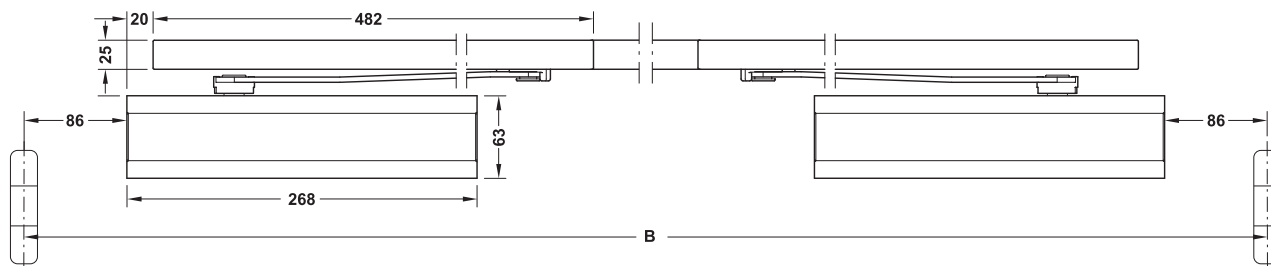
► AH 5.27

DCL 94 SR FE

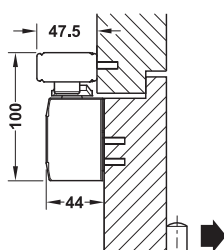
EN 3–6



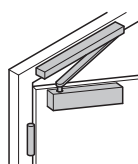
- > Barrier-free in compliance with DIN 18040
- > Meets the requirements of DIN SPEC 1104



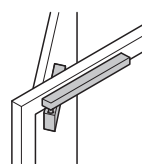
DCL 94



DCL 94 BG



Standard installation
pull side



Standard installation
push side



5

- > Area of application: For double doors
- > Version: Integrated door co-ordinator (SR) that ensures the correct closing sequence of both doors, with hold-open insert (FE)
- > Adjustment facility: Closing speed, latching action and backcheck continuously adjustable
- > Installation: DCL 94 SR FE standard installation on pull side, DCL 94 BG SR FE standard installation on push side
- > Closing force: 3–6 in compliance with EN 1154
- > For door width: B: 1,430–2,800 mm, B (BG): 1,475–2,800 mm
- > Opening angle: ≤180°
- > Hold-open angle: 80°–140°
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class:

3	8	3–6	0	1	4
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	Silver colour lacquered	Satin stainless steel
DCL 94 SR FE Set		
1 overhead door closer with guide rails and cover set	931.21.309	931.21.300
2 basic closers	931.20.802	931.20.802
2 DCL 94 cover caps	931.20.819	931.20.810
2 guide rails	931.20.829	931.20.820
2 guide rail covers	931.20.839	931.20.830
1 door co-ordinator	931.20.840	931.20.840
1 door co-ordinator cover	931.20.859	931.20.850
2 hold-open inserts	931.20.873	931.20.873
DCL 94 BG SR FE Set		
1 overhead door closer with guide rails and cover set	931.21.319	931.21.310
2 BG basic closers	931.20.803	931.20.803
2 DCL 94 cover caps	931.20.819	931.20.810
2 guide rails	931.20.829	931.20.820
2 guide rail covers	931.20.839	931.20.830
1 BG door co-ordinator	931.20.842	931.20.842
1 door co-ordinator cover	931.20.859	931.20.850
2 hold-open inserts	931.20.873	931.20.873

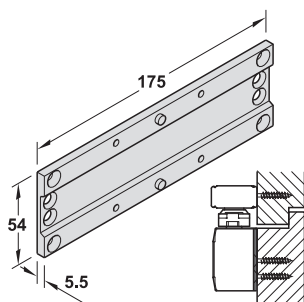
Accessories

► AH 5.27

DGH-B-INT 2019, HDE-en, 12/18; Dimensional data not binding. We reserve the right to alter specifications without notice.

Mounting plate

For DCL 94

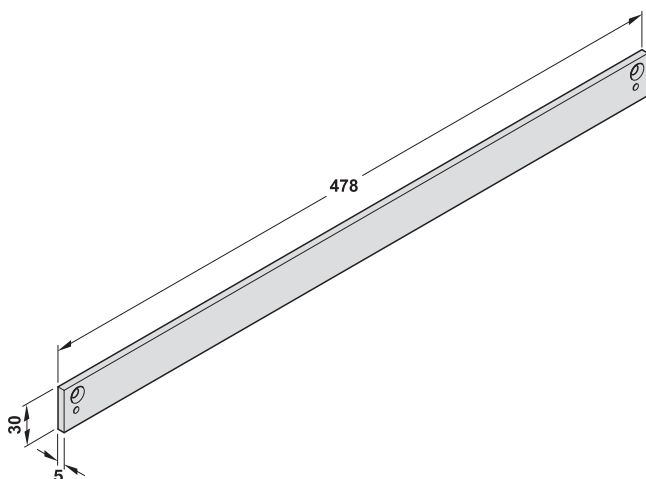


> Area of application: For mounting door closer on doors where direct fixing is not possible

	Silver coloured
Mounting plate	931.20.919

Mounting plate

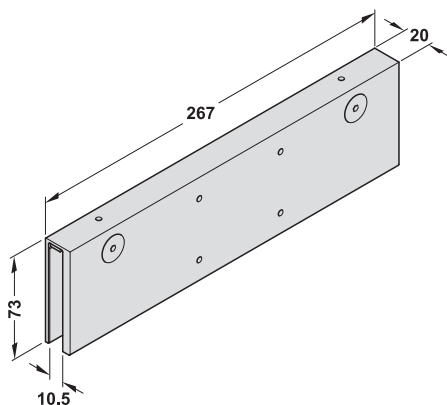
For DCL 94 guide rail



> Area of application: For mounting DCL 94 guide rail

Material	Finish/colour	Cat. No.
Steel	Silver colour lacquered	931.20.910
	Stainless steel colour lacquered	931.20.911

Clamping plate for glass doors

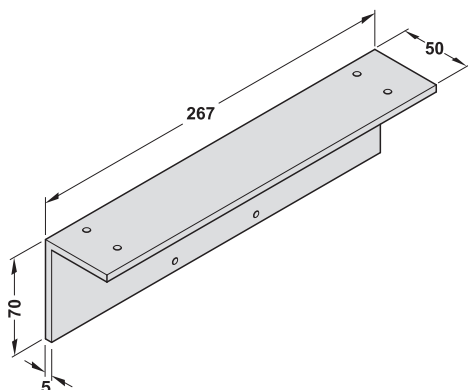


> Area of application: For mounting door closer on glass doors
> For glass thickness: ≤10 mm

Material	Finish/colour	Cat. No.
Steel	Silver colour lacquered	931.20.916
	Stainless steel colour lacquered	931.20.917

Soffit fixing bracket

For Startec DCL 94 closer housing



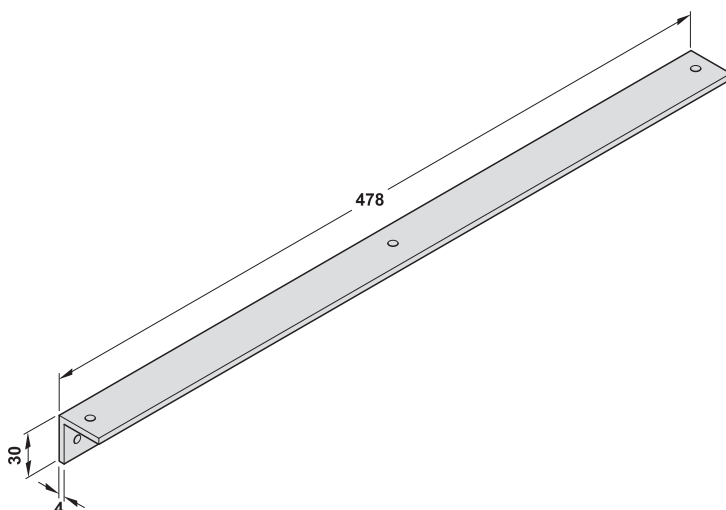
> Area of application: For mounting closer housing on transom on pull side or overhead on push side

Material	Finish/colour	Cat. No.
Steel	Silver colour lacquered	931.20.912
	Stainless steel colour lacquered	931.20.913



Soffit fixing bracket

For Startec DCL 94 guide rail



> Area of application: For mounting guide rail on transom on push side

Material	Finish/colour	Cat. No.
Steel	Silver colour lacquered	931.20.914
	Stainless steel colour lacquered	931.20.915

5

Guide rail cover

For DCL 94

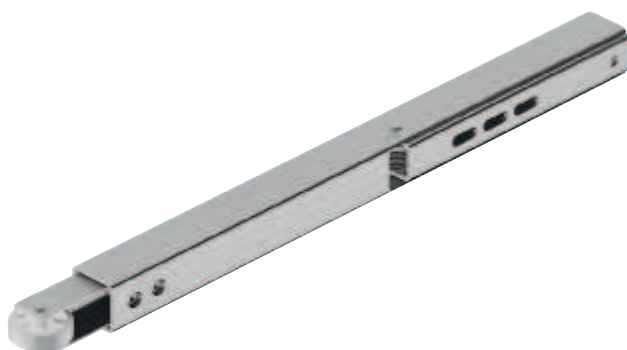


- > Area of application: Cover for DCL 94 guide rail
- > Finish/colour: Silver colour lacquered

	Silver colour
Guide rail cover	931.20.839

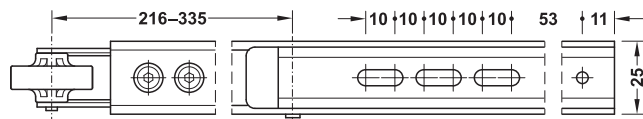
Selector bar

For DCL 94 guide rail



- > Area of application: For double doors
- > Material: Steel
- > Finish/colour: Silver colour lacquered
- > Version: Length adjustable 360–480 mm, for DIN left and right hand use

	Cat. No.
Selector bar	931.20.480



Opening angle restraint

For DCL 94 guide rail

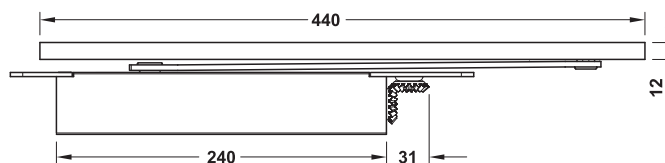


- > Area of application: For retrofitting in DCL 94 guide rail
- > Version: Continuously adjustable opening angle restraint $\leq 120^\circ$
- > Not suitable for use in combination with FE/FEM/FER

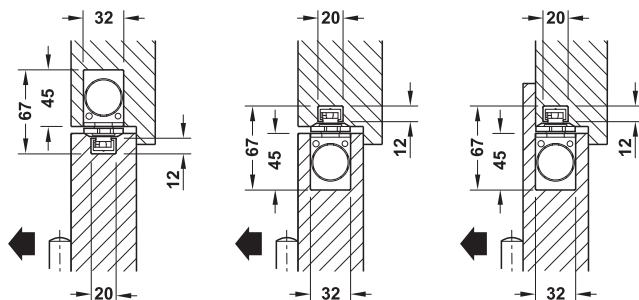
	Cat. No.
Opening angle restraint	931.20.903

DCL 97

EN 3–5



- > Barrier-free in compliance with DIN 18040
- > Meets the requirements of DIN SPEC 1104



Fire resistance and smoke control



Suitable for use on fire resistant and smoke control doors.

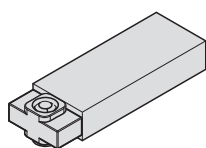
- > Area of application: Door closer and guide rail for concealed installation
- > Adjustment facility: Closing speed, latching action and backcheck continuously adjustable
- > Closing force: 3–5 in compliance with EN 1154
- > Door width: 630–1,250 mm
- > Door thickness: ≥ 40 mm
- > Opening angle: $\leq 120^\circ$
- > Rebate clearance: 286 x 32 x 45 mm
- > Mounting: For DIN left and DIN right hand use
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class:

3	8	3–5	1	1	4
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		Cat. No.
DCL 97 Set		
1 concealed door closer with standard guide rail		931.24.100
1 basic closer	–	931.24.020
1 guide rail	–	931.24.039

Opening angle restraint

For DCL 97



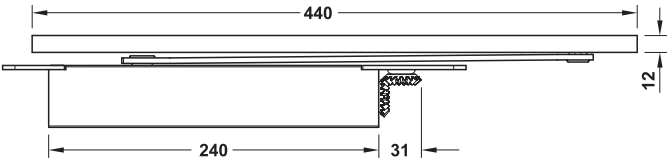
- > Area of application: For retrofitting in DCL 97 guide rail
- > Version: Continuously adjustable opening angle restraint $\leq 120^\circ$

	Cat. No.
Opening angle restraint	931.20.901

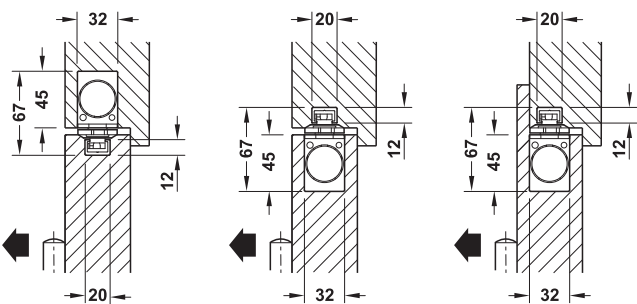
Note

Not suitable for use in combination with hold-open insert.

DCL 97 FE
EN 3–5



- > Barrier-free in compliance with DIN 18040
- > Meets the requirements of DIN SPEC 1104



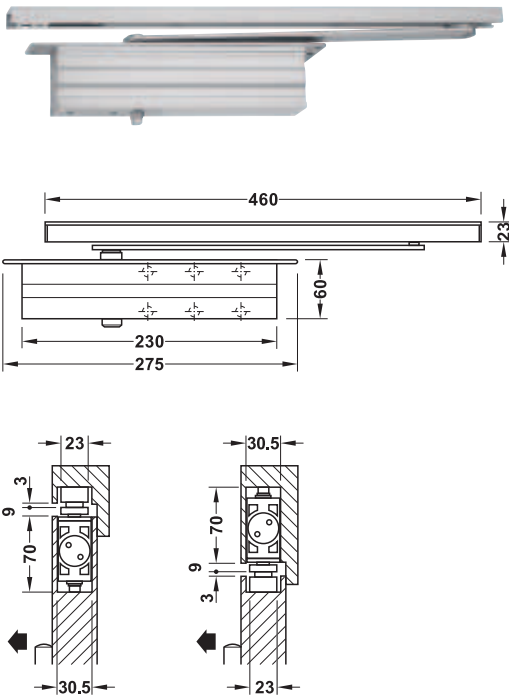
- > Version: With hold-open insert (FE)
- > Area of application: Door closer and guide rail for concealed installation
- > Adjustment facility: Closing speed, latching action and backcheck continuously adjustable
- > Closing force: 3–5 in compliance with EN 1154
- > Door width: 630–1,250 mm
- > Door thickness: ≥40 mm
- > Opening angle: ≤120°
- > Rebate clearance: 286 x 32 x 45 mm
- > Mounting: For DIN left and DIN right hand use
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class:

3	8	3–5	0	1	4
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	Cat. No.
DCL 97 Set with hold-open insert	
1 concealed door closer with guide rail and hold-open insert	931.24.119
1 basic closer	931.24.020
1 guide rail	931.24.039
1 hold-open insert	931.20.900

DCL 31
EN 2–4



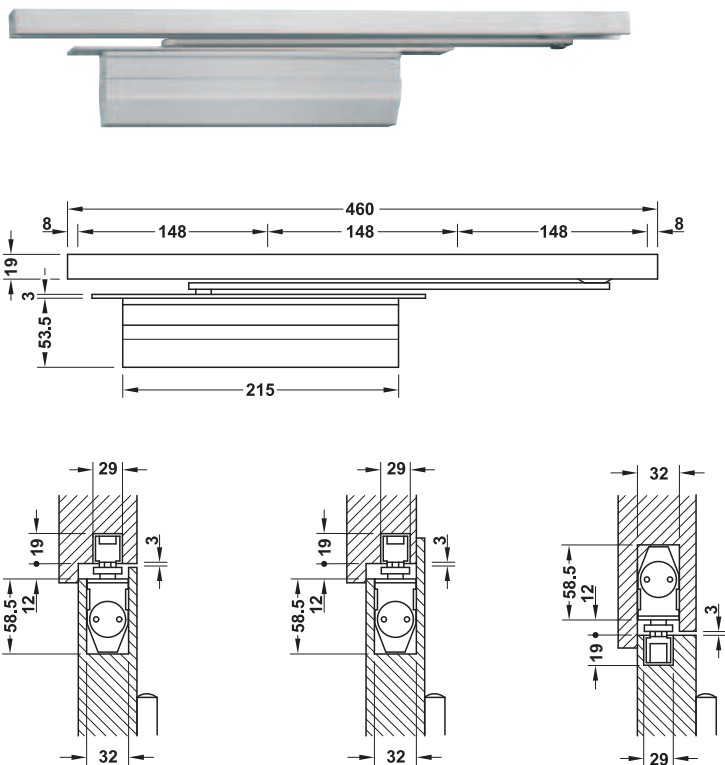
- > Version: With hold-open insert
- > Area of application: Door closer and guide rail for concealed installation
- > Adjustment facility: Closing speed, latching action and backcheck hydraulically adjustable
- > Opening angle: $\leq 120^\circ$
- > Mounting: For DIN left and DIN right hand use
- > Standard: Closing forces in accordance with EN 1154:1996/A1:2002

Technical data			
Closing force	EN 2	EN 3	EN 4
Max. door width	850 mm	950 mm	1100 mm
Max. door weight	45 kg	60 kg	80 kg

Closing force	Cat. No.
DCL 31 Set	
2	931.84.429
3	931.84.419
4	931.84.439

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DCL 34
EN 3



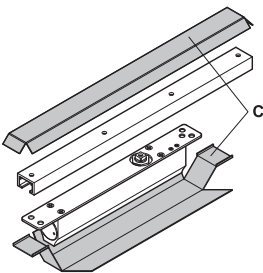
Fire resistance and smoke control

F Tested for fire resistant and smoke control doors.

> Area of application:	Door closer and guide rail for concealed installation
> Adjustment facility:	Closing speed continuously adjustable, latching action continuously adjustable
> Closing force:	3
> Door width:	≤950 mm
> Door weight:	≤60 kg
> For door thickness:	≥40 mm
> Opening angle:	≤120°
> Hold-open angle:	≤115°
> Mounting:	For DIN left and DIN right hand use
> Standard:	Certified in compliance with EN 1154:1996/A1:2002
> Class:	3 8 3 0/1 1 3

		Silver coloured	Gold coloured	Matt black
DCL 34 Set				
1 DCL 34 without hold-open function	F	931.84.049	931.84.048	931.84.043
1 DCL 34 with hold-open function	—	931.84.279	931.84.278	931.84.273

→ Intumescent fire protection kit

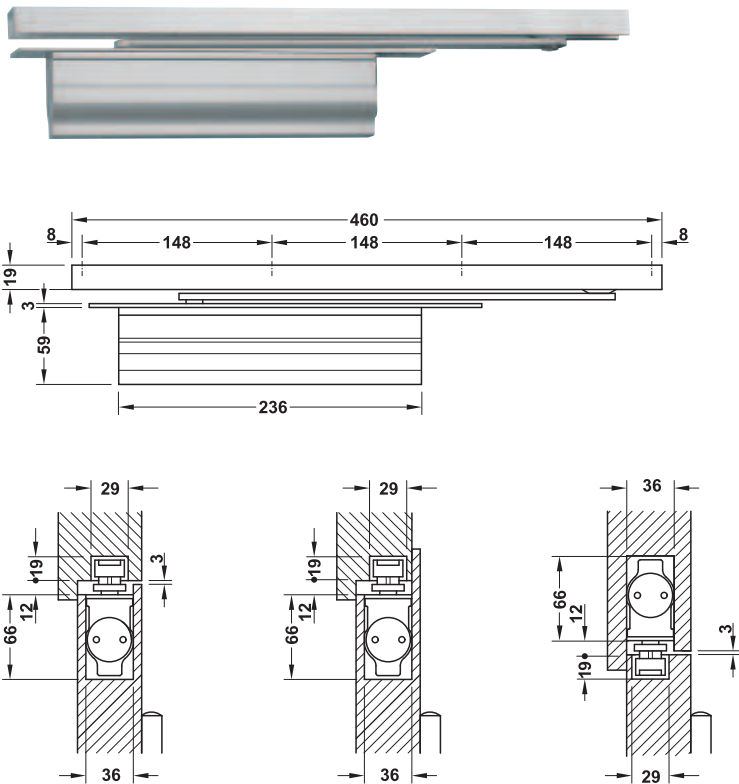


C = intumescent fire protection kit for
DCL concealed door closers

Suitable for	Cat. No.
DCL concealed door closers	950.11.124

Note
Further notes on page 6.34

DCL 32
EN 3



Fire resistance and smoke control

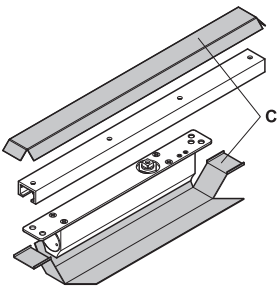
F Tested for fire resistant and smoke control doors.

- > Area of application: Door closer and guide rail for concealed installation
- > Installation: Suitable for standard installation on door or overhead installation on frame
- > Adjustment facility: Closing speed continuously adjustable, latching action continuously adjustable
- > Closing force: 3
- > Door width: ≤950 mm
- > Door weight: ≤60 kg
- > For door thickness: ≥46 mm
- > Opening angle: ≤120°
- > Hold-open angle: ≤115°
- > Mounting: For DIN left and DIN right hand use
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class:

3	8	3	0/1	1	3
---	---	---	-----	---	---

		Silver coloured
DCL 32 Set		
1 DCL 32 without hold-open function	F	931.84.029
1 DCL 32 with hold-open function	—	931.84.259

→ Intumescent fire protection kit

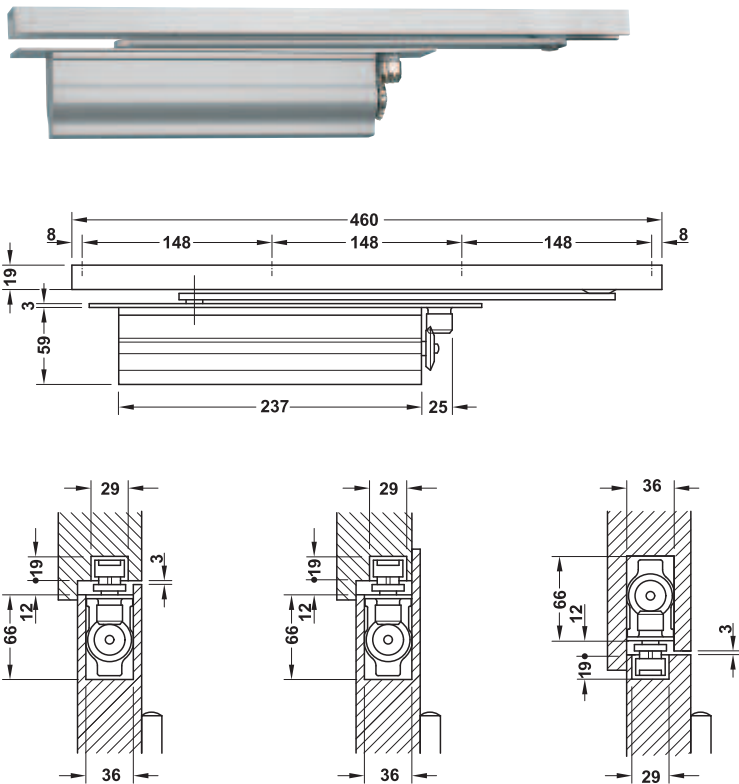


C = intumescent fire protection kit for
DCL concealed door closers

Suitable for	Cat. No.
DCL concealed door closers	950.11.122

Note
Further notes on page 6.34

DCL 33
EN 2-4



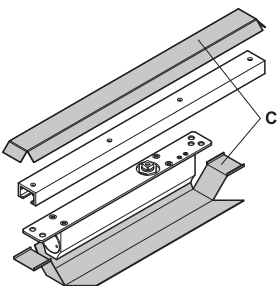
Fire resistance and smoke control

F Tested for fire resistant and smoke control doors.

> Area of application:	Door closer and guide rail for concealed installation						
> Version:	With hold-open function (optional)						
> Adjustment facility:	Closing speed continuously adjustable, latching action continuously adjustable						
> Installation:	Suitable for standard installation on door or overhead installation on frame						
> Closing force:	2-4 in compliance with EN 1154						
> Door width:	≤1,100 mm						
> For door thickness:	≥46 mm						
> Opening angle:	≤115°						
> Hold-open angle:	≤115°						
> Mounting:	For DIN left and DIN right hand use						
> Standard:	Certified in compliance with EN 1154:1996/A1:2002						
> Class:	<table><tr><td>3</td><td>8</td><td>2-4</td><td>0/1</td><td>1</td><td>3</td></tr></table>	3	8	2-4	0/1	1	3
3	8	2-4	0/1	1	3		

		Silver coloured	Gold coloured	Matt black
DCL 33 Set				
1 DCL 33 without hold-open function	F	931.84.039	931.84.035	931.84.033
1 DCL 33 with hold-open function	—	931.84.269	931.84.238	931.84.233

→ **Intumescent fire protection kit**



C = intumescent fire protection kit for
DCL concealed door closers

Suitable for	Cat. No.
DCL concealed door closers	950.11.123

Note
Further notes on page 6.34

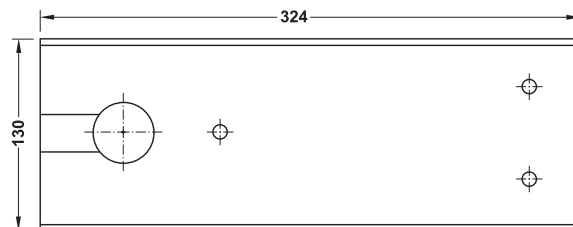
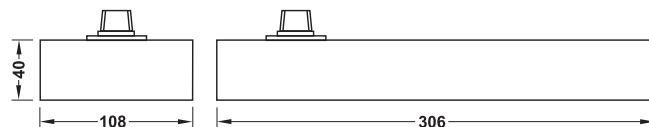
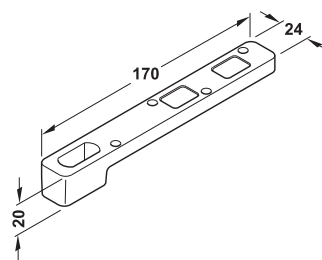
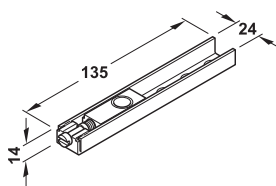
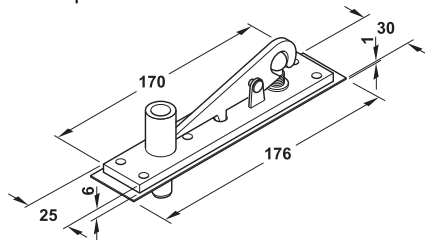


DCL 41, DCL 43

EN 3



With top centre set



5

Fire resistance and smoke control

F Tested for fire resistant and smoke control doors.

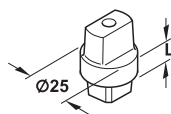
- > Area of application: For double action doors
- > Version: With hold-open function for door opening angle 90° (optional), replaceable pivot, with top centre set
- > Closing force: 3
- > Door weight: ≤105 kg
- > Door width: ≤950 mm
- > Opening angle: ≤130°
- > Material: Cover plate: Stainless steel
- > Finish: Cover plate: Satin finish
- > Mounting: Suitable for DIN left hand and double action doors
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class:

3	8	3	0/1	1	3
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		Cat. No.
DCL 41		
DCL 41 with hold-open function at 90°	—	932.84.030
DCL 43		
DCL 43 without hold-open function	F	932.84.034

Spindle inserts

For DCL 41/43

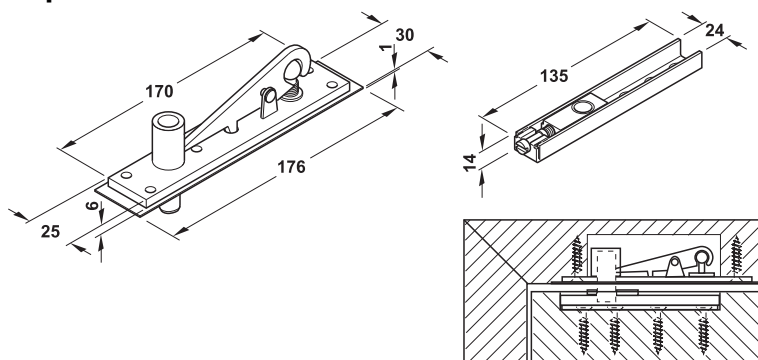


- > Area of application: To increase the floor clearance (i.e. for doors with thresholds or floors fitted with carpets)
- > Version: With radial serrations

Length L mm	Cat. No.
5	932.84.911
10	932.84.912
25	932.84.915

DGH-B-INT 2019, HDE-en, 12/18; Dimensional data not binding. We reserve the right to alter specifications without notice.

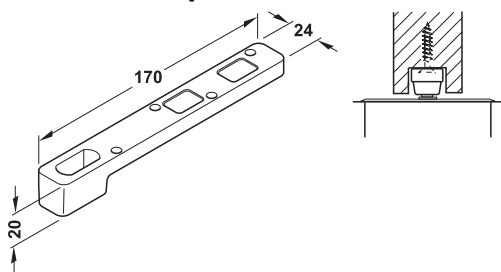
Top centre set



> Material: Stainless steel

	Cat. No.
Top centre set	932.84.901

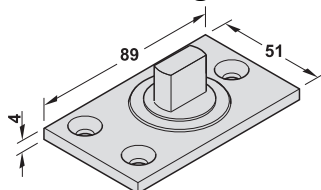
Bottom strap



> Material: Steel
> Finish: Galvanized

	Cat. No.
Bottom strap	932.84.900

Pivot bearing

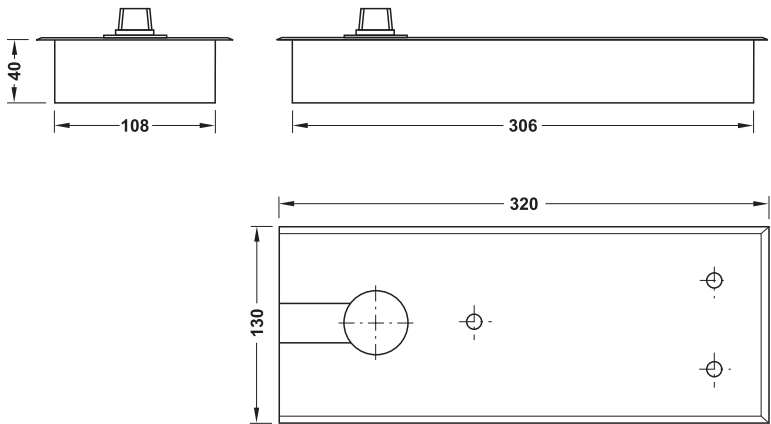


> Material: Stainless steel
> Load bearing capacity: ≤250 kg

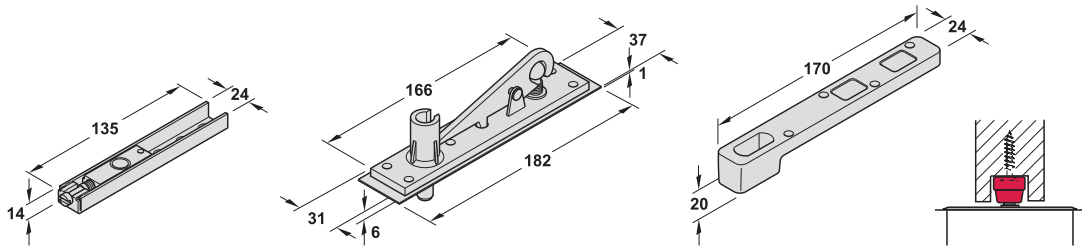
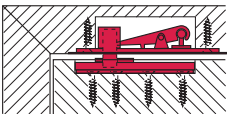
Finish	Cat. No.
Satin finish	981.00.092

Floor spring for double action doors

EN 2, 3, 4



Installation



- > Area of application: For single action and double action doors
- > Adjustment facility: Hydraulic latching action adjustable, closing speed continuously adjustable
- > Version: With hold-open angle 90°
- > Opening angle: ≤130°
- > Material: Cover plate: Stainless steel
- > Mounting: Suitable for DIN left hand, DIN right hand and double action doors
- > Standard: Closing force in compliance with EN 1154
- > Class: 3 8 2/4 0 1 3

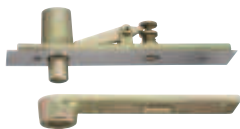
Technical data			
Closing force	EN 2	EN 3	EN 4
Max. door width	850 mm	950 mm	1100 mm
Max. door weight	80 kg	100 kg	120 kg

Supplied with

- 1 floor spring
- 1 cover plate
- 1 top centre set
- 1 door set
- 1 set fixing material

Floor spring for double action doors		Cat. No.
EN 2		932.77.000
EN 3		932.77.010
EN 4		932.77.020

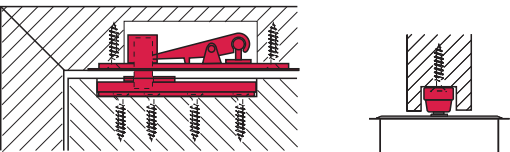
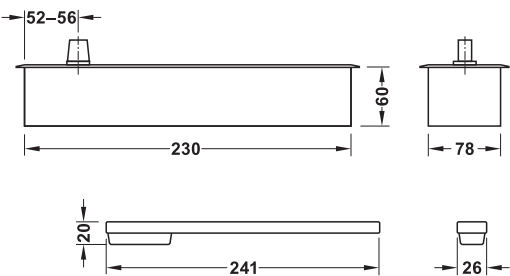
Floor spring for double action doors
EN 5–6



Top centre set



Bottom strap



- | | |
|------------------------|-----------------------------------------------------------------------------|
| > Area of application: | For single action and double action doors |
| > Adjustment facility: | Hydraulic latching action adjustable, closing speed continuously adjustable |
| > Version: | With hold-open angle 90° |
| > Material: | Cover plate: Stainless steel |
| > Mounting: | Suitable for DIN left hand, DIN right hand and double action doors |
| > Standard: | Closing force in compliance with EN 1154 |

5

Technical data	
Closing force	EN 5–6
Max. door width	1400 mm
Max. door weight	300 kg

- Supplied with**
- 1 floor spring
 - 1 cover plate
 - 1 top centre set
 - 1 door set
 - 1 set fixing material

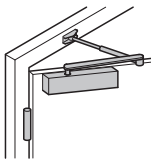
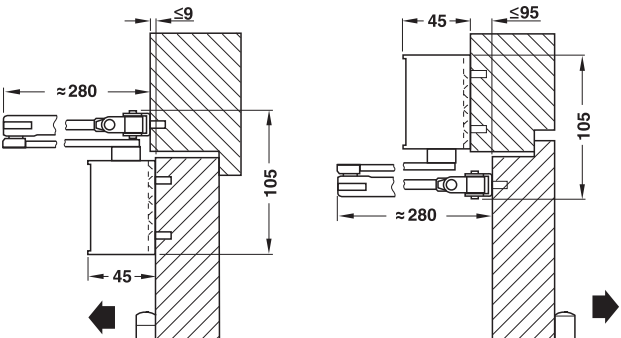
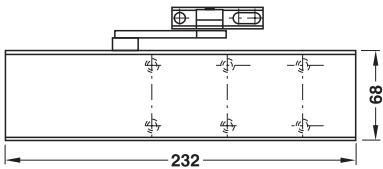
	Cat. No.
Floor spring for double action doors	932.79.170

DGH-B-INT 2019, HDE-en, 12/18; Dimensional data not binding. We reserve the right to alter specifications without notice.

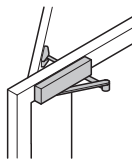
TS 72, TS 72 RF
EN 2–4



TS 72 RF with interlocking hold-open arm



Standard installation
on pull side



Overhead installation
on push side

Fire resistance and smoke control

F Tested for fire resistant and smoke control doors. A final check is mandatory.

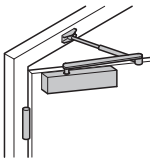
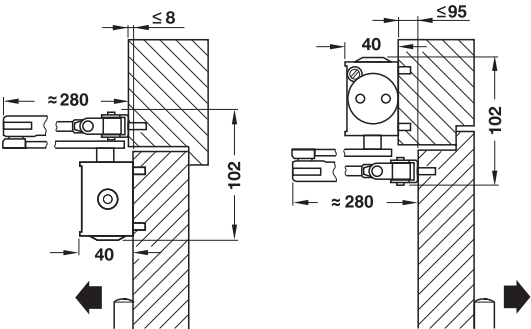
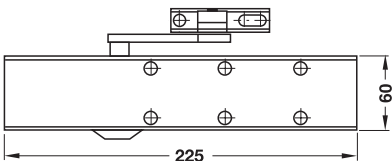
> Version:	With standard arm or interlocking hold-open arm (optional)						
> Installation:	Suitable for standard installation on pull side and overhead installation on push side, suitable for parallel arm installation up to max. door width ≤950 mm						
> Adjustment facility:	Closing force and closing speed continuously adjustable, latching action continuously adjustable via arm assembly						
> Closing force:	2–4 in compliance with EN 1154						
> Opening angle:	≤180°						
> Hold-open angle:	Up to approx. 150°						
> Mounting:	For DIN left and DIN right hand use						
> Standard:	Certified in compliance with EN 1154:1996/A1:2002						
> Class:	<table><tr><td>4</td><td>8</td><td>2–4</td><td>0/1</td><td>1</td><td>2</td></tr></table>	4	8	2–4	0/1	1	2
4	8	2–4	0/1	1	2		

		Silver coloured	White, RAL 9016
TS 72 Set with standard arm			
1 overhead door closer with arm	F	931.07.509	931.07.507
1 basic closer	–	931.07.409	931.07.407
1 standard arm with flat lever	–	931.07.459	931.07.457
TS 72 RF Set with interlocking hold-open arm			
1 overhead door closer with arm	–	931.07.519	931.07.517
1 basic closer	–	931.07.409	931.07.407
1 interlocking hold-open arm	–	931.07.469	931.07.467

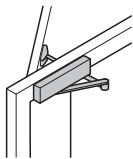
Accessories

► AH 5.42

TS 73 V
EN 2–4



Standard installation
on pull side



Overhead installation
on push side

Fire resistance and smoke control

F Tested for fire resistant and smoke control doors.



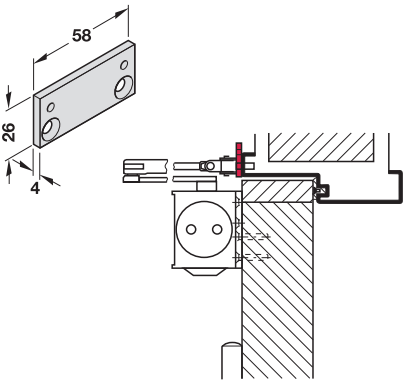
- > Version: With standard arm or flat form arm (optional)
- > Installation: Suitable for standard installation on pull side and overhead installation on push side, suitable for parallel arm installation
- > Adjustment facility: Closing force and closing speed continuously adjustable, adjustable, self-regulating backcheck, latching action continuously adjustable via arm assembly
- > Closing force: 2–4 in compliance with EN 1154
- > Door width: ≤1,100 mm
- > Opening angle: ≤180°
- > Mounting: For DIN left and DIN right hand use
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class:

4	8	2–4	1	1	4
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		Silver coloured	White, RAL 9016
TS 73 V Set with standard arm			
1 overhead door closer with arm	F	931.06.449	931.06.447
1 basic closer	–	931.06.319	931.06.317
1 standard arm with flat lever	–	931.07.459	931.07.457
TS 73 V Set with flat form arm			
1 overhead door closer with arm	F	931.06.459	931.06.457
1 basic closer	–	931.06.319	931.06.317
1 flat form arm	–	931.06.069	931.06.067

Hinge plate

For TS 72, TS 73 V and TS 83

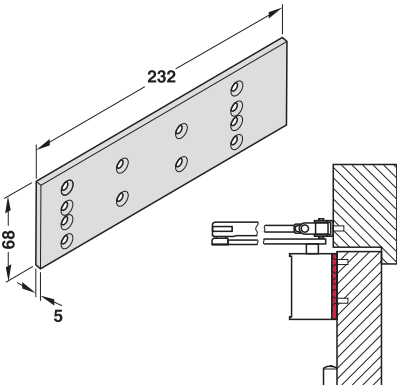


> Area of application: For mounting arm on particularly narrow door frames

	Silver coloured
Hinge plate	931.06.249

Mounting plate

For TS 71 and TS 72



Fire resistance and smoke control

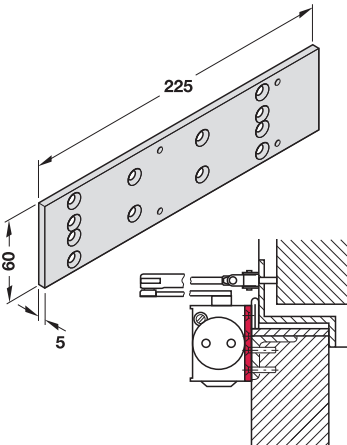
F Certificate of suitability for the fire resistant and smoke control door required.

> Area of application: For mounting door closer where direct fixing on door frame is not possible

	Silver coloured	White, RAL 9016
Mounting plate	931.06.259	931.06.257

Mounting plate

For TS 73 V

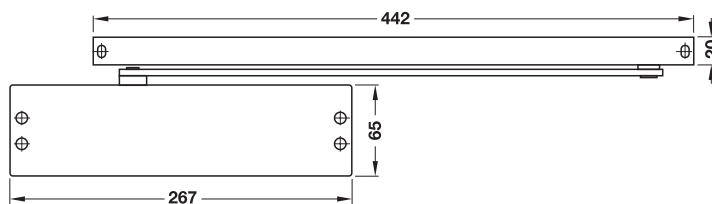


> Area of application: For mounting door closer on fire resistant and smoke control doors, for mounting door closer on doors where direct fixing is not possible

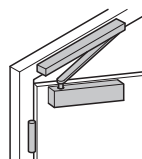
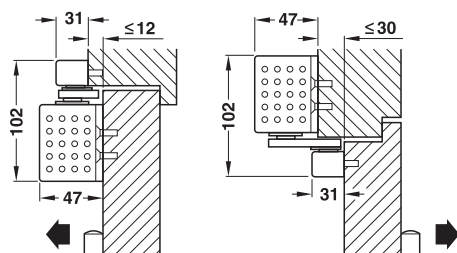
	Silver coloured	White, RAL 9016
Mounting plate	931.06.349	931.06.347

TS 91 Contur design

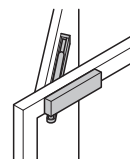
EN 3



> Meets the requirements of DIN SPEC 1104



Standard installation
on pull side



Overhead installation
on push side

Fire resistance and smoke control



The use on fire resistant and smoke control doors is permitted.

- > Version: With interlocking hold-open device that can be disabled (optional)
- > Adjustment facility: Closing speed and latching action continuously adjustable
- > Installation: Suitable for standard installation on pull side and overhead installation on push side
- > Closing force: 3 in compliance with EN 1154
- > Door width: ≤950 mm
- > Opening angle: ≤180°
- > Hold-open angle: 75–150°
- > Mounting: For DIN left and DIN right hand use
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class:

4	8	3	0/1	1	4
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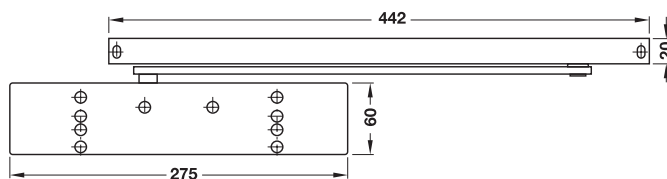
		Silver coloured	White, RAL 9016
TS 91 B Set with Contur design			
1 overhead door closer with guide rail		931.02.009	931.02.007
1 basic closer	–	931.01.309	931.01.307
1 standard rail	–	931.01.509	931.01.507
TS 91 B Set with interlocking hold-open device with Contur design			
1 overhead door closer with guide rail and interlocking hold-open device	–	931.02.019	931.02.017
1 basic closer	–	931.01.309	931.01.307
1 standard rail	–	931.01.509	931.01.507
1 interlocking hold-open device for TS 91, TS 92 and TS 93	–	931.01.590	931.01.590

Accessories

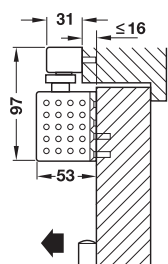
► AH 5.55

TS 93 Contur design

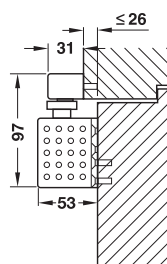
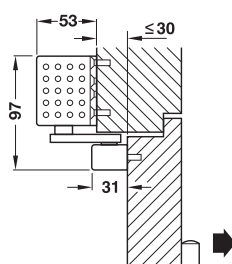
EN 2–5



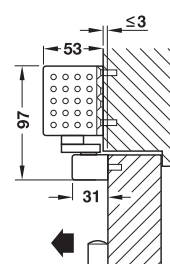
- > Barrier-free in compliance with DIN 18040
- > Meets the requirements of DIN SPEC 1104



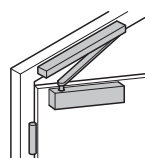
TS 93 B



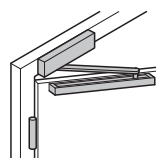
TS 93 G



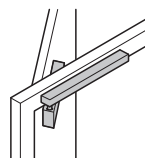
5



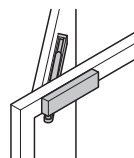
Standard installation
on pull side



Overhead installation
on pull side



Standard installation
on push side





Overhead installation
on push side

Fire resistance and smoke control

- F** Tested for fire resistant and smoke control doors. With transom fixing or when mounting on the push side, a certificate of suitability in combination with the respective fire resistant and smoke control door is required.

- > Version: With interlocking hold-open device that can be disabled (optional), mounting bracket with universal hole system
- > Adjustment facility: Closing force, latching action, delayed closing action, closing speed and backcheck continuously adjustable
- > Installation: TS 93 B standard installation on pull side, overhead installation on push side, TS 93 G standard installation on push side, overhead installation on pull side
- > Closing force: 2–5 in compliance with EN 1154
- > Door width: ≤1,250 mm
- > Opening angle: With standard installation on pull side ≤180°, with overhead installation on pull side ≤145°, with standard installation on push side ≤145°, with overhead installation on push side ≤180°
- > Hold-open angle: Up to approx. 150°
- > Delayed closing action: ≤30 seconds
- > Mounting: For DIN left and DIN right hand use
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class:

4	8	2–5	0/1	1	4
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		Silver coloured	Stainless steel design	Polished brass	White, RAL 9016
TS 93 B Set with Contur design					
1 overhead door closer with guide rail		931.02.069	931.02.060	931.02.068	931.02.067
1 B basic closer, pull side	–	931.01.339	931.01.330	931.01.338	931.01.337
1 standard rail	–	931.01.509	931.01.500	931.01.508	931.01.507
TS 93 G Set with Contur design					
1 overhead door closer with guide rail		931.02.079	931.02.070	931.02.078	931.02.077
1 G basic closer, push side	–	931.01.349	931.01.340	931.01.348	931.01.347
1 standard rail	–	931.01.509	931.01.500	931.01.508	931.01.507
TS 93 B Set with interlocking hold-open device with Contur design					
1 overhead door closer with guide rail and interlocking hold-open device	–	931.02.089	931.02.080	931.02.088	931.02.087
1 B basic closer, pull side	–	931.01.339	931.01.330	931.01.338	931.01.337
1 standard rail	–	931.01.509	931.01.500	931.01.508	931.01.507
1 interlocking hold-open device for TS 91, TS 92 and TS 93	–	931.01.590	931.01.590	931.01.590	931.01.590
TS 93 G Set with interlocking hold-open device with Contur design					
1 overhead door closer with guide rail and interlocking hold-open device	–	931.02.099	931.02.090	931.02.098	931.02.097
1 G basic closer, push side	–	931.01.349	931.01.340	931.01.348	931.01.347
1 standard rail	–	931.01.509	931.01.500	931.01.508	931.01.507
1 interlocking hold-open device for TS 91, TS 92 and TS 93	–	931.01.590	931.01.590	931.01.590	931.01.590

Order reference

Mounting plate for door closer supplied.

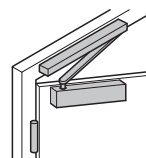
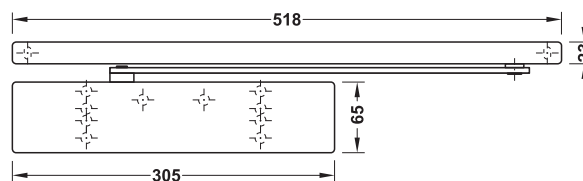
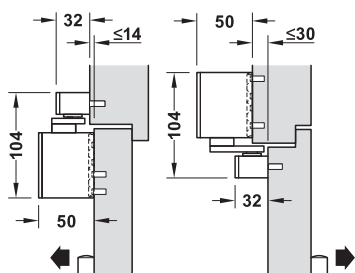


TS 92 XEA

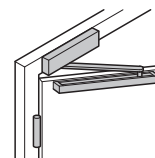
EN 1–4



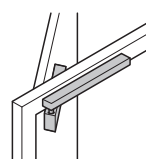
- > Barrier-free in compliance with DIN 18040
- > Meets the requirements of DIN SPEC 1104



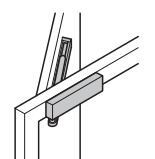
Standard installation
on pull side



Overhead installation
on pull side



Standard installation
on push side



Overhead installation
on push side

Fire resistance and smoke control



The use on fire resistant and smoke control doors is permitted.

- > Version: Mounting bracket with universal hole system
- > Adjustment facility: Closing force and closing speed continuously adjustable
- > Installation: TS 92 XEA B standard installation on pull side, overhead installation on push side, TS 92 XEA G standard installation on push side, overhead installation on pull side
- > Closing force: 1–4 in compliance with EN 1154
- > Door width: ≤1,100 mm
- > Opening angle: Installation on pull side: ≤180°, installation on push side: ≤145°
- > Hold-open angle: 75–150°
- > Mounting: For DIN left and DIN right hand use
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class:

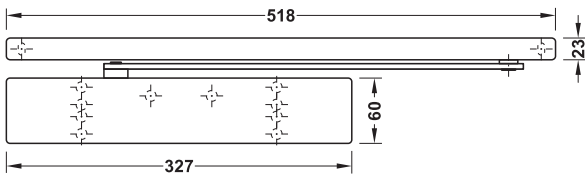
4	8	1–4	1	1	3
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		Silver coloured	White, RAL 9016
TS 92 XEA B Set			
1 overhead door closer with guide rail		931.03.009	931.03.007
1 B basic closer, pull side	–	931.02.669	931.02.667
1 normal arm	–	931.02.529	931.02.527
TS 92 XEA G Set			
1 overhead door closer with guide rail		931.03.019	931.03.017
1 G basic closer, push side	–	931.02.679	931.02.677
1 normal arm	–	931.02.529	931.02.527

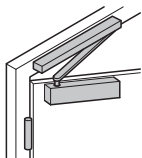
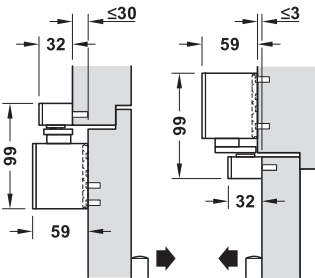
Order reference

Mounting plate for door closer supplied.

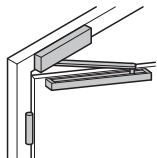
TS 98 XEA
EN 1–6



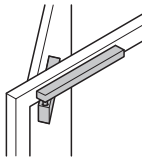
- > Barrier-free in compliance with DIN 18040
- > Meets the requirements of DIN SPEC 1104



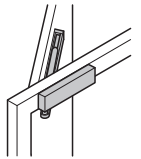
Standard installation
on pull side



Overhead installation
on pull side



Standard installation
on push side



Overhead installation
on push side

Fire resistance and smoke control

F Tested for fire resistant and smoke control doors. With transom fixing or when mounting on the push side, a certificate of suitability in combination with the respective fire resistant and smoke control door is required.

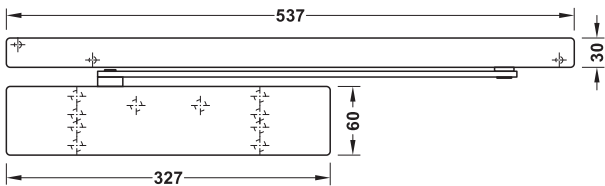
- > Version: Mounting bracket with universal hole system
- > Adjustment facility: Closing force, latching action, delayed closing action, closing speed and backcheck continuously adjustable
- > Installation: Standard installation on pull side, overhead installation on push side, Standard installation on push side, overhead installation on pull side
- > Closing force: 1–6 in compliance with EN 1154
- > Door width: ≤1,400 mm
- > Opening angle: With standard installation on pull side ≤180°, with overhead installation on pull side ≤145°, with standard installation on push side ≤145°, with overhead installation on push side ≤180°
- > Hold-open angle: Up to approx. 150°
- > Delayed closing action: ≤30 seconds
- > Mounting: For DIN left and DIN right hand use
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class: 4 8 1–6 1 1 4

		Silver coloured	Black	Gold coloured	White, RAL 9016
TS 98 XEA Set					
1 overhead door closer with guide rail	F	931.03.029	931.03.023	931.03.028	931.03.027
1 basic closer	–	931.02.519	931.02.513	931.02.518	931.02.517
1 normal arm	–	931.02.529	931.02.523	931.02.528	931.02.527

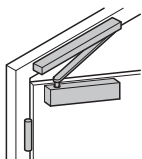
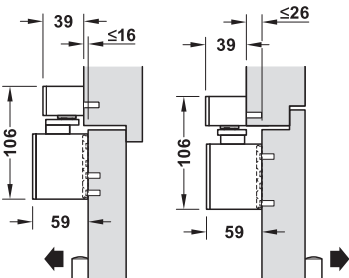
Order reference

Mounting plate for door closer supplied.

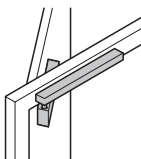
TS 98 XEA EMF
EN 1–6



- > Barrier-free in compliance with DIN 18040
- > Meets the requirements of DIN SPEC 1104



Standard installation
on pull side



Standard installation
on push side

Fire resistance and smoke control

F Tested for fire resistant and smoke control doors. A final check is mandatory.

> Version:	Electromechanical hold-open function (EMF), mounting bracket with universal hole system
> Adjustment facility:	Closing force, latching action, delayed closing action, closing speed and backcheck continuously adjustable
> Installation:	Standard installation on pull side, standard installation on push side
> Closing force:	1–6 in compliance with EN 1154
> Door width:	≤1,400 mm
> Opening angle:	≤140° (a door stop must be installed with 140°)
> Hold-open angle:	80–140°
> Nominal voltage:	24 V DC ±15%
> Power consumption:	1.4 W
> Rated for continuous duty:	100%
> Mounting:	For DIN left and DIN right hand use
> Standard:	Certified in compliance with EN 1154:1996/A1:2002
> Class:	4 8 1–6 1 1 4

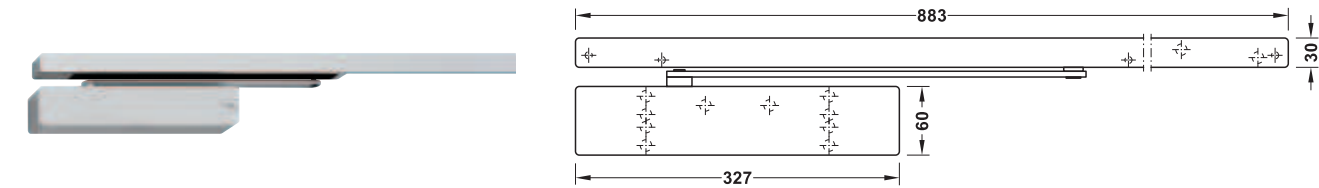
		Silver coloured	White, RAL 9016
TS 98 XEA EMF Set			
1 overhead door closer with guide rail	F	931.03.039	931.03.037
1 basic closer	–	931.02.519	931.02.517
1 EMF guide rail	–	931.02.549	931.02.547

Order reference

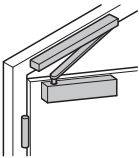
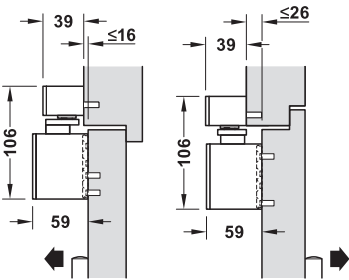
Mounting plate for door closer supplied.

DGH-B-INT 2019, HDE-en, 12/18; Dimensional data not binding. We reserve the right to alter specifications without notice.

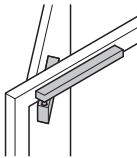
TS 98 XEA EMR
EN 1–6



- > Barrier-free in compliance with DIN 18040
- > Meets the requirements of DIN SPEC 1104



Standard installation
on pull side



Standard installation
on push side

Fire resistance and smoke control

F Tested for fire resistant and smoke control doors. When mounting on the push side, a certificate of suitability in combination with the respective fire resistant and smoke control door is required.

> Version:	Electromechanical hold-open function and integrated smoke alarm (EMR), terminals for further alarms, external manual release and potential-free changer-over contact in comfort version (K), mounting bracket with universal hole system						
> Adjustment facility:	Closing force, latching action, delayed closing action, closing speed and backcheck continuously adjustable						
> Installation:	Standard installation on pull side, standard installation on push side						
> Closing force:	1–6 in compliance with EN 1154						
> Door width:	950–1,400 mm						
> Opening angle:	≤140° (a door stop must always be used with an opening angle of 140°)						
> Hold-open angle:	80–140°						
> Nominal voltage:	24 V DC						
> Power consumption:	9.8 W						
> Rated for continuous duty:	100%						
> Mounting:	For DIN left and DIN right hand use						
> Standard:	Certified in compliance with EN 1154:1996/A1:2002						
> Class:	<table><tr><td>4</td><td>8</td><td>1–6</td><td>1</td><td>1</td><td>4</td></tr></table>	4	8	1–6	1	1	4
4	8	1–6	1	1	4		

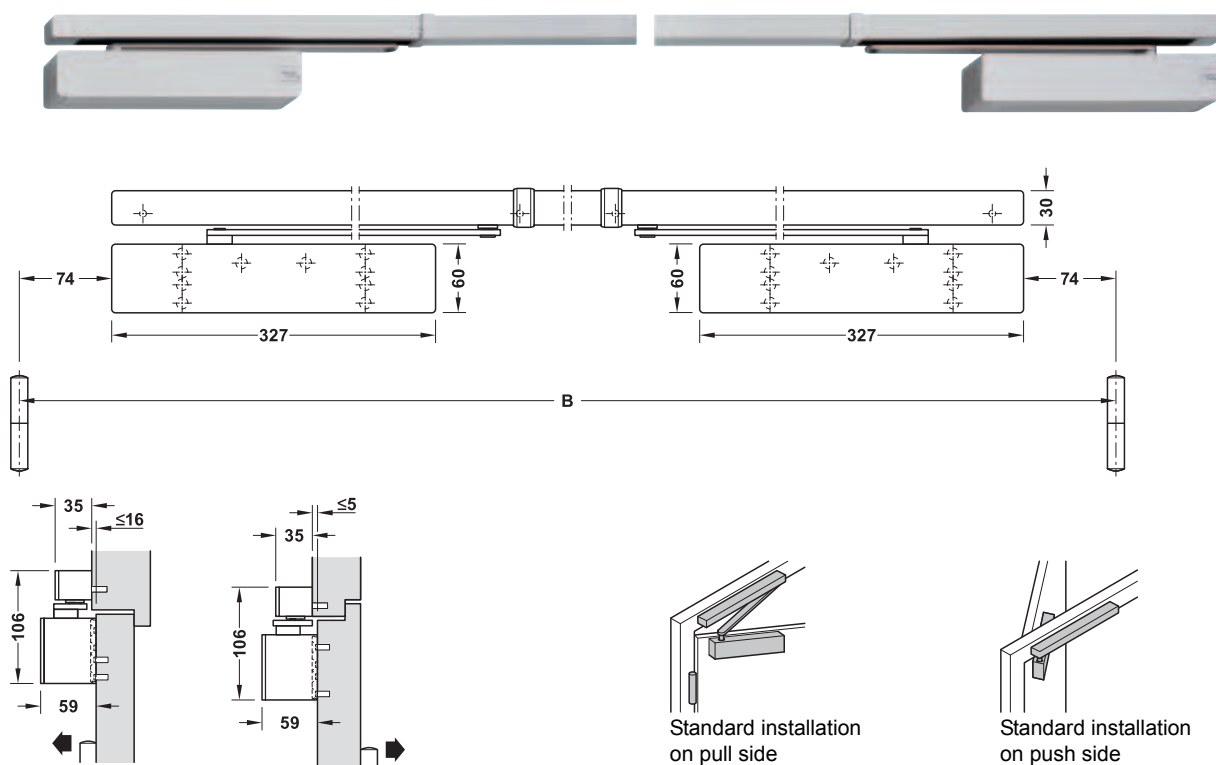
		Silver coloured	White, RAL 9016
TS 98 XEA EMR Set			
1 overhead door closer with guide rail	F	931.03.049	931.03.047
1 basic closer	–	931.02.519	931.02.517
1 EMR guide rail	–	931.02.559	931.02.557

Order reference

Mounting plate for door closer supplied.

TS 98 XEA GSR

EN 1–6



Fire resistance and smoke control

F Tested for fire resistant and smoke control doors. When mounting to the push side, a certificate of suitability in combination with the respective fire resistant and smoke control door is required.

- > Area of application: For double doors
- > Version: Integrated guide rail door co-ordinator (GSR) that ensures the correct closing sequence of both doors, cover set with arms
- > Adjustment facility: Closing force, latching action, delayed closing action, closing speed and backcheck continuously adjustable
- > Installation: Standard installation on pull side, standard installation on push side
- > Closing force: 1–6 in compliance with EN 1154
- > For door width: B: 1,350–2,500 mm, BG: 1,500–2,500 mm
- > Opening angle: Installation on pull side: $\leq 180^\circ$, installation on push side: $\leq 145^\circ$
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class:

4	8	1–6	1	1	4
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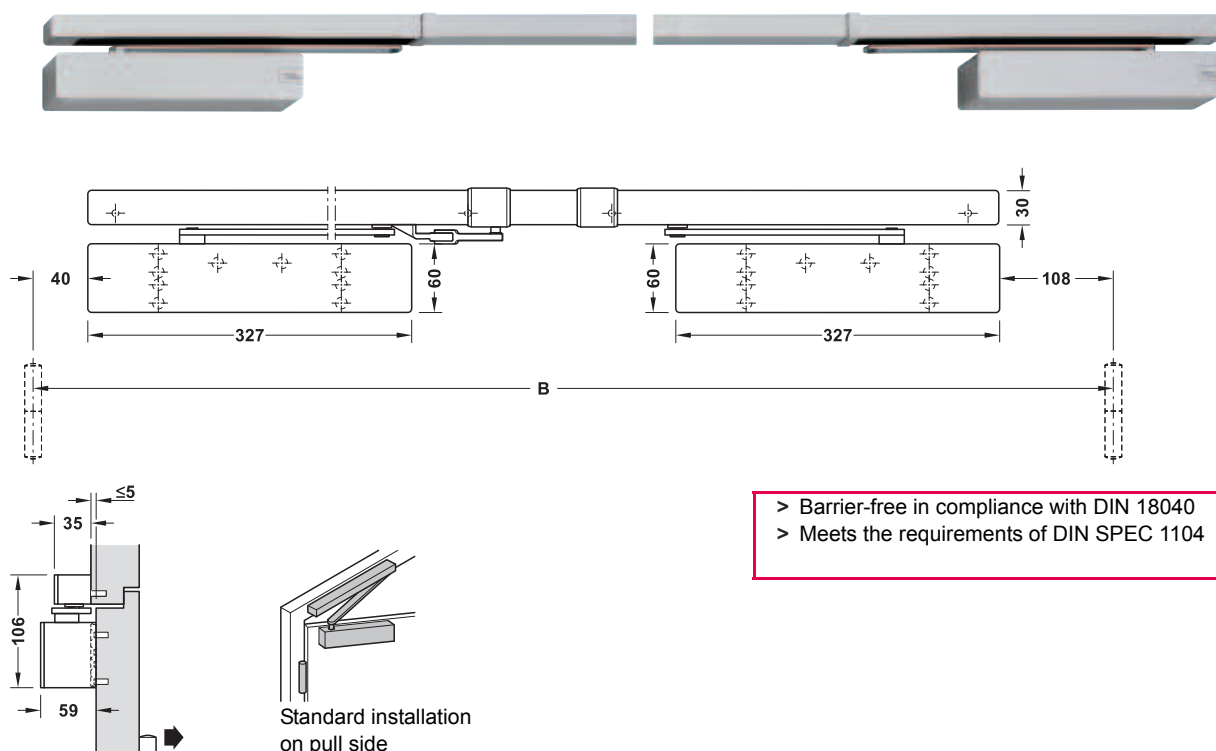
		Silver coloured	Gold coloured	White, RAL 9016
TS 98 XEA GSR Set				
2 overhead door closers with guide rail	F	931.03.059	931.03.058	931.03.057
2 basic closers	–	931.02.519	931.02.518	931.02.517
1 V cover set with guide rails	–	931.02.579	931.02.578	931.02.577
TS 98 XEA GSR/BG Set				
2 overhead door closers with guide rail	F	931.03.109	–	931.03.107
2 basic closers	–	931.02.519	–	931.02.517
1 V cover set with guide rails	–	931.02.639	–	931.02.637

Order reference

Cover set for other door widths on request.
Mounting plate for door closer supplied.

TS 98 XEA GSR-EMF1 and GSR-EMF2

EN 1–6



- > Barrier-free in compliance with DIN 18040
- > Meets the requirements of DIN SPEC 1104



Fire resistance and smoke control

- F** Tested for fire resistant and smoke control doors. When mounting on the push side, a certificate of suitability in combination with the respective fire resistant and smoke control door is required.

- > Area of application: For double doors
- > Version: Integrated guide rail door co-ordinator (GSR) that ensures the correct closing sequence of both doors, cover set with arms, electromechanical hold-open function in inactive leaf (EMF 1) or in both leaves (EMF 2) (optional)
- > Adjustment facility: Closing force, latching action, delayed closing action, closing speed and backcheck continuously adjustable
- > Installation: Suitable for standard installation on pull side
- > Closing force: 1–6 in compliance with EN 1154
- > For door width: B: 1,350–2,500 mm
- > Opening angle: EMF 1: Active leaf $\leq 150^\circ$, inactive leaf $\leq 130^\circ$;
EMF 2: Active leaf and inactive leaf $\leq 130^\circ$ (a door stop must always be used with max. door opening angle)
- > Hold-open angle: EMF 1: Active leaf $\leq 150^\circ$, inactive leaf $80\text{--}130^\circ$;
EMF 2: Active and inactive leaf $80\text{--}130^\circ$
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class:

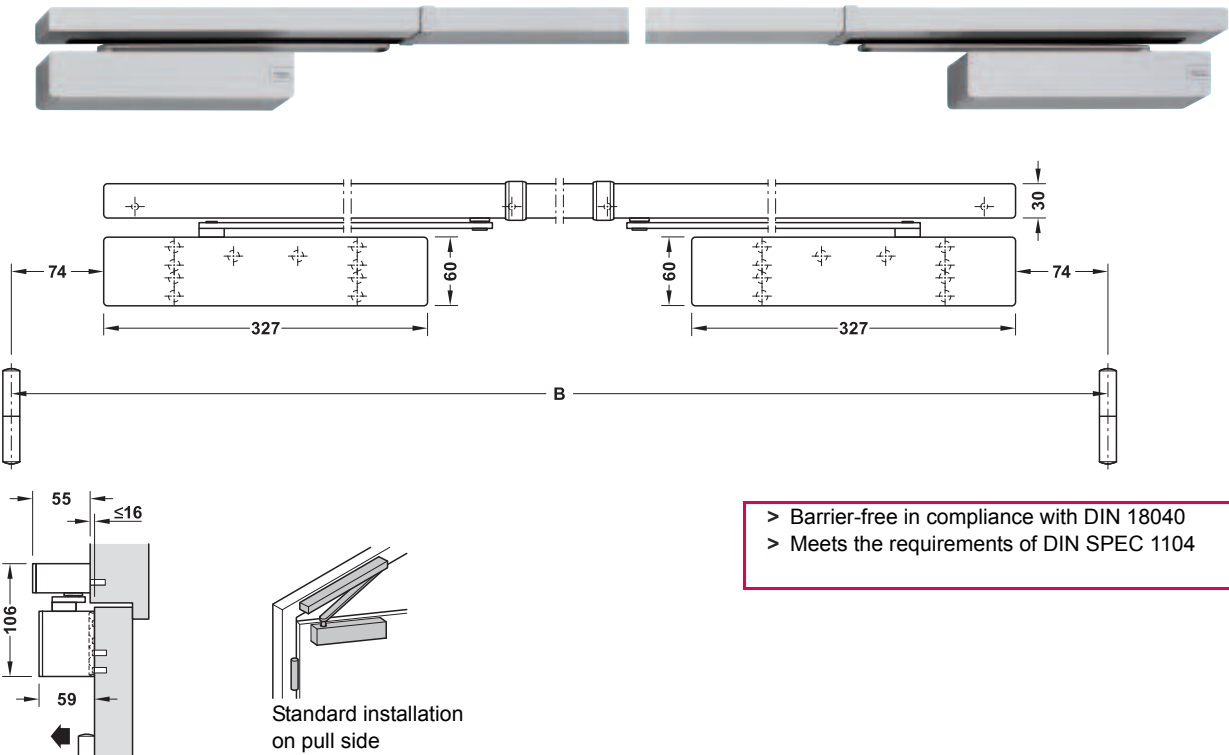
4	8	1–6	1	1	4
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		Silver coloured	White, RAL 9016
TS 98 XEA GSR-EMF1 Set			
2 overhead door closers with guide rail	F	931.03.069	931.03.067
2 basic closers	–	931.02.519	931.02.517
1 V cover set with guide rails	–	931.02.599	931.02.597
TS 98 XEA GSR-EMF2 Set			
2 overhead door closers with guide rail	F	931.03.079	931.03.077
2 basic closers	–	931.02.519	931.02.517
1 V cover set with guide rails	–	931.02.609	931.02.607

Order reference

Cover set for other door widths on request.
Mounting plate for door closer supplied.

TS 98 XEA GSR-EMR1 and GSR-EMR2
EN 1–6



Fire resistance and smoke control

F Tested for fire resistant and smoke control doors. When mounting on the push side, a certificate of suitability in combination with the respective fire resistant and smoke control door is required.

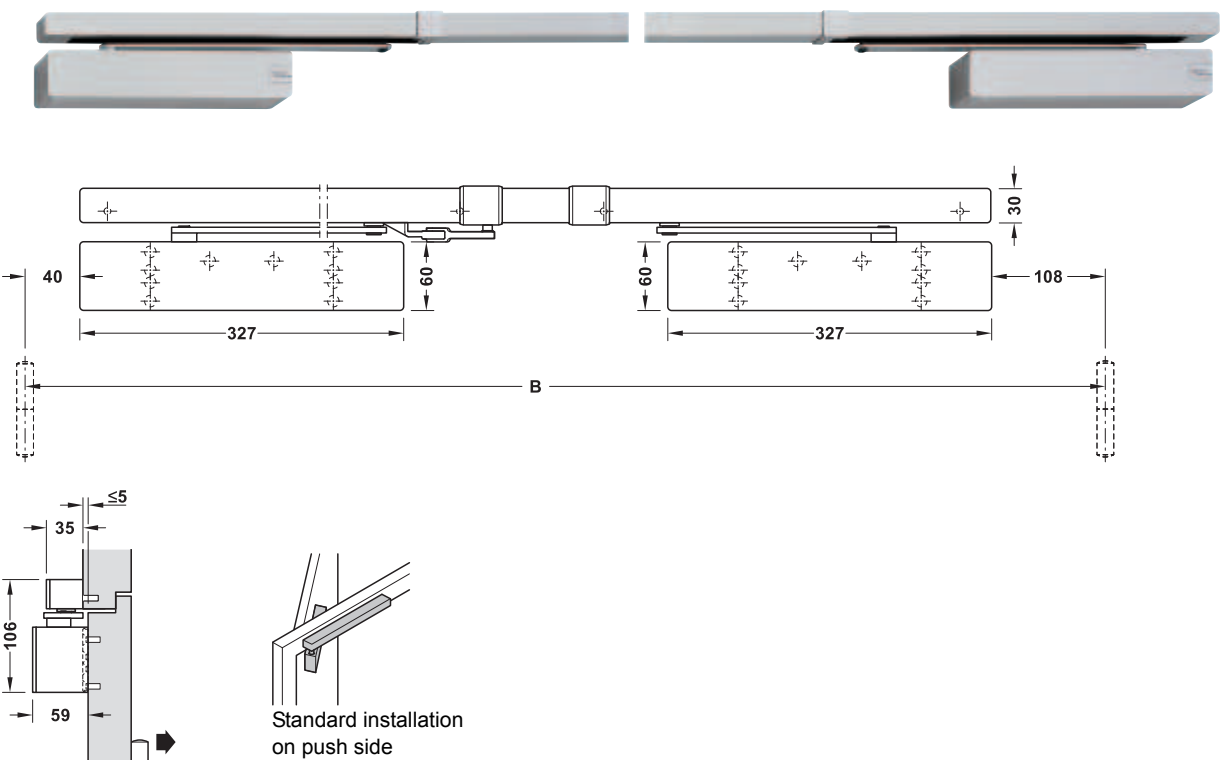
> Area of application:	For double doors						
> Version:	Integrated guide rail door co-ordinator (GSR) that ensures the correct closing sequence of both doors, cover set with arms, electromechanical hold-open function in inactive leaf (EMR 1) or in both leaves (EMR 2) (optional), including central smoke alarm system (RMZ)						
> Adjustment facility:	Closing force, latching action, delayed closing action, closing speed and backcheck continuously adjustable						
> Installation:	Suitable for standard installation on pull side						
> Closing force:	1–6 in compliance with EN 1154						
> For door width:	B: 1,700–2,500 mm						
> Opening angle:	EMR 1: Active leaf ≤150°, inactive leaf ≤130°; EMR 2: Active leaf and inactive leaf ≤130° (a door stop must always be used with max. door opening angle)						
> Hold-open angle:	EMR 1: Active leaf ≤150°, inactive leaf 80–130°; EMR 2: Active and inactive leaf 80–130°						
> Standard:	Certified in compliance with EN 1154:1996/A1:2002						
> Class:	<table><tr><td>4</td><td>8</td><td>1–6</td><td>1</td><td>1</td><td>4</td></tr></table>	4	8	1–6	1	1	4
4	8	1–6	1	1	4		

		Silver coloured	White, RAL 9016
TS 98 XEA GSR-EMR Set			
2 overhead door closers with guide rail	F	931.03.089	931.03.087
2 basic closers	–	931.02.519	931.02.517
1 V cover set with guide rails and integrated central smoke alarm system	–	931.02.619	931.02.617
TS 98 XEA GSR-EMR Set			
2 overhead door closers with guide rail	F	931.03.099	931.03.097
2 basic closers	–	931.02.519	931.02.517
1 V cover set with guide rails and integrated central smoke alarm system	–	931.02.629	931.02.627

Order reference

Cover set for other door widths on request.
Mounting plate for door closer supplied.

TS 98 XEA GSR-EMF2/BG
EN 1–6



Fire resistance and smoke control

F Tested for fire resistant and smoke control doors. A final check is mandatory.

- > Area of application: For double doors
- > Version: Integrated guide rail door co-ordinator (GSR) that ensures the correct closing sequence of both doors, cover set with arms, electromechanical hold-open function in both leaves
- > Adjustment facility: Closing force, latching action, delayed closing action, closing speed and backcheck continuously adjustable
- > Installation: Suitable for standard installation on push side
- > Closing force: 1–6 in compliance with EN 1154
- > For door width: B: 1,350–2,500 mm
- > Opening angle: Active and inactive leaf $\leq 120^\circ$ (a door stop must always be used with the max. door opening angle)
- > Hold-open angle: Active and inactive leaf 80° – 120°
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class:

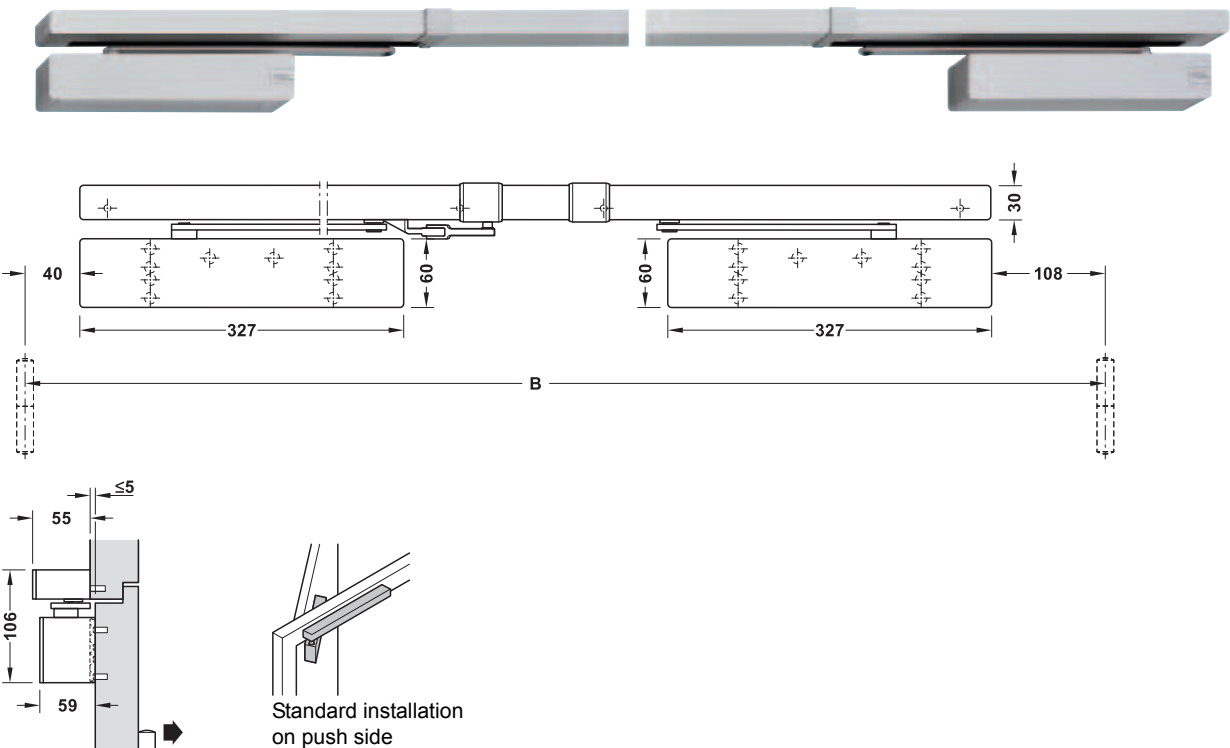
4	8	1–6	1	1	4
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		Silver coloured	White, RAL 9016
TS 98 XEA GSR-EMF2/BG Set			
2 overhead door closers with guide rail	F	931.03.119	931.03.117
2 basic closers	–	931.02.519	931.02.517
1 V cover set with guide rails	–	931.02.649	931.02.647

Order reference

Mounting plate for door closer supplied.

TS 98 XEA GSR-EMR2/BG
EN 1–6



Fire resistance and smoke control

F Tested for fire resistant and smoke control doors. A final check is mandatory.

- > Area of application: For double doors
- > Version: Integrated guide rail door co-ordinator (GSR) that ensures the correct closing sequence of both doors, cover set with arms, electromechanical hold-open function in both leaves, including central smoke alarm system (RMZ)
- > Adjustment facility: Closing force, latching action, delayed closing action, closing speed and backcheck continuously adjustable
- > Installation: Suitable for standard installation on push side
- > Closing force: 1–6 in compliance with EN 1154
- > For door width: B: 1,800–2,500 mm
- > Opening angle: Active and inactive leaf $\leq 130^\circ$ (a door stop must always be used with the max. door opening angle)
- > Hold-open angle: Active and inactive leaf 80° – 130°
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class:

4	8	1–6	1	1	4
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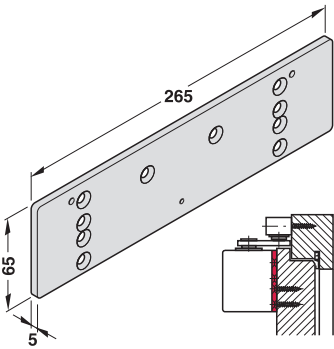
		Silver coloured	White, RAL 9016
TS 98 XEA GSR-EMR2/BG Set			
2 overhead door closers with guide rail	F	931.03.129	931.03.127
2 basic closers	–	931.02.519	931.02.517
1 V cover set with guide rails and integrated central smoke alarm system	–	931.02.569	931.02.567

Order reference

Mounting plate for door closer supplied.

Mounting plate

For TS 91 guide rail

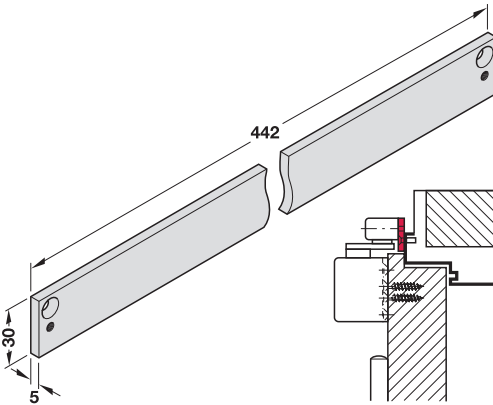


> Area of application: For mounting door closer on doors where direct fixing is not possible

	Silver coloured
Mounting plate	931.00.969

Mounting plate

For TS 91, TS 92 and TS 93 guide rail

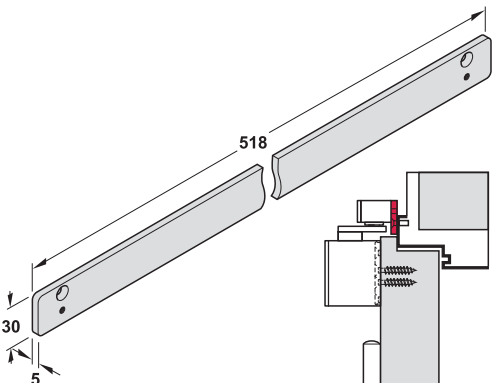


> Area of application: For mounting door closer on doors where direct fixing is not possible

	Silver coloured	White, RAL 9016
Mounting plate	931.00.709	931.00.707

Mounting plate

For TS 92 XEA and TS 98 XEA guide rail



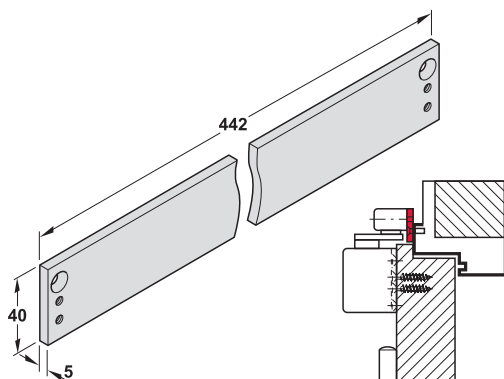
> Area of application: For mounting door closer on doors where direct fixing is not possible

	Silver coloured	White, RAL 9016
Mounting plate	931.02.689	931.02.687

DGH-B-INT 2019, HDE-en, 12/18; Dimensional data not binding. We reserve the right to alter specifications without notice.

Mounting plate

For TS 91, TS 92 and TS 93 guide rail

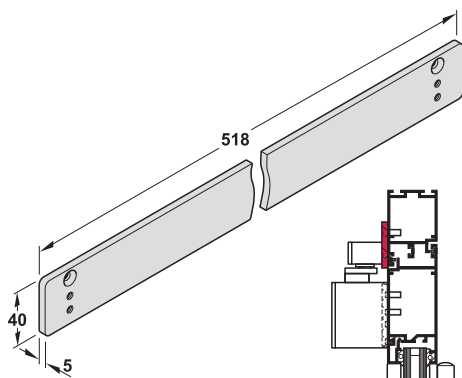


> Area of application: For mounting door closer on doors where direct fixing is not possible

	Silver coloured	White, RAL 9016
Mounting plate	931.00.719	931.00.717

Mounting plate

For TS 92 XEA and TS 98 XEA guide rail

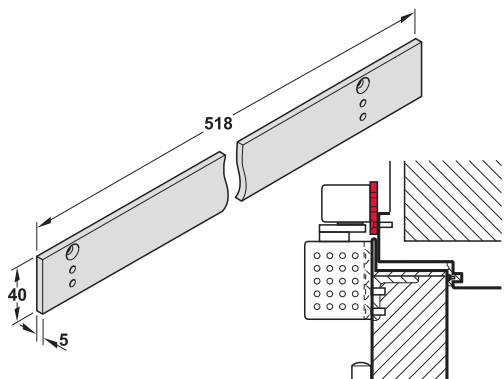


> Area of application: For mounting door closer on doors where direct fixing is not possible

	Silver coloured	White, RAL 9016
Mounting plate	931.09.329	931.09.327

Mounting plate

For TS 93 EMF guide rail

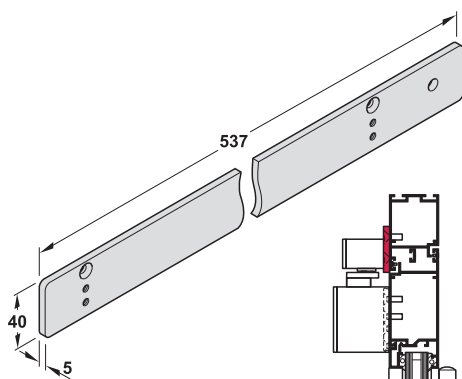


> Area of application: Mounting plate for EMF guide rail

	Silver coloured	White, RAL 9016
Mounting plate	931.01.569	931.01.567

Mounting plate

For TS 98 XEA EMF guide rail

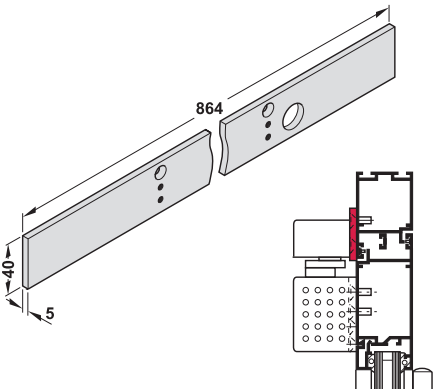


> Area of application: Mounting plate for EMF guide rail

	Silver coloured	White, RAL 9016
Mounting plate	931.09.339	931.09.337

Mounting plate

For TS 93 EMR and TS 99 FLR-K guide rail

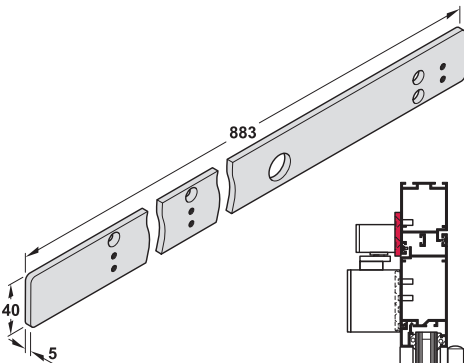


> Area of application: Mounting plate for EMR guide rail

	Silver coloured	White, RAL 9016
Mounting plate	931.01.579	931.01.577

Mounting plate

For TS 98 XEA EMR guide rail

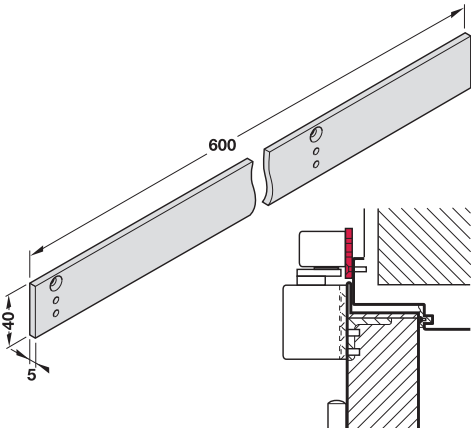


> Area of application: For mounting door closer on doors where direct fixing is not possible

	Silver coloured	White, RAL 9016
Mounting plate	931.09.349	931.09.347

Mounting plate

For G93-SR guide rail from TS 93

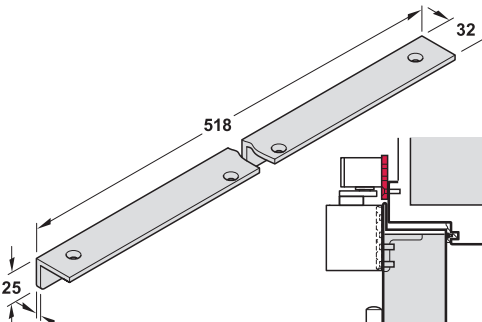


> Area of application: For mounting G93-SR guide rails on door frames where direct fixing is not possible

	Silver coloured	White, RAL 9016
Mounting plate	931.01.809	931.01.807

Mounting plate

For TS 98 XEA GSR guide rail

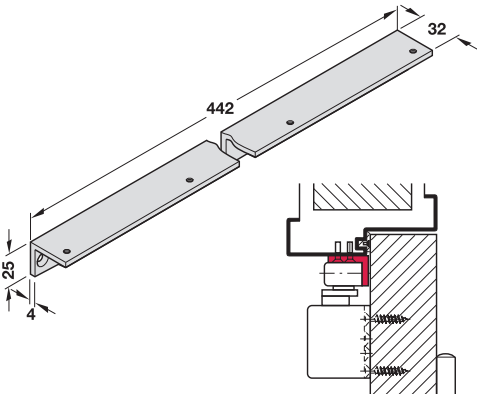


> Area of application: For mounting door closer on doors where direct fixing is not possible

	Silver coloured	White, RAL 9016
Mounting plate	931.09.369	931.09.367

Soffit fixing bracket

For TS 91, TS 92 and TS 93 guide rail

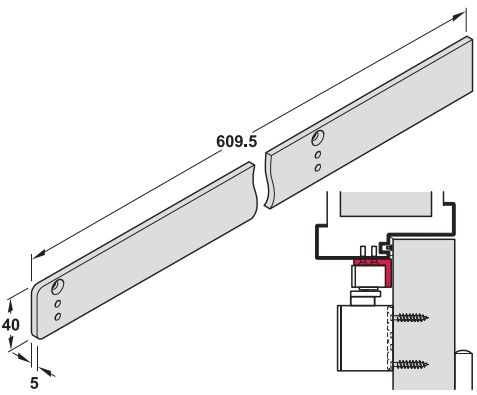


> Area of application: For mounting 91 N, 92 N and 93 N guide rail on door frames with deep soffit when mounting on push side

	Silver coloured	White, RAL 9016
Soffit fixing bracket	931.00.739	931.00.737

Soffit fixing bracket

For TS 92 XEA and TS 98 XEA guide rail



> Area of application: For mounting 92 N XEA and 98 N XEA guide rail on door frames with deep soffit when mounting on push side

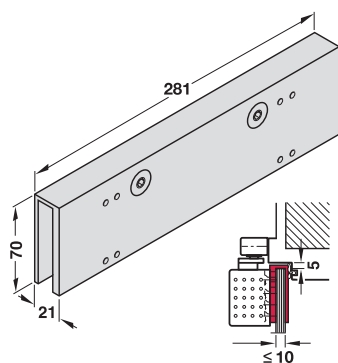
	Silver coloured	White, RAL 9016
Mounting plate	931.09.359	931.09.357

5

DGH-B-INT 2019, HDE-en, 12/18; Dimensional data not binding. We reserve the right to alter specifications without notice.

Glass door shoe

For TS 92

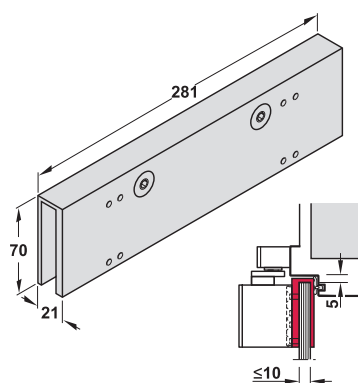


- > Area of application: For mounting door closer on glass doors
- > For glass door thickness: 8–10 mm

	Silver coloured	Stainless steel design	White, RAL 9016
Glass door shoe	931.00.899	931.00.890	931.00.897

Glass door shoe

For TS 92 XEA

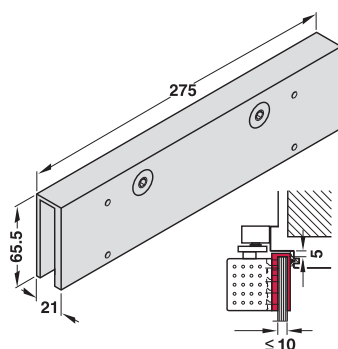


- > Area of application: For mounting door closer on glass doors
- > For glass door thickness: 8–10 mm

	Silver coloured	White, RAL 9016
Glass door shoe	931.09.379	931.09.377

Glass door shoe

For TS 93

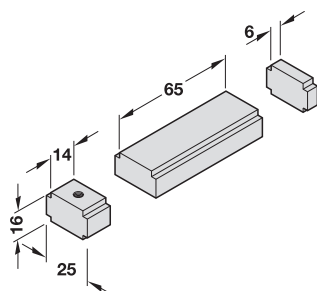


- > Area of application: For mounting door closer on glass doors
- > For glass door thickness: 8–10 mm

	Silver coloured
Glass door shoe	931.00.879

Opening angle restraint

For TS 91, TS 92, TS 93, TS 92 XEA, TS 98 XEA and TS 93 GSR guide rail



- > Area of application: For retrofitting in G 91 N, G 92 N, G 93 N, G 92 N XEA and G 98 N XEA guide rails or for TS 93 GSR door co-ordinator
- > Version: Opening angle approx. 80°–120°

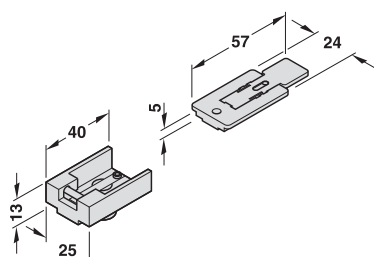
	Cat. No.
Opening angle restraint for TS 91, TS 92, TS 93, TS 92 XEA and TS 98 XEA	931.00.791
Opening angle restraint for TS 93 GSR	931.00.792

Order reference

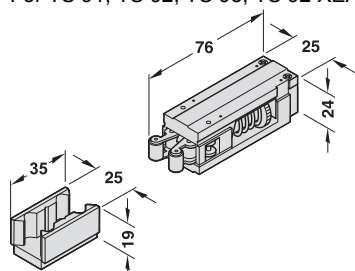
The opening angle restraint is no overload protection and does not replace the door stop.

Interlocking hold-open device

For TS 91, TS 92, TS 93, TS 92 XEA, TS 98 XEA, TS 93 GSR and TS 98 XEA GSR guide rail



For TS 91, TS 92, TS 93, TS 92 XEA and TS 98 XEA



For TS 93 GSR and TS 98 XEA GSR

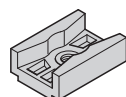
- > Area of application: For retrofitting in guide rails G 91 N, G 92 N, G 93 N, G 92 N XEA and G 98 N XEA or with door co-ordinator TS 93 GSR and TS 98 XEA GSR, allows doors to be held open without any spring-back resilience
- > Version: Releasing force adjustable, can be disabled
- > Hold-open angle: Approx. 75–150°

	Cat. No.
Interlocking hold-open device for TS 91, TS 92, TS 93, TS 92 XEA and TS 98 XEA	931.01.590
Interlocking hold-open device for TS 93 GSR and TS 98 XEA GSR	931.00.143



Glide plate

For TS 91, TS 92 and TS 93

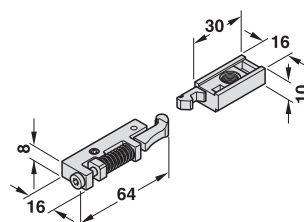


- > Area of application: For connecting the swing arm with the guide rail
- > Installation: For inserting into guide rail

	Cat. No.
Glide plate	931.01.900

Interlocking hold-open device

For TS 97 guide rail

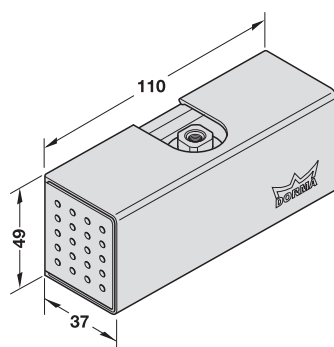


- > Area of application: Allows doors to be held open without any spring-back resilience
- > Version: Releasing force adjustable
- > Hold-open angle: ≤120°

	Cat. No.
Interlocking hold-open device	931.00.796

GSR Pivot bearing with Contur design

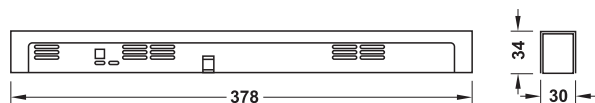
For TS 93



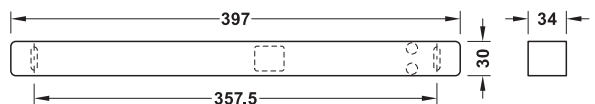
- > Area of application: Pivot bearing for G 93 GSR guide rail, for mounting G 93 GSR guide rail with door co-ordinator independently from basic closers

	Silver coloured	White, RAL 9016
Pivot bearing	931.01.589	931.01.587

Central smoke alarm system



RMZ central smoke alarm system

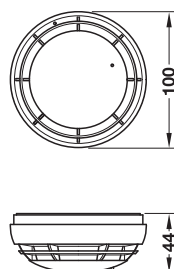


RMZ XEA central smoke alarm system

- > Area of application: Controls all connected hold-open devices without using power in case of an alarm or power cut
- > Version: Central smoke alarm system with integrated power supply unit and optical smoke alarm, RM-N smoke alarm and other smoke alarms can be connected, potential-free change-over contact and terminal clamps for external manual release devices, for connecting hold-open devices with 24 V DC
- > Input voltage: 230 V AC, 50 Hz
- > Nominal voltage: 24 V DC
- > Wattage: ≤4.4 W
- > Degree of protection: IP20
- > Operating temperature range: -15° to +60 °C

	Silver coloured	Stainless steel design	Polished brass	White, RAL 9016
RMZ central smoke alarm system	931.09.009	931.09.000	931.09.008	931.09.007
RMZ XEA central smoke alarm system	931.02.699	—	—	931.02.697

RM-N Smoke alarm

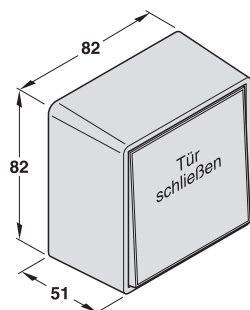


- > Area of application: Smoke switch, for connection as second or third alarm, for RMZ central smoke alarm system with Contur design
- > Installation: For ceiling installation
- > Nominal voltage: 24 V DC
- > Current consumption: 22.5 mA
- > Degree of protection: IP20
- > Operating temperature range: -20° to +50 °C

	Cat. No.
RM-N smoke alarm	931.09.058

Packing: 2 pieces

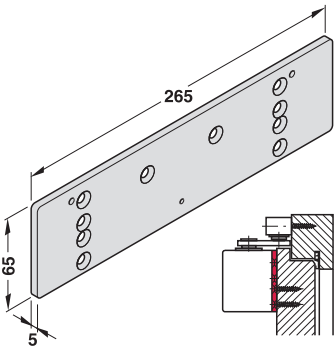
Manual switch UP/AP



- > Area of application: For releasing electromagnetic hold-open devices
- > Finish: White, button red
- > Installation: For surface mounting or flush mounting (optional)

	Cat. No.
Flush mounted manual switch	931.09.300
Surface mounted manual switch	931.09.310

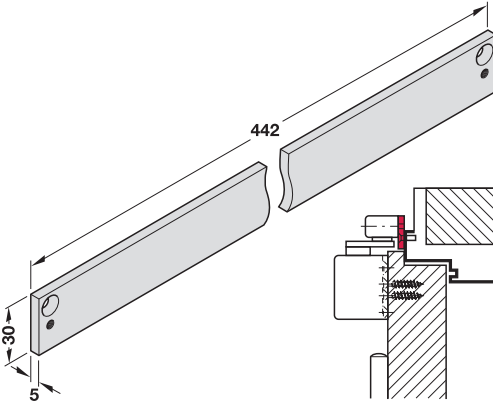
Mounting plate
For TS 91



> Area of application: For mounting door closer on doors where direct fixing is not possible

	Silver coloured
Mounting plate	931.00.969

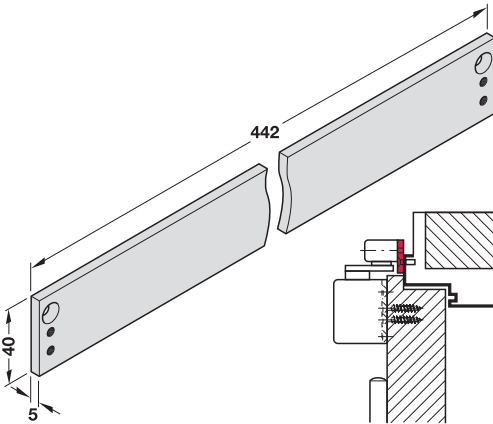
Mounting plate
For TS 91, TS 92 and TS 93 guide rail and corresponding model from Contur series



> Area of application: Mounting plate for TS 91, 92, 93 guide rail

	Silver coloured	White, RAL 9016
Mounting plate	931.00.709	931.00.707

Mounting plate
For TS 91, TS 92 and TS 93 guide rail and corresponding model from Contur series



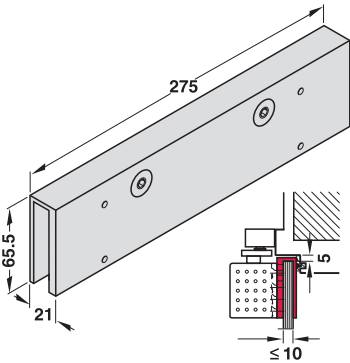
> Area of application: Mounting plate for TS 91, 92, 93 guide rail

	Silver coloured	White, RAL 9016
Mounting plate	931.00.719	931.00.717

DGH-B-INT 2019, HDE-en, 12/18; Dimensional data not binding. We reserve the right to alter specifications without notice.

Glass door shoe

For TS 93

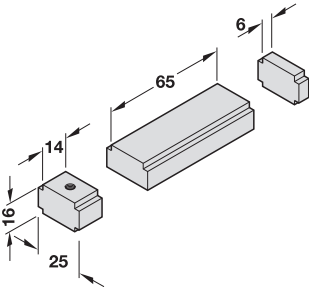


- > Area of application: For mounting door closer on glass doors
- > For glass door thickness: 8–10 mm

	Silver coloured
Glass door shoe	931.00.879

Opening angle restraint

For TS 91, TS 92 and TS 93 GSR guide rail



- > Area of application: For retrofitting in G 91 N, G 92 N, G 93 N guide rails or with door co-ordinator TS 93 GSR
- > Version: Opening angle approx. 80°–120°

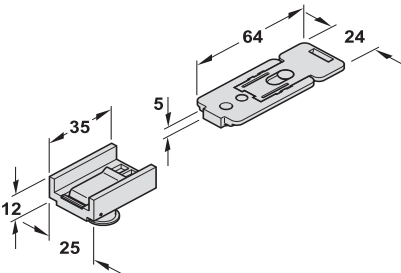
	Cat. No.
Opening angle restraint for TS 91, TS 92 and TS 93	931.00.791

Order reference

The opening angle restraint is no overload protection and does not replace the door stop.

Interlocking hold-open device

For TS 91, TS 92, TS 93 and TS 93 GSR guide rail



- > Area of application: For retrofitting in guide rails G 91 N, G 92 N and G 93 N or with door co-ordinator TS 93 GSR, allows doors to be held open without any spring-back resilience
- > Version: Releasing force adjustable, can be disabled
- > Hold-open angle: Approx. 75–150°

	Silver coloured
Interlocking hold-open device for TS 91, TS 92 and TS 93	931.01.590

ITS 96 N20
EN 2-4



5

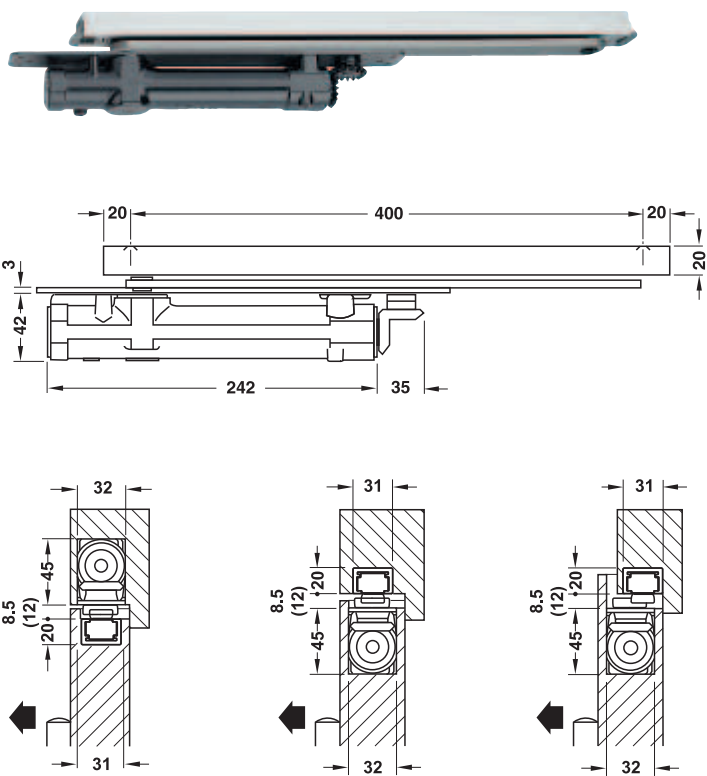
 Tested for fire resistant and smoke control doors.

- > Area of application: Door closer and guide rail for concealed installation
- > Version: With mechanical opening angle restraint,
with standard pivot
- > Adjustment facility: Closing force, closing speed and latching action continuously adjustable
- > Closing force: 2–4 in compliance with EN 1154
- > Door width: ≤1,100 mm
- > For door thickness: ≥40 mm
- > Opening angle: ≤120°
- > Rebate clearance: 8 mm and 12 mm (spacer supplied)
- > Mounting: For DIN left and DIN right hand use
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class:

3	8	2-4	1	1	4
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Other rebate clearance dimensions on request

ITS 96 N
EN 2–4



> Barrier-free in compliance with DIN 18040
> Meets the requirements of DIN SPEC 1104

Fire resistance and smoke control
F Tested for fire resistant and smoke control doors.

- > Area of application: Door closer and guide rail for concealed installation
- > Version: With mechanical opening angle restraint, with standard pivot
- > Adjustment facility: Closing force, closing speed and latching action continuously adjustable
- > Closing force: 2–4 in compliance with EN 1154
- > Door width: ≤1,100 mm
- > For door thickness: ≥40 mm
- > Opening angle: ≤120°
- > Rebate clearance: 8 mm and 12 mm (spacer supplied)
- > Mounting: For DIN left and DIN right hand use
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class:

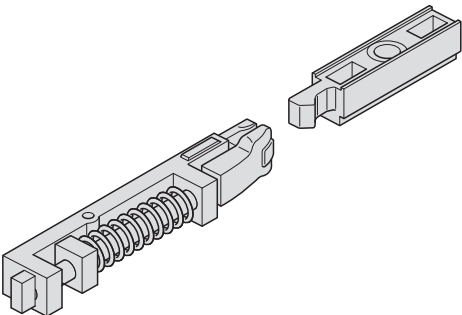
3	8	2–4	1	1	4
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		DIN left	DIN right
ITS 96 N Set			
1 concealed door closer with guide rail	F	931.04.054	931.04.050
1 basic closer	–	931.04.002	931.04.002
1 guide rail	–	931.04.039	931.04.029

Order reference
Other rebate clearance dimensions on request

Interlocking hold-open device

For G 96 N20 guide rail



- > Version: Engaging and releasing force adjustable
- > Area of application: For retrofitting in G 96 N 20 guide rail
- > Hold-open angle: Up to approx. 120°
- > Suitable for: Rebate clearance dimensions 8 and 12 mm

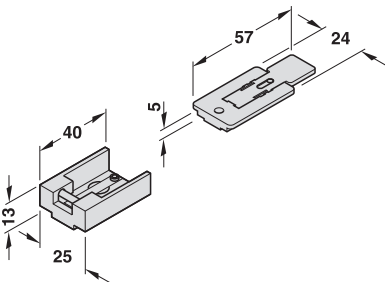
	Cat. No.
Interlocking hold-open device	931.04.940

Interlocking hold-open device

For G 96 N guide rail



5

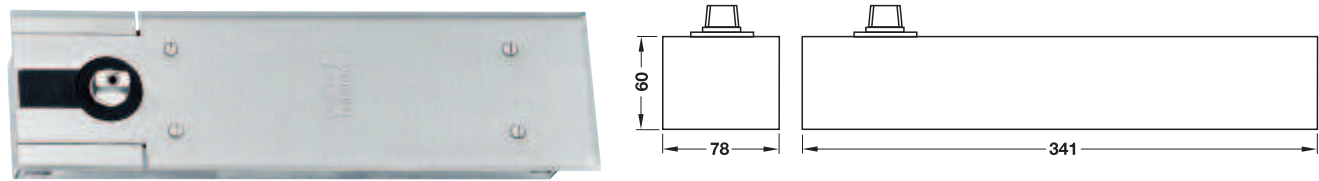


- > Version: Engaging and releasing force adjustable, can be enabled and disabled
- > Area of application: For retrofitting in G 96 N guide rail
- > Hold-open angle: Up to approx. 120°
- > Suitable for: Rebate clearance dimensions 8 and 12 mm

	Cat. No.
Interlocking hold-open device	931.04.044

BTS 80

EN 3, 4, 6



- > Area of application: For single action or double action doors
- > Version: Mechanical backcheck, adjustable, hydraulic hold-open function, can be activated alternatively for delayed closing action
- > Adjustment facility: Closing speed and delayed closing action continuously adjustable
- > Closing force: 3, 4, 6
- > Door weight: ≤300 kg
- > Door width: 3: 950 mm, 4: 1,100 mm, 6: 1,400 mm
- > Mounting: For DIN left and DIN right hand use

	Cat. No.
BTS 80	
BTS 80 EN 3	932.00.023
BTS 80 EN 4	932.00.024
BTS 80 EN 6	932.00.026

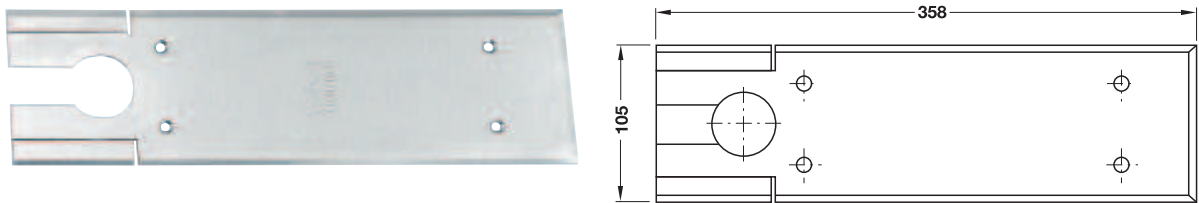
Order reference

Cover plate not supplied, please order separately.



Cover plate

For BTS 80

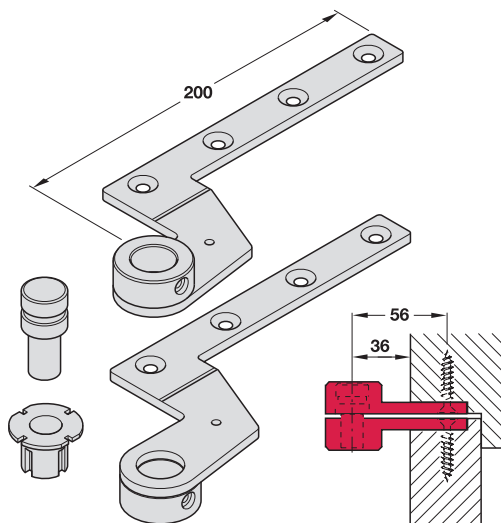


- > Area of application: For double action doors
- > Material thickness: 1.5 mm
- > Mounting: Pre-cut edges may be broken off for DIN left or DIN right hand single action doors

	Stainless steel	Matt brass
Cover plate	932.00.210	932.00.218

7411/K 56 Pair of top centres

For flush doors

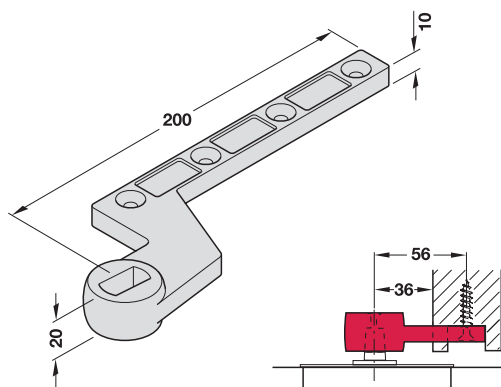


- > Area of application: For flush doors
- > Version: For adjustment of installed door (adjustment ± 2 mm)
- > Installation: For screw fixing
- > Mounting: For DIN left and DIN right hand use

	Cat. No.
Pair of top centres	932.00.420

7411/56 Bottom strap

For flush doors

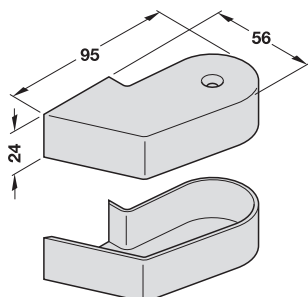


- > Area of application: For flush doors
- > Version: Drop forged
- > Installation: For screw fixing
- > Finish: Galvanized
- > Material: Steel

	Cat. No.
Bottom strap	932.00.401

Cover cap

For flush doors

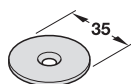


- > Area of application: For flush doors, for pair of top centres (2-piece) or bottom strap (1-piece) (optional)
- > Version: For bottom strap, for DIN left or DIN right

	Cat. No.
Cover cap for pair of top centres	932.00.509
Cover cap for bottom strap DIN left	932.00.529
Cover cap for bottom strap DIN right	932.00.519

Cover disc

For flush doors

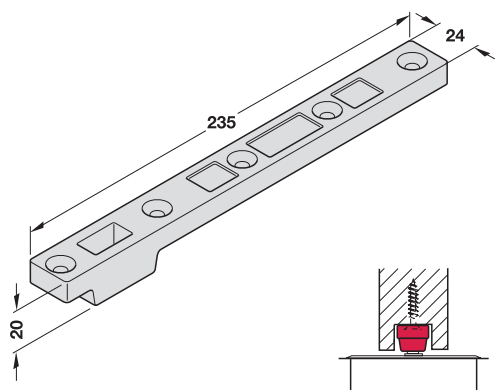


- > Area of application: For bottom strap
- > Material: Rustproof stainless steel
- > Fixing screw supplied

	Cat. No.
Cover disc	932.00.460

7421 N Bottom strap

For double action doors

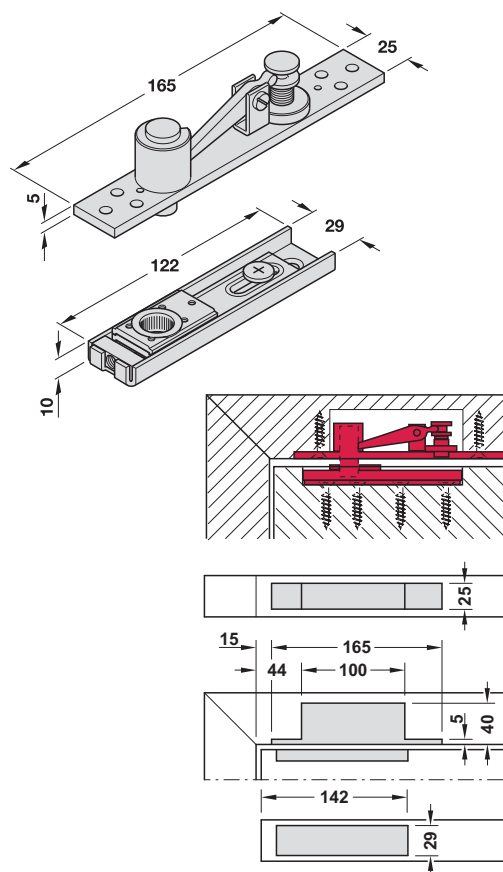


- > Area of application: For double action doors
- > Version: Drop forged
- > Installation: For screw fixing
- > Finish: Galvanized
- > Material: Steel

	Cat. No.
Bottom strap	932.00.402

8066 Top centre, adjustable, with needle roller bearing

For double action doors

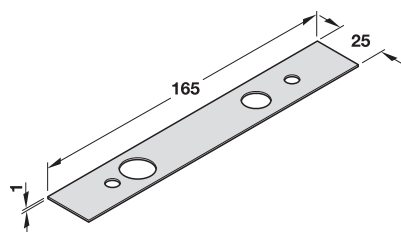


- > Area of application: For double action doors
- > Version: Top part with adjustable pivot for compensating rebate clearance dimensions of up to max. 20 mm, bottom part with needle roller bearing
- > Installation: Routing the base profile is not necessary
- > Finish: Galvanized
- > Material: Steel

	Cat. No.
Top centre set consists of	932.00.620
Top centre top part	932.00.600
Top centre bottom part	932.00.610

8064 Cover plate

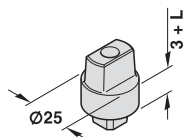
For top centre top part



- > Area of application: For top centre top part
- > Material: Rustproof stainless steel

	Cat. No.
Cover plate	932.00.220

Spindle inserts



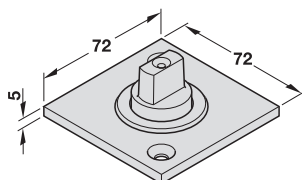
- > Area of application: To increase the floor clearance (e.g. for doors with thresholds or floors fitted with carpets)
- > Version: Flat conical
- > Mounting: For DIN left and DIN right hand use

Length L mm	Cat. No.
0 (standard)	932.00.100
5	932.00.101
10	932.00.103
15	932.00.105
20	932.00.106
25	932.00.107

Order reference

Other lengths on request (up to max. 50 mm)

Pivot bearing

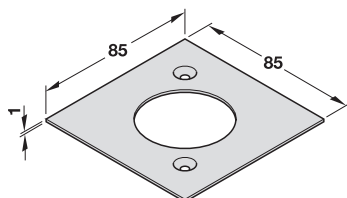


- > Version: With ball bearing or angular ball bearing (optional)
- > Load bearing capacity: Ball bearing ≤200 kg, angular ball bearing ≤300 kg

	Cat. No.
Pivot bearing with ball bearing	932.00.300
Pivot bearing with angular ball bearing	932.00.301

Cover plate

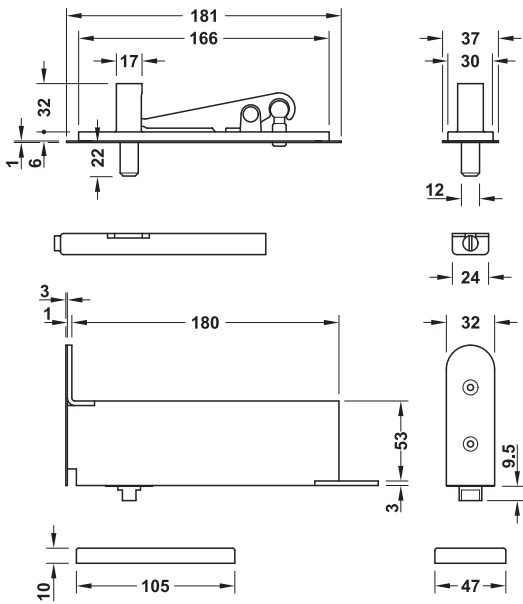
For rebated doors



- > Area of application: For pivot bearing
- > Material: Rustproof stainless steel

	Cat. No.
Cover plate	932.00.230

Floor spring for double action doors
EN 3



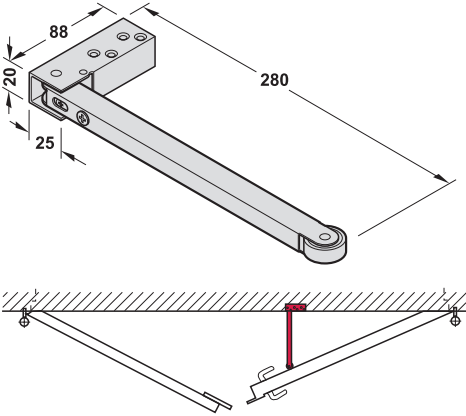
Technical data	
Closing force	EN 3
Max. door width	≥950 mm
Max. door thickness	≥40 mm
Max. door weight	60 kg

> Area of application:	For 1-leaf doors
> Adjustment facility:	Closing speed: 150–10°, braking speed: 10–0°
> Opening angle:	150°
> Material:	Cover plate: Stainless steel
> Finish:	Cover plate: Satin
> Mounting:	For DIN left and DIN right hand use

	Cat. No.
Floor spring for double action doors	970.08.000



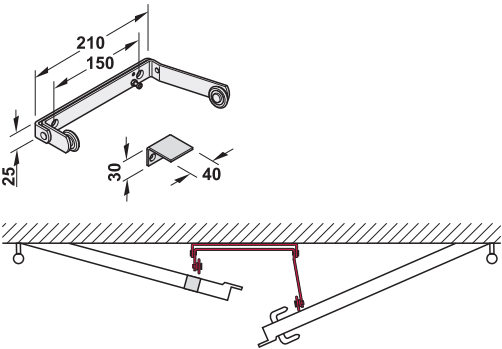
Door co-ordinator



- > Area of application: Ensures the correct closing sequence of 2-leaf doors with door closer
- > Installation: Visible in soffit
- > Material: Stainless steel
- > Mounting: For DIN left and DIN right hand use

	Satin
Door co-ordinator	931.99.900

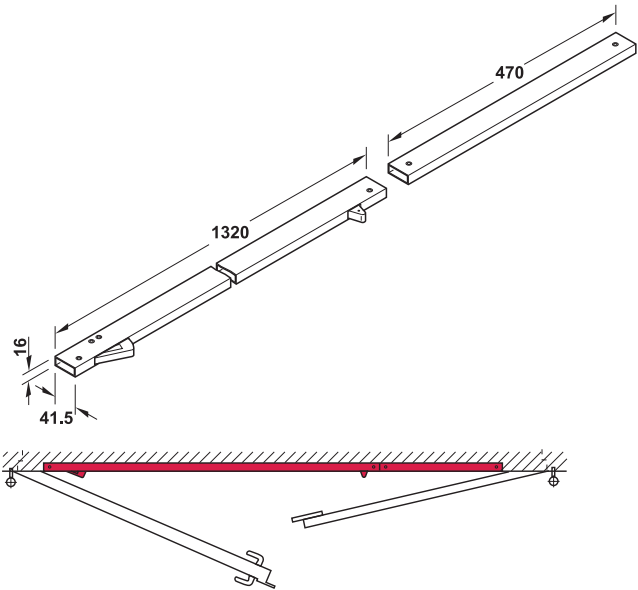
Door co-ordinator



- > Area of application: Ensures the correct closing sequence of 2-leaf doors with door closer
- > Installation: On door frame
- > Material: Steel
- > Mounting: For DIN left and DIN right hand use

	Cat. No.
Door co-ordinator	931.97.902

Door co-ordinator

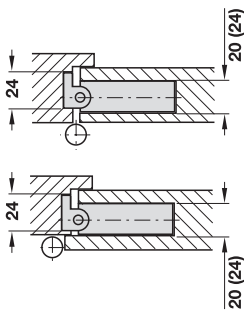
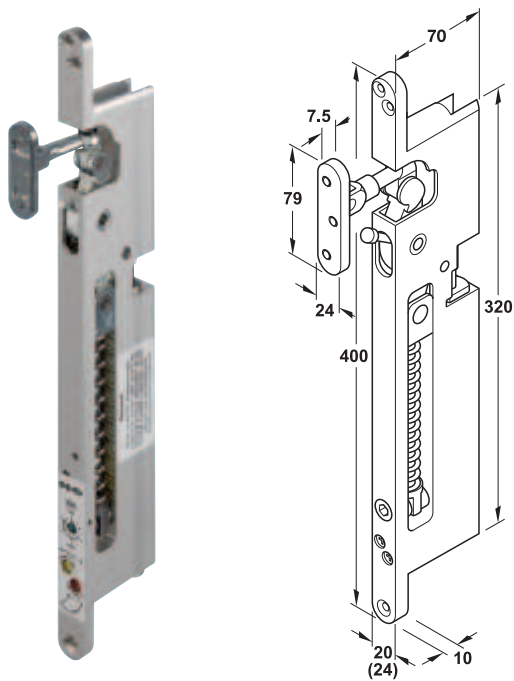


- > Area of application: Ensures the correct closing sequence of 2-leaf doors with door closer
- > Installation: Visible in soffit
- > Door width: Total: 1,520 – 2,440 mm
- > Mounting: For DIN left and DIN right hand use

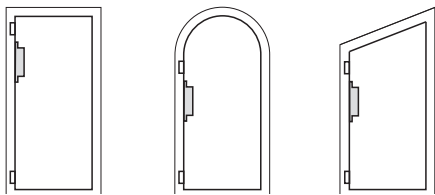
	Cat. No.
Door co-ordinator	931.98.903



FTS 20 and FTS 24



Application
Installation examples:



Specifications in brackets apply to FTS 24

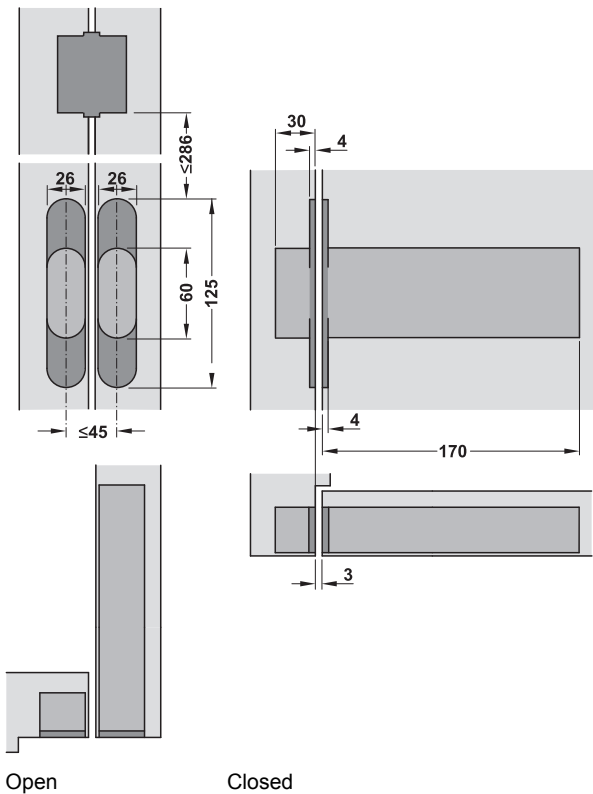
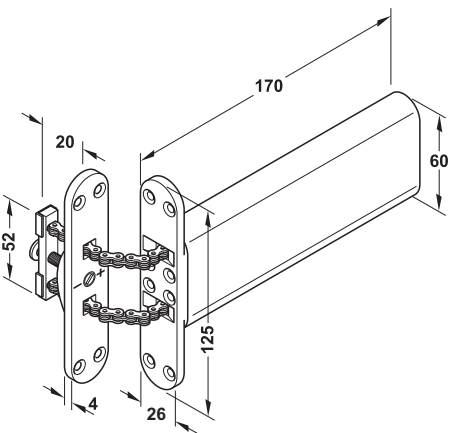
Technical data		
	FTS 20	FTS 24
Max. door width mm	900	1000
Max. door opening angle° approx.	140	140
Max. door weight kg	80	140
Min. door weight kg	35	50
Min. door thickness mm	30	40
Closing force in compliance with EN 1154	1–2	2–3

> Area of application:	For rebated and flush single action and interior doors												
> Version:	Concealed jamb door closer, door action can be switched off												
> Adjustment facility:	Size adjustment by adjusting the closing force from the front when the door is open, closing speed and latching action continuously adjustable												
> Installation:	Concealed installation on pull side in the vertical door rebate below the upper door hinge, a door stop must be used with the max. door opening angle												
> Mounting:	For DIN left and DIN right hand use												
> Standard:	Certified in compliance with EN 1154:1996/A1:2002												
> Class:	FTS 20: <table><tr><td>4</td><td>8</td><td>1/2</td><td>0</td><td>1</td><td>4</td></tr></table> FTS 24: <table><tr><td>4</td><td>8</td><td>2/3</td><td>0</td><td>1</td><td>4</td></tr></table>	4	8	1/2	0	1	4	4	8	2/3	0	1	4
4	8	1/2	0	1	4								
4	8	2/3	0	1	4								

	Cat. No.
FTS 20	931.24.000
FTS 24	931.24.010



Concealed jamb door closer



- > Area of application: For flush doors only, not suitable for rising or falling door hinges
- > Version: Latching action adjustable
- > Material: Forend: Brass
- > Door height: $\leq 2,100$ mm
- > Door width: ≤ 850 mm
- > Door weight: ≤ 75 kg
- > Door thickness: 40–44 mm
- > Opening angle: $\leq 180^\circ$
- > Mounting: For DIN left and DIN right hand use

Note

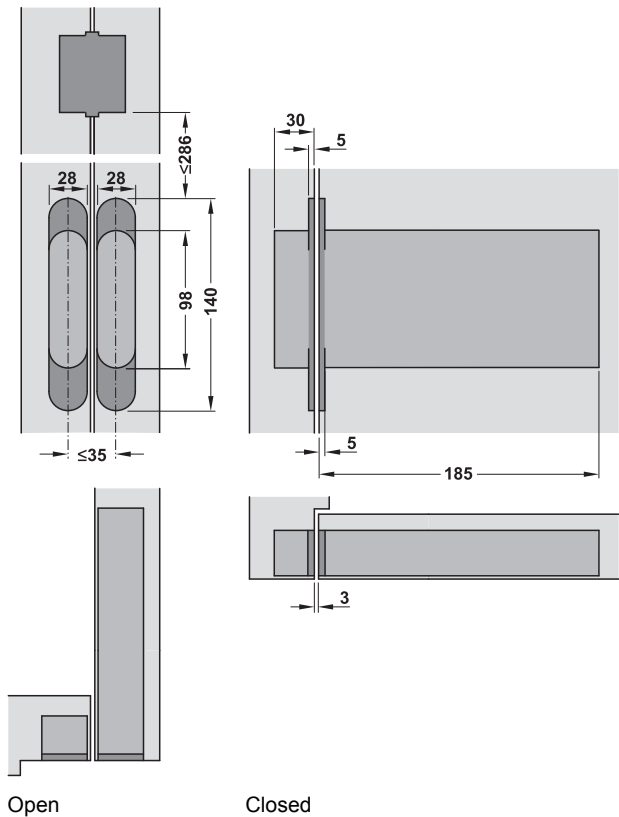
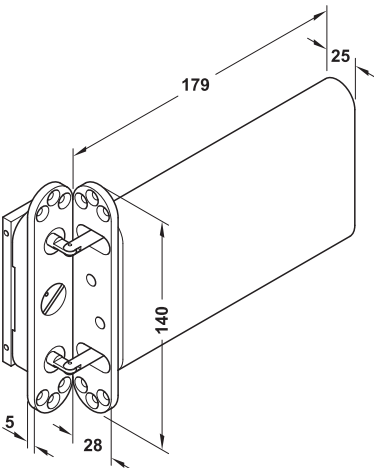
- > Concealed installation on pull side with max. 300 mm distance from door hinge.
- > Besides the standard installation in the door leaf, installation of the door closer unit in the door frame or wall is also possible.
- > A door stop must be used with the max. door opening angle.

	Finish/colour	Cat. No.
Concealed jamb door closer	Polished, brass coloured	931.90.428
	Chrome plated	931.90.422
	Chrome plated satin finish	931.90.424

Order reference

Buffer not supplied. Please order separately.

Concealed jamb door closer
EN 3



5

Fire resistance and smoke control

F Tested for fire resistant and smoke control doors.

- > Area of application: For flush doors only, not suitable for rising or falling door hinges
- > Version: Latching action adjustable
- > Closing force: 3 in compliance with EN 1154
- > Material: Forend: Brass
- > Door height: $\leq 2,100$ mm
- > Door width: ≤ 850 mm
- > Door weight: ≤ 75 kg
- > Door thickness: 40–44 mm
- > Opening angle: $\leq 105^\circ$
- > Mounting: For DIN left and DIN right hand use
- > Standard: Certified in compliance with EN 1154:1996/A1:2002
- > Class:

3	8	3	1	1	3
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Note

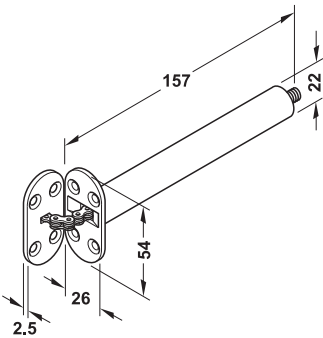
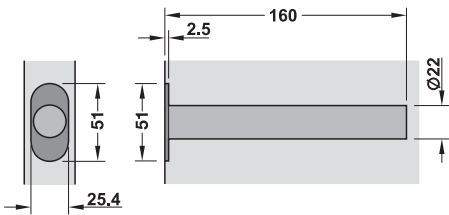
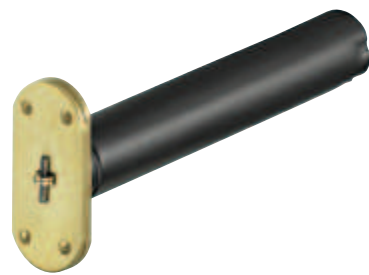
- > Concealed installation on the pull side with max. 300 mm distance from door hinge.
- > Besides the standard installation in the door leaf, installation of the door closer unit in the door frame or wall is also possible.
- > A door stop must be used with the max. door opening angle.

		Finish/colour	Cat. No.
Concealed jamb door closer	F	Polished, brass coloured	931.90.438
		Chrome plated	931.90.432
		Chrome plated satin finish	931.90.434

Order reference

Buffer not supplied. Please order separately.

Concealed jamb door closer



5

- > Area of application: Only for use on flush doors, not suitable for rising or falling door hinges
- > Material: Forend: Brass
- > Door height: ≤2,100 mm
- > Door width: ≤850 mm
- > Door weight: ≤50 kg
- > Door thickness: 35–40 mm
- > Opening angle: ≤180°
- > Mounting: For DIN left and DIN right hand use

Note

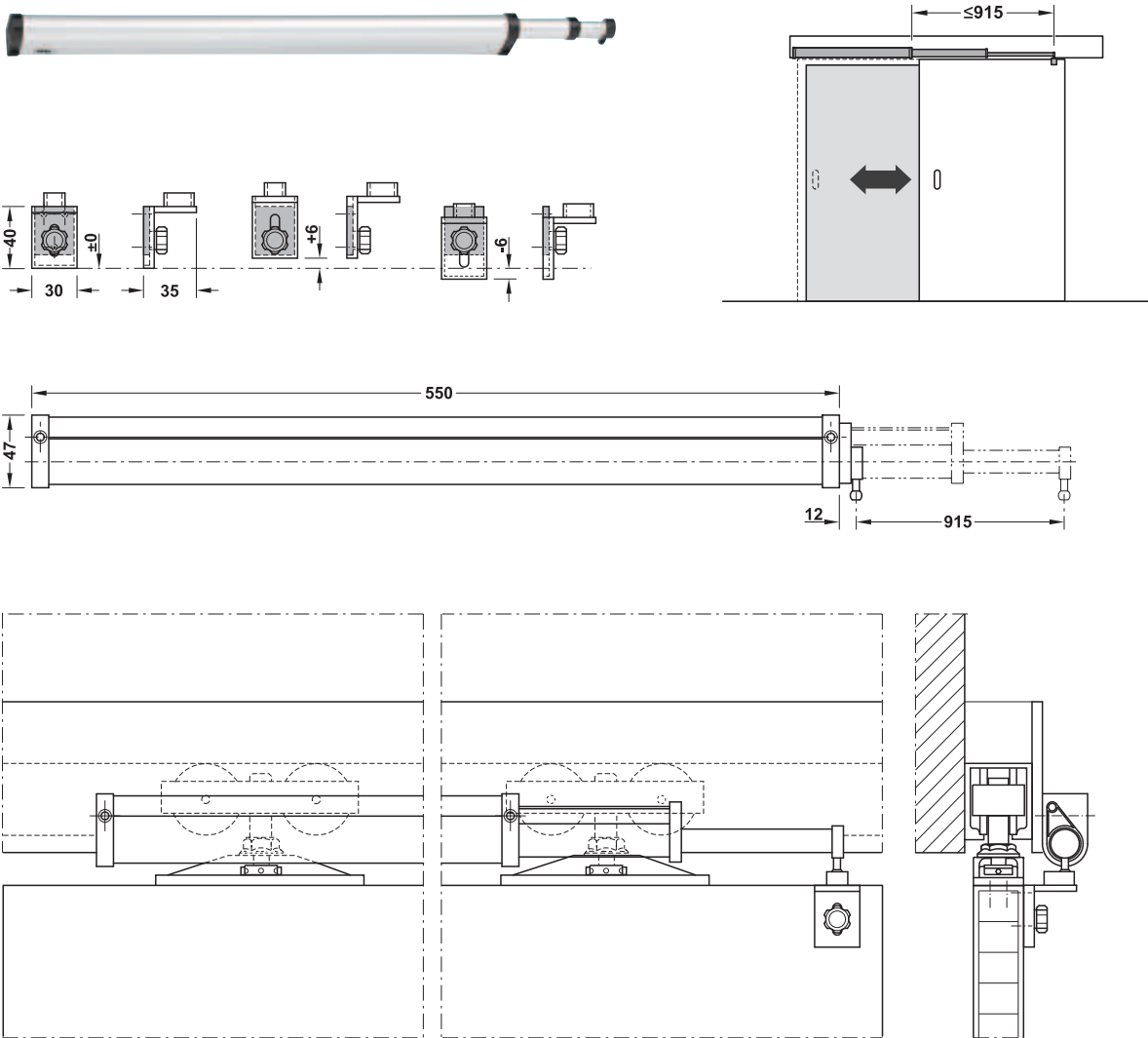
- > Concealed installation on pull side.
- > Besides the standard installation in the door leaf, installation of the door closer unit in the door frame or wall is also possible.
- > A door stop must be used with the max. door opening angle.

	Cat. No.
Concealed jamb door closer	931.90.418

DGH-B-INT 2019, HDE-en, 12/18; Dimensional data not binding. We reserve the right to alter specifications without notice.

Overhead door closer

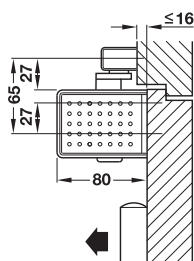
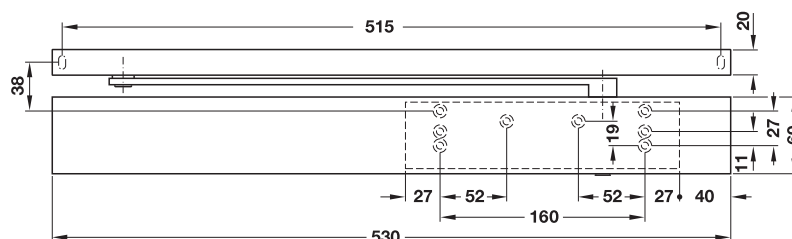
For sliding doors



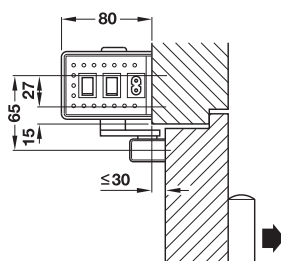
- > Area of application: For mounting on existing wooden or metal doors
- > Installation: Surface mounted
- > Adjustment facility: Closing force and speed
- > Door width: 590–900 mm

	Cat. No.
Overhead door closer for sliding doors	931.85.009

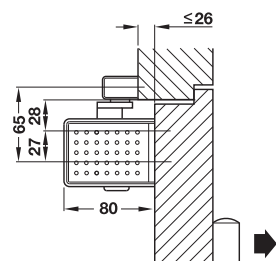
Porteo Automatic door operator



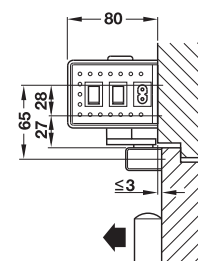
Door leaf installation/pull side



Transom fixing/push side

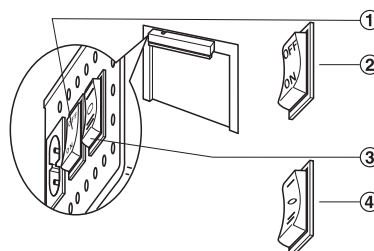
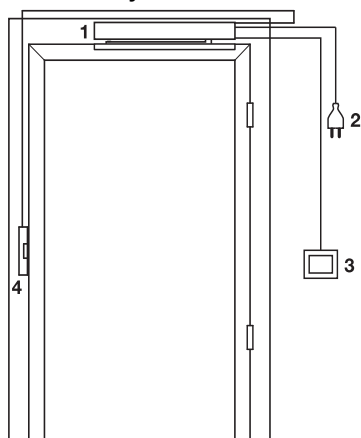


Door leaf installation/push side



Transom fixing/pull side

Functionality



Cable layout plan

- 1 Porteo automatic door operator
- 2 Mains supply (230 V AC)
- 3 Manual switch (inside/outside)
- 4 Electric strike (optional)

A hand transmitter can be used in combination with and instead of a manual switch (optional).

- ① Power switch
- ② OFF = OFF
ON = ON
- ③ Program switch
- ④ I = PowerMotion
0 = OFF
II = PermanentOpen

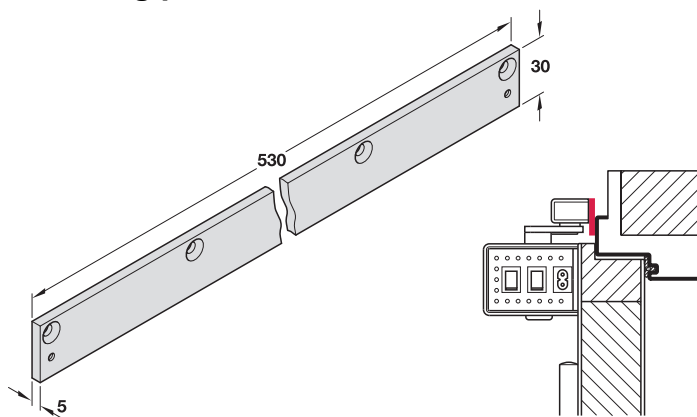
- > Version: Plug-and-go complete solution package, low installation height, for use with manual switch and/or hand transmitter (optional)
- > Adjustment facility: Door opens automatically when slight pressure is applied to the door handle
- > Installation: Standard installation or overhead installation on pull side or push side possible
- > Door width: ≤1,100 mm
- > Door weight: ≤80 kg
- > Input voltage: 230 V AC
- > Nominal voltage: 24 V DC
- > Degree of protection: IP20
- > Opening angle: ≤110°
- > Mounting: For DIN left and DIN right hand use
- > Maintenance contract not required.

Supplied with

- 1 Porteo automatic door operator
- 1 guide rail
- 1 lever arm
- 1 mounting plate
- 1 mains lead (230 V)
- 1 drilling and angle jig
- 1 set of installation instructions

	Silver coloured	White, RAL 9016
Porteo Automatic door operator		
1 overhead door closer with guide rail	935.03.009	935.03.007

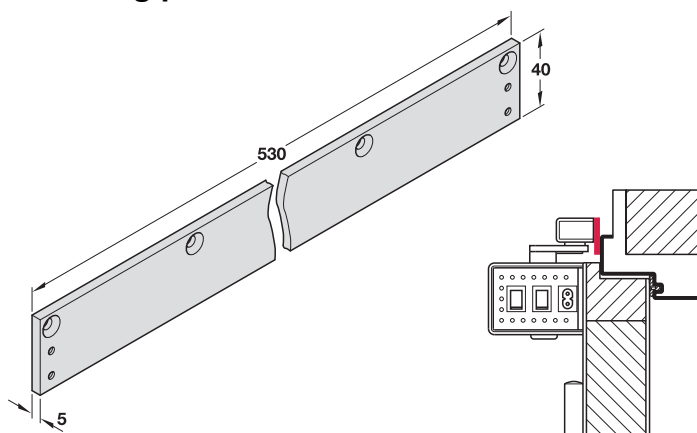
Mounting plate 30 mm



> Area of application: Mounting plate for Porteo guide rail

	Height mm	Silver coloured	White, RAL 9016
Mounting plate	30	935.03.019	935.03.017

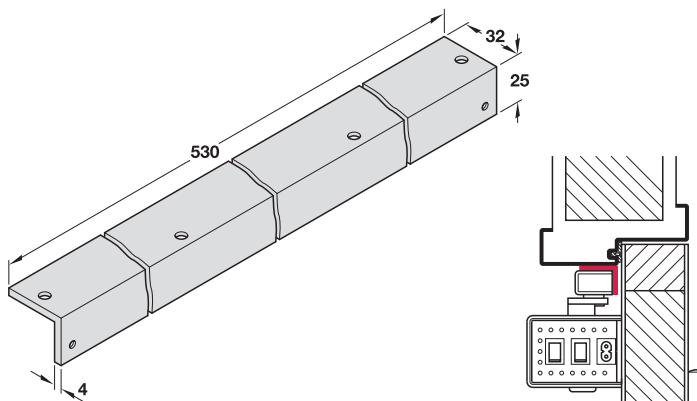
Mounting plate 40 mm



> Area of application: Mounting plate for Porteo guide rail

	Height mm	Silver coloured	White, RAL 9016
Mounting plate	40	935.03.029	935.03.027

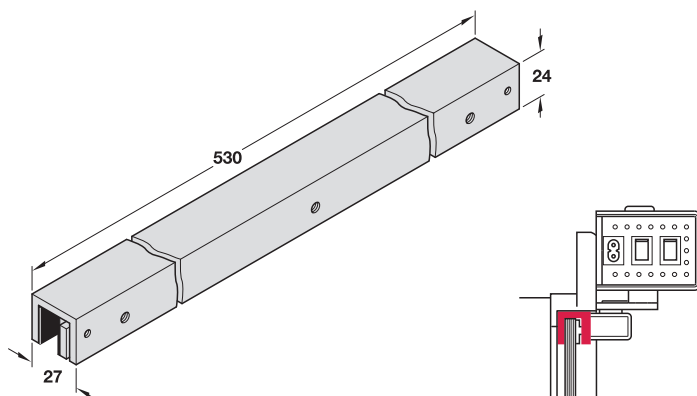
Soffit fixing bracket



> Area of application: For mounting the Porteo guide rail on door frame with deep soffit
> For soffit depths from –20 to 200 mm

	Silver coloured	White, RAL 9016
Soffit fixing bracket	935.03.039	935.03.037

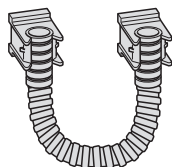
Glass door shoe



> Area of application: For mounting door closer on glass doors
> For glass door thickness: 8–10 mm
> Installation: Only suitable for transom fixing

	Silver coloured	White, RAL 9016
Glass door shoe	935.03.049	935.03.047

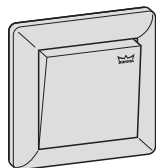
Cable transition



- > Area of application: For protecting the electric cable between the door frame and door leaf, for leading flexible cables through

	Cat. No.
Cable transition	935.03.060

Manual switch



- > Area of application: For push-button controlled door opening activation
- > Installation: For flush mounting

	Cat. No.
Manual switch	935.03.070

Order reference

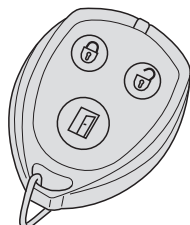
If pulse generators (manual switch, hand transmitter) are used, an electric strike must also be installed.

The electric strike is not supplied, please order separately.



5

Hand transmitter



- > Version: With 3 push buttons (frequency 868.3 MHz),
- > Area of application: For remote controlled door opening activation
- > Material: Plastic
- > Colour: Black
- > Range: 15 m within the building
- > Including batteries (12 V)

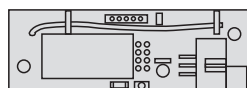
	Cat. No.
Hand transmitter	935.03.071

Order reference

If pulse generators (manual switch, hand transmitter) are used, an electric strike must also be installed.

The electric strike is not supplied, please order separately.

→ Receiver



- > Version: For installation in the Porteo fitting (frequency 868.3 MHz),
- > Area of application: Receiver printed circuit board for hand transmitter

	Cat. No.
Receiver	935.03.072

Electric strike	► See product group 02
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