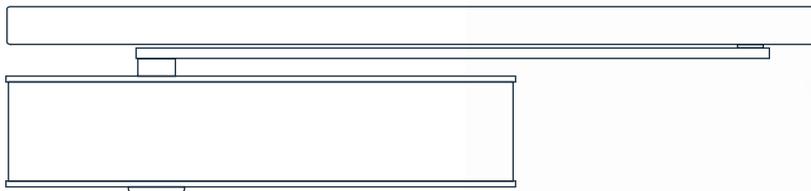




ECO

Door closer technology



Door closer technology

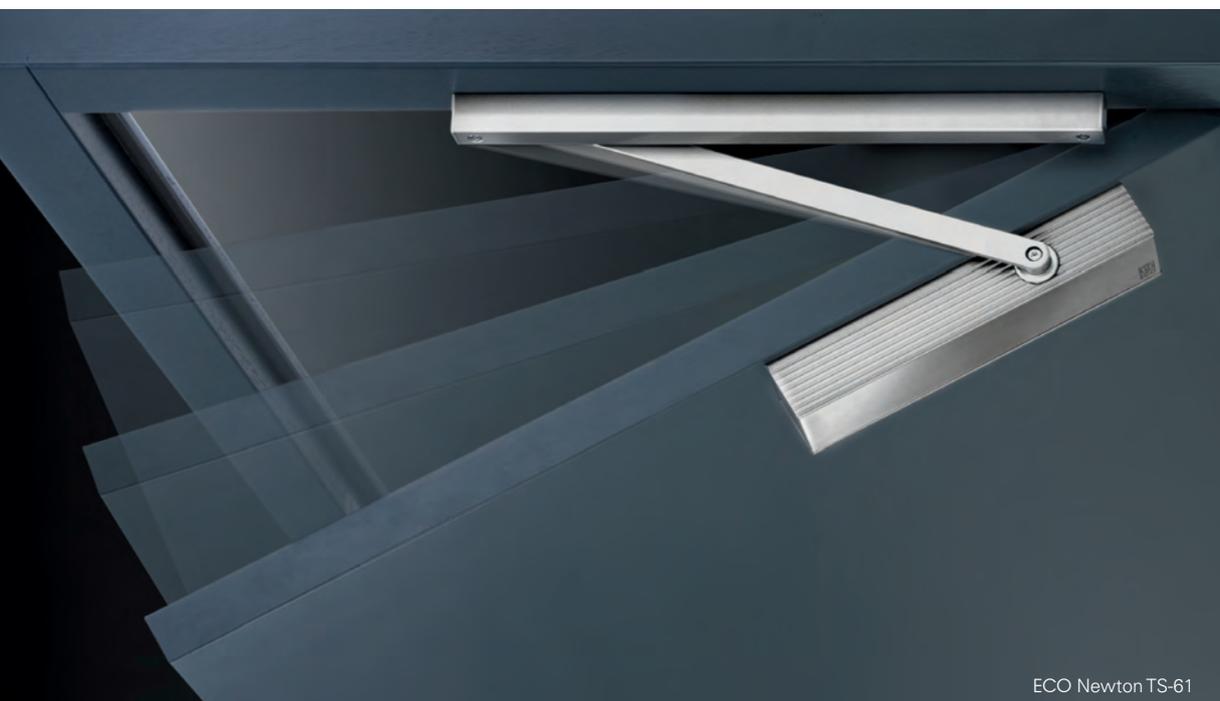
Aesthetic

Powerhouses



Turning safety into a product

Door closers have to cope with routine daily business and emergency situations: they soften the door strike and close the door securely. In emergency situations, they guarantee that fire compartments are separated reliably so that lives can be saved. In routine situations, the asymmetric transmission makes it easier to open the door.



ECO Newton TS-61

Door closers from ECO Schulte work purely mechanically with hydraulically damped, stepped gear spring force. The mechanical principle ensures correct functioning under all conditions – even when there is a power cut. The special gearing geometry guarantees easy opening while at the same time producing sufficient standard-compliant closing power to overcome the lock resistance.

Door closers have a safety function, which makes them a part of the architecture. The ECO Schulte door closer portfolio reflects the complete spectrum of practical demands of modern architecture – no matter whether these are defined for aesthetic or functional reasons. They extend from the functional standard of the standard arm door closer through minimized, aesthetic slide rail closers and hold-open systems to "virtually invisible" closing solutions integrated into the floor or door leaf.

The Aesthete: ECO Newton

The new door closer generation from ECO Schulte: a meticulously well-conceived design consisting of a stainless steel cover and aluminium body. Concealed mounting plates, adjusting elements protected against vandalism, colour-matched materials and the variable combination of all slide rail door closers with closing sequence regulator systems are the distinguishing features of this new generation of door closer models. In addition to this, the new "ECOvalve" technology guarantees the simple and high-precision adjustment of all parameters of the closing process.



ECO Newton TS-61

ECO Newton overview

Door closer with slide rail

Description	Tests ¹	Size acc. to EN ²	Latching speed adjustment ³	Back-check ⁴	Closing force adjustment	Delayed action ⁵	DIN L + R / BS + BG ⁶
TS-62	 / 	2–5 continuously	from the front	adjustable	from the front	adjustable	yes / yes ⁷
TS-61 (5–6)	 / 	5–6 continuously	from the front	adjustable	from the front	–	yes / yes ⁷
TS-61 (2–5)	 / 	2–5 continuously	from the front	adjustable	from the front	optional	yes / yes ⁷
TS-51	 / 	1–4 continuously	from the front	adjustable	from the front	–	yes / yes ⁷
TS-41	 / 	1–4 continuously	from the side	fixed	from the side	–	yes / yes
TS-31	 / 	1–4 continuously	from the side	fixed	from the side	–	yes / yes
TS-15	–	1 / 2	from the side	–	from the side	–	yes / yes

Door closer with standard arm

Description	Tests ¹	Size acc. to EN ²	Latching speed adjustment ³	Back-check ⁴	Closing force adjustment	Delayed action ⁵	DIN L + R / BS + BG ⁶
TS-50 (2–6)	 / 	2–6 continuously	from the side	fixed	from the side	–	yes / yes
TS-50 (1–5)	 / 	1–5 continuously (6)	from the side	fixed	from the side	–	yes / yes
TS-20	 / 	3 / 5	from the side	fixed	from the side	–	yes / yes
TS-15	–	2 / 3 / 4 / 5	from the side	–	from the side	–	yes / yes
TS-14	–	1 / 2 / 3 / 4	from the side	–	from the side	–	yes / yes

Legend: **1)** EN 1154 - CE-sign and fire-protection tested **2)** Door closer sizes acc. to European Norm (EN) **3)** Increases the closing force to ensure that the door closes reliably **4)** Regulates the force which is necessary to open the door **5)** Comfortable delayed action, for example for hotel rooms **6)** Available for DIN left and DIN right (L+R) as well as for hinge side (BS) or hinge-opposite side (BG) **7)** Please order execution G (=hinge-opposite side)

The highlights of the ECO Newton range

Two units for the entire building

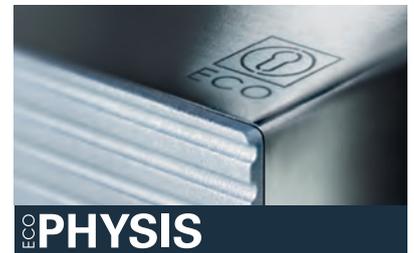
The ECO Newton closer portfolio covers all door dimensions with only two basic closer units. In addition to this, end-mounted valve technology permits the mounting of the same closer on the hinge and hinge-opposite side (TS-41/31).



ECO **UNITY**

Combination of elegant materials

Elegant materials are standard with ECO Newton: the stainless steel cover and aluminium body unit of the new door closer generation are perfectly matched with one another - in an architecturally compatible form language.



ECO **PHYSIS**

Intelligent stainless steel cover

ECOclíc envelops the aluminium body unit with the power of spring steel. The cover conceals all of the adjusting elements and cannot be removed without tools, thus securing the closer against unauthorized access.



ECO **CLIC**

Well-conceived assembly system

The special feature of the ECO Newton assembly system is that the mounting plate is completely concealed by the aluminium body of the closer, thus making it invisible. The mounting plate has standardized drill holes which guarantee time-saving, secure and simple attachment.



ECO **MOUNT**

New valve technology

The new ECOvalve technology offers a wide and precisely adjustable setting range. This means the simple, high-precision and permanently secure adjustment of all parameters of the closing process with one conventional allen key. As with all ECO Newton door closers, the closing speed and latching speed are regulated via the ECOvalve as a standard feature.



ECO **VALVE**

Stainless steel full cover

The full cover is an optional stainless steel covering for the ECO Newton door closers and related slide rails. The overall appearance is perfected by a lever arm with a stainless steel look. A cover on the closer body is available for standard arm closers.



Saves resources

ECO Newton door closers are up to 1,000 grammes lighter than comparable solutions. Their intelligent construction and carefully planned use of materials help considerably to save resources - without compromising functionality, safety, security or quality.



Uniform finishing edge and colour design

The mounted slide rail and door closer are flush when the door is closed. The colours of all materials are perfectly matched - right down to the end caps of the slide rail. In this way, ECO Newton door closers can be integrated harmoniously into every design context.



Combination talent

The ECO Newton Vario concept permits the use of all slide rail door closers and can even be combined with different door leaf widths. In this way, optimum value for money can be achieved for each individual door situation.



Standardized quality

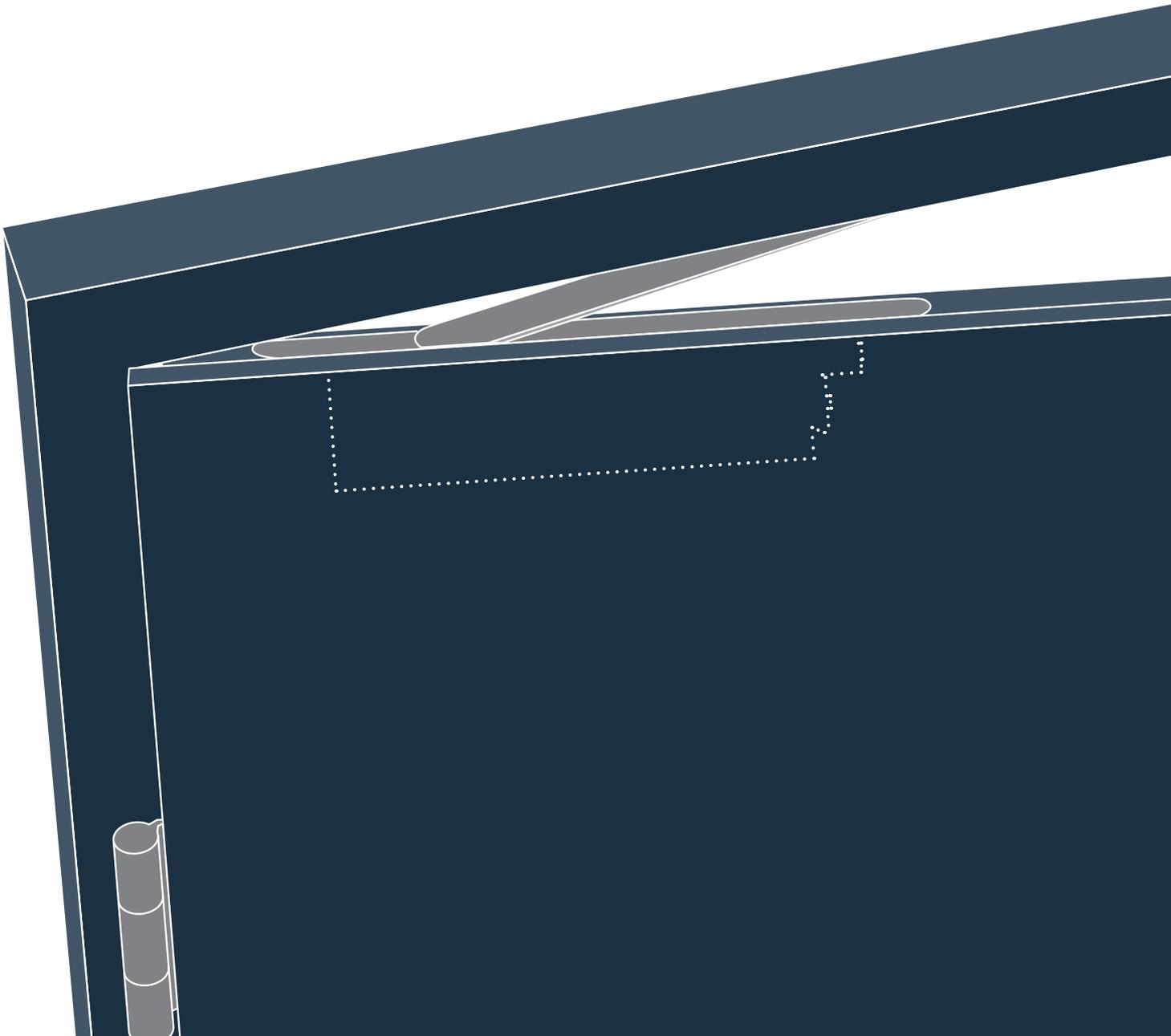
As with all ECO Schulte products, the door closers are manufactured in a quality management process certified in accordance with **ISO 9001**. This guarantees that top quality is produced and installed. Many door closer versions are suitable for use with fire and smoke protection doors - and tested in line with **EN 1154 A**. All products tested in accordance with valid European directives have the CE mark applied to them.





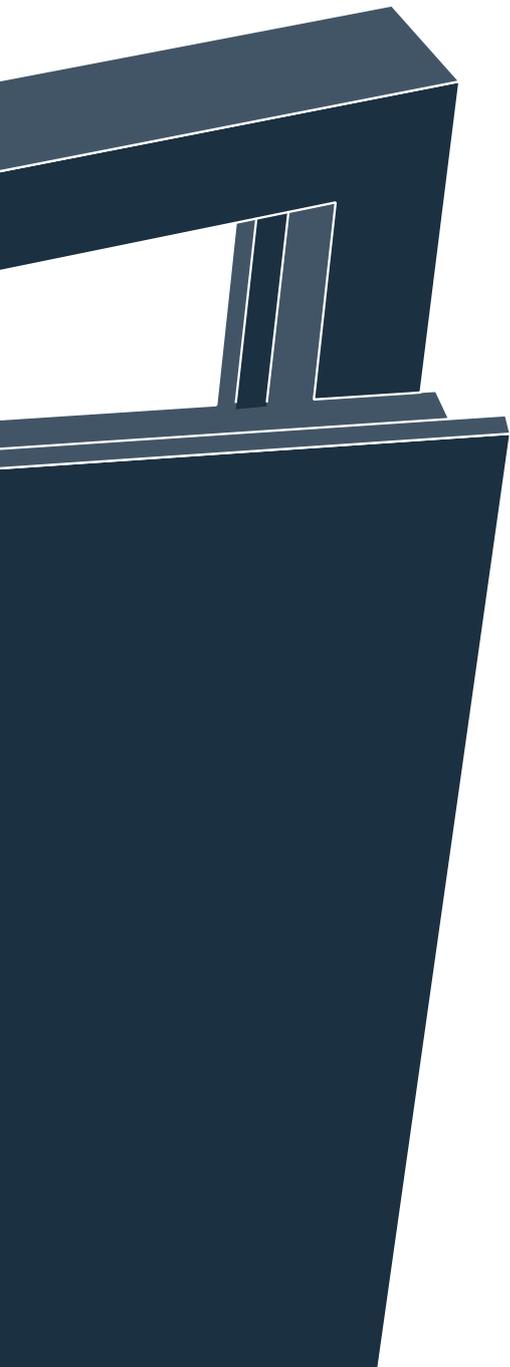
ECO

The integration specialist: ECO ITS 420



The aesthetics of integration

This door closer makes itself invisible. The ECO ITS 420 is extremely compact, and this makes it suitable for installation in doors with a leaf thickness of only 40 mm. This in turn means that the closer can be integrated virtually invisibly before the door even leaves the factory. Thanks to its distinctly decreasing opening torque, the ECO ITS 420 is the ideal easy-use door closer with a high level of user convenience.



The ECO ITS 420 is one of the most compact door closers on the market - compact enough for installation in wooden, sheet steel and profile frame doors made of aluminium/steel ≥ 42 mm. The principle works with an eccentrically controlled pull mechanism and microhydraulic damping unit which guarantee optimum user convenience. Thanks to intelligent gear design, the ITS guarantees optimum walking comfort and thus meets the requirements of **DIN 18040** and **DIN Spec 1104**. It can be used for DIN left / DIN right doors and can be combined with various slide rail variants and locking devices.

The Choreography of security

Door closing sequence selectors are highly complex systems which were developed to separate fire and smoke sections independently and purely mechanically. In the event of fire, a locking sequence is set in motion which is reminiscent of an exact choreography in its predetermined precision. A precisely defined closing sequence is prescribed with double-leaf doors: the passive wing must close first, then the active wing. A play of forces developed to save human life.



ECO FSA System overview

Slide rails for single-leaf doors

Description	Tests ¹	Function	Max. door leaf width	Max. hold-open angle	Type of mounting ²
EF	F / CE	Electromagnetic hold open (24V)	1.400 mm	145°	BS
EF-BG	F / CE	Electromagnetic hold open (24V)	1.250 mm	110°	BG
EFR	F / CE	Electromagnetic hold open and integrated smoke detector (230V)	1.400 mm	145°	BS
EFR-BG	F / CE	Electromagnetic hold open and integrated smoke detector (230V)	1.250 mm	110°	BG

Slide rails for double-leaf doors

Description	Tests ¹	Function	Max. door leaf width	Max. hold-open angle	Type of mounting ²
SR	F / CE	Closing sequence selector	2.800 mm	–	BS
SR-BG	F / CE	Closing sequence selector	2.500 mm	–	BG
SR-EF	F / CE	Closing sequence selector (SR) with electromagnetic hold open (24V)	2.800 mm	145° / 130°	BS
SR-EF-BG	F / CE	Closing sequence selector (SR) with electromagnetic hold open (24V)	2.500 mm	95° / 95°	BG
SR-EFR	F / CE	Closing sequence selector (SR) with hold-open function and integrated smoke detector (230V)	2.800 mm	145° / 130°	BS
SR-EFR-BG	F / CE	Closing sequence selector (SR) with hold-open function and integrated smoke detector (230V)	2.500 mm	95° / 95°	BG

Legend: 1) EN 1155 – CE mark and fire protection authorization **2)** BS = Hing-side / BG = Hinge-opposite side
* (mechanical hold open FKL, not suitable for use on fire doors and smoke doors)

All a question of the system

The new ECO Newton door closers are a part of the comprehensive ECO Schulte door fittings system. ECO Schulte thinks in terms of complete solutions and is one of the very few system providers dealing in all aspects of the door. From hinges to handles and from locking technology to single and double-leaf door closing systems, the company provides all safety relevant components from a single source. A unique, logical overall concept in regard to technology, function, form and service, because safety is inseparable.

Life-saving - if the worst comes to the worst

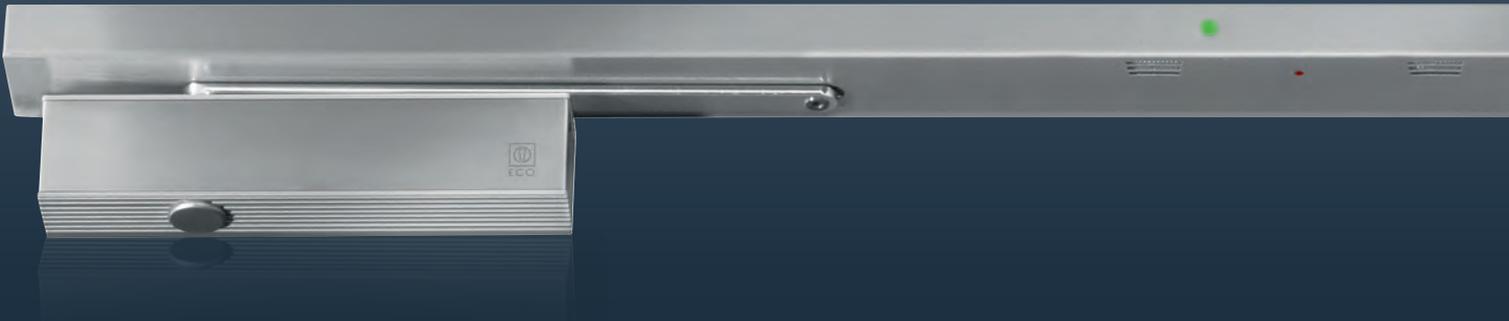


ECO Schulte system technology for doors protects property and generates safety. The system philosophy at the door is universal: with system solutions from ECO Schulte, it is guaranteed that a door cannot become an obstacle when trying to escape. This claim is visualized in the company logo: it is the all-encompassing system technology that makes doors safe.



ECO closing sequence selector

Impressive in design, technology and installation



1. Design

- Continuous cover
- Continuously painted in RAL, or stainless steel full cover
- No visible smoke detector from front, slots only visible from the top and the bottom
- No visible release button, release from the bottom



2. Technique

- New smoke detector technology acc. to **DIN 14677** (revision mandatory after 8 years)
- Alarm level monitoring /automatic calibration
- Dust indication (optical pre-information about dirt level)
- Approval for hinge side and hinge-opposite side. Power supply for connection of external magnets
- Compatible for connection of external fire alarm system, BUS-compatible, central building control systems (GLT)
- Compatible for smoke detector type ORS 142 and TDS 247

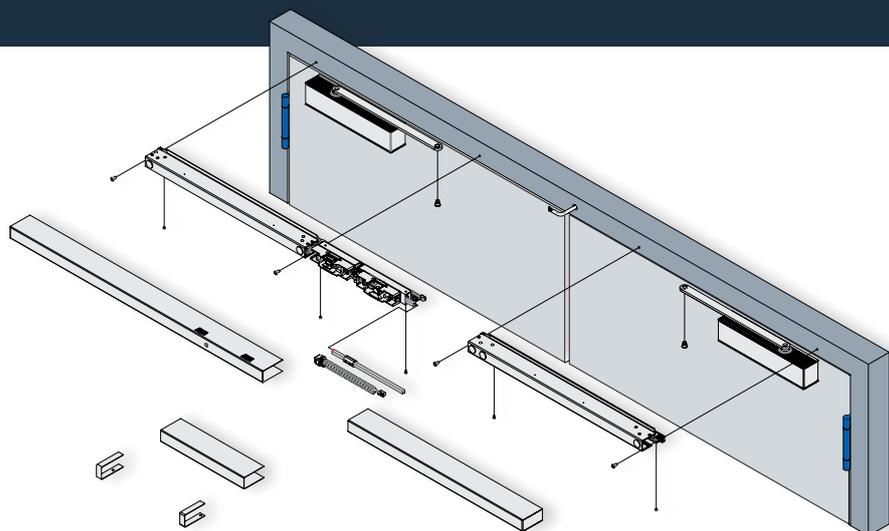


Scan QR-Code and view the movie of our new mounting technology



3. Mounting

- No calibration of the coordinator necessary
- Pre-mounted components
- Mounting with two screws per leaf only
- Continuous cover
- Wiring through easy plug- and play cable connection systems



4. Packing



- New complete packing, complete set including door closer and accessory
- No information about hinge distance necessary since all coordinators are delivered up to maximum length
- Set systems: e.g.
 - TS-41 up to 2.200 mm
 - TS-61 (2-5) up to 2.500 mm
 - TS-61 (5-6) up to 2.800 mm

OLE Newton



Door closers with slide rail



ECO **Newton** TS-62 (EN 2 – 5)
from page 42



ECO **Newton** TS-61 (EN 2 – 5 / EN 5 – 6)
from page 50



ECO **Newton** TS-51 (EN 1 – 4)
from page 58



ECO **Newton** TS-41 (EN 1 – 4)
from page 64



ECO **Newton** TS-31 (EN 1 – 3)
from page 72



ECO **Newton** TS-15 B (EN 1 / 2)
from page 80

Slide rails (surface mounted)

Slide rail SR-EFR-2 with ECO **Newton** door closer TS-61



Slide rails for single-leaf doors

Slide rail GS B	from page 87
Slide rail GS B-FKL	from page 87
Slide rail EF	from page 90
Slide rail EF BG	from page 91

Slide rails for single-leaf doors with integrated smoke detector

Slide rail EFR (short)	from page 94
Slide rail EFR BG (short)	from page 95

Slide rails for double-leaf doors

Slide rail SR	from page 98
Slide rail SR BG	from page 99
Slide rail ECO SR III	from page 100
Slide rail SR BGX	from page 101
Slide rail SR-EF-2	from page 102
Slide rail SR-EF-2 BG	from page 103

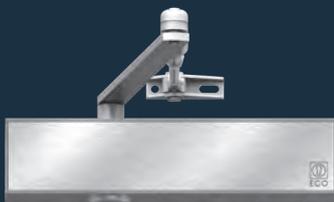
Slide rails for double-leaf doors with integrated smoke detector

Slide rail SR-EFR-2	from page 106
Slide rail SR-EFR-2 BG	from page 107

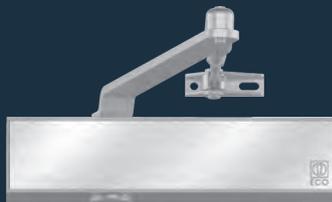
ECO **Newton**



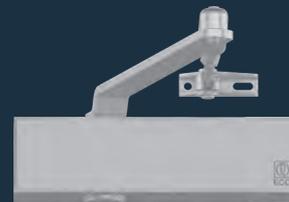
Door closers with standard arm



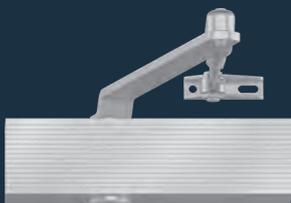
ECO **Newton** TS-50
(EN 1 – 5 / EN 2 – 6)
from page 108



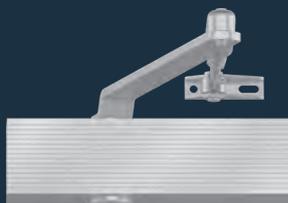
ECO **Newton** TS-20
(EN 2 / 3 / 5)
from page 114



ECO **Newton** TS-14 EN
(EN 2 / 3 / 4)
from page 122



ECO **Newton** TS-15
(EN 2 / 3 / 4 / 5)
from page 130



ECO **Newton** TS-14
(EN 1 / 2 / 3 / 4)
from page 136

Concealed door closers



ITS 420 (EN 2 – 4)
Concealed door closer
from page 142



ITS Multi-Genius (EN 1 – 4 / EN 2 – 5)
Concealed door closer
from page 146

Slide rail (concealed)



Concealed slide rails for single-leaf doors

Slide rail IS 12
Slide rail IS 21
Slide rail IS-EF

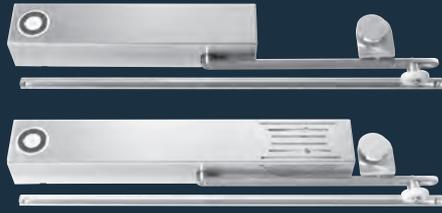
from page 151
from page 151
from page 152

Concealed slide rails for double-leaf doors

Slide rail IS-SR
Slide rail IS-SR-EF

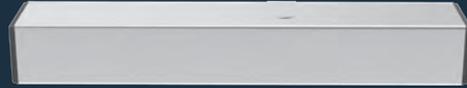
from page 153
from page 153

Free-swinging door closers



FTS-63 (EN 1 – 4 / EN 5 – 6)
FTS-63 R (EN 1 – 4 / EN 5 – 6)
Free-swinging door closers
from page 154

Electromotoric swing door drive



ETS 64-R (EN 3 – 6)
ETS 73 (EN 3 – 7)
Electromotoric swing door drive
from page 158

Floor spring



BTS 843 (EN 3) / BTS 844 (EN 4)
Floor springs
from page 170

Transom closer



RTS 42 (EN 2 – 4)
Transom closer
from page 174

Accessories

Mounting plates for ECO Newton	from page 180
Fullcover for door closer body	
ECO Newton	from page 181
Fullcover for slide rail B	from page 181
Arms	from page 182
Slide rail K	from page 182
Standard arms	from page 183
Hold open arms	from page 183
Panic flap MK	from page 184
SR Basis 2	from page 184
Adaptor for arm	from page 185
Accessorie set tandem door closer	from page 185
Complete set tandem door closer	from page 185
Glass clamping device	from page 185
Adaptor profiles	from page 189
Metal drilling template	from page 187
Under-lintel angle	from page 188
Angle bracket	from page 189
Adaptor profile for steel frame	
installation FTS	from page 189
Axis bolt extension FTS	from page 189
Accessorie set FKL-E / SR-FKL (BGX)	from page 190
Accessorie set MÖB I GS Basis	from page 191
Pivot hinges	from page 191

Accessories for hold open devices

ECO RSZ III	from page 192
RSZ kompakt	from page 192
Smoke switch	from page 194
Hold open switch FSZ Basis	from page 193
Manual door release button	from page 193
Ceiling smoke switch	from page 194
ORS 142 Set	from page 194
Thermo switch	from page 194
Mounting plate	from page 195
Electromagnetic door retainers	from page 196
Anchor plates	from page 157
Test gas P-250	from page 199
Approval set (Maintenance book)	from page 199

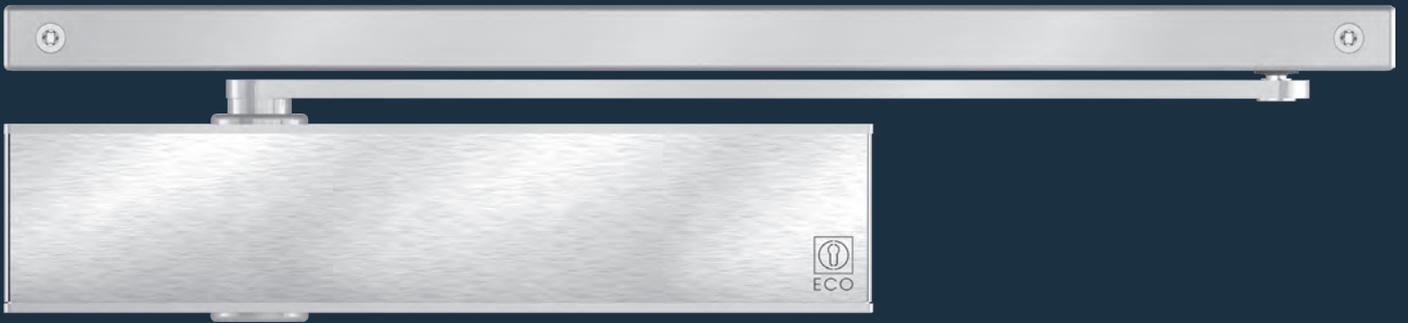
Accessories ETS

Mounting plate	from page 200
Door stop	from page 200
Clamp piece	from page 200
Cladding for double-leaf doors	from page 200
Integrated closing	
sequence control (SRI)	from page 200
Relay board (RSP)	from page 201
Dead bolt switch contact (RSK)	from page 201
Standard opener with	
smoke smoke protection approval	from page 201
Fire protection door opener	from page 201

Operating and safety elements

BEDIX control device	from page 202
Flip switch	from page 202
Contactless switch	from page 202
Contactless motion detector	from page 202
Radar „Eagle One“	from page 203
Radio control set for ETS	from page 203
Sensor strips	from page 203
Flatscan	from page 203

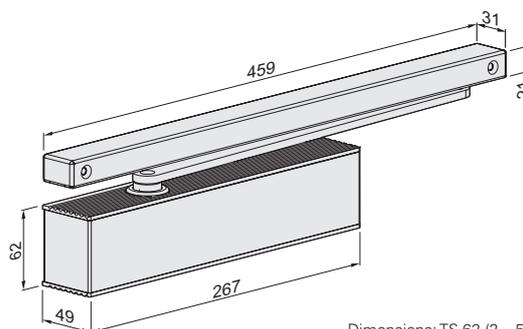
ECO **Newton** TS-62



Product characteristics

Closing force (continuously adjustable)	Size acc. to EN	2 – 5
		F
Door width	≤ 1.250 mm	■
Dimensions (incl. mounting plate)	Length in mm	267
	Depth in mm	49
	Height in mm	62
Mounting plate acc. to EN 1154 (supplementary sheet 1)		■
Hinge side and hinge-opposite side		□
DIN left / right		■
Latching speed (continuously adjustable)		■
Closing speed (continuously adjustable)		■
Back-check (continuously adjustable)		■
Delayed action (continuously adjustable)		■
Tested acc. to EN / DIN		EN 1154
Meets requirements	PMR ERP DIN 18040 DIN SPEC 1104	
Suitable for fire- and smoke control doors		F
Certified according to EU-Directive		CE

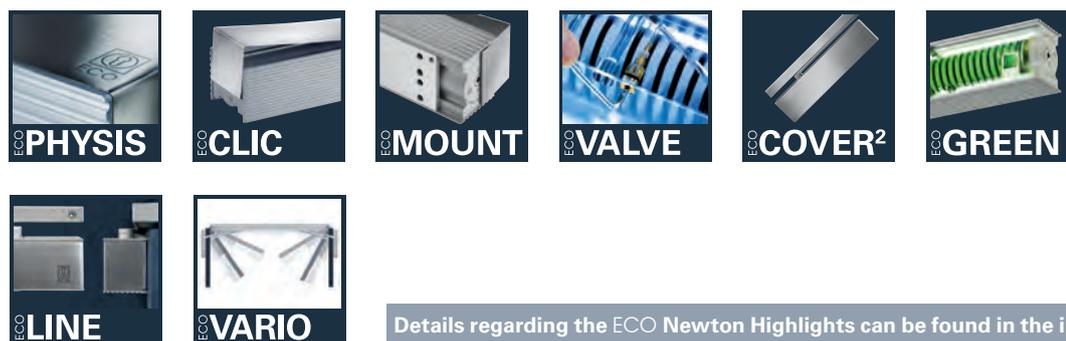
- Yes
- No
- Option



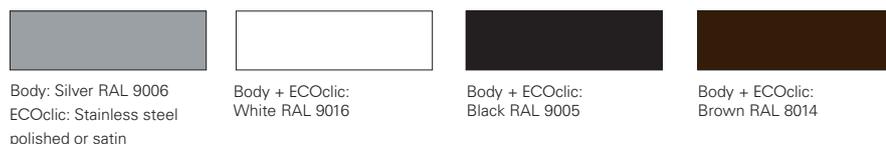
Dimensions: TS-62 (2 – 5)



ECO Newton TS-62 ■ Highlights at a glance



Details regarding the ECO Newton Highlights can be found in the intro of this chapter.



Slide rail and arm are always delivered in the same colour as the ordered door closer body.



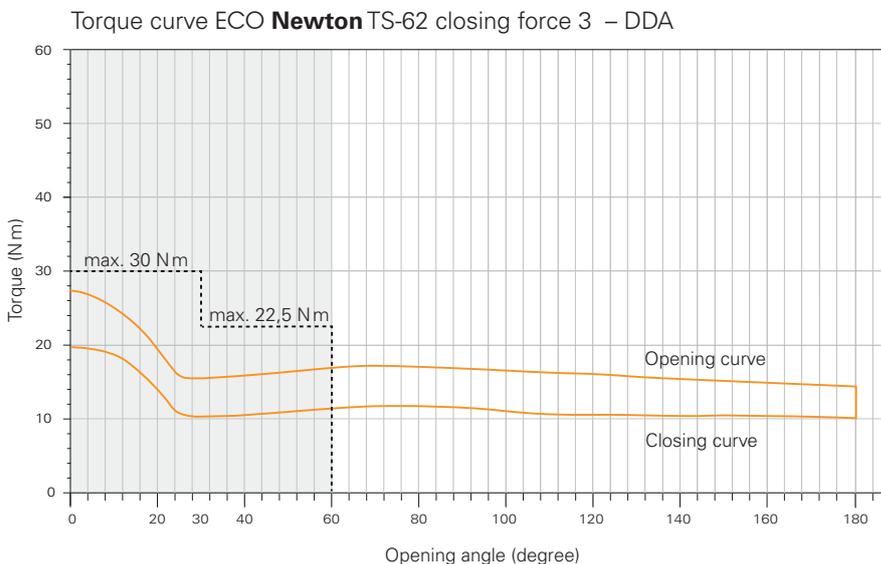
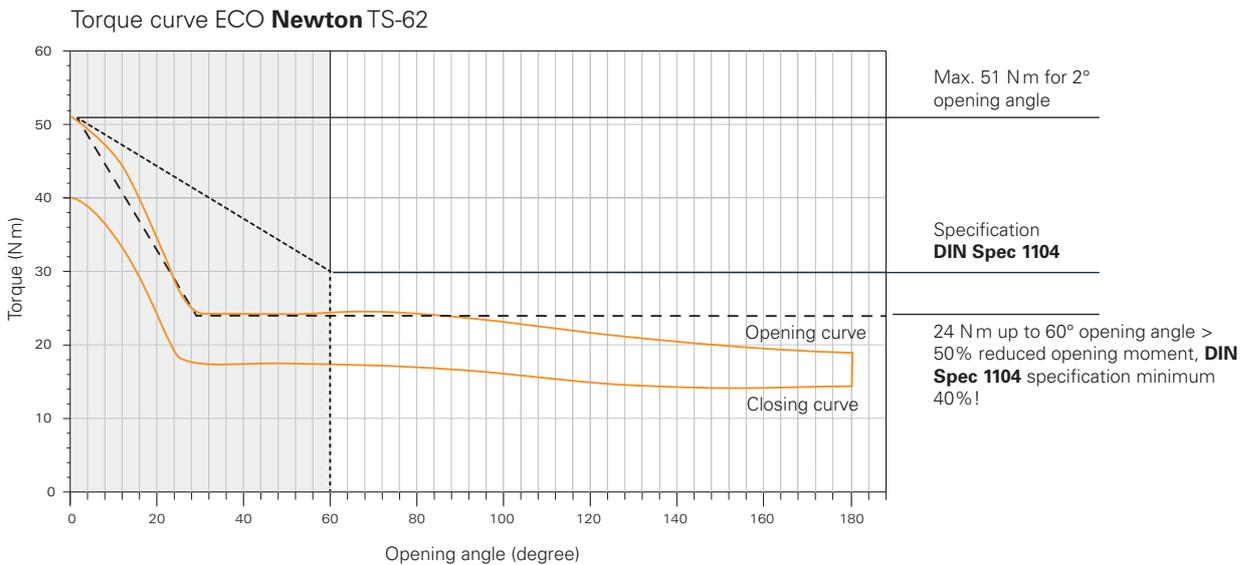
Applications for the ECO Newton TS-62

The ECO **Newton TS-62** can be used everywhere, where elegant design and ease of opening are required. The closing speed, cushioning when opening, closure delay and latching speed can easily & smoothly be adjusted from the front. The closer's function can thus be ideally adjusted for the requirements of the door concerned.

The opening torque required reduces tangibly. With its intelligent gearing design, the ECO **Newton TS-62** achieves a performance which is ideal when opening and closing as well as being very efficient. The forces which arise when a door is opened are reduced to a minimum, without any compromises on the reliability of the door closing. For the user, this means that distinctly less torque is required to open a door in comparison to other similar door closers. This makes the ECO **Newton TS-62** into the perfect problem solver for standard and special-function doors, especially for clinics, nursing homes, kindergartens and schools.

The ECO **Newton TS-62** complies with all European standards for universal design with requirements for doors to move smoothly, with an opening torque which quickly drops and with high efficiency:

Germany: DIN Spec 1104 , German version CEN/TR 15894 DIN 18040 – Barrier free building	England: BS 8300:2001 DDA	France: PMR
---	-------------------------------------	-----------------------



Important notes

ECO Newton TS-62 ▪ Door closer with slide rail

Extracts from DIN SPEC 1104

B.6.4.1 General

For easy access, the opening forces must be kept as low as possible.

Door closers with a high efficiency (see B.6.4.3.3.2) and an opening torque which significantly drops (see B.6.4.3.3.3) are always to be recommended.

B.6.4.3.3.1 Adjustable closing force

Door closers with adjustable closing force allow the closing force to be set in situ to the value specified by the planner to close that specific door. This closing force can be less than that specified in **EN 1154** for this particular door.

B.6.4.3.3.2 Efficiency

The efficiency corresponds to the closing force expressed as a percentage of the opening force. A good door closer will typically have an efficiency of at least 65%.

B.6.4.3.3.3 Reducing opening torque

It is recommended that door closing devices are chosen which have a reduction in the opening force of about 40% in the range of 2° to 60° of the door opening.

B.6.4.4.1 General

The closing speed should be set so that the time for the door to move from being open at 90° to its being closed is between 7 seconds (for small doors) and 15 seconds (for large doors), for fire safety doors it must not however exceed 30 seconds.

B.6.4.2.1 Door closing agent with controlled closure

The agent should be chosen in accordance with **EN 1154** or **EN 1155**, if an electrically driven fire door holder is installed. To achieve the best opening/closing forces, door closers with adjustable closing and latching speeds should be used, selected by door size.

Extracts from DIN 18040-1:2010-10

4.3.3.3 Requirements on the design of the door

It must be possible to open and close doors with a low force (max. 25 Nm), otherwise, automatic door systems are required, see **DIN 18650-1** and **DIN 18650-2**, according to table 1 in this standard, from line 12. If door closers are required, then they must be set so that the opening torque does not exceed size 3 according to **DIN EN 1154** (max. 47 Nm).

It is recommended to use door closers with smoothly adjustable closing force.

So that people with restricted mobility have enough time to pass safely through the door, closing delays may be necessary.

For fire and smoke safety doors, holding systems (e.g. magnets or a free swing door closer) should be used.

Extract from DDA (Usage in GB):

"... door closers used on fire safety doors (**EN 1154**) must meet the requirements of closing force according to size EN 3.

Whereby the opening torque may not exceed the following values:

For an opening angle of 0 - 30° max. 30 Nm.

For an opening angle of 31- 60° max. 22.5 Nm..."

Extract from PMR (Usage in France):

"... in general, the opening force may not exceed 50 N."

(Please note that the opening force is meant here and not the opening torque. The force is measured at the door handle. This means that, especially for small doors, the requirements increase on the ease of movement of the door closer.)

Order information

ECO **Newton** TS-62 ▪ Door closer with slide rail

Product information

Closing force 2 – 5 tested acc. to **EN 1154** (for door width up to 1.250 mm continuously adjustable. Latching speed, closing speed and back-check continuously adjustable. **Delayed action as option**. Same version DIN left and DIN right. Mounting height with mounting plate only 49 mm. Door opening angle: 175°

- ECOphysis: Door closer and slide rail build a unit in aluminium and stainless steel
- ECOclic: The stainless steel cover encloses the aluminium body with the power of spring steel and conceals all of the adjusting elements, thus securing the closer against unauthorized access.
- ECOmount: Mounting plate according to **EN 1154** is completely covered by the door closer
- ECOvalve: Simple, high-precision and permanently secure adjustment of all parameters of the closing process with one conventional Allen key.
- ECOgreen: The intelligent construction and carefully planned use of materials help considerably to save resources.
- ECOcover²: Optional stainless steel cover for the ECO **Newton** door closers and related slide rails. Please order the lever arm in stainless steel look for the perfect overall appearance.
- ECOline: The mounted slide rail and door closer are flush when the door is closed. The colours of all materials are perfectly matched- right down to the end caps of the slide rail.
- ECOvario: Allows the use of all slide rail door closers and can even be combined with different door leaf widths. In this way, optimum value for money can be achieved for each individual door situation.

New packaging:

Set incl. door closer body, slide rail B, arm for slide rail B, mounting plate, allen key, mounting instructions, paper drilling template and fixing material.



Hinge side

with / without slide rail B

TS-62 B (2 – 5)



Closer body with arm and slide rail B	Colour	Article number	Closer body with arm, without slide rail B	Colour	Article number
TS-62 B (2 – 5)	Silver RAL 9006*	306254AB1A01010	TS-62 B (2 – 5)	Silver RAL 9006*	356254AB1A00210
TS-62 B (2 – 5)	White RAL 9016	306254AB3E01010	TS-62 B (2 – 5)	White RAL 9016	356254AB3E00210
TS-62 B (2 – 5)	Brown RAL 8014	306254AB3D01010	TS-62 B (2 – 5)	Brown RAL 8014	356254AB3D00210
TS-62 B (2 – 5)	Black RAL 9005	306254AB3G01010	TS-62 B (2 – 5)	Black RAL 9005	356254AB3G00210

Hinge-opposite side

with / without slide rail B

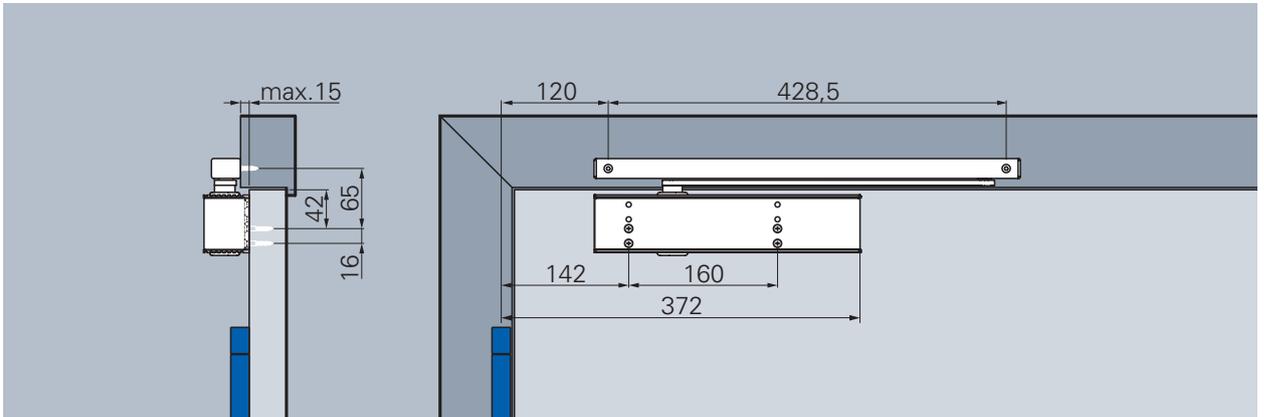
TS-62 G (2 – 5)



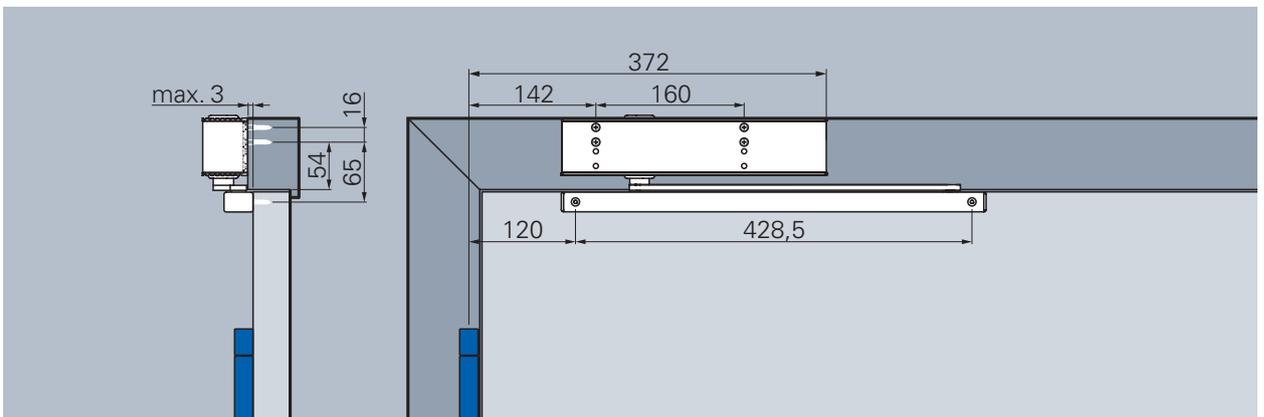
Closer body with arm and slide rail B	Colour	Article number	Closer body with arm, without slide rail B	Colour	Article number
TS-62 G (2 – 5)	Silver RAL 9006*	306264AB1A01010	TS-62 G (2 – 5)	Silver RAL 9006*	306264AB1A00210
TS-62 G (2 – 5)	White RAL 9016	306264AB3E01010	TS-62 G (2 – 5)	White RAL 9016	306264AB3E00210
TS-62 G (2 – 5)	Brown RAL 8014	306264AB3D01010	TS-62 G (2 – 5)	Brown RAL 8014	306264AB3D00210
TS-62 G (2 – 5)	Black RAL 9005	306264AB3G01010	TS-62 G (2 – 5)	Black RAL 9005	306264AB3G00210

Hinge side

Mounting with slide rail B, illustration DIN left door, DIN right laterally reversed



Standard mounting TS-62 with slide rail B, hinge side



Head mounting TS-62G with slide rail B, hinge side

Closing speed

Continuously adjustable closing speed from approx. 180° to 0°.

Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 0°.

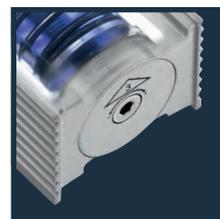
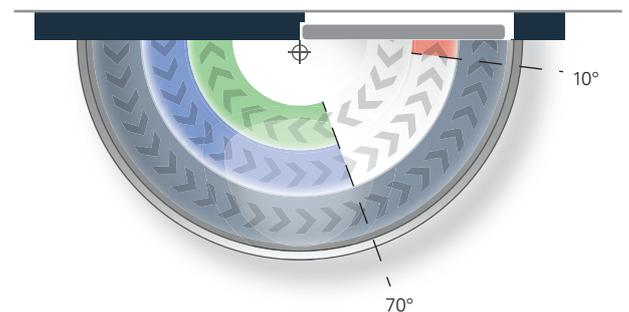
Back-check

Reduces the opening speed starting at 70° and avoids the slamming of the door. Back-check continuously adjustable

Delayed action

Reduces the closing speed and allows a safer passing for people and transports. Especially suitable for the use in nursing homes and hospitals. Delay action continuously adjustable. Works between 180° to 70°.

Closing force diagram ECO Newton TS-62, hinge side



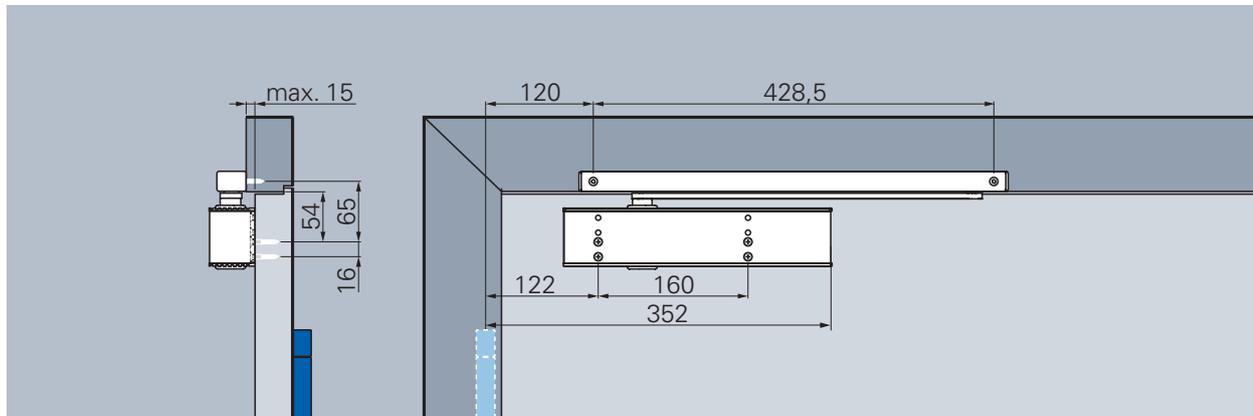
Closing force:

Continuously adjustable min. size 2
TS-62 (2 – 5) max. size 5

Default delivery condition: size 3

Hinge opposite side

Montage with slide rail B, illustration DIN right door, DIN left laterally reversed



Standard mounting TS-62G with slide rail B, hinge-opposite side

Closing speed

Continuously adjustable closing speed from approx. 140°* to 0°

Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 0°

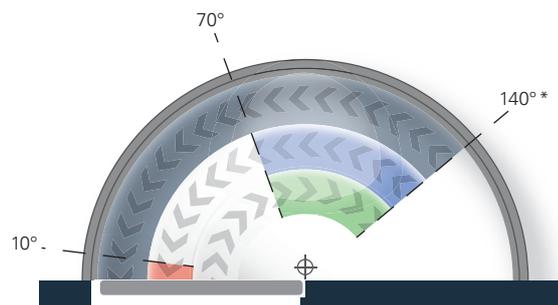
Back-check

Reduces the opening speed starting at 70° and avoids the slamming of the door. Back-check continuously adjustable

Delayed action

Reduces the closing speed and allows a safer passing for people and transports. Especially suitable for the use in nursing homes and hospitals. Delayed action continuously adjustable. Works between 140°* to 70°.

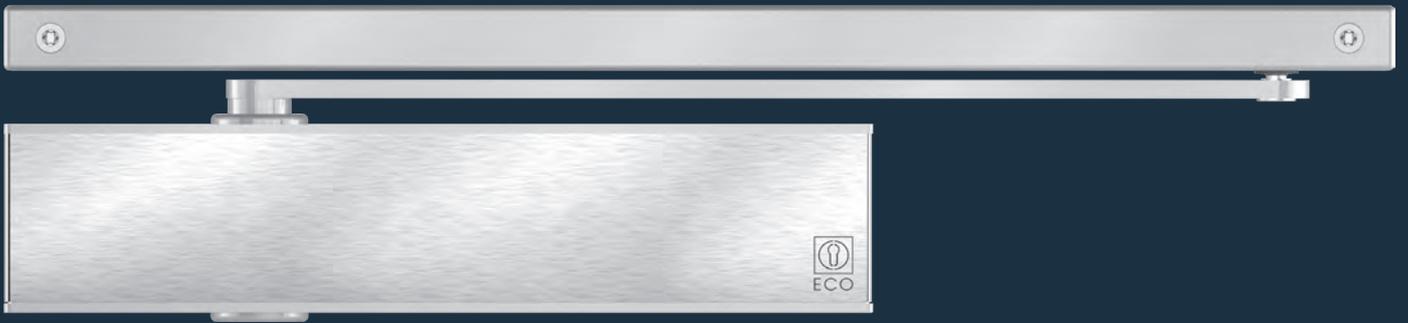
Closing force diagram ECO Newton TS-62, hinge-opposite side



*Varies according to door thickness and type of hinge.

A door stopper for opening limit is a must!

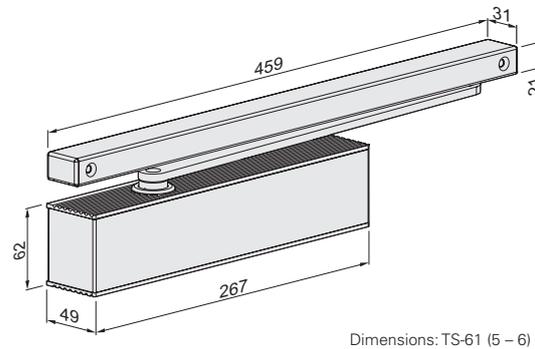
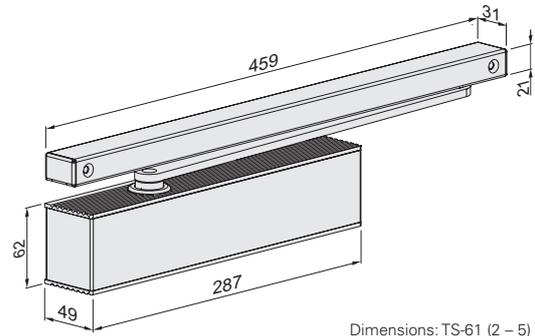
ECO **Newton** TS-61



Product characteristics

	Size acc. to EN	2 – 5	2 – 5	5 – 6
Closing force (continuously adjustable)		F	SV	F
Door width	≤ 1.250 mm	■	■	■
acc. to EN	≤ 1.400 mm	-	-	■
Dimensions (incl. mounting plate)	Length in mm	287	287	267
	Depth in mm	49	49	49
	Height in mm	62	62	62
Mounting plate acc. to EN 1154 (supplementary sheet 1)		■	■	■
Hinge side and hinge-opposite side		□	□	□
DIN left / right		■	■	■
Latching speed (continuously adjustable)		■	■	■
Closing speed (continuously adjustable)		■	■	■
Back-check (continuously adjustable)		■	■	■
Delayed action (continuously adjustable)		-	■	-
Tested acc. to EN		EN 1154		
Suitable for fire- and smoke control doors		F	-	F
Certified according to EU-Directive		CE	-	CE

- Yes
- No
- Option



ECO Newton TS-61 ■ Highlights at a glance

ECO UNITY

ECO PHYSIS

ECO CLIC

ECO MOUNT

ECO VALVE

ECO COVER²

ECO GREEN

ECO LINE

ECO VARIO

Details regarding the ECO Newton Highlights can be found in the intro of this chapter.

Body: Silver RAL 9006
 ECOcllic: Stainless steel polished or satin

Body + ECOcllic: White RAL 9016

Body + ECOcllic: Black RAL 9005

Body + ECOcllic: Brown RAL 8014

Slide rail and arm are always delivered in the same colour as the ordered door closer body.

Under-lintel angle for door closer from page 188.

Under-lintel angle for slide rail from page 188.

Adaptor profiles from page 189.

Applications for the ECO Newton TS-61

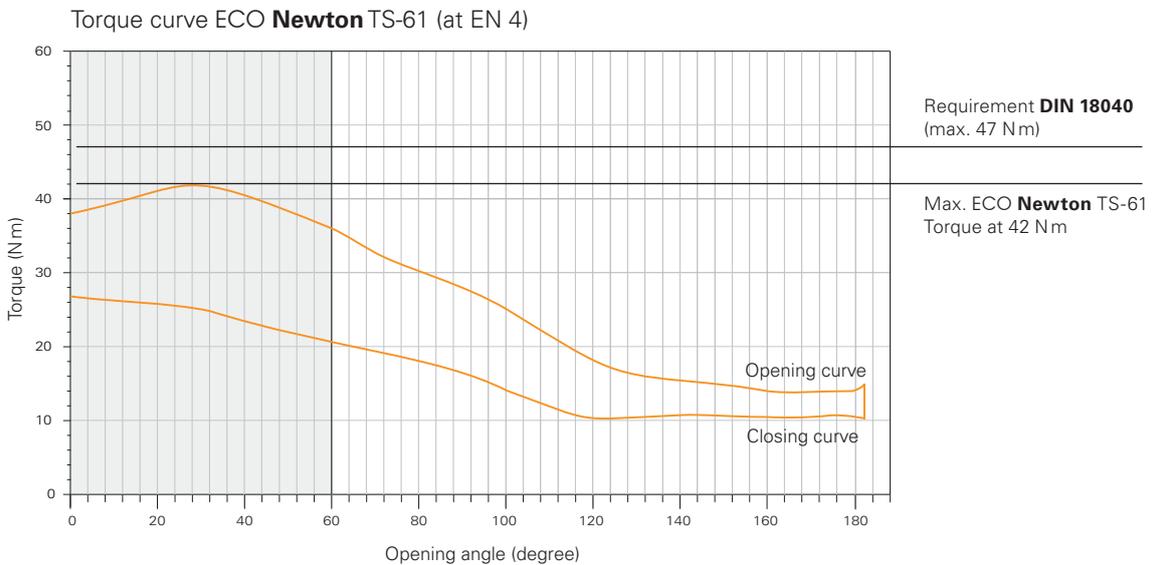
The ECO **Newton TS-61** is designed for middle and heavy function doors (**EN 1154** up to size 5 resp. 6) and can be used everywhere, where elegant design, functionality, ease of opening and cost-conscious building need to be combined. Closing speed, back-check and latching speed can be adjusted continuously. Delayed action (only for size EN 2-5, up to 70°) is an option.

Due to its gearing design, the ECO **Newton TS-61** achieves a high degree of efficiency and thereby an optimal ratio between opening and closing act. This makes the ECO **Newton TS-61** the perfect problem solver on standard and function doors. Especially for the object area.

The ECO **Newton TS-61** (2 – 5) meets the **DIN 18040** (Construction of accessible buildings with requirements for smooth-running doors with high efficiency) up to closing force EN 4. The maximum opening moment at closing force EN 4 is just about 42 Nm (the standard **DIN 18040** requires an opening moment of 47 Nm for fire resistant doors with door closers).

Germany:
DIN 18040 – Barrier free building

France:
PMR



Extracts from DIN 18040-1:2010-10

4.3.3.3 Requirements on the design of the door

It must be possible to open and close doors with a low force (max. 25 Nm), otherwise, automatic door systems are required, see **DIN 18650-1** and **DIN 18650-2**, according to table 1 in this standard, from line 12. If door closers are required, then they must be set so that the opening torque does not exceed size 3 according to **DIN EN 1154** (max. 47 Nm).

It is recommended to use door closers with smoothly adjustable closing force.

So that people with restricted mobility have enough time to pass safely through the door, closing delays may be necessary.

For fire and smoke safety doors, holding systems (e.g. magnets or a free swing door closer) should be used.

Order information

ECO **Newton** TS-61 ■ Door closer with slide rail

Product information

Closing force 2 – 5 (5 – 6) tested acc. to **EN 1154** (for door width up to 1.250 mm (1.400 mm) continuously adjustable. Latching speed, closing speed and back-check continuously adjustable. **Delayed action as option (only for closing force EN 2-5)**. Same version DIN left and DIN right. Mounting height with mounting plate only 49 mm. Door opening angle: 180°

- **ECOunity**: The ECO **Newton** closer portfolio covers all door dimensions with only two basic closer units.
- **ECOphysics**: Door closer and slide rail build a unit in aluminium and stainless steel
- **ECOcllic**: The stainless steel cover encloses the aluminium body with the power of spring steel and conceals all of the adjusting elements, thus securing the closer against unauthorized access.
- **ECMount**: Mounting plate according to **EN 1154** is completely covered by the door closer.
- **ECOvalve**: Simple, high-precision and permanently secure adjustment of all parameters of the closing process with one conventional allen key.
- **ECOgreen**: The intelligent construction and carefully planned use of materials help considerably to save resources.
- **ECOcover²**: Optional stainless steel cover for the ECO **Newton** door closers and related slide rails. Please order the lever arm in stainless steel look for the perfect overall appearance.
- **ECOline**: The mounted slide rail and door closer are flush when the door is closed. The colours of all materials are perfectly matched- right down to the end caps of the slide rail.
- **ECOvario**: Allows the use of all slide rail door closers and can even be combined with different door leaf widths. In this way, optimum value for money can be achieved for each individual door situation.

New packaging:

Set incl. door closer body, slide rail B, arm for slide rail B, allen key, mounting plate, mounting instructions, paper template and fixing material.



Hinge side

Without delayed action

TS-61 B (5 – 6) **EN 1154 F CE**



Closer body with arm and slide rail B	Colour	Article number	Closer body with arm, without slide rail B	Colour	Article number
TS-61 B (5 – 6)	Silver RAL 9006*	306153CB1A01010	TS-61 B (5 – 6)	Silver RAL 9006*	356153CB1A00210
TS-61 B (5 – 6)	White RAL 9016	306153CB3E01010	TS-61 B (5 – 6)	White RAL 9016	356153CB3E00210
TS-61 B (5 – 6)	Brown RAL 8014	306153CB3D01010	TS-61 B (5 – 6)	Brown RAL 8014	356153CB3D00210
TS-61 B (5 – 6)	Black RAL 9005	306153CB3G01010	TS-61 B (5 – 6)	Black RAL 9005	356153CB3G00210

TS-61 B (2 – 5) **EN 1154 F CE**



Closer body with arm and slide rail B	Colour	Article number	Closer body with arm, without slide rail B	Colour	Article number
TS-61 B (2 – 5)	Silver RAL 9006*	306153AB1A01010	TS-61 B (2 – 5)	Silver RAL 9006*	3516153AB1A00210
TS-61 B (2 – 5)	White RAL 9016	306153AB3E01010	TS-61 B (2 – 5)	White RAL 9016	3516153AB3E00210
TS-61 B (2 – 5)	Brown RAL 8014	306153AB3D01010	TS-61 B (2 – 5)	Brown RAL 8014	3516153AB3D00210
TS-61 B (2 – 5)	Black RAL 9005	306153AB3G01010	TS-61 B (2 – 5)	Black RAL 9005	3516153AB3G00210

With delayed action

TS-61 B-SV (2 – 5) **EN 1154**



Closer body with arm and slide rail B	Colour	Article number	Closer body with arm, without slide rail B	Colour	Article number
TS-61 B-SV (2 – 5)	Silver RAL 9006*	306154AB1A01010	TS-61 B-SV (2 – 5)	Silver RAL 9006*	356154AB1A00210
TS-61 B-SV (2 – 5)	White RAL 9016	306154AB3E01010	TS-61 B-SV (2 – 5)	White RAL 9016	356154AB3E00210
TS-61 B-SV (2 – 5)	Brown RAL 8014	306154AB3D01010	TS-61 B-SV (2 – 5)	Brown RAL 8014	356154AB3D00210
TS-61 B-SV (2 – 5)	Black RAL 9005	306154AB3G01010	TS-61 B-SV (2 – 5)	Black RAL 9005	356154AB3G00210

Hinge-opposite side

Without delayed action

TS-61 G (5 – 6) EN 1154 F CE



Closer body with arm and slide rail B	Colour	Article number	Closer body with arm, without slide rail B	Colour	Article number
TS-61 G (5 – 6)	Silver RAL 9006*	306163CB1A01010	TS-61 G (5 – 6)	Silver RAL 9006*	356163CB1A00210
TS-61 G (5 – 6)	White RAL 9016	306163CB3E01010	TS-61 G (5 – 6)	White RAL 9016	356163CB3E00210
TS-61 G (5 – 6)	Brown RAL 8014	306163CB3D01010	TS-61 G (5 – 6)	Brown RAL 8014	356163CB3D00210
TS-61 G (5 – 6)	Black RAL 9005	306163CB3G01010	TS-61 G (5 – 6)	Black RAL 9005	356163CB3G00210

TS-61 G (2 – 5) EN 1154 F CE

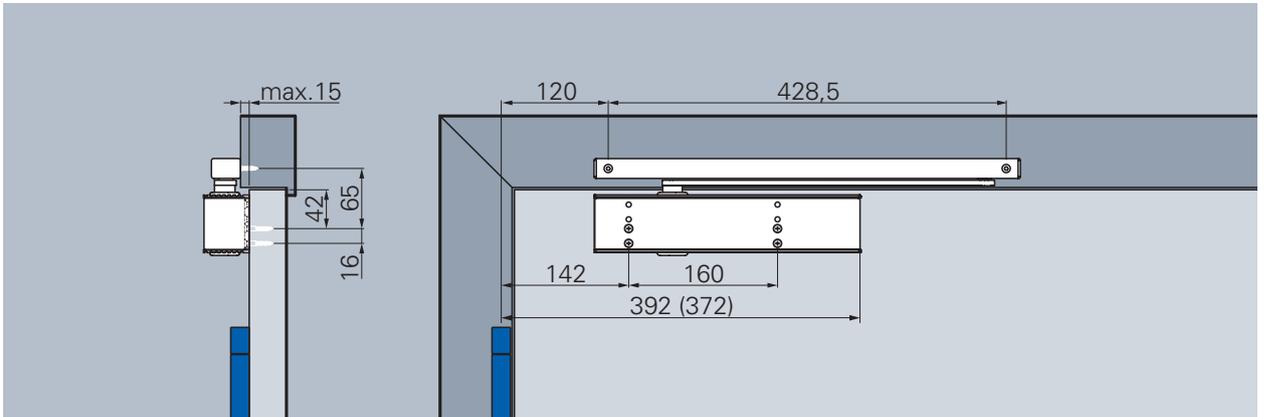


Closer body with arm and slide rail B	Colour	Article number	Closer body with arm, without slide rail B	Colour	Article number
TS-61 G (2 – 5)	Silver RAL 9006*	306163AB1A01010	TS-61 G (2 – 5)	Silver RAL 9006*	356163AB1A00210
TS-61 G (2 – 5)	White RAL 9016	306163AB3E01010	TS-61 G (2 – 5)	White RAL 9016	356163AB3E00210
TS-61 G (2 – 5)	Brown RAL 8014	306163AB3D01010	TS-61 G (2 – 5)	Brown RAL 8014	356163AB3D00210
TS-61 G (2 – 5)	Black RAL 9005	306163AB3G01010	TS-61 G (2 – 5)	Black RAL 9005	356163AB3G00210

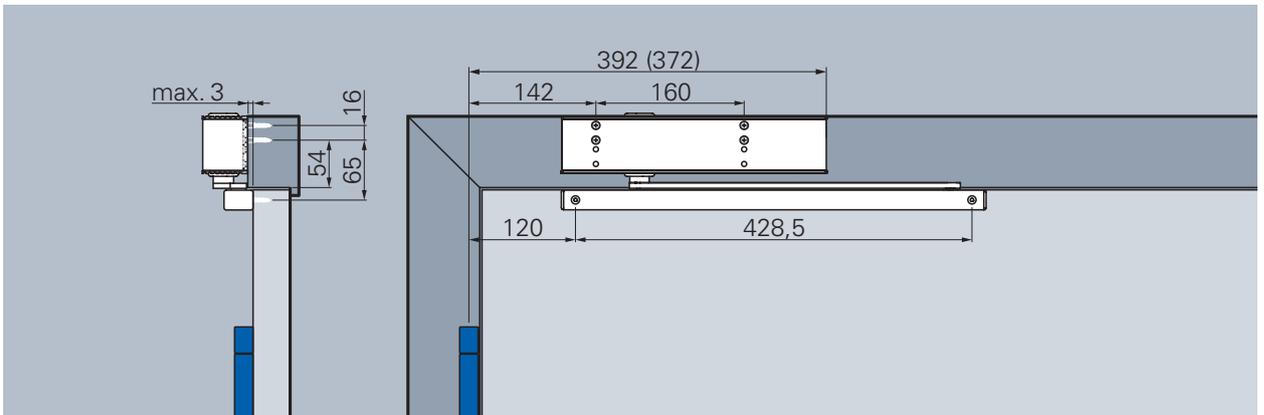
2

Hinge side

Mounting with slide rail B, illustration DIN left door, DIN right laterally reversed



Standard mounting TS-61 with slide rail B, hinge side



Head mounting TS-61 G with slide rail B, hinge side

Closing speed

Continuously adjustable closing speed from approx. 180° to 0°

Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 0°

Back-check

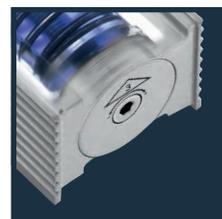
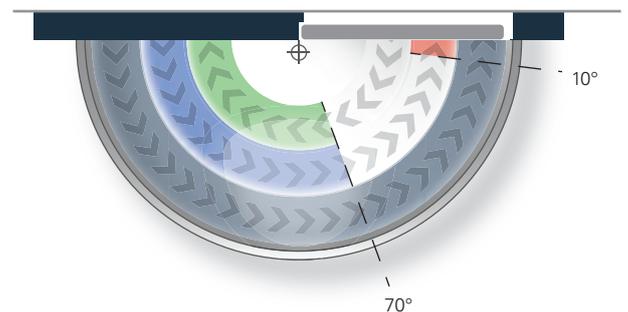
Reduces the opening speed starting at 70° and avoids the slamming of the door. Back-check continuously adjustable

Delayed action (only for TS-61 SV)

Not suitable for fire-and smoke control doors!
Not certified according to EU directives!

Reduces the closing speed and allows a safer passing for people and transports. Especially suitable for the use in nursing homes and hospitals. Delay action continuously adjustable. Works between 180° to 70°.

Closing force diagram ECO Newton TS-61, Hinge side



Closing force:

Continuously adjustable TS-61 (5 – 6) min. size 5 max. size 6

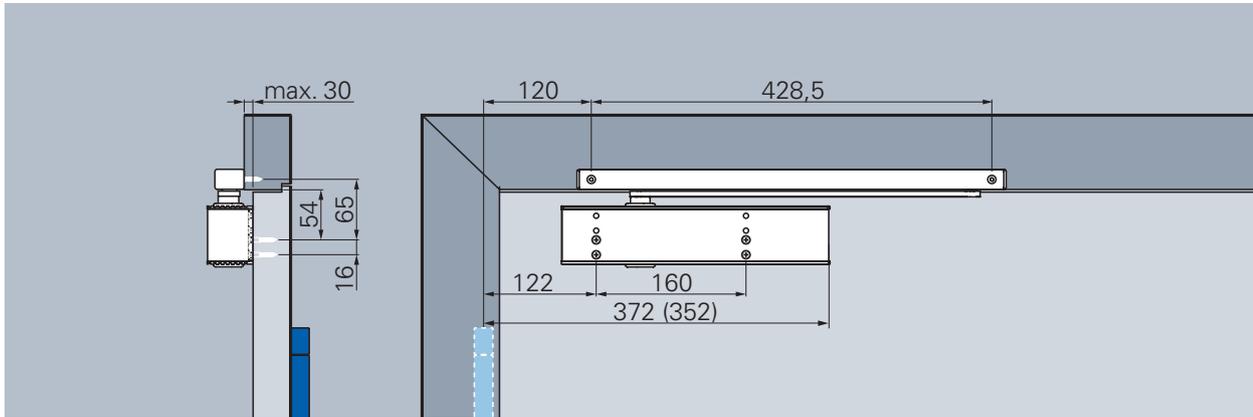
Continuously adjustable TS-61 (2 – 5) min. size 2 max. size 5

Default delivery condition: size 3

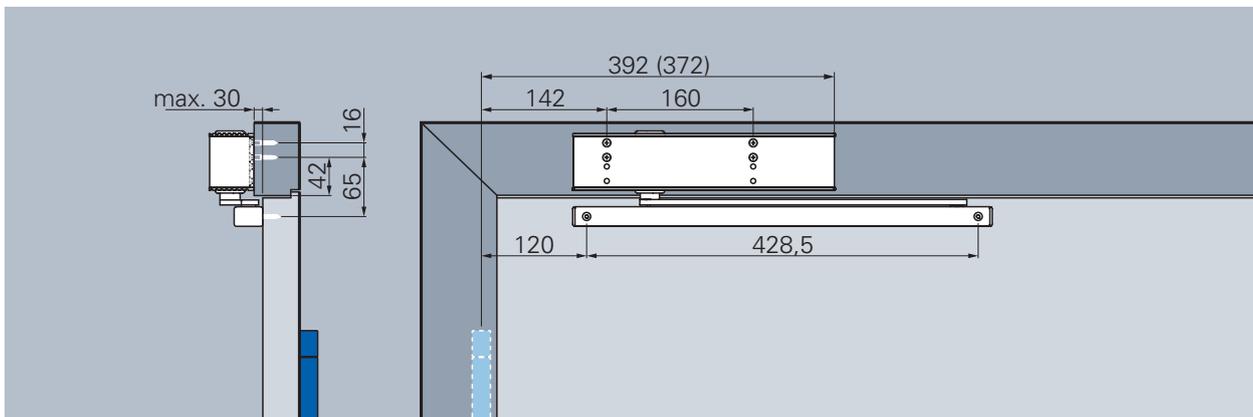
Back check out of order for head mounting. 

Hinge opposite side

Mouting with slide rail B, illustration DIN right door, DIN left laterally reversed



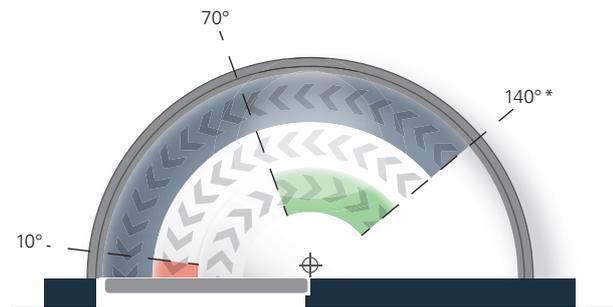
Standard mounting TS-61 G with slide rail B, hinge-opposite side



Head mounting TS-61 with slide rail B, hinge-opposite side

- Closing speed**
Continuously adjustable closing speed from approx. 140°* to 0°
- Latching speed**
Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 0°
- Back-check**
Reduces the opening speed starting at 70° and avoids the slamming of the door. Back-check continuously adjustable

Closing force diagram ECO Newton TS-61, Hinge opposite side

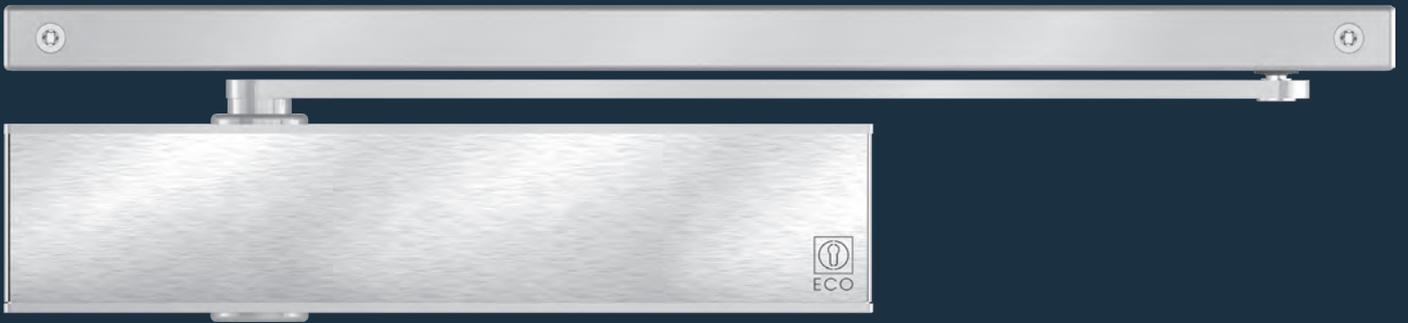


*Varies according to door thickness and type of hinge

A door stopper for opening limit is a must!

Back-check is not working when using head mounting

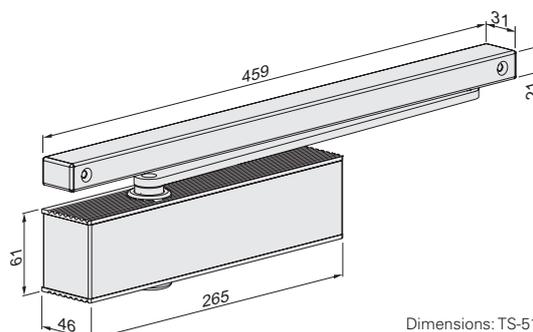
ECO **Newton** TS-51



Product characteristics

Closing force (continuously adjustable)	Size acc. to EN	1 - 4
Door width	acc. to EN ≤ 1.100 mm	■
Dimensions (incl. mounting plate)	Lengths in mm Depth in mm Height in mm	265 46 61
Mounting plate	acc. to EN 1154 (supplementary sheet 1)	■
Hinge side and hinge-opposite side		□
DIN left / right		■
Latching speed (continuously adjustable)		■
Closing speed (continuously adjustable)		■
Back-check (continuously adjustable)		■
Tested acc. to EN	EN 1154	
Suitable for fire-and smoke control doors	F	
Certified according to EU-directive	CE	

- Yes
- No
- Option



2



ECO Newton TS-51 - Order information



*optional

Details regarding the ECO Newton Highlights can be found in the intro of this chapter.



Body: Silver RAL 9006
ECOcllic: Stainless steel polished or satin

Body + ECOcllic: White RAL 9016

Body + ECOcllic: Black RAL 9005

Body + ECOcllic: Brown RAL 8014

Slide rail and arm are always delivered in the same colour as the ordered door closer body.



Under-lintel angle for door closer from page 188.



Under-lintel angle for slide rail from page 188.



Adaptor profiles from page 189.



Glassclamping device from page 185.

Order information

ECO **Newton** TS-51 ■ Door closer with slide rail

Product information

Closing force 1-4, tested acc. to **EN 1154** (for door widths up to 1.100 mm) continuously adjustable. Latching speed, closing speed and back-check continuously adjustable. Same version DIN left and DIN right. Mounting height with mounting plate only 46 mm. Door opening angle: 180°

- **ECOunity**: The ECO **Newton** closer portfolio covers all door dimensions with only two basic closer units.
- **ECOphysis**: Door closer and slide rail build a unit in aluminium and stainless steel
- **ECOcllic**: The stainless steel cover encloses the aluminium body with the power of spring steel and conceals all of the adjusting elements, thus securing the closer against unauthorized access.
- **ECOmout**: Mounting plate according to **EN 1154** is completely covered by the door closer
- **ECOvalve**: Simple, high-precision and permanently secure adjustment of all parameters of the closing process with one conventional allen key.
- **ECOcover²**: Optional stainless steel cover for the ECO **Newton** door closers and related slide rails. Please order the lever arm in stainless steel look for the perfect overall appearance.
- **ECOline**: The mounted slide rail and door closer are flush when the door is closed. The colours of all materials are perfectly matched- right down to the end caps of the slide rail.
- **ECOvario**: Allows the use of all slide rail door closers and can even be combined with different door leaf widths. In this way, optimum value for money can be achieved for each individual door situation.

New Packaging:

Set incl. door closer body, slide rail B, arm for slide rail B, allen key, mounting plate, mounting instructions, paper template and fixing material.

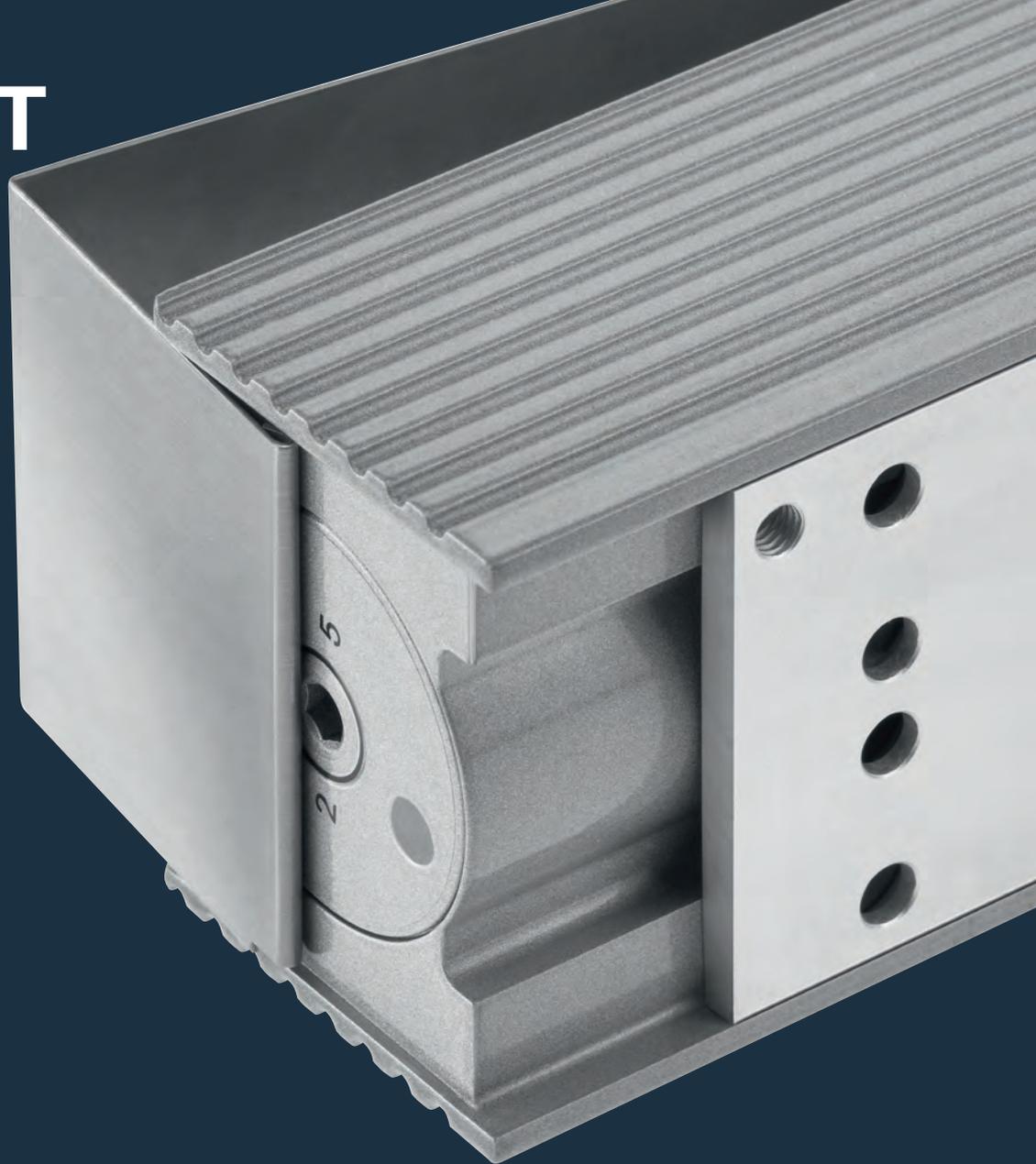
Article numbers



Hinge side			Hinge-opposite side		
Colour	Article number		Colour	Article number	
TS-51 B (1 – 4)	Silver RAL 9006*	305153EA1A01010	TS-51 B (1 – 4)	Silver RAL 9006*	356153EA1A00210
TS-51 B (1 – 4)	White RAL 9016	305153EA3E01010	TS-51 B (1 – 4)	White RAL 9016	356153EA3E00210
TS-51 B (1 – 4)	Brown RAL 8014	305153EA3D01010	TS-51 B (1 – 4)	Brown RAL 8014	356153EA3D00210
TS-51 B (1 – 4)	Black RAL 9005	305153EA3G01010	TS-51 B (1 – 4)	Black RAL 9005	356153EA3G00210

*Door closer body in silver RAL 9006, ECOcllic stainless steel satin or polished as option

ECO MOUNT



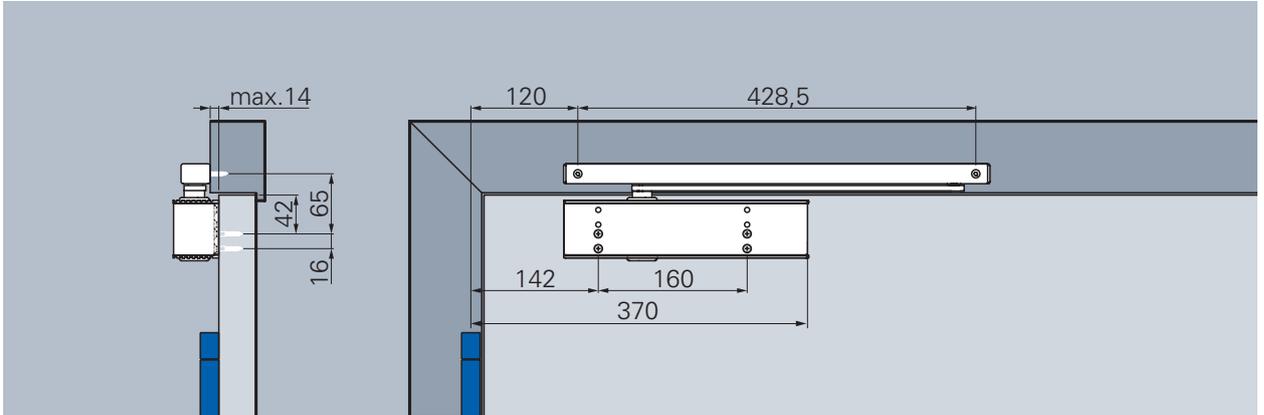
ECO Newton Highlights in detail.

Well-conceived assembly system:

The special feature of the ECO **Newton** assembly system is that the mounting plate is completely concealed by the aluminium body of the closer, thus making it invisible. The mounting plate has standardized drill holes which guarantee time-saving, secure and simple attachment.

Hinge side

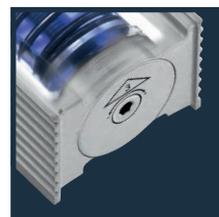
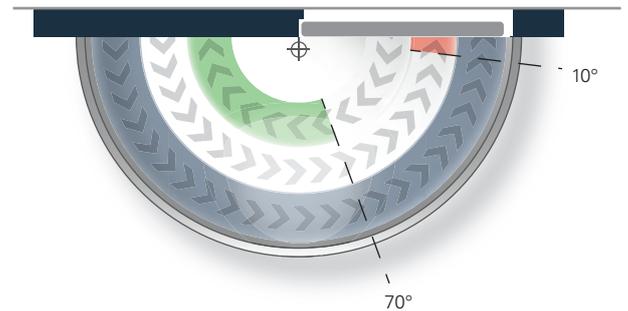
Mounting with slide rail B, illustration DIN left door, DIN right laterally reversed



Standard mounting TS-51 with slide rail B, hinge side

- Closing speed**
 Continuously adjustable closing speed from approx. 180° to 0°
- Latching speed**
 Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 0°
- Back-check**
 Reduces the opening speed starting at 70° and avoids the slamming of the door. Back-check continuously adjustable

Closing force diagram ECO **Newton TS-51**, hinge side



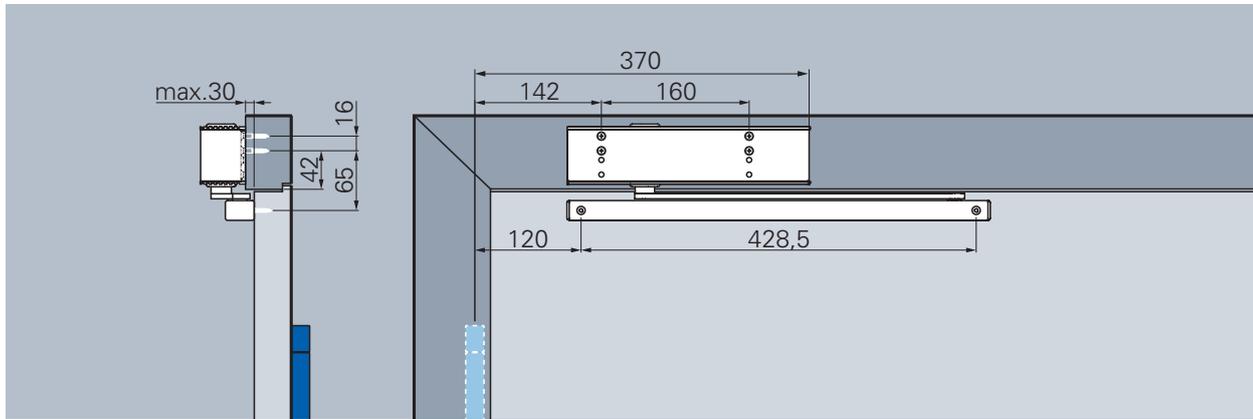
Closing force:

Continuously adjustable min. size 1
max. size 4

Default delivery condition: size 3

Hinge-opposite side

Mouting with slide rail B, illustration DIN left door, DIN left laterally reversed



Head mounting TS 51 with slide rail B, hinge-opposite side

Closing speed

Continuously adjustable closing speed from approx. 140°* to 0°

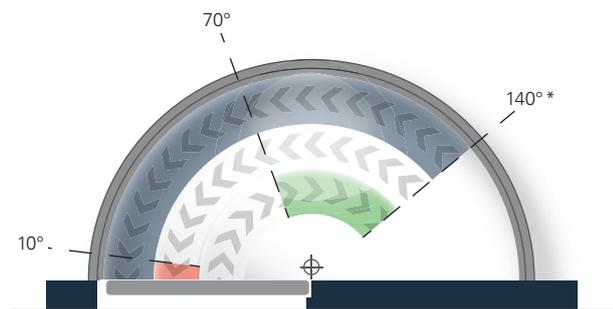
Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 0°

Back-check

Reduces the opening speed starting at 70° and avoids the slamming of the door. Back-check continuously adjustable. Back-check out of order for head mounting / hinge-opposite side

Closing force diagram ECO Newton TS-51, hinge-opposite side



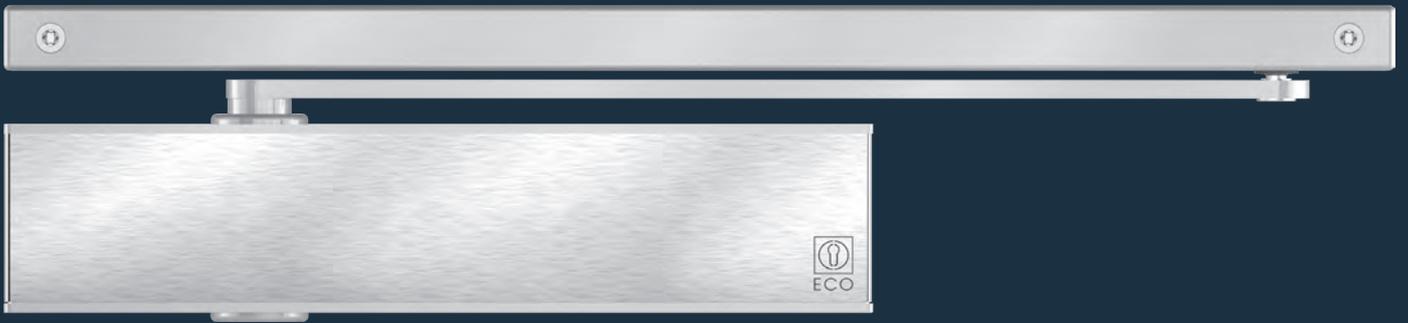
*Varies according to door thickness and type of hinge.

A door stopper for opening limit is a must!

Back-check out of order for head mounting.



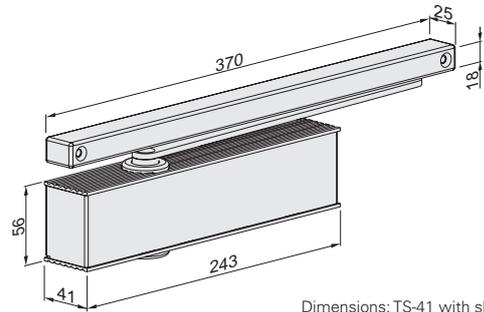
ECO **Newton** TS-41



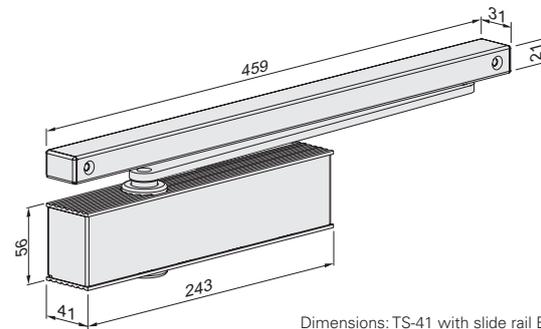
Product characteristics

Closing force (continuously adjustable)	Size acc. to EN	1 - 4
Door width	acc. to EN ≤ 1.100 mm	■
Dimensions (incl. mounting plate)	Length in mm	243
	Depth in mm	41
	Height in mm	56
Mounting plate acc. to EN 1154 (supplementary sheet 1) with GS B		□
Hinge side and hinge-opposite side		■
DIN left / right		■
Latching speed (continuously adjustable)		■
Closing force (continuously adjustable)		■
Back check (constant)		■
Delayed action (continuously adjustable)		-
Tested acc. to EN	EN 1154	
Suitable for fire- and smoke control doors	F	
Certified according to EU-Directive	CE	
Construction of accessible buildings	DIN 18040	

- Yes
- No
- Option



Dimensions: TS-41 with slide rail K



Dimensions: TS-41 with slide rail B



ECO Newton TS-41 - Highlights at a glance

ECO UNITY

ECO PHYSIS

ECO CLIC

ECO VALVE

ECO GREEN

ECO LINE

ECO VARIO

*optional

ECO MOUNT

ECO COVER2

Details regarding the ECO Newton Highlights can be found in the intro of this chapter.

<p>Body: Silver RAL 9006 ECOcllic: Stainless steel polished or satin</p>	<p>Body + ECOcllic: White RAL 9016</p>	<p>Body + ECOcllic: Black RAL 9005</p>	<p>Body + ECOcllic: Brown RAL 8014</p>
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Slide rail and arm are always delivered in the same colour as the ordered door closer body.

Under-lintel angle for door closer from page 188.

Under-lintel angle for slide rail from page 188.

Adaptor profiles from page 189.

Glass clamping device from page 185.

Applications for the ECO Newton TS-41

The ECO **Newton TS-41** is designed for light and middle doors (**EN 1154** size 4) and can be used everywhere, where elegant design, functionality, ease of opening and cost-conscious building need to be combined. Closing speed and latching speed can be adjusted continuously. The back-check (from 70° opening) is already preinstalled in every door closer.

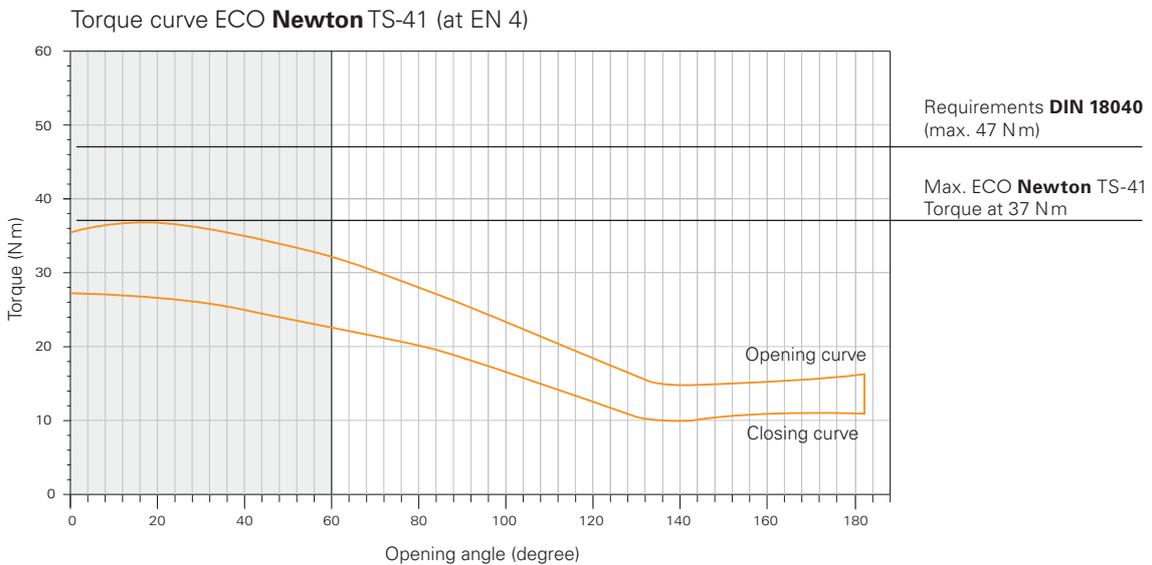
Due to its new gearing design, the ECO **Newton TS-41** achieves a high degree of efficiency and thereby an optimal ratio between opening and closing act. The forces occurring when opening the door are minimized without causing any lower closing safety. This results in a noticeably easier opening moment compared to comparable door closers. This makes the ECO **Newton TS-41** the perfect problem solver on standard- and function doors, especially in the area of clinics, nursing homes, kindergartens and schools.

The ECO **Newton TS-41** meets the **DIN 18040**

Meets requirements of **DIN 18040** (Construction of accessible buildings with requirements for smooth-running doors with high efficiency). The maximum opening moment for closing force EN 4 is just about 37 Nm (the standard **DIN 18040** requires max. 47 Nm).

Germany:
DIN 18040 – Barrier free building

France:
PMR



Extracts from DIN 18040-1:2010-10

4.3.3.3 Requirements on the design of the door

It must be possible to open and close doors with a low force (max. 25 Nm), otherwise, automatic door systems are required, see **DIN 18650-1** and **DIN 18650-2**, according to table 1 in this standard, from line 12. If door closers are required, then they must be set so that the opening torque does not exceed size 3 according to **DIN EN 1154** (max. 47 Nm).

It is recommended to use door closers with smoothly adjustable closing force.

So that people with restricted mobility have enough time to pass safely through the door, closing delays may be necessary.

For fire and smoke safety doors, holding systems (e.g. magnets or a free swing door closer) should be used.

Order information

ECO **Newton** TS-41 ■ Door closer with slide rail

Product information

Closing force 1 – 4, tested acc. to **EN 1154** (for door width up to 1.100 mm) continuously adjustable. Latching speed and closing speed continuously adjustable. Back-check fixed. Same version DIN left and DIN right. Mounting height only 41 mm. Weight: 1.380 g. Max. door opening angle: 180°

- **ECOunity**: The ECO **Newton** closer portfolio covers all door dimensions with only two basic closer units. One execution for all four mounting types.
- **ECOphysis**: Door closer and slide rail build a unit in aluminium and stainless steel
- **ECOcllic**: The stainless steel cover encloses the aluminium body with the power of spring steel and conceals all of the adjusting elements, thus securing the closer against unauthorized access.
- **ECMount**: Optional mounting plate, acc. to **EN 1154**, supplementary sheet 1 – only with slide rail B
- **ECOvalve**: Simple, high-precision and permanently secure adjustment of all parameters of the closing process with one conventional Allen key.
- **ECOcover²**: Optional stainless steel cover for the ECO **Newton** door closers and related slide rails. Please order the lever arm in stainless steel look for the perfect overall appearance.
- **ECogreen**: The intelligent construction and carefully planned use of materials help considerably to save resources
- **EColine**: The mounted slide rail and door closer are flush when the door is closed. The colours of all materials are perfectly matched- right down to the end caps of the slide rail K
- **ECOvario**: Allows the use of all slide rail door closers and can even be combined with different door leaf widths. In this way, optimum value for money can be achieved for each individual door situation.

New packaging:

TS-41 B: (Mounting acc. DIN holes) Set incl. door closer, slide rail B, arm for slide rail B, mounting plate, mounting instructions, paper template and fixing material.

TS-41 K: Mounting set incl. door closer, slide rail K, arm for slide rail K, paper template and fixing material

Article numbers



Closer body with arm and slide rail B	Colour	Article number	Colour	Article number
TS-41 B (1 – 4)	Silver RAL 9006*	304152F11A00590	TS-41 (1 – 4)	Silver RAL 9006* 354152F11A00290
TS-41 B (1 – 4)	White RAL 9016	304152F11E00590	TS-41 (1 – 4)	White RAL 9016 354152F11E00290
TS-41 B (1 – 4)	Brown RAL 8014	304152F11D00590	TS-41 (1 – 4)	Brown RAL 8014 354152F11D00290
TS-41 B (1 – 4)	Black RAL 9005	304152F11G00590	TS-41 (1 – 4)	Black RAL 9005 354152F11G00290

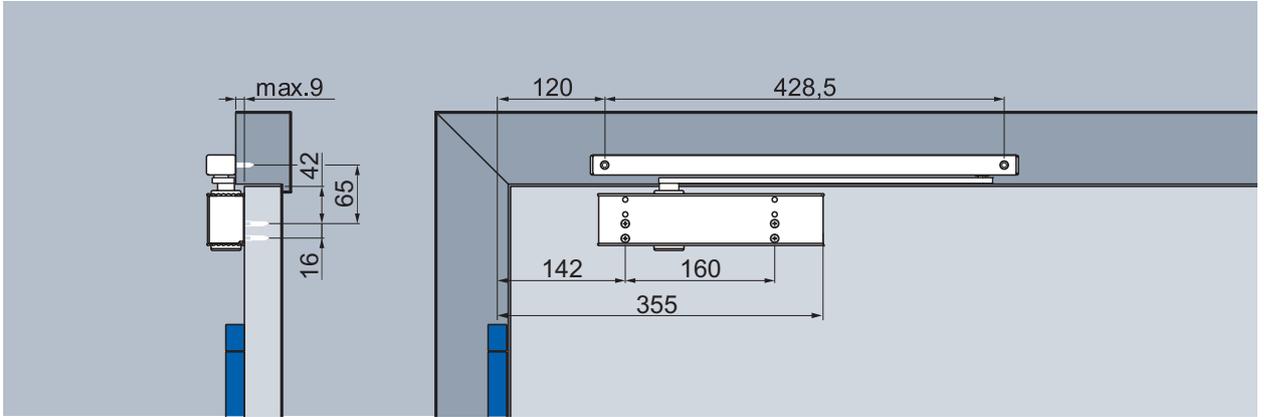


Colour	Article number
TS-41 K (1 – 4) Silver RAL 9006*	304152F11A00910
TS-41 K (1 – 4) White RAL 9016	304152F11E00910
TS-41 K (1 – 4) Brown RAL 8014	304152F11D00910
TS-41 K (1 – 4) Black RAL 9005	304152F11G00910

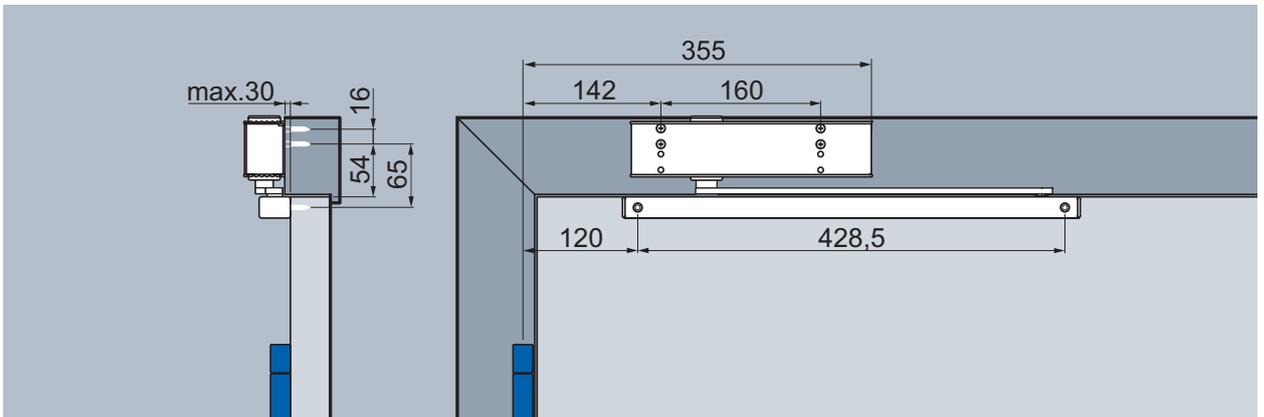
*Door closer body in silver RAL 9006, ECOcllic stainless steel satin, polished on request.

Hinge side

Mounting with slide rail B, illustration DIN left door, DIN right laterally reversed



Standard mounting with slide rail B, hinge side (Mounting, with mounting plate)



Head mounting with slide rail B, hinge side (Mounting, with mounting plate)

Closing speed

Continuously adjustable closing speed from approx. 180° to 0°

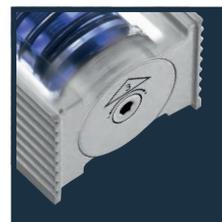
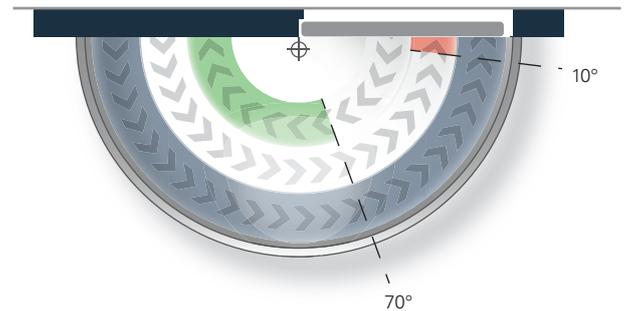
Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 0°

Back-check (constant)

Reduces the opening speed starting at 70° and avoids the slamming of the door. Back-check fixed

Closing force diagram ECO **Newton TS-41**, hinge side



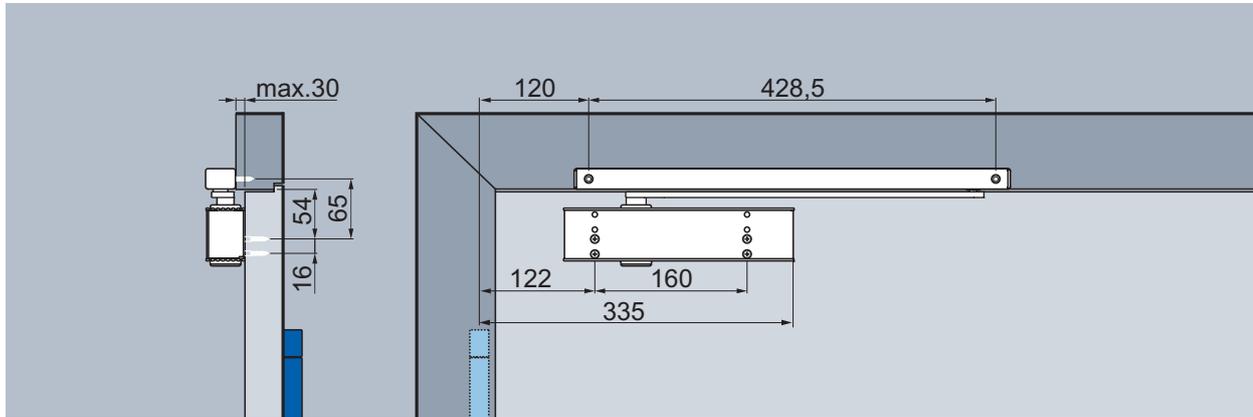
Closing force:

Continuously adjustable min. size 1
max. size 4

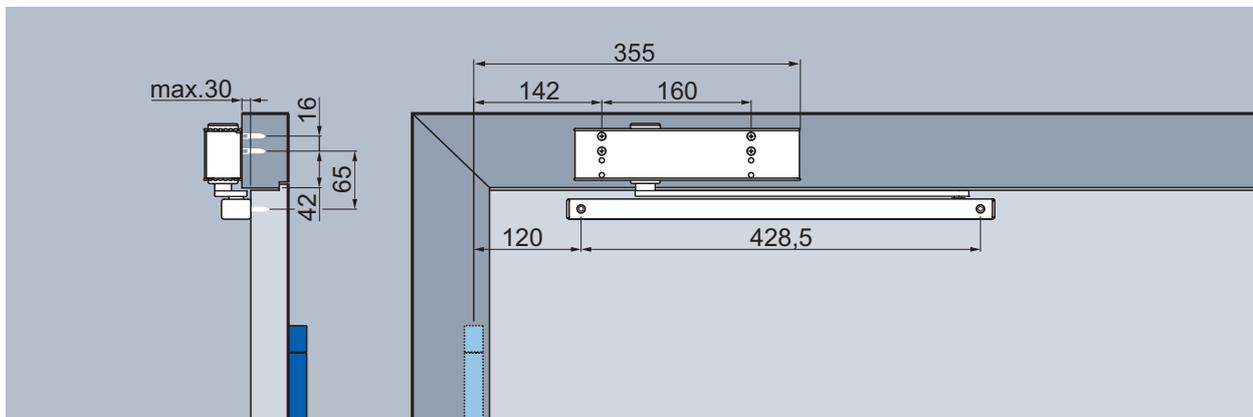
Default delivery condition: size 3

Hinge-opposite side

Mounting with slide rail B, illustration DIN right door, DIN left laterally reversed



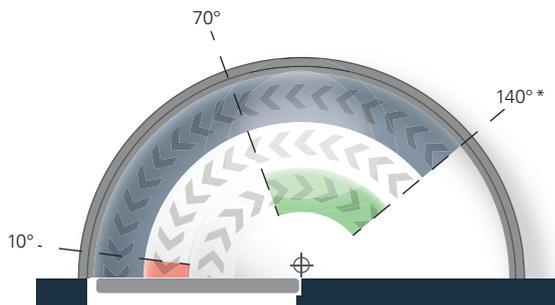
Standard mounting with slide rail B, hinge-opposite side (Mounting, with mounting plate)



Head mounting with slide rail B, hinge-opposite side (Mounting, with mounting plate)

- Closing speed**
Continuously adjustable closing speed from approx. 140°* to 0°
- Latching speed**
Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 40°
- Back-check (constant)**
Reduces the opening speed starting at 70° and avoids the slamming of the door. Back-check fixed

Closing force diagram ECO Newton TS-41, hinge opposite side



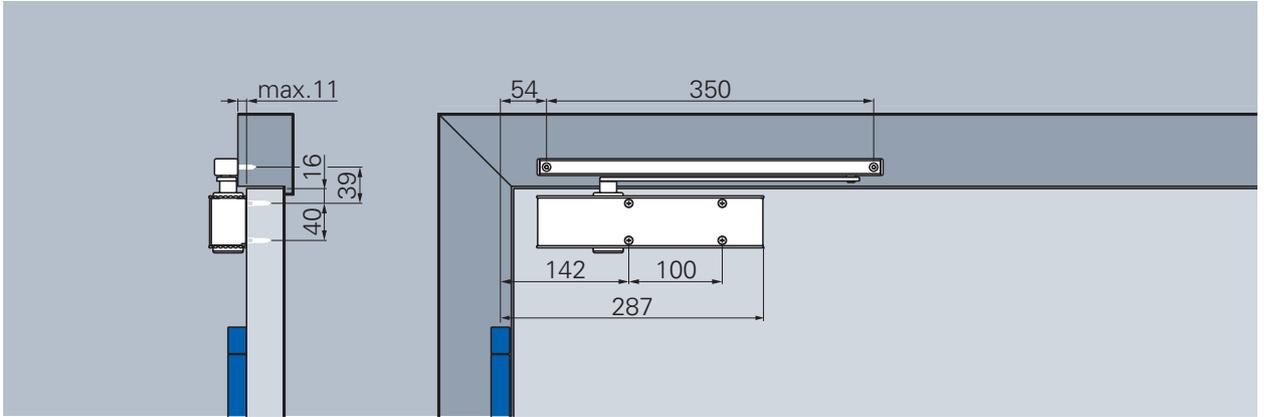
*Varies according to door thickness and type of hinge

A door stopper for opening limit is a must!

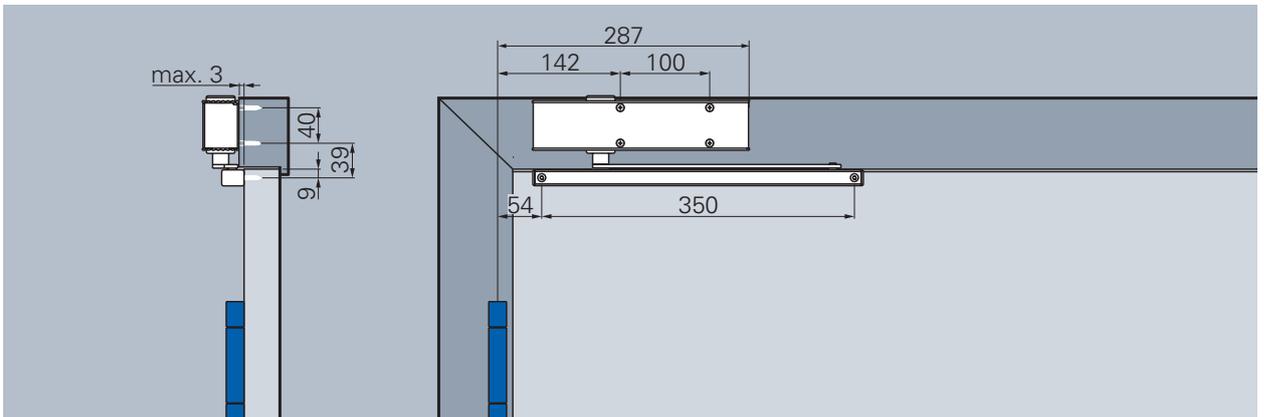
Back-check out of order for head mounting.

Hinge side

Mounting with slide rail K, illustration DIN left door, DIN right laterally reversed



Standard mounting with slide rail K, hinge side (direct mounting, without mounting plate)



Head mounting with slide rail K, hinge side (direct mounting, without mounting plate)

Closing speed

Continuously adjustable closing speed from approx. 180° to 0°

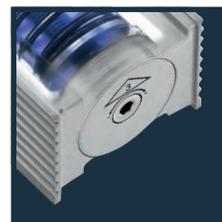
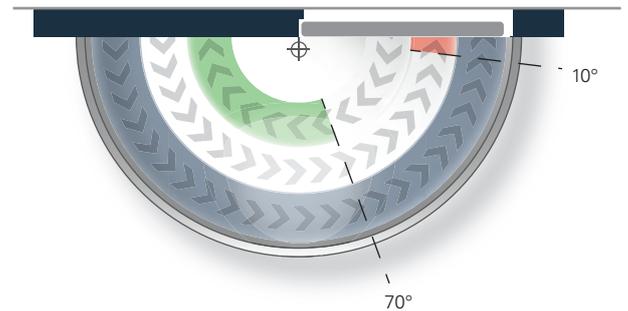
Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 0°

Back-check (constant)

Reduces the opening speed starting at 70° and avoids the slamming of the door. Back-check fixed

Closing force diagram ECO Newton TS-41, hinge side



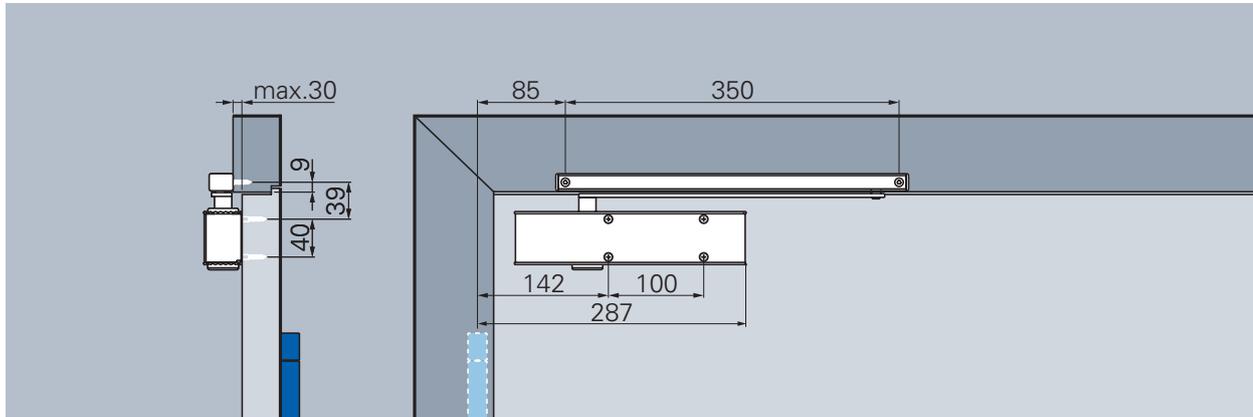
Closing force:

Continuously adjustable min. size 1
max. size 4

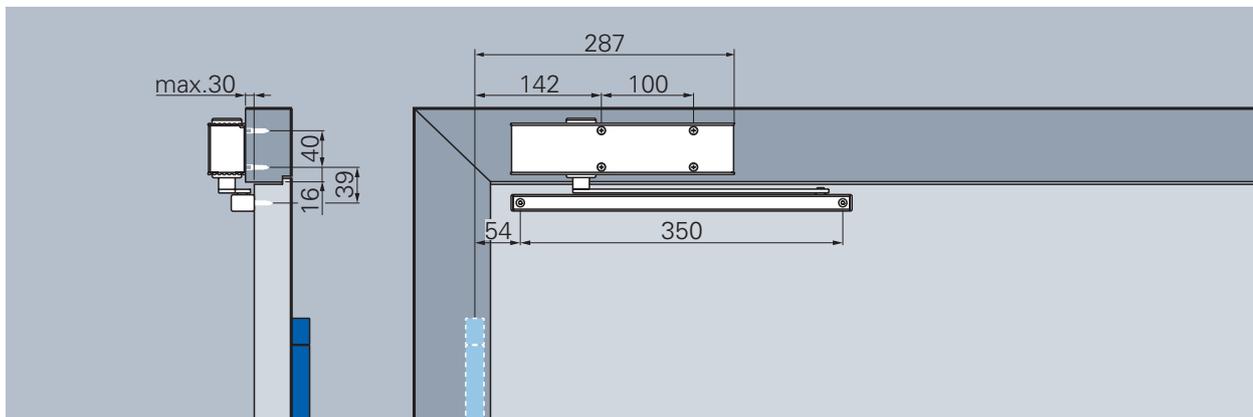
Default delivery condition: size 3

Hinge-opposite side

Mounting with slide rail K, illustration DIN right door, DIN left laterally reversed



Standard mounting with slide rail K, hinge-opposite side (direct mounting, without mounting plate)



Head mounting with slide rail K, hinge-opposite side (direct mounting, without mounting plate)

Closing speed

Continuously adjustable closing speed from approx. 140°* to 0°

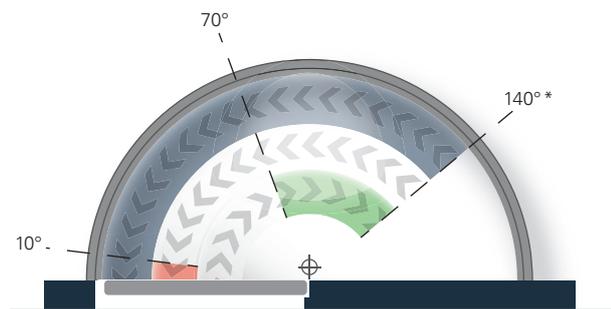
Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 0°

Back-check (constant)

Reduces the opening speed starting at 70° and avoids the slamming of the door. Back-check fixed

Closing force diagram ECO Newton TS-41, hinge-opposite side

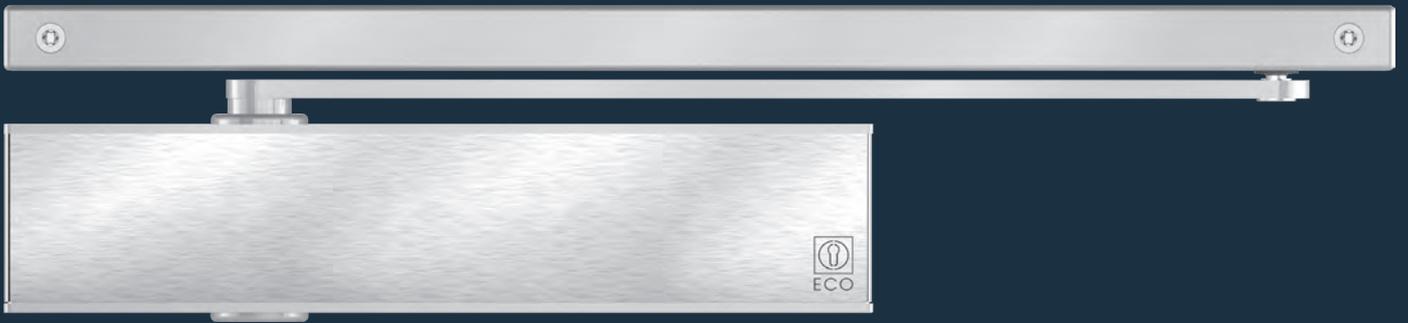


*Varies according to door thickness and type of hinge

A door stopper for opening limit is a must!

Back-check out of order for head mounting.

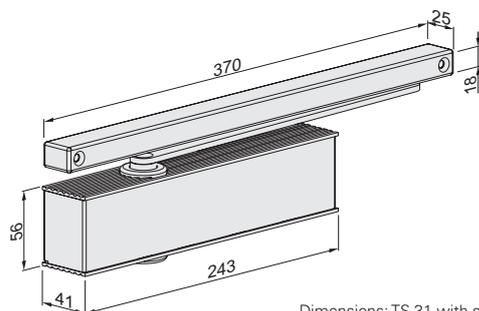
ECO **Newton** TS-31



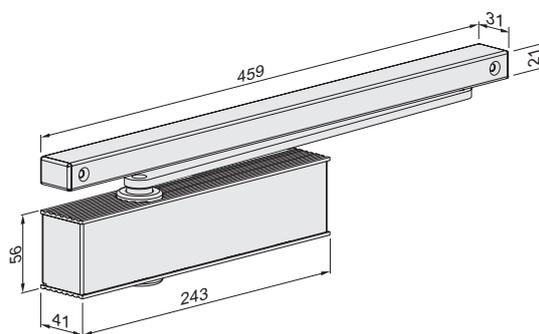
Product characteristics

Closing force (continuously adjustable)	Size acc. to EN	1 - 3
Door width	acc. to EN ≤ 950 mm	■
Dimensions (incl. mounting plate)	Length in mm	243
	Depth in mm	41
	Height in mm	56
Mounting plate acc. to EN 1154 (supplementary sheet 1) with GS B		□
Hinge side and hinge-opposite side		■
DIN left / right		■
Latching speed (continuously adjustable)		■
Closing speed (continuously adjustable)		■
Back-check (constant)		-
Delayed action (continuously adjustable)		-
Tested acc. to EN	EN 1154	
Suitable for fire- and smoke control doors	F	
Certified according to EU-Directive	CE	

- Yes
- No
- Option



Dimensions: TS-31 with slide rail K



Dimensions: TS-31 with slide rail B



ECO Newton TS-31 - Highlights at a glance



*optional

Details regarding the ECO Newton Highlights can be found in the intro of this chapter.



Body: Silver RAL 9006
ECOcllic: Stainless steel polished or satin



Body + ECOcllic: White RAL 9016



Body + ECOcllic: Black RAL 9005



Body + ECOcllic: Brown RAL 8014

Slide rail and arm are always delivered in the same colour as the ordered door closer body.



Under-lintel angle for door closer from page 188.



Under-lintel angle for slide rail from page 188.



Adaptor profiles from page 189.



Glass clamping device from page 185.

Order information

ECO **Newton** TS-31 ▪ Door closer with slide rail

Product information

Closing force 1 – 3, tested acc. to **EN 1154** (for door widths up to 950 mm) continuously adjustable. Latching speed and closing speed continuously adjustable from the side. Same version DIN left and DIN right. Mounting height only 41 mm. Weight: 1.380g. Max. door opening angle: 180°

- **ECOunity:** The ECO **Newton** closer portfolio covers all door dimensions with only two basic closer units. One execution for all four mounting types
- **ECOphysis:** Door closer and slide rail build a unit in aluminium and stainless steel
- **ECOcllic:** The stainless steel cover encloses the aluminium body with the power of spring steel and conceals all of the adjusting elements, thus securing the closer against unauthorized access.
- **ECOMount:** Optional mounting plate, acc. to **EN 1154**, supplementary sheet 1 – only with slide rail B
- **ECOvalve:** Simple, high-precision and permanently secure adjustment of all parameters of the closing process with one conventional Allen key.
- **ECOcover²:** Optional stainless steel cover for the ECO **Newton** door closers and related slide rails. Please order the lever arm in stainless steel look for the perfect overall appearance.
- **ECOgreen:** The intelligent construction and carefully planned use of materials help considerably to save resources.
- **ECOline:** The mounted slide rail and door closer are flush when the door is closed. The colours of all materials are perfectly matched- right down to the end caps of the slide rail K.
- **ECOvario:** permits the use of all slide rail door closers and can even be combined with different door leaf widths. In this way, optimum value for money can be achieved for each individual door situation.

New packaging:

TS-31 B: (Mounting acc. DIN holes) Set incl. door closer, slide rail, arm for slide rail B, mounting plate, mounting instructions, paper template and fixing material.

TS-31 K: Mounting set incl. door closer body, slide rail K, arm for slide rail K, paper template and fixing material

Article numbers



Closer body with arm and slide rail B	Colour	Article number	Closer body with arm, without slide rail	Colour	Article number
TS-31 B (1 – 3)	Silver RAL 9006*	303155F11A00590	TS-31 (1 – 3)	Silver RAL 9006*	353155F11A00290
TS-31 B (1 – 3)	White RAL 9016	303155F11E00590	TS-31 (1 – 3)	White RAL 9016	353155F11E00290
TS-31 B (1 – 3)	Brown RAL 8014	303155F11D00590	TS-31 (1 – 3)	Brown RAL 8014	353155F11D00290
TS-31 B (1 – 3)	Black RAL 9005	303155F11G00590	TS-31 (1 – 3)	Black RAL 9005	353155F11G00290



Closer body with arm and slide rail K	Colour	Article number
TS-31 K (1 – 3)	Silver RAL 9006*	303155F11A09010
TS-31 K (1 – 3)	White RAL 9016	303155F11E09010
TS-31 K (1 – 3)	Brown RAL 8014	303155F11D09010
TS-31 K (1 – 3)	Black RAL 9005	303155F11G09010

*Door closer body in silver RAL 9006, ECOcllic stainless steel satin, polished on request.

ECO COVER²



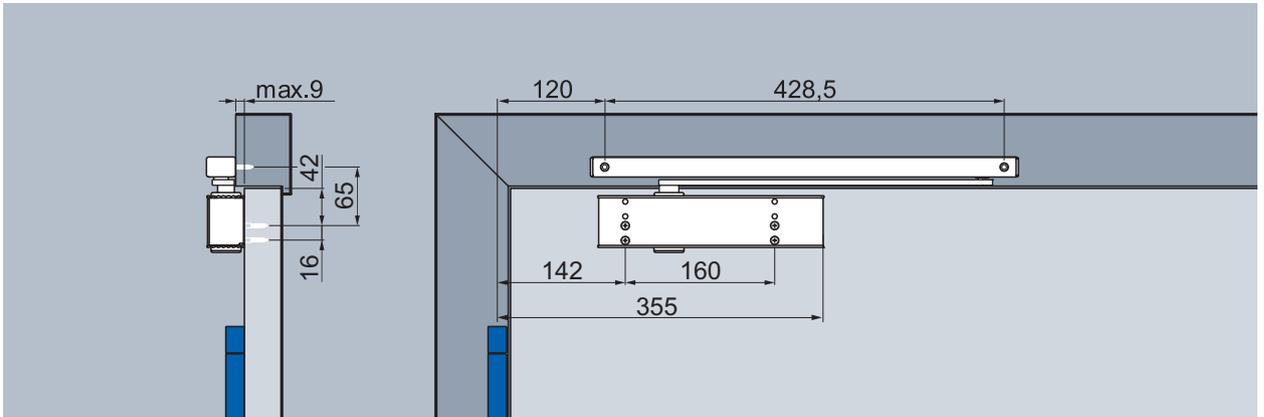
ECO Newton Highlights in detail.

Stainless steel Fullcover:

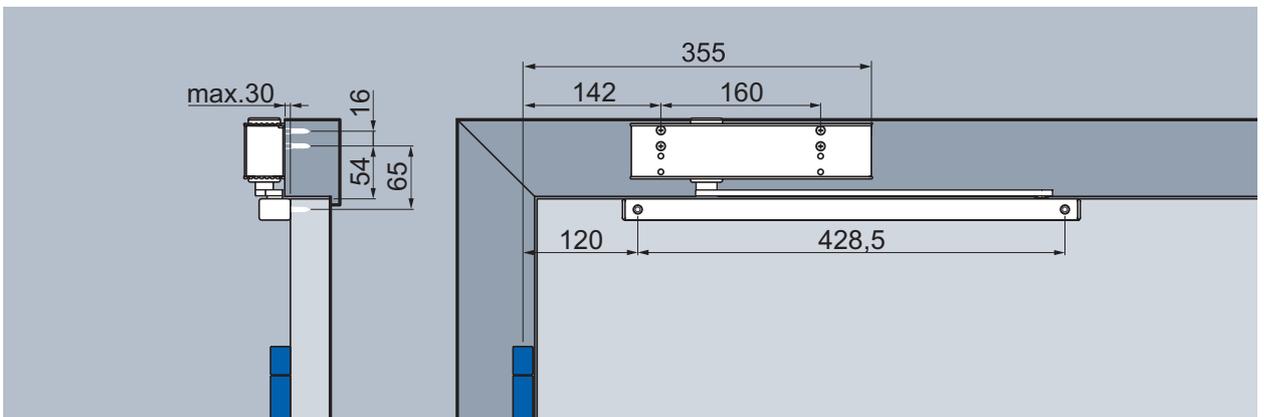
The full cover is an optional stainless steel cover for the ECO **Newton** door closers and related slide rails. The overall appearance is perfected by a lever arm with a stainless steel look. A cover for the closer body is available for standard arm door closers.

Hinge side

Mounting with slide rail B, illustration DIN left door, DIN right laterally reversed



Standard mounting with slide rail B, hinge side (Mounting, with mounting plate)



Head mounting with slide rail B, hinge side (Mounting, with mounting plate)

Closing speed

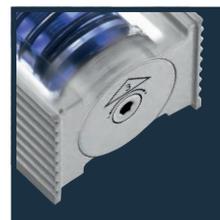
Continuously adjustable closing speed from approx. 180° to 0°

Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure.

Continuously adjustable, works between 10 to 0°

Closing force diagram ECO **Newton TS-31**, hinge side



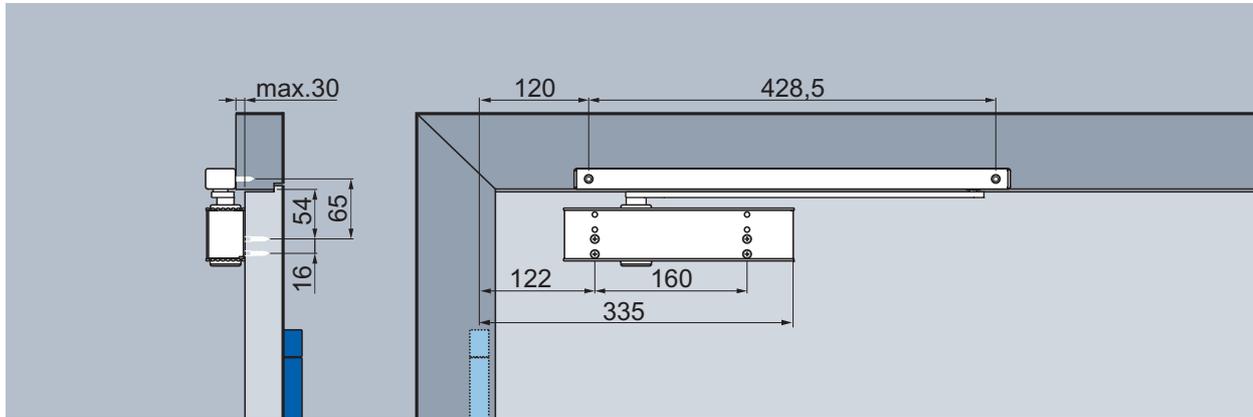
Closing force:

Continuously adjustable min. size 1
max. size 3

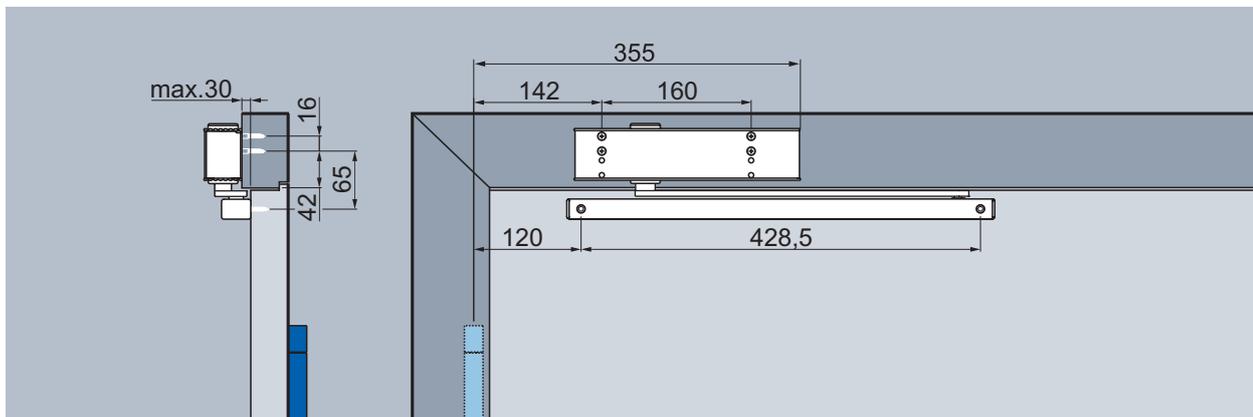
Default delivery condition: size 3

Hinge opposite side

Mouting with slide rail B, illustration DIN right door, DIN left laterally reversed



Standard mounting with slide rail B, hinge-opposite side (Mounting, with mounting plate)



Head mounting with slide rail B, hinge-opposite side (Mounting, with mounting plate)

- **Closing speed**
 Continuously adjustable closing speed from approx. 140°* to 0°
- **Latching speed**
 Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 0°

Closing force ECO Newton TS-31, hinge-opposite side

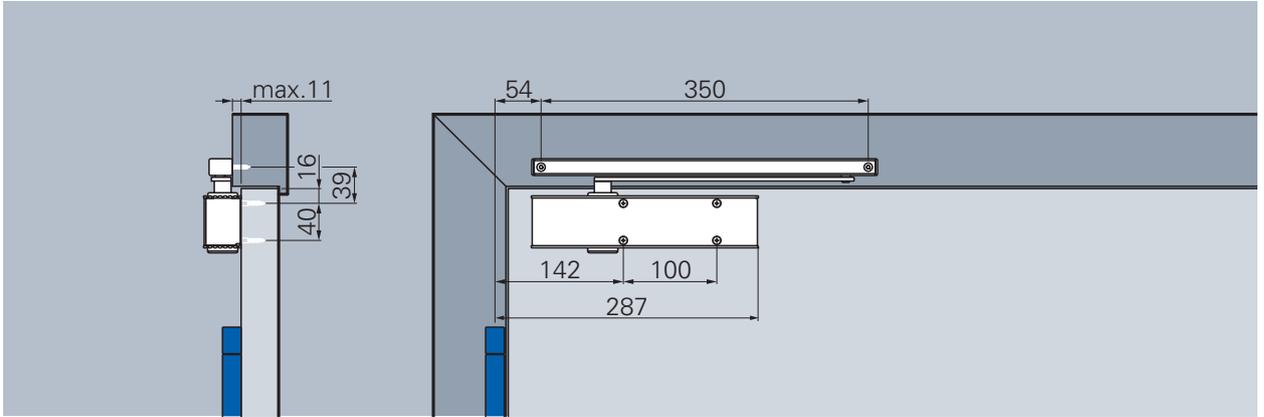


*Varies according to door thickness and type of hinge

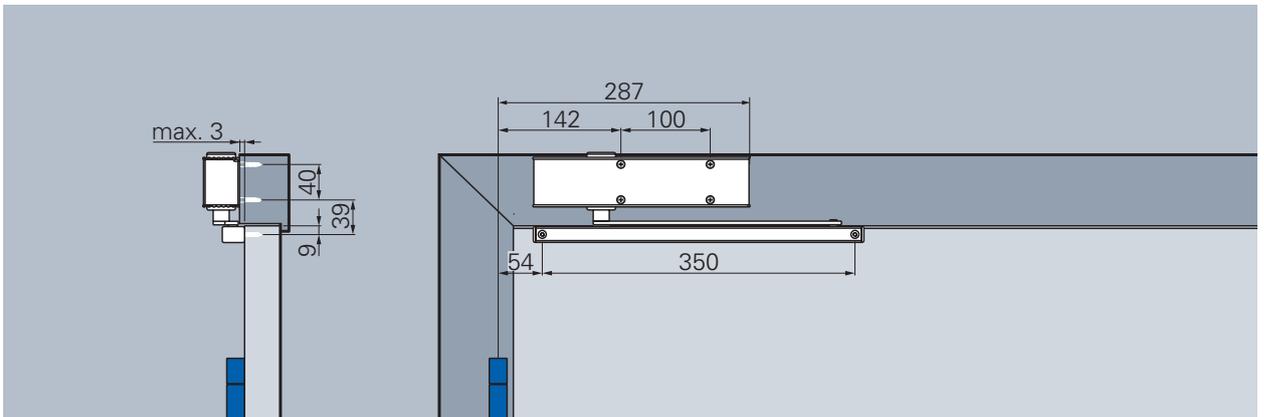
A door stopper for opening limit is a must!

Hinge side

Mounting with slide rail K, illustration DIN left door, DIN right laterally reversed



Standard mounting with slide rail K, hinge side (direct mounting, without mounting plate)



Head mounting with slide rail K, hinge side (direct mounting, without mounting plate)

Closing speed

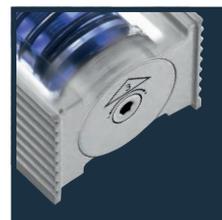
Continuously adjustable closing speed from approx. 180° to 0°

Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure.

Continuously adjustable, works between 10 to 0°

Closing force diagram ECO **Newton TS-31**, hinge side



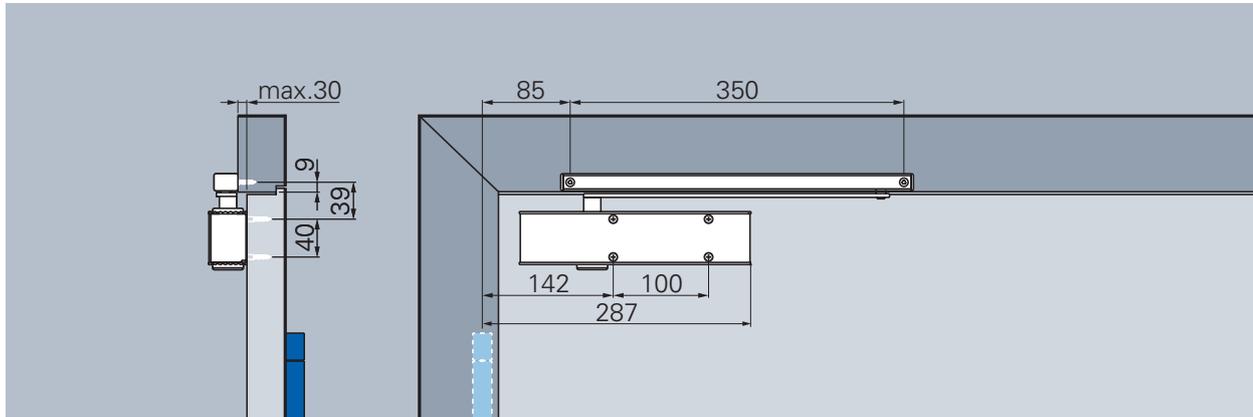
Closing force:

Continuously adjustable min. size 1
max. size 3

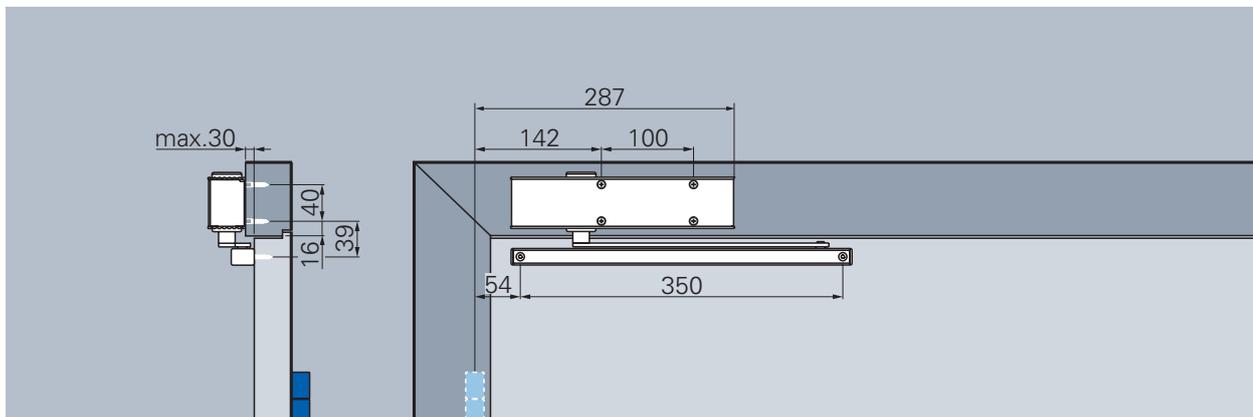
Default delivery condition: size 3

Hinge-opposite side

Mounting with slide rail K, illustration DIN right door, DIN left laterally reversed



Standard mounting with slide rail K, hinge-opposite side (direct mounting, without mounting plate)



Head mounting with slide rail K, hinge-opposite side (direct mounting, without mounting plate)

Closing speed

Continuously adjustable closing speed from approx. 140°* to 0°

Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 0°

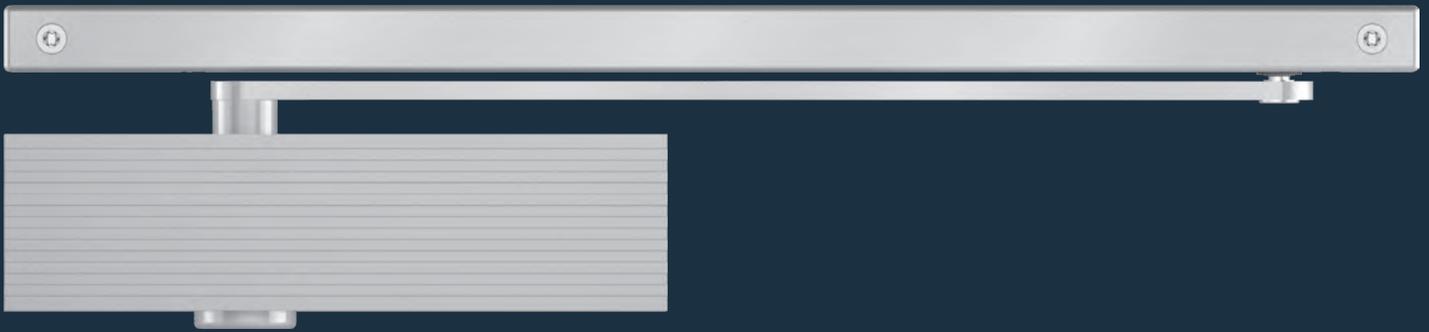
Closing force diagram ECO Newton TS-31, hinge-opposite side



*Varies according to door thickness and type of hinge

A door stopper for opening limit is a must!

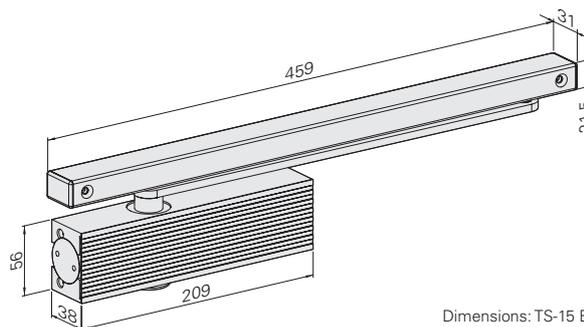
ECO **Newton** TS-15 B



Product characteristics

Closing force	Sizes acc. to EN	1/2
Door width	≤ 800 mm	■
Dimensions	Length in mm	209
	Depth in mm	38
	Height in mm	56
Slide rail		GS B
Mounting plate		-
Hinge side and hinge-opposite side		■
DIN left / right		■
Latching speed (adjustable from the side)		■
Closing speed (adjustable from the side)		■

- Yes
- No
- Option



Dimensions: TS-15 B



Body + ECOslide:
Silver RAL 9006



Body + ECOslide:
White RAL 9016



Body + ECOslide:
Black RAL 9005



Body + ECOslide:
Brown RAL 8014

Slide rail and standard arm are always delivered in the same colour as the ordered door closer body.

ECO Newton TS-15 with slide rail B:



Under-lintel angle
for door closer
from page 188.



Under-lintel angle
for slide rail B
from page 188.



Adaptor profiles
from page 189.

Order information

ECO **Newton** TS-15 B ■ Door closer with slide rail

Product information

- Closing force 1 / 2 acc. to EN (for door width to 800 mm)
- Latching speed and closing speed continuously adjustable from the side
- Same version DIN left and DIN right
- Height only 38 mm
- Max. door opening angle: 180°

New packaging:

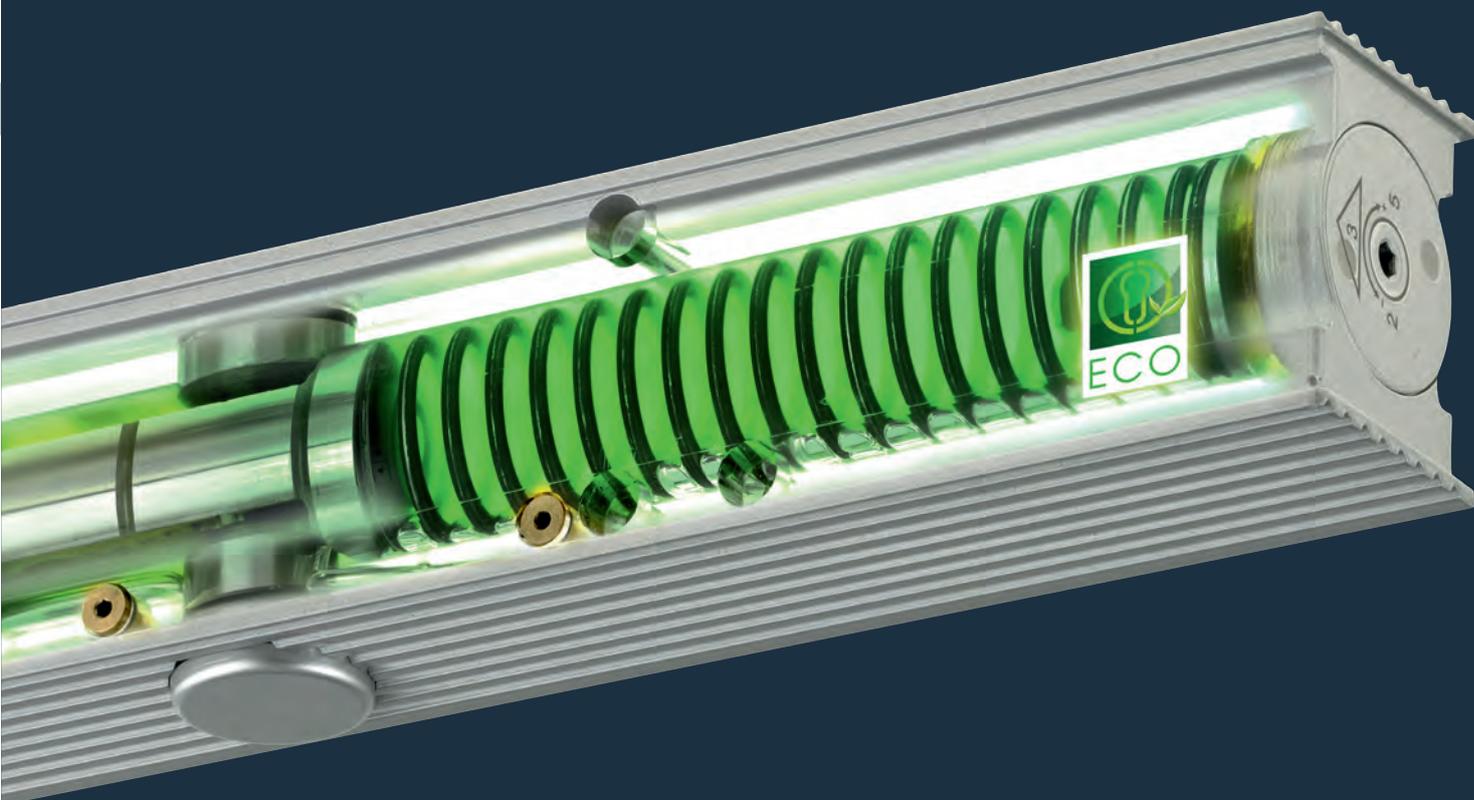
Set incl. door closer body, slide rail and special lever (with octagon nut).

Article numbers



Door closer with slide rail B	Colour	Article number
TS-15 B (1/2)	Silver RAL 9006	301552E15A00510
TS-15 B (1/2)	White RAL 9016	301552E15E00510
TS-15 B (1/2)	Brown RAL 8014	301552E15D00510
TS-15 B (1/2)	Black RAL 9005	301552E15G00510

ECO GREEN



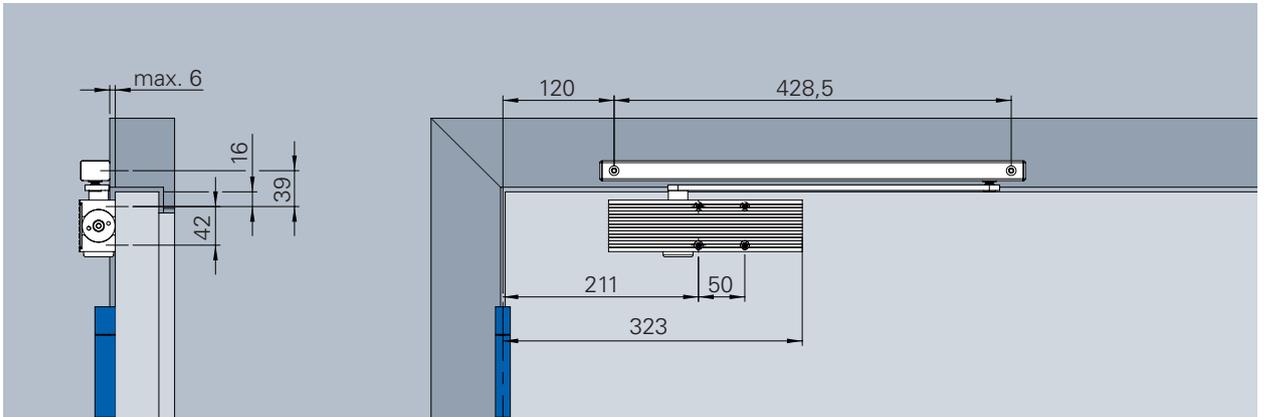
ECO Newton Highlights in detail.

Saves resources:

ECO **Newton** door closers are up to 1.000 grammes lighter than comparable solutions. Their intelligent construction and carefully planned use of materials help considerably to save resources.– and without compromising on function, safety and quality.

Hinge side

Mounting with slide rail K, illustration DIN left door, DIN right laterally reversed



with slide rail B

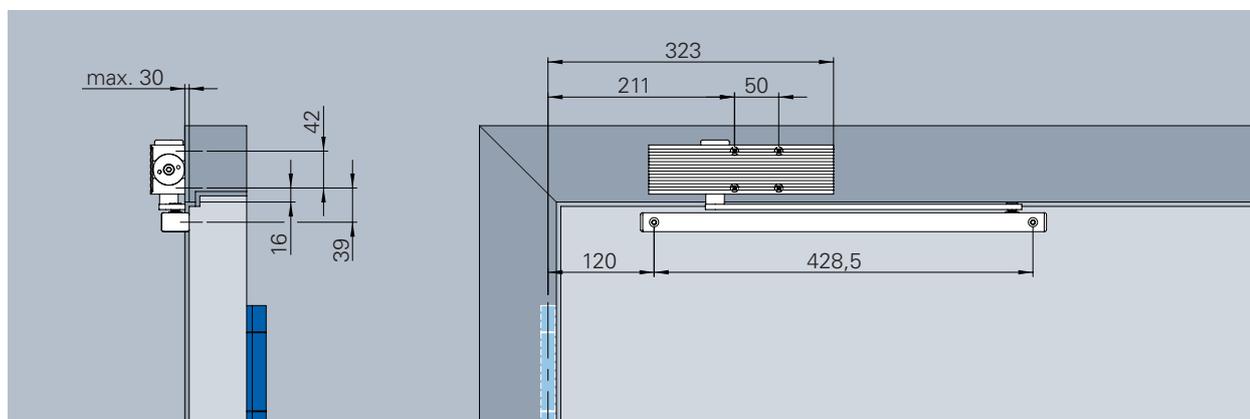
- Closing speed**
 Continuously adjustable closing speed from approx. 180° to 0°
- Latching speed**
 Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure.
 Continuously adjustable, works between 10 to 0°

Closing force diagram ECO **Newton TS-15 B**, hinge side



Hinge-opposite side

Mounting with slide rail K, illustration DIN right door, DIN left laterally reversed



Head mounting with slide rail K, hinge-opposite side

2

Closing speed

Continuously adjustable closing speed from approx. 140°* to 0°

Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 0°

Closing force diagram ECO **Newton TS-15 B**, hinge-opposite side

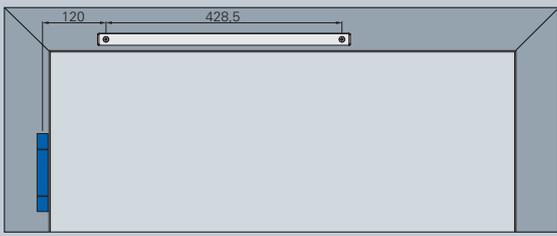


*Varies according to door thickness and type of hinge

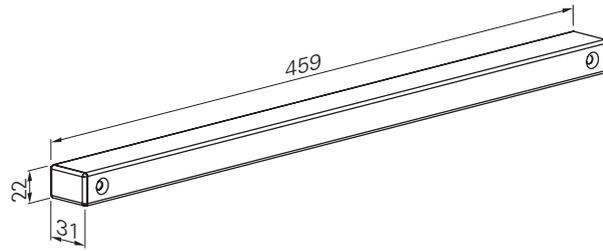
A door stopper for opening limit is a must!

ECO Newton Slide rails





Direct mounting slide rail B



Slide rail - Basis (GS B)

For surface mounting

For the use in preventive fire-protection. Slide rail is tested acc. to EN 1154

Slide rail B	Colour	Article number
GS B (Si)	Silver RAL 9006	350220000A00000
GS B (W)	White RAL 9016	350220000E00000
GS B (Br)	Brwon RAL 8014	350220000D00000
GS B (S)	Black RAL 9005	350220000G00000

Delivery without arm, which is part of the door closer.

Slide rail with mechanical hold open (GS B-FKL)

Hold-open angle adjustable from approx. 70° to 150°. For surface mounted slide rails

This version can be achieved afterwards by using slide rail B and accessory set FKL.

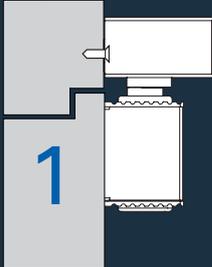
Not suitable for the use in fire-protection. Please specify DIN direction when ordering.

Slide rail B-FKL	Colour	Article number
GS B (Si)	Silver RAL 9006	350220000A56000
GS B (W)	White RAL 9016	350220000E56000
GS B (Br)	Brown RAL 8014	350220000D56000
GS B (S)	Black RAL 9005	350220000G56000

Delivery without arm, which is part of the door closer.

ECO Mounting variants – hinge side

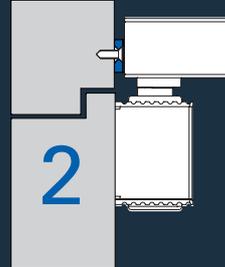
Direct mounting



Direct mounting is the standard mounting at ECO. Slide rail is mounted directly onto the door frame. The ECO mounting holes need to be prepared. The respective mounting holes are shown on the next pages.

A paper drilling template is included in each box. Additionally, a metal drilling template (accessories, page 187) or respective mounting holes as PDF or DXF files are available.

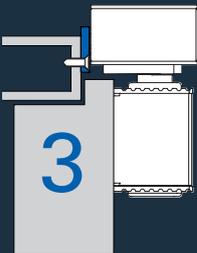
Mounting with standard profile



The mounting with the standard profile (SP) is used when the door frame is already equipped with the mounting drill holes 120/428,5 mm - e.g. for steel door frames or when exchanging / retrofitting.

The standard profile is mounted directly to the door frame and adapts the ECO drill holes to the prepared drill holes. It can be ordered separately as accessory.

Mounting with adaptor profile (ADP 30)

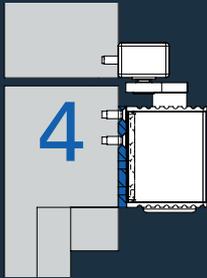


The adaptor profile (ADP) is being used when a stable mounting of the slide rail is not possible due to constructions (e.g. steel frame doors with double rebated notches). The adaptor profile is mounted directly to the door frame. The slide rail can be mounted onto the ADP and will be stable. It can be ordered separately as accessory.

The drilling dimensions for the adaptor profiles are included on the attached paper drilling template. Additionally, a metal drilling template (accessories, page 187) or respective PDF or DXF files containing the dimensions can be available (www.eco-schulte.de)

ECO Mounting variants – hinge-opposite side

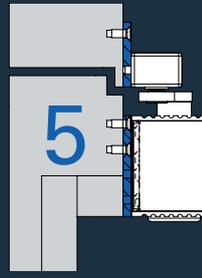
Direct mounting



Direct mounting is the standard mounting at ECO. Slide rails is mounted directly onto the door frame. The ECO mounting holes need to be prepared. The respective mounting holes are shown on the next pages.

A paper drilling template is included in each box. Additionally, a metal drilling template (accessories, page 187) or respective mounting holes as PDF or DXF files are available.

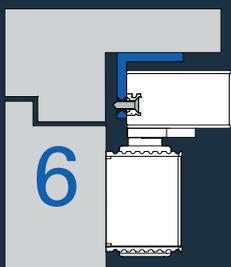
Mounting with adaptor profile (ADP 40)



The adaptor profile (ADP) is being used when a stable mounting of the slide rail is not possible due to constructions (e.g. steel frame doors with double rebated notches). The adaptor profile is mounted directly to the door frame. The slide rail can be mounted onto the ADP and will be stable. It can be ordered separately as accessory.

The drilling dimensions for the adaptor profiles are included on the attached paper drilling template. Additionally, a metal drilling template (accessories, page 187) or respective PDF or DXF files containing the dimensions can be available (www.eco-schulte.de)

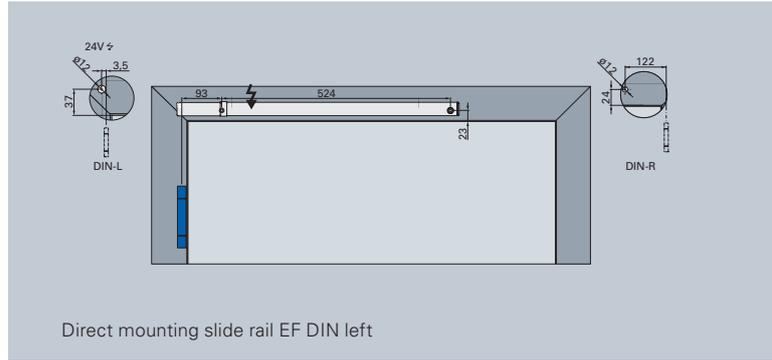
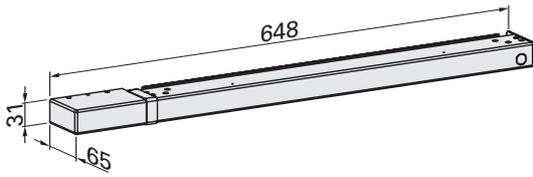
Mounting with under-lintel angle



The under-lintel angle (SFW) is being used for installation on the hinge-opposite side if the slide rail needs to be mounted under the door frame (for doors with deep door lintels).

The under-lintel angle is screwed bottom-up to the door frame and the slide rails is fixed to the under-lintel angle.

The drilling dimensions for the SFW are mentioned in the mounting instruction or can be available as PDF or DXF file (www.eco-schulte.de). The under-lintel angle can be ordered separately as accessory.



EF

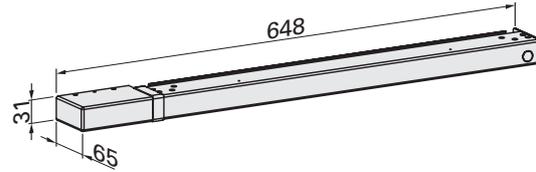
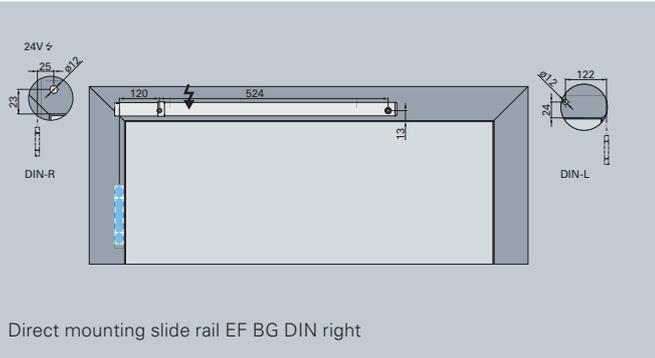
Slide rail with electromagnetic hold-open, hinge side
for all ECO Newton door closers

- **Controlled by:** External fire alarm system.
- **Hold open angle:** Approx. 70° to 145°
- **Power supply:** 24 V DC
- **Scope of Delivery:** Without arm, which is part of the door closer
- **Mounting:** Only hinge side
- **Slide rail:** Tested acc. to EN 1155

Slide rail EF

DIN left	Colour	Article number	DIN right	Colour	Article number
GS-EF (Si)	Silver RAL 9006	350220000A03501	GS-EF (Si)	Silver RAL 9006	350220000A03502
GS-EF (W)	White RAL 9016	350220000E03501	GS-EF (W)	White RAL 9016	350220000E03502
GS-EF (Br)	Brown RAL 8014	350220000D03501	GS-EF (Br)	Brown RAL 8014	350220000D03502
GS-EF (S)	Black RAL 9005	350220000G03501	GS-EF (S)	Black RAL 9005	350220000G03502
GS-EF (ER M)	Stainless steel satin	350220000Q03501	GS-EF (ER M)	Stainless steel satin	350220000Q03502

Note!
Please also order the accessories (from page 186) for the different mounting versions (see pages 88 and 89).



EF BG (Hinge-opposite side)

Slide rail with electromagnetic hold-open, hinge-opposite side
for all ECO Newton door closers

- **Controlled by:** External fire alarm system.
- **Hold open angle:** max. 110°
- **Power supply:** 24 V DC
- **Scope of Delivery:** Without arm, which is part of the door closer
- **Mounting:** Only hinge-opposite side.
- **Slide rail:** Tested acc. to **EN 1155**

Slide rail EF BG

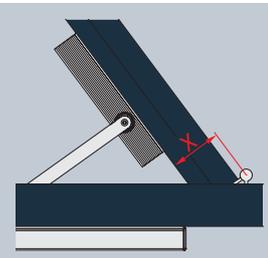
DIN left	Colour	Article number	DIN right	Colour	Article number
GS-EF BG (Si)	Silver RAL 9006	35022BG00A03501	GS-EF BG (Si)	Silver RAL 9006	35022BG00A03502
GS-EF BG (W)	White RAL 9016	35022BG00E03501	GS-EF BG (W)	White RAL 9016	35022BG00E03502
GS-EF BG (Br)	Brwon RAL 8014	35022BG00D03501	GS-EF BG (Br)	Brwon RAL 8014	35022BG00D03502
GS-EF BG (S)	Black RAL 9005	35022BG00G03501	GS-EF BG (S)	Black RAL 9005	35022BG00G03502
GS-EF BG (ER M)	Stainless steel satin	35022BG00Q03501	GS-EF BG (ER M)	Stainles steel satin	35022BG00Q03502

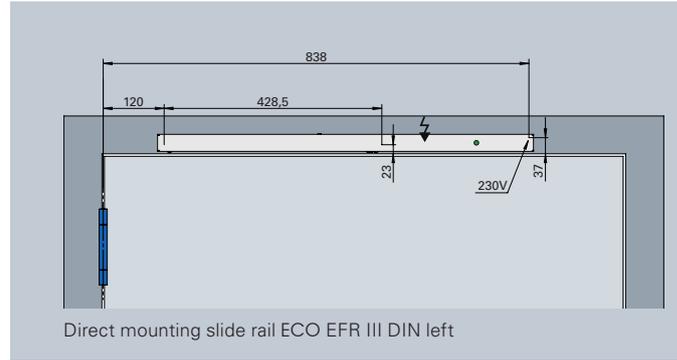
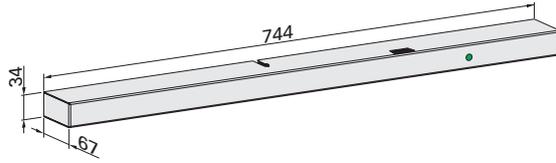
Note!
The use of an interrupt button for releasing the closing sequence selector is urgently required. The maximum opening angle of the leaves has to be limited by a suitable ground stopper. When using in schools, caserns and stadiums as well as in areas with a high potential of vandalism, we recommend the use of eletromagnetic door retainers.

For special dimensions (door leaf thickness, notches) please contact our technical support.

Please also order the accessories (from page 186) for the dciferent mounting versions (see pages 88 and 89).

The maximum opening or holdo-
pen angle is 110°!
X = 60 - 92 mm





ECO EFR III

Slide rail with continuous cover, electromagnetic hold-open, integrated smoke detector with optical pre-information about dirt level and automatic calibration to avoid false alarms for all ECO Newton door closers

- **Compatible for smoke detector type:**
DRM ORS 142, TDS 247
- **Controlled by:**
Integrated smoke detector with power supply unit. Power supply: 230 V AC, IP 10, protection class I
- **Range of application:**
-15 to + 45°C, relative humidity max. 95%
- **Electromagnetic hold-open:**
Holding force adjustable (Recommendation DIBt, **DIN 18040** as well as **DIN EN 12217**: max. 80 N.)
Adjustable bracket from 80° to 130°
- **Scope of Delivery:**
Without arm, which is part of the door closer
- **Mounting:**
Only hinge side
- **Slide rail:**
Tested acc. to **EN 1155** and approved by DIBt.

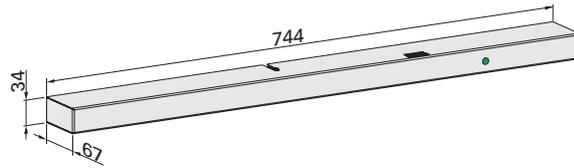
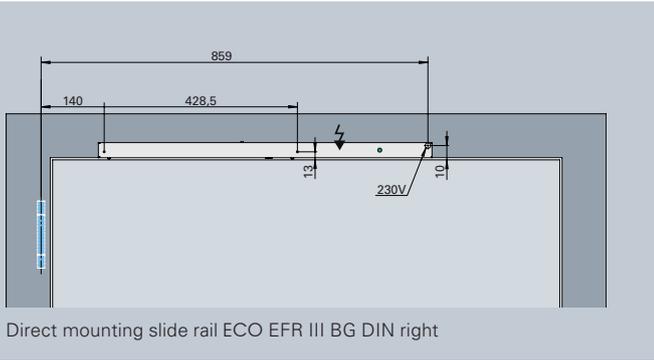
Slide rail ECO EFR III

DIN left	Colour	Article number	DIN right	Colour	Article number
ECO EFR III (Si)	Silver RAL 9006	5030052210	ECO EFR III (Si)	Silver RAL 9006	5030052211
ECO EFR III (W)	White RAL 9016	5030052212	ECO EFR III (W)	White RAL 9016	5030052213
ECO EFR III (Br)	Brown RAL 8014	on request	ECO EFR III (Br)	Brown RAL 8014	on request
ECO EFR III (S)	Black RAL 9005	on request	ECO EFR III (S)	Black RAL 9005	on request
ECO EFR III (ER M)	Stainless steel satin	5030052214	ECO EFR III (ER M)	Stainless steel satin	5030052215

Note!

The maximum opening angle of the leaves has to be limited by a suitable ground stopper. When using in schools, caserns and stadiums as well as in areas with a high potential of vandalism, we recommend the use of eletromagnetic door retainers.

Please also order the accessories (from page 186) for the dciferent mounting versions (see pages 88 and 89).



ECO EFR III BG (Hinge-opposite side)

Slide rail with continuous cover, electromagnetic hold-open, integrated smoke detector with optical pre-information about dirt level and automatic calibration to avoid false alarms
for all ECO Newton door closers

- **Compatible for smoke detector type:**
DRM ORS 142, TDS 247
- **Controlled by:**
Integrated smoke detector with power supply unit. Power supply: 230 V AC, IP 10, protection class I
- **Range of application:**
-15 to + 45°C, relative humidity max. 95%
- **Electromagnetic hold-open:**
Holding force adjustable (Recommendation DIBt, **DIN 18040** as well as **DIN EN 12217**: max. 80 N.)
Adjustable bracket from 80° to 110°

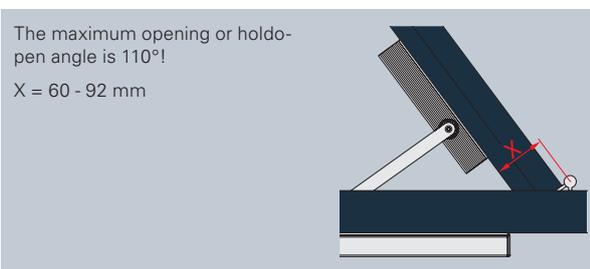
- **Scope of Delivery:**
Without arm, which is part of the door closer
- **Mounting:**
Only hinge-opposite side
- **Slide rail:**
Tested acc. to **EN 1155** and approved by DIBt.

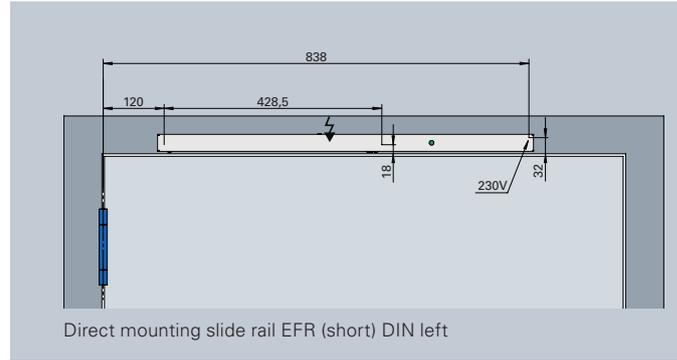
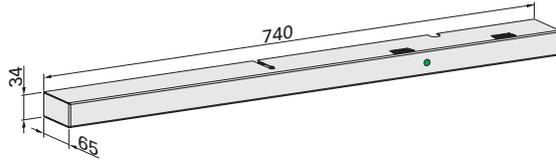
Slide rail ECO EFR III BG

DIN left	Colour	Article number	DIN right	Colour	Article number
ECO EFR III BG (Si)	Silver RAL 9006	5030052216	ECO EFR III BG (Si)	Silver RAL 9006	5030052217
ECO EFR III BG (W)	White RAL 9016	5030052218	ECO EFR III BG (W)	White RAL 9016	5030052219
ECO EFR III BG (Br)	Brown RAL 8014	on request	ECO EFR III BG (Br)	Brown RAL 8014	on request
ECO EFR III BG (S)	Black RAL 9005	on request	ECO EFR III BG (S)	Black RAL 9005	on request
ECO EFR III BG (ER M)	Stainless steel satin	5030052220	ECO EFR III BG (ER M)	Stainless steel satin	5030052221

Note!
The use of an interrupt button for releasing the closing sequence selector is urgently required. The maximum opening angle of the leafs has to be limited by a suitable ground stopper. When using in schools, caserns and stadiums as well as in areas with a high potential of vandalism, we recommend the use of eletromagnetic door retainers.

Please also order the accessories (from page 186) for the dciferent mounting versions (see pages 88 and 89).





EFR (short)

Slide rail with continuous cover, electromagnetic hold-open, integrated smoke detector with optical pre-information about dirt level and automatic calibration to avoid false alarms
for all ECO Newton door closers

- **Compatible for smoke detector type:**
DRM ORS 142, TDS 247
- **Controlled by:**
Integrated smoke detector with power supply unit. Power supply: 230 V AC
- **Hold open angle:** approx. 70° to 145°
- **Scope of Delivery:** Without arm, which is part of the door closer
- **Mounting:** Only hinge side
- **Slide rail:** Tested acc. to EN 1155 and approved by DIBt.

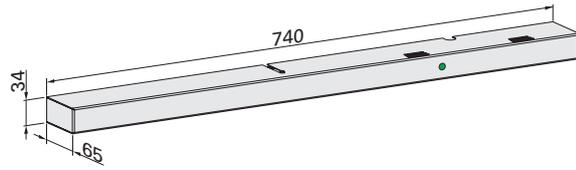
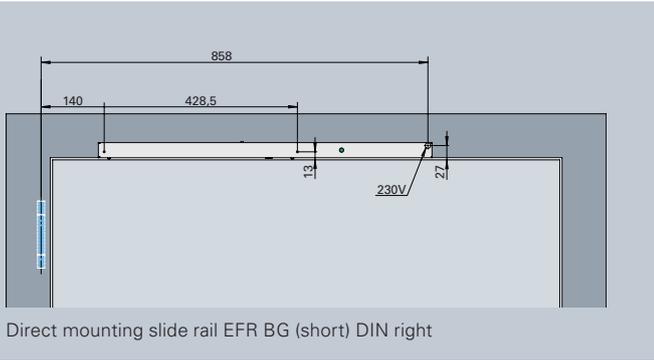
Slide rail EFR (short)

DIN left	Colour	Article number	DIN right	Colour	Article number
GS-EFR (short) (Si)	Silver RAL 9006	350220000A05601	GS-EFR (short) (Si)	Silver RAL 9006	350220000A05602
GS-EFR (short) (W)	White RAL 9016	350220000E05601	GS-EFR (short) (W)	White RAL 9016	350220000E05602
GS-EFR (short) (Br)	Brown RAL 8014	350220000D05601	GS-EFR (short) (Br)	Brown RAL 8014	350220000D05602
GS-EFR (short) (S)	Black RAL 9005	350220000G05601	GS-EFR (short) (S)	Black RAL 9005	350220000G05602
GS-EFR (short) (ER M)	Stainless steel satin	350220000Q05601	GS-EFR (short) (ER M)	Stainless steel satin	350220000Q05602

Note!

The maximum opening angle of the leaves has to be limited by a suitable ground stopper. When using in schools, caserns and stadiums as well as in areas with a high potential of vandalism, we recommend the use of eletromagnetic door retainers.

Please also order the accessories (from page 186) for the dciferent mounting versions (see pages 88 and 89).



EFR BG (short) (hinge-opposite side)

Slide rail with continuous cover, electromagnetic hold-open, integrated smoke detector with optical pre-information about dirt level and automatic calibration to avoid false alarms
for all ECO **Newton** door closers

- **Compatible for smoke detector type:**
DRM ORS 142, TDS 247
- **Controlled by:**
Integrated smoke detector with power supply unit. Power supply: 230 V AC
- **Hold open angle:** max. 110°.
- **Scope of Delivery:** Without arm, which is part of the door closer
- **Mounting:** Only hinge-opposite side
- **Slide rail:** Tested acc. to **EN 1155** and approved by DIBt.

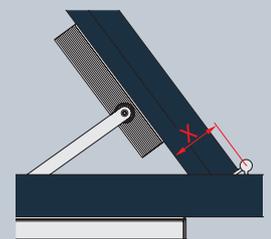
Slide rail EFR BG (short)

DIN left	Colour	Article number	DIN right	Colour	Article number
GS-EFR BG (short) (Si)	Silver RAL 9006	35022BG00A05601	GS-EFR BG (short) (Si)	Silver RAL 9006	35022BG00A05602
GS-EFR BG (short) (W)	White RAL 9016	35022BG00E05601	GS-EFR BG (short) (W)	White RAL 9016	35022BG00E05602
GS-EFR BG (short) (Br)	Brown RAL 8014	35022BG00D05601	GS-EFR BG (short) (Br)	Brown RAL 8014	35022BG00D05602
GS-EFR BG (short) (S)	Black RAL 9005	35022BG00G05601	GS-EFR BG (short) (S)	Black RAL 9005	35022BG00G05602
GS-EFR BG (short) (ER M)	Stainless steel satin	35022BG00Q05601	GS-EFR BG (short) (ER M)	Stainless steel satin	35022BG00Q05602

Note!
The use of an interrupt button for releasing the closing sequence selector is urgently required. The maximum opening angle of the leafs has to be limited by a suitable ground stopper. When using in schools, caserns and stadiums as well as in areas with a high potential of vandalism, we recommend the use of eletromagnetic door retainers.

Please also order the accessories (from page 186) for the dciferent mounting versions (see pages 88 and 89).

The maximum opening or hold-open angle is 110°!
X = 60 - 92 mm





ECO

Slide rails for double-leaf doors (surface mounted)

A photograph showing a stainless steel fullcover for a door closer installed on a dark grey door. The fullcover is a long, rectangular, brushed metal piece that covers the top of the door closer mechanism. It is mounted to the door and the door frame. The door closer itself is visible below the fullcover, with the ECO logo on its side. The door is dark grey, and the background is white.

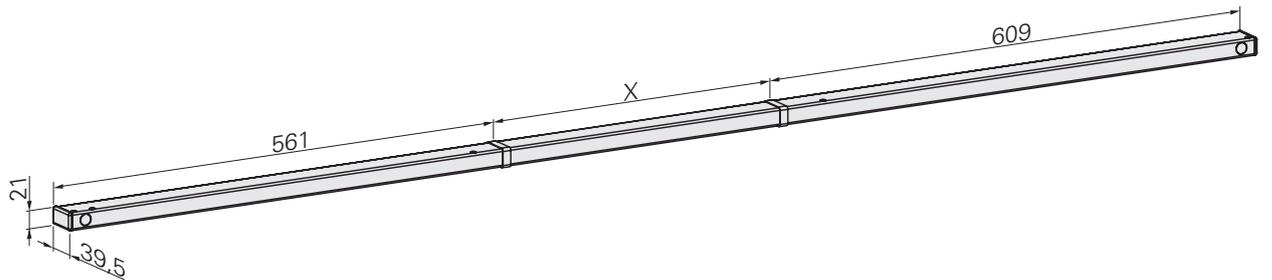
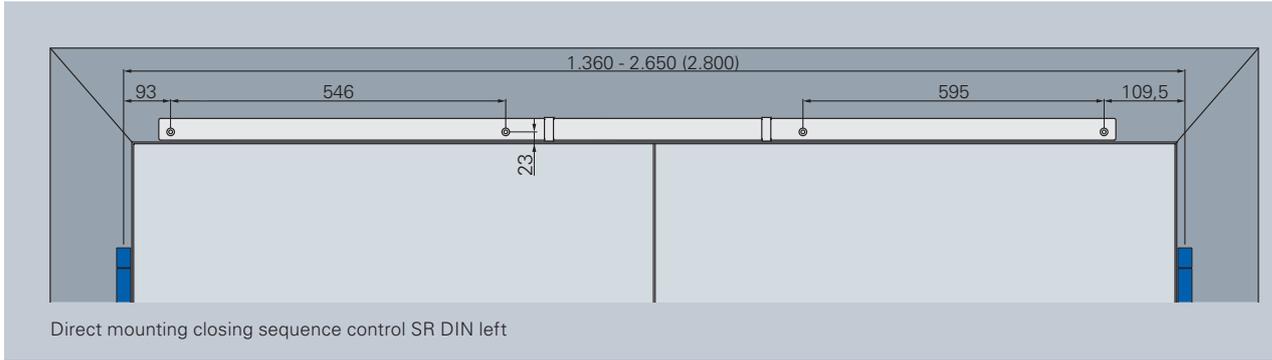
Stainless steel fullcover for door closer

The fullcover is an optional stainless steel cover for the ECO **Newton** door closer. It is available as an accessory for an additional charge (Page 181).

TS-61 SR-EFR-2 (ER)

Execution: Stainless steel standard:
Slide rail and door closer cover in stainless steel, door closer body silver.





SR

Closing sequence control hinge side for all ECO Newton door closers

- **Hold open angle for active leaf:**
at 160°-175°, an additional assembly work is necessary
- **Hold open angle for passive leaf**
max. 175° (depending on the fold-and frame geometry)
- **Minimum size passive leaf:**
360 mm (for TS-41) / 400 mm (for TS-61)
- **Scope of Delivery:**
Incl. corresponding cover profile, without arm, which is part of the door closer
- **Mounting:** Only hinge side

- **Slide rail-closing sequence control:**

The closing sequence control ensures that the door leaves are closing in the correct order. E.g.: the passive leaf first, the active leaf last. When opening the passive leaf, chocks in the active leaf slide rail (mechanical independent from the hydraulics of the door closer) make sure that the active leaf stops as soon as the passive leaf is opened. Tested acc. to **EN 1158**.

Closing sequence control hinge side

Hinge gap: 1.360 – 2.650 mm

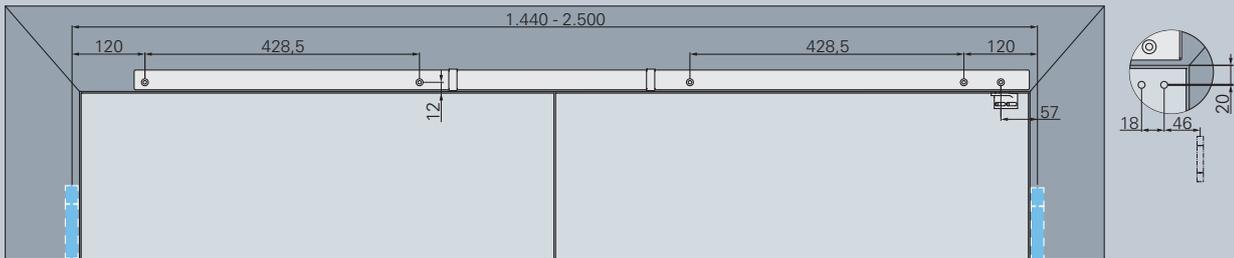
For smaller hinge gaps (1.260 – 1.360 mm) or bigger hinge gaps (over 2.650 mm), special variants can be used.

Please contact our technical support.

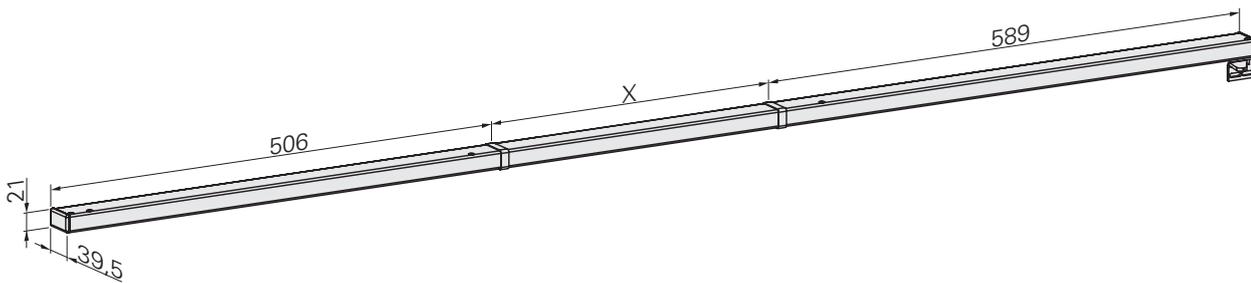
DIN left	Colour	Article number	DIN right	Colour	Article number
SR (Si)	Silver RAL 9006	350220000AK1501	SR (Si)	Silver RAL 9006	350220000AK1502
SR (W)	White RAL 9016	350220000EK1501	SR (W)	White RAL 9016	350220000EK1502
SR (Br)	Brown RAL 8014	350220000DK1501	SR (Br)	Brown RAL 8014	350220000DK1502
SR (S)	Black RAL 9005	350220000GK1501	SR (S)	Black RAL 9005	350220000GK1502
SR (ER M)	Stainless steel satin	350220000QK1501	SR (ER M)	Stainless steel satin	350220000QK1502

Notel:
For full panic doors, the use of ECO panic flap MK 1 is required!

Please also order the accessories (from page 186) for the different mounting versions (see pages 88 and 89).



Direct mounting closing sequence control SR BG DIN right



SR BG (Hinge opposite side)

Closing sequence control hinge-opposite side
for all ECO Newton door closers

- **On full panic doors**, the TS-62G (TS-31) and the panic flap MK2 must be used
- **Opening angle:**
max. 110° (depending on the fold-and frame geometry)
- **Minimum size passive leaf:** 600 mm.
- **Scope of Delivery:**
Without arm, which is part of the door closer.
Please specify active leaf **DIN left** oder **DIN right** when you order.
- **Mounting:** Only hinge-opposite side.
Direct mounting BG (sketch 4, page 89)
or mounting BG with ADP 40 (sketch 5, page 89),
or mounting with SFW (sketch 6, page 89).

■ **Slide rail-closing sequence control:**

The closing sequence control ensures that the door leaves are closing in the correct order. E.g.: the passive leaf first, the active leaf last. When opening the passive leaf, chocks in the active leaf slide rail (mechanical independent from the hydraulics of the door closer) make sure that the active leaf stops as soon as the passive leaf is opened. Tested acc. to **EN 1158**.

Closing sequence control hinge-opposite side
Hinge gap: 1.440 – 2.500 mm

DIN left	Colour	Article number	DIN right	Colour	Article number
SR BG (Si)	Silver RAL 9006	350220000AK9401	SR BG (Si)	Silver RAL 9006	350220000AK9402
SR BG (W)	White RAL 9016	350220000EK9401	SR BG (W)	White RAL 9016	350220000EK9402
SR BG (Br)	Brown RAL 8014	350220000DK9401	SR BG (Br)	Brown RAL 8014	350220000DK9402
SR BG (S)	Black RAL 9005	350220000GK9401	SR BG (S)	Black RAL 9005	350220000GK9402
SR BG (ER M)	Stainless steel satin	350220000QK9401	SR BG (ER M)	Stainless steel satin	350220000QK9402

Note!

Limits of use!

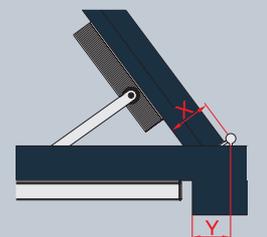
Rotational axis dimensions: X = 60 - 92 mm
(Door thickness + rotational axis hinge, see sketch)
Frame overhang: Y = max. 30 mm
(Overhang of the frame on hinge-opposite side, measured from rotational axis of the hinge, see sketch)

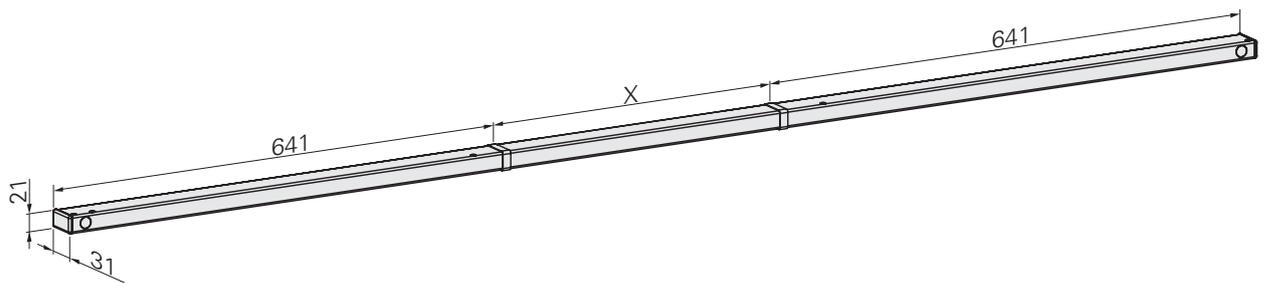
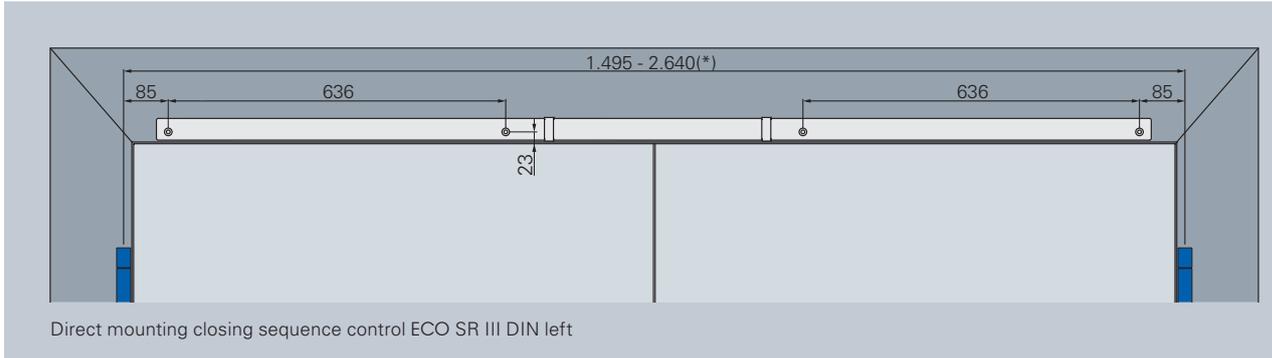
For special dimensions (door leaf thickness, notches) please contact our technical support.

The maximum opening angle of the leaves has to be limited by a suitable ground stopper.

Please also order the accessories (from page 186) for the different mounting versions (see pages 88 and 89).

X = 60 - 92 mm
Y = ≤ 30 mm





ECO SR III

Closing sequence control hinge side for all ECO Newton door closers

■ **Mounting:**

DIN left / DIN right usable variably.
The DIN direction is choosable on site.

■ **Opening angle:**

max. 175° (depending on the fold-and frame geometry)

■ **Minimum size passive leaf:**

360 mm (for TS-41) resp. 400 mm (for TS-61)

■ **Scope of Delivery:**

Incl. corresponding cover profile (latching system), mounting fitting parts and fixing screws in Torx.

■ **Slide rail-closing sequence control:**

The closing sequence control ensures that the door leaves are closing in the correct order. E.g.: the passive leaf first, the active leaf last. When opening the passive leaf, chocks in the active leaf slide rail (mechanical independent from the hydraulics of the door closer) make sure that the active leaf stops as soon as the passive leaf is opened. Tested acc. to **EN 1158**.

Closing sequence control

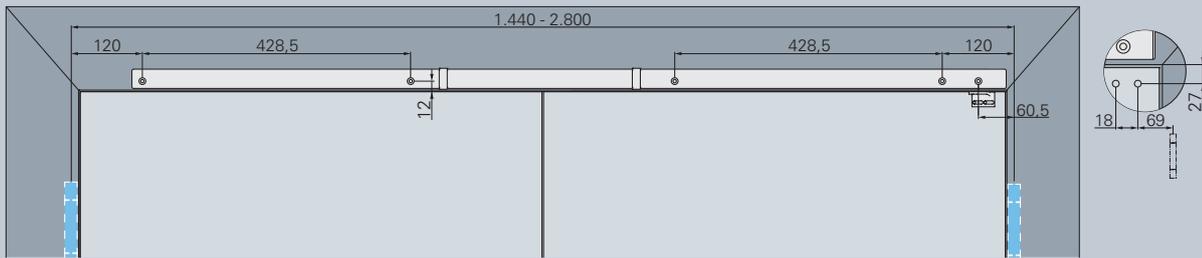
Hinge gap: 1.495 – 2.640 mm

* At a shorter distance (1.370 – 1.490 mm), the active leafs profile can be shortened up to 130 mm.
For larger gaps (2.645 - 2.800 mm), please order the additional connection rod VBS ECO SR III.

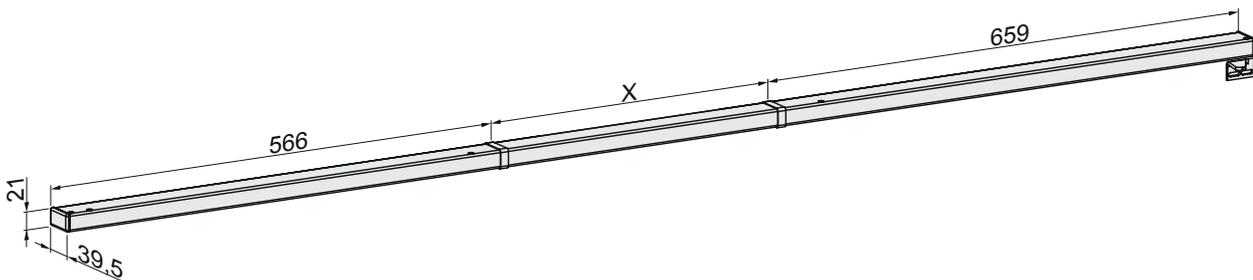
DIN left / DIN right	Colour	Article number
ECO SR III (Si)	Silver eloxed	5030051094
ECO SR III (W)	White RAL 9016	5030050928
ECO SR III (S)	Black RAL 9005	5030049725
ECO SR III (ER M)	Stainless steel satin	5030051547
VBS ECO SR III (BA to 2800 mm)	Steel galvanized	5030051651

Notel:
For full panic doors, the use of ECO panic flap MK 1 is required!

Please also order the accessories (from page 186) for the different mounting versions (see pages 88 and 89).



Direct mounting closing sequence control SR BGX DIN right



SR BGX (Hinge-opposite side)

Closing sequence control hinge-opposite side for doors with large profiles (X-Dimension > 92 mm) for ECO **Newton TS-61** and **TS-51**

Not approved for use on fire- and smoke control doors!

- **Opening angle:**
max. 120° (depending on the fold-and frame geometry)
- **Minimum size passive leaf:** 700 mm.
- **Scope of Delivery:**
The SR BGX is only available as a set incl. door closer and arm. The selection depends on the door dimensions and its function (for example full panic). Please consult our technical support.
- **Mounting:** Only hinge-opposite side
- **Rotational axis dimension:** X = 70 mm to 110 mm maximum
- **Mechanical hold open:**
Suitable for the use of mechanical hold open devices. Opening angle decreases when using FKL-BG
- **Hinge gap:** 1.440 – 2.800 mm

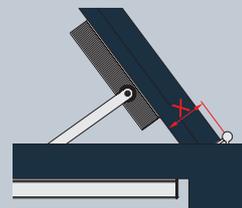
- **Slide rail-closing sequence control:**
The closing sequence control ensures that the door leaves are closing in the correct order. E.g.: the passive leaf first, the active leaf last. When opening the passive leaf, chocks in the active leaf slide rail (mechanical independent from the hydraulics of the door closer) make sure that the active leaf stops as soon as the passive leaf is opened. Tested acc. to **EN 1158**.

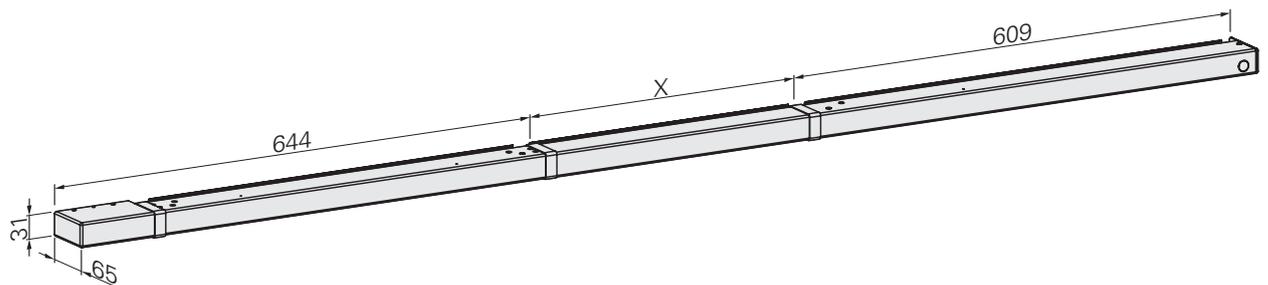
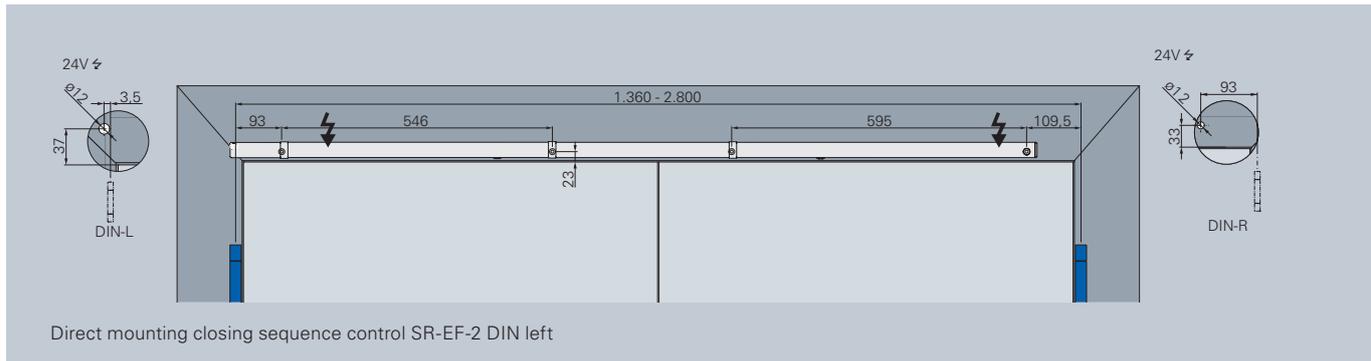
Note:
The maximum opening angle of the leaves has to be limited by a suitable ground stopper.

Please also order the accessories (from page 186) for the different mounting versions (see pages 88 and 89).

The max. opening angle of the **active- and passive leaf** is 120°!
Frame overhang max. 8 mm!

X = 70 - 110 mm





SR-EF-2

Closing sequence control with electromagnetic hold-open in the active and passive leaf
for all ECO Newton door closers

■ **Hold open angle for passive leaf and active leaf**

Active leaf: approx. 70° to 145°, passive leaf: 70° bis 130°

■ **Power supply: 24 V DC**

■ **Minimum size passive leaf:**

360 mm (for TS-41) resp. 400 mm (for TS-61)

■ **Scope of delivery:**

Incl. corresponding cover profile, without arm, which is part of the door closer

■ **Mounting:** Only hinge side

■ **Slide rail closing sequence control:**

The closing sequence selector ensures, that the door leaves are closing in the correct order. E.g.: the passive leaf first, active leaf last.

■ **Electromagnetic hold-open:**

In active and passive leaf. Active leaf is held open electromagnetically when opened. If passive leaf is opened additionally, it will be held open electromagnetically, too. At the same time the integrated closing sequence is activated which locks the active leaf. The magnet of the active leaf disconnects, both door leaves stay open.

■ **Tested acc. to: EN 1155 and EN 1158**

Closing sequence control EF-2

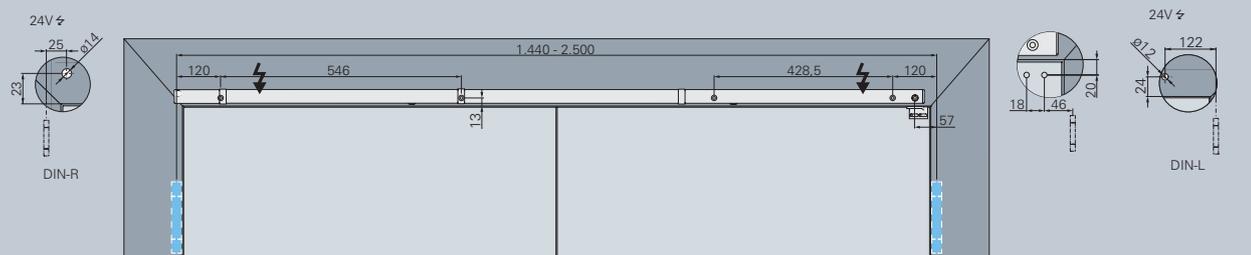
Hinge gap: 1.360 – 2.800 mm

DIN left	Colour	Article number	DIN right	Colour	Article number
SR-EF-2 (Si)	Silver RAL 9006	350220000AK2501	SR-EF-2 (Si)	Silver RAL 9006	350220000AK2502
SR-EF-2 (W)	White RAL 9016	350220000EK2501	SR-EF-2 (W)	White RAL 9016	350220000EK2502
SR-EF-2 (Br)	Brown RAL 8014	350220000DK2501	SR-EF-2 (Br)	Brown RAL 8014	350220000DK2502
SR-EF-2 (S)	Black RAL 9005	350220000GK2501	SR-EF-2 (S)	Black RAL 9005	350220000GK2502
SR-EF-2 (ER M)	Stainless steel satin	350220000QK2501	SR-EF-2 (ER M)	Stainless steel satin	350220000QK2502

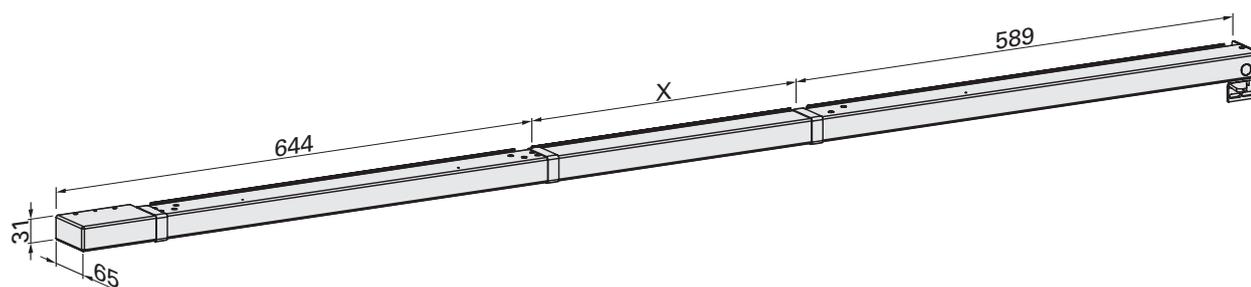
Note!

The maximum opening angle of the leaves has to be limited by a suitable ground stopper. We recommend the use of electromagnetic door retainers when the FSA is used in schools, caserns, stadiums or vandalism endangered areas.

Please also order the accessories (from page 186) for the different mounting versions (see pages 88 and 89).



Direct mounting closing sequence control SR-EF-2 BG DIN right



SR-EF-2 BG (Hinge-opposite side)

Closing sequence control with electromagnetic hold-open in the active and passive leaf
for all ECO Newton door closers

- **Hold open angle for passive leaf and active leaf**
Active leaf: max. 95°, passive leaf: max. 95°
- **Power supply:** 24 V DC
- **Minimum size passive leaf:**
500 mm.
- **Scope of delivery:**
Incl. corresponding cover profile, without arm, which is part of the door closer
- **Mounting:** Only hinge-opposite side
- **Rotational axis dimension:** X = max. 92 mm
(Door thickness + rotational axis hinge, see sketch) For special variants over 92 mm please contact our technical support.

- **Slide rail closing sequence control:**
The closing sequence selector ensures, that the door leaves are closing in the correct order. E.g.: the passive leaf first, active leaf last.
- **Electromagnetic hold-open:**
In active and passive leaf. Active leaf is held open electromagnetically when opened. If passive leaf is opened additionally, it will be held open electromagnetically, too. At the same time the integrated closing sequence is activated which locks the active leaf. The magnet of the active leaf disconnects, both door leaves stay open.
- **Tested acc. to:** EN 1155 and EN 1158

Closing sequence control EF-2 BG

Hinge gap: 1.440 – 2.500 mm

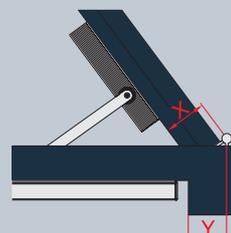
DIN left	Colour	Article number	DIN right	Colour	Article number
SR-EF-2 BG (Si)	Silver RAL 9006	35022BG00AK2501	SR-EF-2 BG (Si)	Silver RAL 9006	35022BG00AK2502
SR-EF-2 BG (W)	White RAL 9016	35022BG00EK2501	SR-EF-2 BG (W)	White RAL 9016	35022BG00EK2502
SR-EF-2 BG (Br)	Brown RAL 8014	35022BG00DK2501	SR-EF-2 BG (Br)	Brown RAL 8014	35022BG00DK2502
SR-EF-2 BG (S)	Black RAL 9005	35022BG00GK2501	SR-EF-2 BG (S)	Black RAL 9005	35022BG00GK2502
SR-EF-2 BG (ER M)	Stainless steel satin	35022BG00QK2501	SR-EF-2 BG (ER M)	Stainless steel satin	35022BG00QK2502

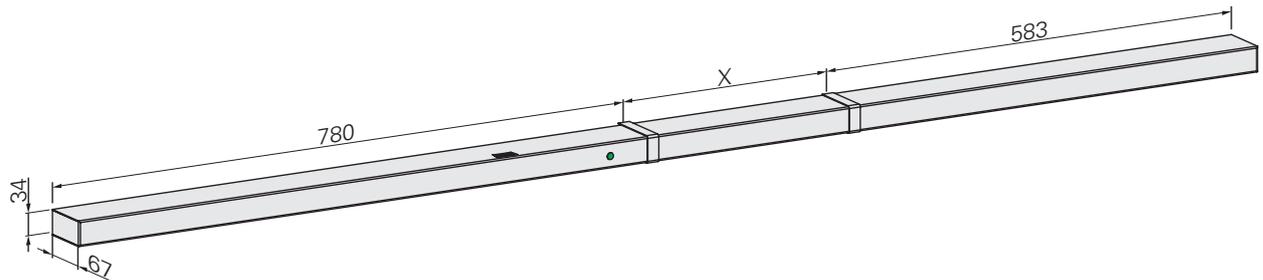
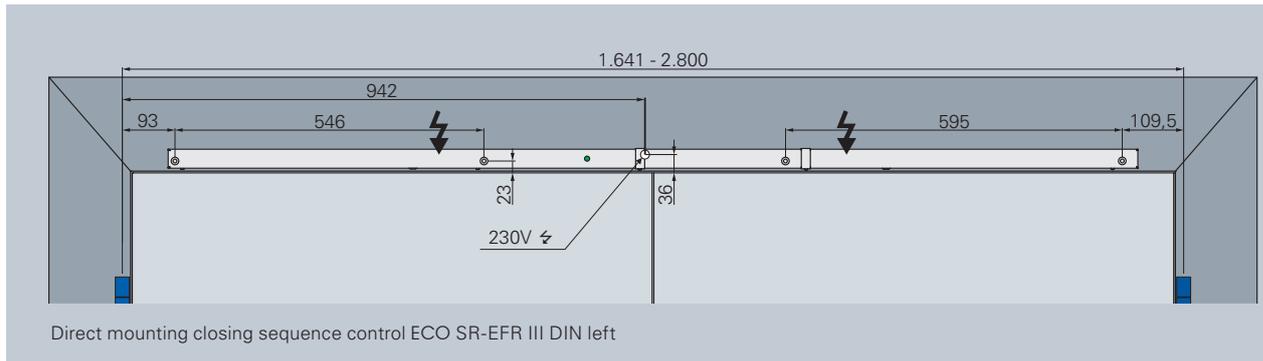
Note!
The use of an interrupt button for releasing the closing sequence selector is urgently required. The maximum opening angle of the leaves has to be limited by a suitable ground stopper. When using in schools, caserns and stadiums as well as in areas with a high potential of vandalism, we recommend the use of an eletromagnetic door retainers.

Please also order the accessories (from page 186) for the different mounting versions (see pages 88 and 89).

The maximum opening or hold-open angle of the **active and passive leaf** is 95°!
Frame overhang max. 8 mm!

X = 60 - 92 mm
Y ≤ 33 mm





ECO SR-EFR III

Closing sequence control with continuous cover, two electromagnetic hold-open in the active and passive leaf, integrated smoke detector with optical pre-information about dirt level and automatic calibration to avoid false alarms
for all ECO Newton door closers

- **Compatible for smoke detector type:**
DRM ORS 142, TDS 247
- **Controlled by:**
Integrated smoke detector with power supply unit. Power supply: 230 V AC, IP 10, protection class I
- **Range of application:**
-15 to + 45°C, relative humidity max. 95%
- **Electromagnetic hold-open:**
Holding force adjustable (Recommendation DIBt, **DIN 18040** as well as **DIN EN 12217**: max. 80 N.)
Adjustable bracket from: Hinge side: 80° to 130°,
Hinge-opposite side 80° to 130°
- **Minimum size passive leaf:**
360 mm (for TS-41) resp. 400 mm (for TS-61)
- **Scope of Delivery:**
Incl. corresponding cover profile, without arm, which is part of the door closer
- **Mounting:**
Only hinge side
- **Slide rail closing sequence control:**
The closing sequence control ensures, that the door leaves are closing in the correct order. E.g.: the passive leaf first, active leaf last.
- **Electromagnetic hold-open:**
In active and passive leaf. Active leaf is held open electromagnetically when opened. If passive leaf is opened additionally, it will be held open electromagnetically, too. At the same time the integrated closing sequence is activated which locks the active leaf.
The magnet of the active leaf disconnects, both door leaves stay open.
- **Tested acc. to: EN 1155 and EN 1158** and approved by DIBt

Closing sequence control ECO SR-EFR III

Hinge gap 1.641 – 2.800 mm

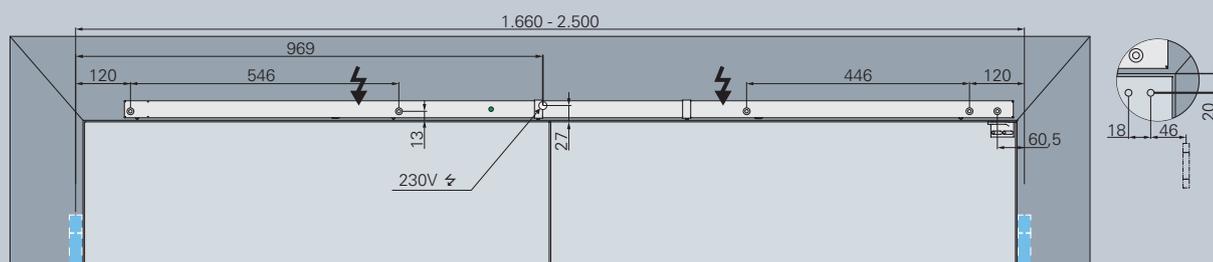
For smaller hinge gaps 1.360 – 1.641 mm **the SR-EF II can be used in combination with the ECO RSZ III (Accessories Page 201).**

For larger hinge gaps (2.645 – 2.800 mm) **please additionally order the extended connecting rod VBS ECO SR III.**

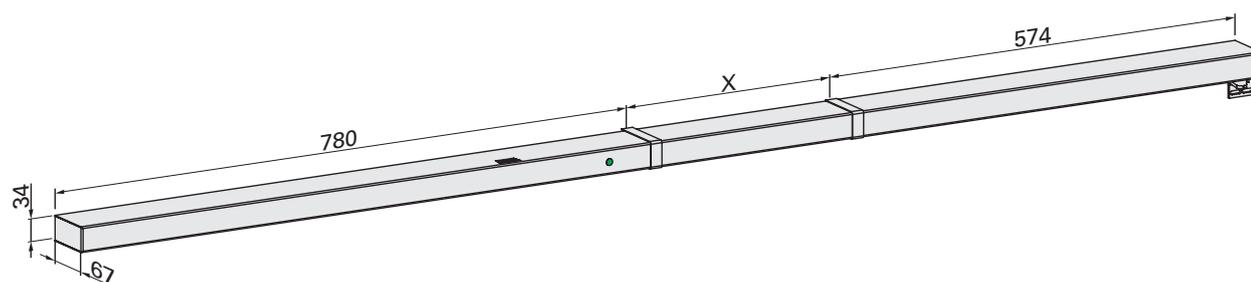
DIN left	Colour	Article number	DIN right	Colour	Article number
ECO SR-EFR III (Si)	Silver RAL 9006	5030052223	ECO SR-EFR III (Si)	Silver RAL 9006	5030052225
ECO SR-EFR III (W)	White RAL 9016	5030052226	ECO SR-EFR III (W)	White RAL 9016	5030052227
ECO SR-EFR III (Br)	Brown RAL 8014	on request	ECO SR-EFR III (Br)	Brown RAL 8014	on request
ECO SR-EFR III (S)	Black RAL 9005	on request	ECO SR-EFR III (S)	Black RAL 9005	on request
ECO SR-EFR III (ER M)	Stainless steel satin	5030052228	ECO SR-EFR III (ER M)	Stainless steel satin	5030052229
VBS ECO SR III (BA to 2800 mm)	Steel zinc-plated	5030051651			

Note!
When using in schools, caserns and stadiums as well as in areas with a high potential of vandalism, we recommend the use of eletromagnetic door retainers. For full panic doors, the use of ECO panic flap MK 1 is required!

Please also order the accessories (from page 186) for the dciferent mounting versions (see pages 88 and 89).



Direct mounting closing sequence control ECO SR-EFR III BG DIN right



ECO SR-EFR III BG (Hinge-opposite side)

Closing sequence control with continuous cover, two electromagnetic hold-open in the active and passive leaf, integrated smoke detector with optical pre-information about dirt level and automatic calibration to avoid false alarms for all ECO Newton door closers

- **Compatible for smoke detector type:**
DRM ORS 142, TDS 247
- **Controlled by:**
Integrated smoke detector with power supply unit. Power supply: 230 V AC, IP 10, protection class I
- **Range of application:**
-15 to + 45°C, relative humidity max. 95%
- **Electromagnetic hold-open:**
Holding force adjustable (Recommendation DIBt, **DIN 18040** as well as **DIN EN 12217**: max. 80 N.)
Adjustable bracket from: Hinge side: 80° to 110°,
Hinge-opposite side 80° to 110°
- **Minimum size passive leaf:**
500 mm
- **Scope of Delivery:**
Incl. corresponding cover profile, without arm, which is part of the door closer
- **Mounting:**
Only hinge-opposite side
- **Rotational axis dimension:**
X = max. 92 mm (Door thickness + rotational axis hinge, see sketch)
For special variants over 92mm please contact our technical support.
- **Slide rail closing sequence control:**
The closing sequence control ensures, that the door leaves are closing in the correct order. E.g.: the passive leaf first, active leaf last.
- **Electromagnetic hold-open:**
In active and passive leaf. Active leaf is held open electromagnetically when opened. If passive leaf is opened additionally, it will be held open electromagnetically, too. At the same time the integrated closing sequence is activated which locks the active leaf.
The magnet of the active leaf disconnects, both door leaves stay open.
- **Tested acc. to:** EN 1155 and EN 1158 and approved by DIBt

Closing sequence control ECO SR-EFR III BG

Hinge gap 1.660 – 2.500 mm

For smaller hinge gaps 1.440 – 1.685 mm **the SR-EF II BG can be used in combination with the ECO RSZ III (Accessories Page 201).**

DIN left	Colour	Article number	DIN right	Colour	Article number
ECO SR-EFR III BG (Si)	Silver RAL 9006	5030052235	ECO SR-EFR III BG (Si)	Silver RAL 9006	5030052236
ECO SR-EFR III BG (W)	White RAL 9016	5030052237	ECO SR-EFR III BG (W)	White RAL 9016	5030052238
ECO SR-EFR III BG (Br)	Brown RAL 8014	on request	ECO SR-EFR III BG (Br)	Brown RAL 8014	on request
ECO SR-EFR III BG (S)	Black RAL 9005	on request	ECO SR-EFR III BG (S)	Black RAL 9005	on request
ECO SR-EFR III BG (ER M)	Stainless steel satin	5030052239	ECO SR-EFR III BG (ER M)	Stainless steel satin	5030052240

Note!
The use of an interrupt button for releasing the closing sequence selector is urgently required. The maximum opening angle of the leaves has to be limited by a suitable ground stopper. When using in schools, caserns and stadiums as well as in areas with a high potential of vandalism, we recommend the use of electromagnetic door retainers. For full panic doors, the use of ECO panic flap MK 2 is required!

Please also order the accessories (from page 186) for the different mounting versions (see pages 88 and 89).

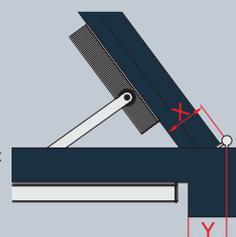
The maximum opening or holdopen angle of the **active and passive** leaf is 110°!

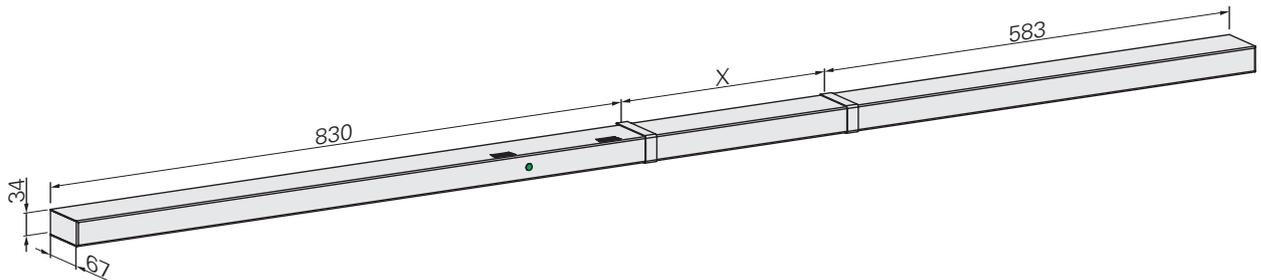
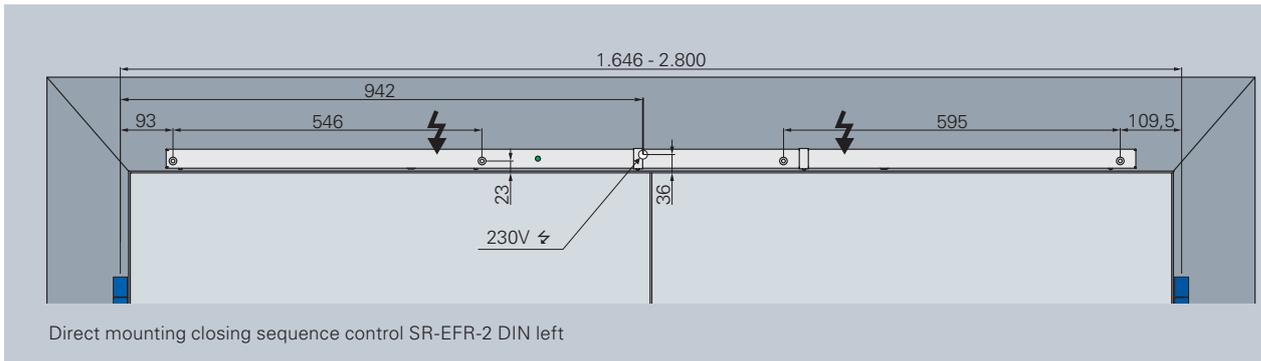
Frame overhang max. 8 mm!

X = 60 - 92 mm

Only when mounting with Under-lintel angle:
Y = max. 18 to 22 mm.

(please consult also our technical support)





SR-EFR-2

Closing sequence control with continuous cover, two electromagnetic hold-open in the active and passive leaf, integrated smoke detector with optical pre-information about dirt level and automatic calibration to avoid false alarms for all ECO Newton door closers

- **Compatible for smoke detector type:**
DRM ORS 142, TDS 247
- **Hold open angle for active leaf / passive leaf**
Active leaf: ca. 70° bis 145°, Passive leaf: 70° bis 130°
- **Power supply:** 230 V AC, 50 Hz
- **Minimum size passive leaf:**
360 mm (for TS-41) bzw. 400 mm (for TS-61)
- **Scope of Delivery:**
Incl. corresponding cover profile, without arm, which is part of the door closer
- **Mounting:** Only hinge side
- **Slide rail closing sequence control:**
The closing sequence control ensures, that the door leaves are closing in the correct order. E.g.: the passive leaf first, active leaf last.
- **Electromagnetic hold-open:**
In active and passive leaf. Active leaf is held open electromagnetically when opened. If passive leaf is opened additionally, it will be held open electromagnetically, too. At the same time the integrated closing sequence is activated which locks the active leaf.
The magnet of the active leaf disconnects, both door leaves stay open.
- **Tested acc. to:** EN 1155 and EN 1158 and approved by DIBt.

Closing sequence control EFR-2

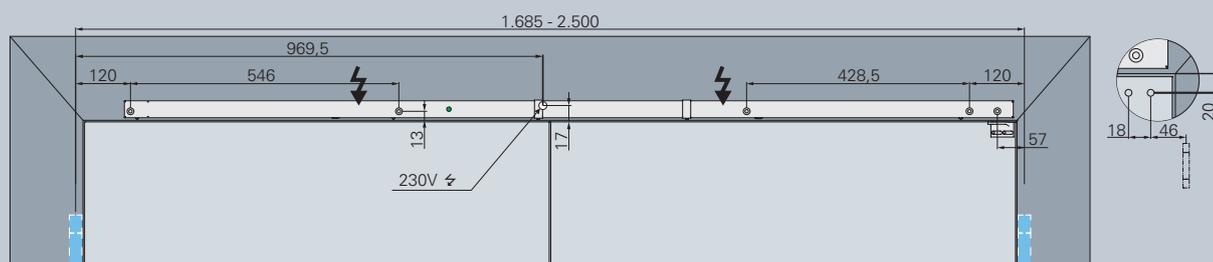
Hinge gap: 1.646 – 2.800 mm

For smaller hinge gaps (1.360 – 1.646 mm) the SR-EF-2 can be used in combination with the ECO RSZ (Accessories Page 192).

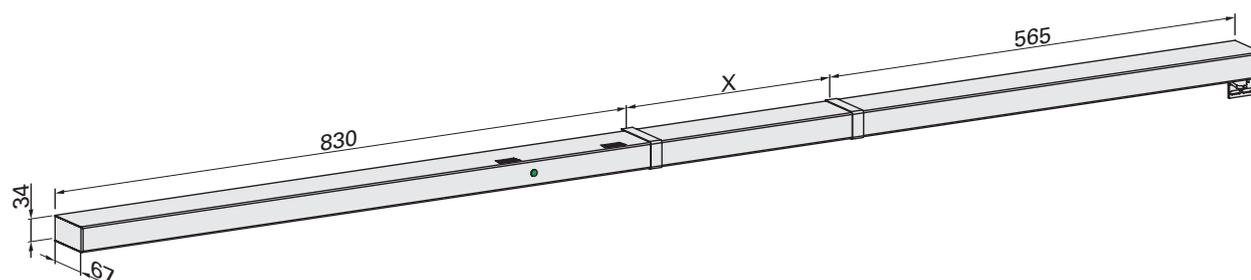
DIN left	Colour	Article number	DIN right	Colour	Article number
SR-EFR-2 (Si)	Silver RAL 9006	350220000AL2601	SR-EFR-2 (Si)	Silver RAL 9006	350220000AL2602
SR-EFR-2 (W)	White RAL 9016	350220000EL2601	SR-EFR-2 (W)	White RAL 9016	350220000EL2602
SR-EFR-2 (Br)	Brown RAL 8014	350220000DL2601	SR-EFR-2 (Br)	Brown RAL 8014	350220000DL2602
SR-EFR-2 (S)	Black RAL 9005	350220000GL2601	SR-EFR-2 (S)	Black RAL 9005	350220000GL2602
SR-EFR-2 (ER M)	Stainless steel satin	350220000QL2601	SR-EFR-2 (ER M)	Stainless steel satin	350220000QL2602

Note!
When using in schools, caserns and stadiums as well as in areas with a high potential of vandalism, we recommend the use of eletromagnetic door retainers. For full panic doors, the use of ECO panic flap MK 1 is required!

Please also order the accessories (from page 186) for the dciferent mounting versions (see pages 88 and 89).



Direct mounting closing sequence control SR-EFR-2 BG DIN right



SR-EFR-2 BG (Hinge-opposite side)

Closing sequence control with continuous cover, two electromagnetic hold-open in the active and passive leaf, integrated smoke detector with optical pre-information about dirt level and automatic calibration to avoid false alarms for all ECO Newton door closers

- **Compatible for smoke detector type:**
DRM ORS 142, TDS 247
- **Hold open angle for active leaf / passive leaf**
Active leaf: max. 95°, Passive leaf: max. 95°
- **Power supply:** Supply voltage 230 V AC, 50 Hz
- **Minimum size passive leaf:** 500 mm
- **Scope of Delivery:**
Incl. corresponding cover profile, without arm, which is part of the door closer
- **Mounting:** Only hinge-opposite side
- **Rotational axis dimension:** X = max. 92 mm
(Door thickness + rotational axis hinge, see sketch) For special variants over 92mm please contact our technical support.

- **Slide rail closing sequence control:**
The closing sequence control ensures, that the door leaves are closing in the correct order. E.g.: the passive leaf first, active leaf last.
- **Electromagnetic hold-open:**
In active and passive leaf. Active leaf is held open electromagnetically when opened. If passive leaf is opened additionally, it will be held open electromagnetically, too. At the same time the integrated closing sequence is activated which locks the active leaf.
The magnet of the active leaf disconnects, both door leaves stay open.
- **Tested acc. to:** EN 1155 and EN 1158 and approved by DIBt.

Closing sequence control EFR-2 BG

Hinge gap: 1.685 – 2.500 mm

For smaller hinge gaps (1.440 – 1.685 mm) the SR-EF-2 BG can be used in combination with the ECO RSZ (Accessories Page 192).

DIN left	Colour	Article number	DIN right	Colour	Article number
SR-EFR-2 BG (Si)	Silver RAL 9006	35022BG00AL2601	SR-EFR-2 BG (Si)	Silver RAL 9006	35022BG00AL2602
SR-EFR-2 BG (W)	White RAL 9016	35022BG00EL2601	SR-EFR-2 BG (W)	White RAL 9016	35022BG00EL2602
SR-EFR-2 BG (Br)	Brown RAL 8014	35022BG00DL2601	SR-EFR-2 BG (Br)	Brown RAL 8014	35022BG00DL2602
SR-EFR-2 BG (S)	Black RAL 9005	35022BG00GL2601	SR-EFR-2 BG (S)	Black RAL 9005	35022BG00GL2602
SR-EFR-2 BG (ER M)	Stainless steel satin	35022BG00QL2601	SR-EFR-2 BG (ER M)	Stainless steel satin	35022BG00QL2602

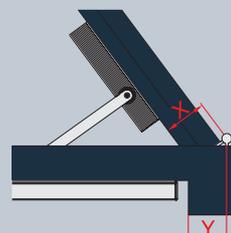
Note!:

The use of an interrupt button for releasing the closing sequence selector is urgently required. The maximum opening angle of the leaves has to be limited by a suitable ground stopper. When using in schools, caserns and stadiums as well as in areas with a high potential of vandalism, we recommend the use of electromagnetic door retainers. For full panic doors, the use of ECO panic flap MK 2 is required!

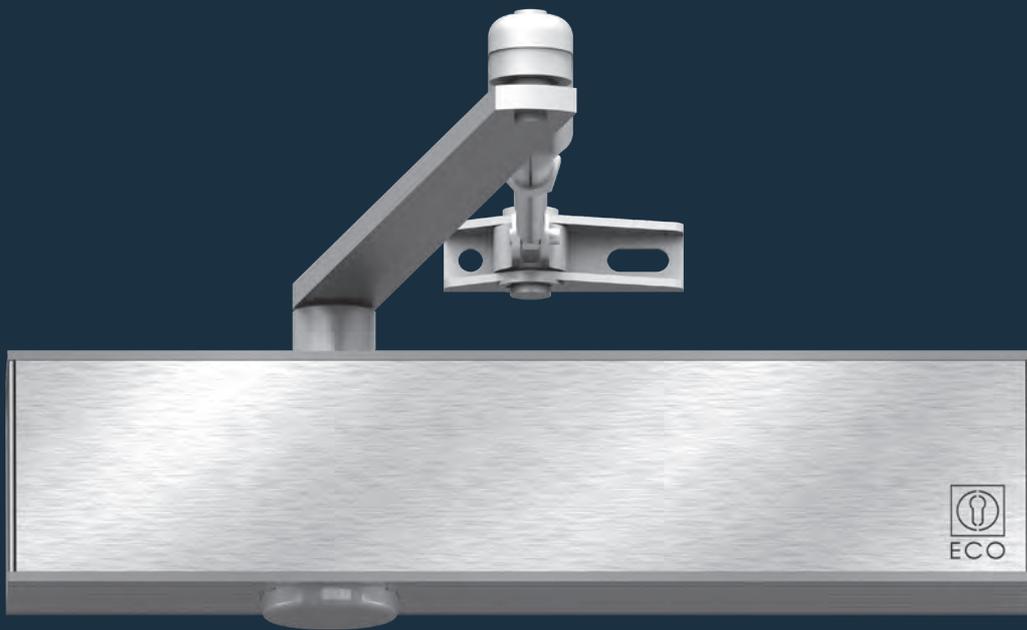
Please also order the accessories (from page 186) for the different mounting versions (see pages 88 and 89).

The maximum opening or hold-open angle of the **active and passive** leaf is 95°!
Frame overhang max. 8 mm!

X = 60 - 92 mm
Y ≤ 33 mm



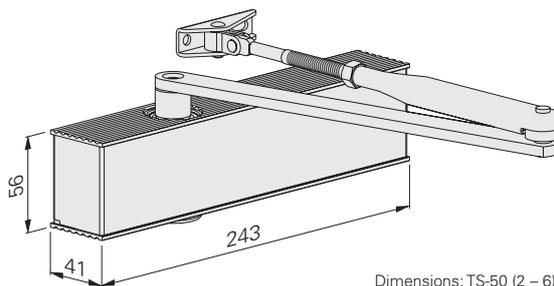
ECO **Newton** TS-50



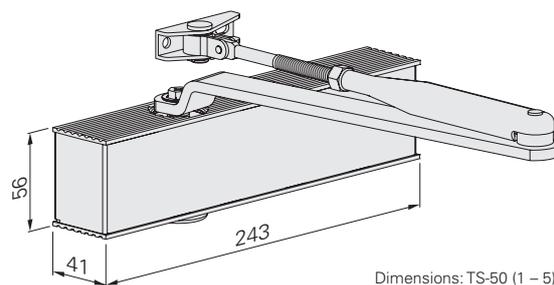
Product characteristics

Closing force (continuously adjustable)	Size acc. to EN	1 – 5	2 – 6
Door width	acc. to EN ≤ 1.250 mm	■	
Door width (acc. separate mounting position)	acc. to EN ≤ 1.400 mm		■
Dimensions (incl. mounting plate)	Length in mm	243	243
	Depth in mm	41	41
	Height in mm	56	56
Mounting plate acc. to EN 1154 (supplementary sheet 1)		□	□
Hinge side and hinge-opposite side		■	■
DIN left / right		■	■
Latching speed (continuously adjustable)		■	■
Closing speed (continuously adjustable)		■	■
Back-check (constant)		■	■
Dealyed action not fire certified (continuously adjustable)		-	-
Tested acc. to EN		EN 1154	
Suitable for fire- and smoke control doors		F	
Certified according to EU-Directive		CE	

- Yes
- No
- Option



Dimensions: TS-50 (2 – 6)



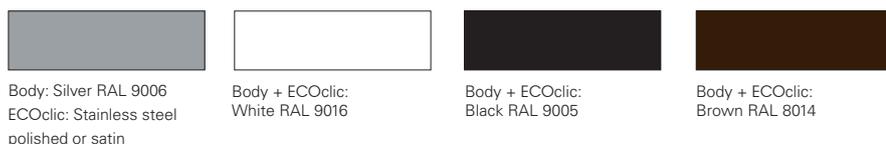
Dimensions: TS-50 (1 – 5)



ECO Newton TS-50 - Highlights at a glance



Details regarding the ECO Newton Highlights can be found in the intro of this chapter.



The standard arm is always delivered in the same colour as the ordered door closer body.



Order information

ECO **Newton** TS-50 ▪ Door closer with standard arm

Product information

Closing force 1 – 5 (2 – 6), tested acc. to **EN 1154** (for door widths up to 1.250 mm (1.400 mm)) continuously adjustable. Latching speed and closing speed continuously adjustable. Back-check constant. Same version for DIN left and DIN right. Mounting height only 41 mm. Weight: 1.280g. Max. opening angle: 180°

- **ECOunity:** The ECO **Newton** closer portfolio covers all door dimensions with only two basic closer units.
- **ECOcllic:** The stainless steel cover encloses the aluminium body with the power of spring steel and conceals all of the adjusting elements, thus securing the closer against unauthorized access
- **ECOmout:** Optional mounting plate according to **EN 1154**, supplementary sheet 1
- **ECOvalve:** Simple, high-precision and permanently secure adjustment of all parameters of the closing process with one conventional Allen key.
- **ECOcover²:** Optional stainless steel cover for the ECO **Newton** door closers
- **ECOgreen:** The intelligent construction and carefully planned use of materials help considerably to save resources

Hinge side: Standard mounting on door leaf. Hinge-opposite side: Head mounting on door frame.

New packaging:

TS-50 Standard: (Standard mounting set) incl. door closer body, standard arm, paper template and fixing material.
 TS-50 DIN: (Mounting acc. DIN holes) Set with door closer body, standard arm, incl. mounting plate, mounting instructions, paper template and fixing material.

Article numbers



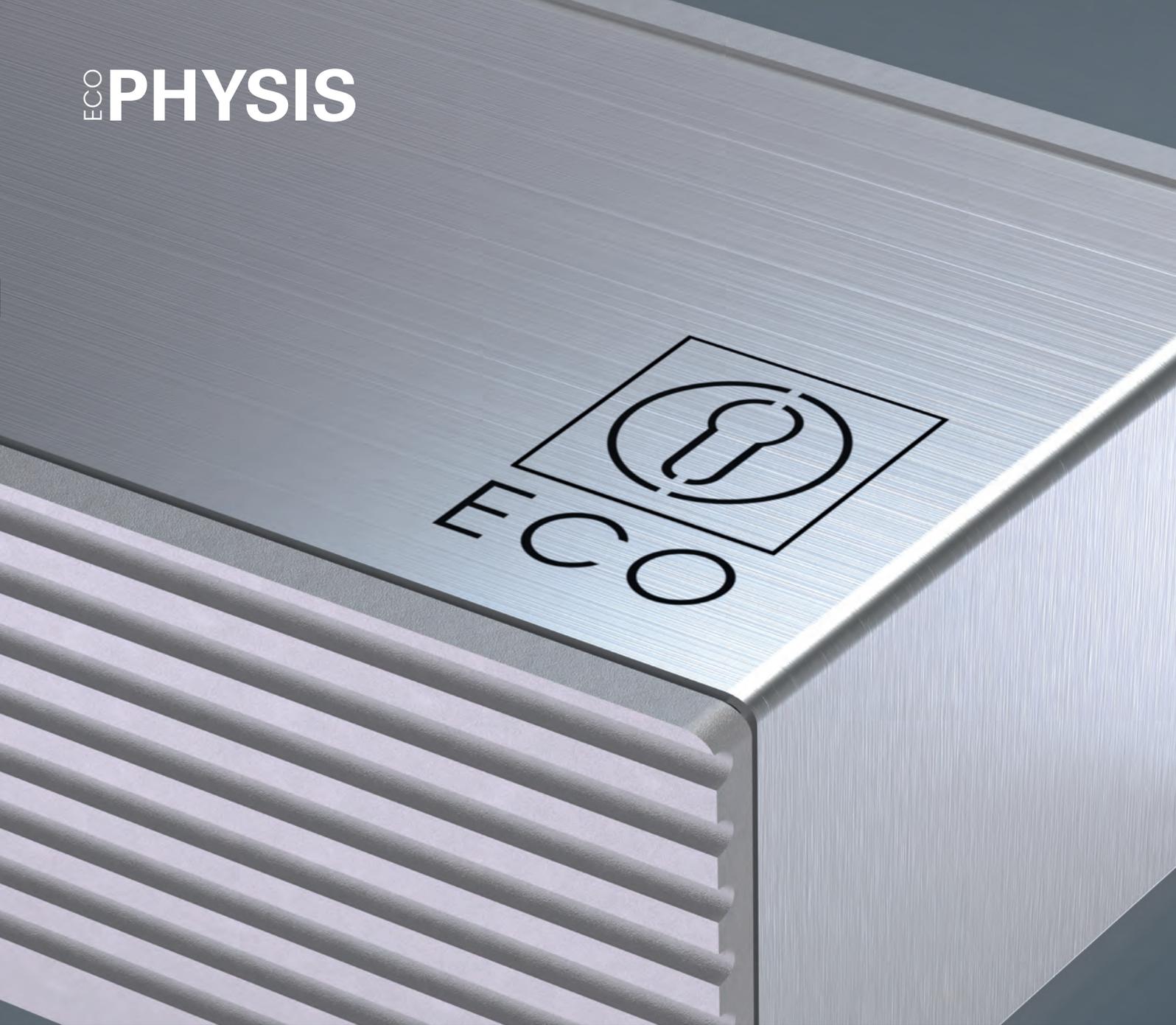
Door closer with standard arm, without mounting plate	Colour	Article number	Door closer with standard arm, incl. mounting plate	Colour	Article number
TS-50 Standard (1 – 5)	Silver RAL 9006*	305052F11A71000	TS-50 DIN (1 – 5)	Silver RAL 9006*	305052F11A71090
TS-50 Standard (1 – 5)	White RAL 9016	305052F11E71000	TS-50 DIN (1 – 5)	White RAL 9016	305052F11E71090
TS-50 Standard (1 – 5)	Brown RAL 8014	305052F11D71000	TS-50 DIN (1 – 5)	Brown RAL 8014	305052F11D71090
TS-50 Standard (1 – 5)	Black RAL 9005	305052F11G71000	TS-50 DIN (1 – 5)	Black RAL 9005	305052F11G71090



Door closer with standard arm, without mounting plate	Colour	Article number	Door closer with standard arm, incl. mounting plate	Colour	Article number
TS-50 Standard (2 – 6)	Silver RAL 9006*	305062F11A71000	TS-50 DIN (2 – 6)	Silver RAL 9006*	305062F11A71090
TS-50 Standard (2 – 6)	White RAL 9016	305062F11E71000	TS-50 DIN (2 – 6)	White RAL 9016	305062F11E71090
TS-50 Standard (2 – 6)	Brown RAL 8014	305062F11D71000	TS-50 DIN (2 – 6)	Brown RAL 8014	305062F11D71090
TS-50 Standard (2 – 6)	Black RAL 9005	305062F11G71000	TS-50 DIN (2 – 6)	Black RAL 9005	305062F11G71090

*Door closer body in silver RAL 9006, ECOcllic in stainless steel satin, polished on request

ECO PHYSIS



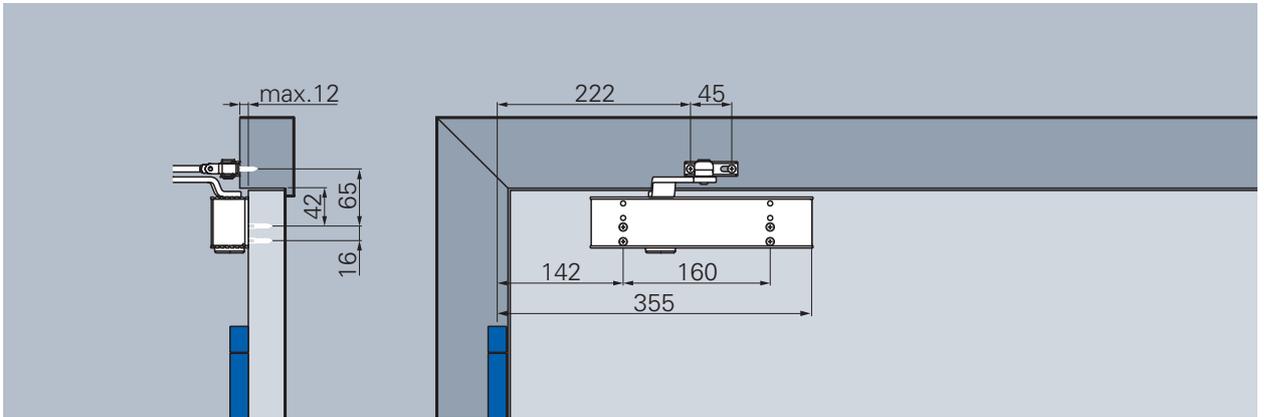
ECO Newton Highlights in detail.

Stainless steel and aluminium:

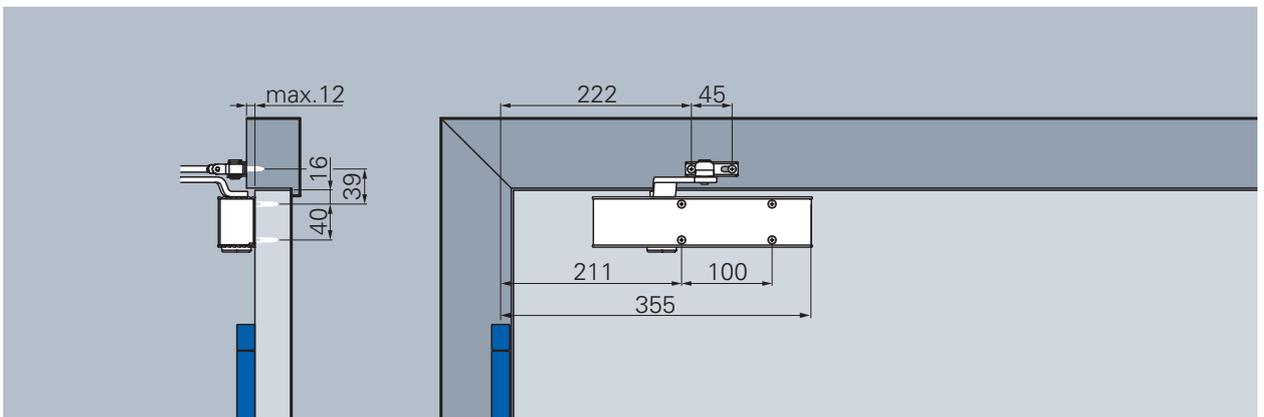
Elegant materials are standard with ECO **Newton**: the stainless steel cover and aluminium body unit of the new door closer generation are perfectly matched with one another – in an architecturally compatible form language.

Hinge side

Illustration DIN left door, DIN right laterally reversed



Standard mounting, hinge side (with mounting plate, with DIN holes)



Standard mounting, hinge side (direct mounting, without mounting plate)

Closing speed

Continuously adjustable closing speed from approx. 180° to 0°

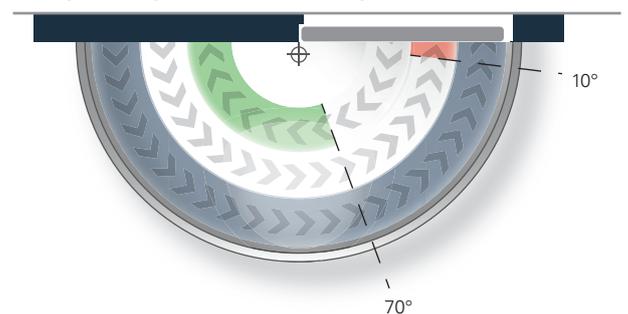
Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 0°

Back-check (constant)

Reduces the opening speed starting at 70° and avoids the slamming of the door. Back-check fixed

Closing force diagram **Newton TS-50**, hinge side



Closing force:

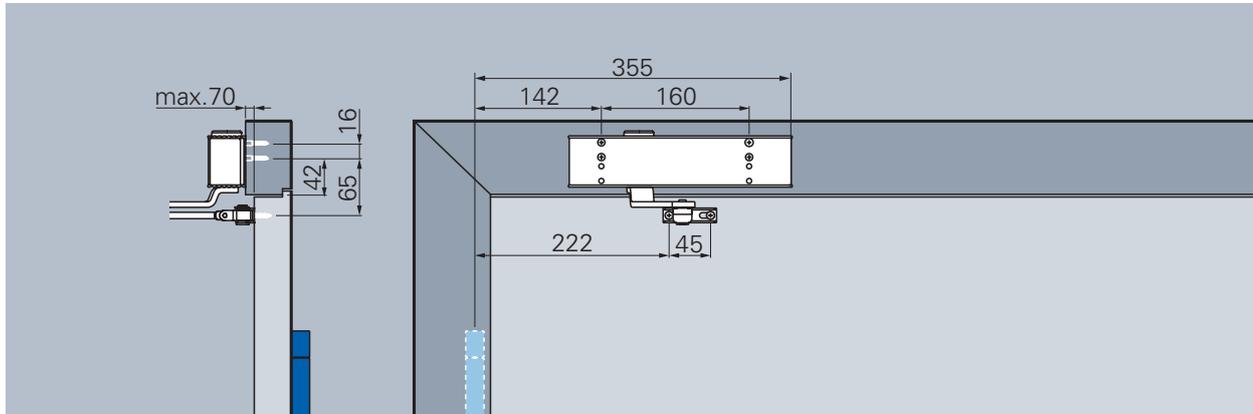
Continuously adjustable min. size 2
TS-50 (2 – 6) max. size 6
resp.

Continuously adjustable min. size 1
TS-50 (1 – 5) max. size 5

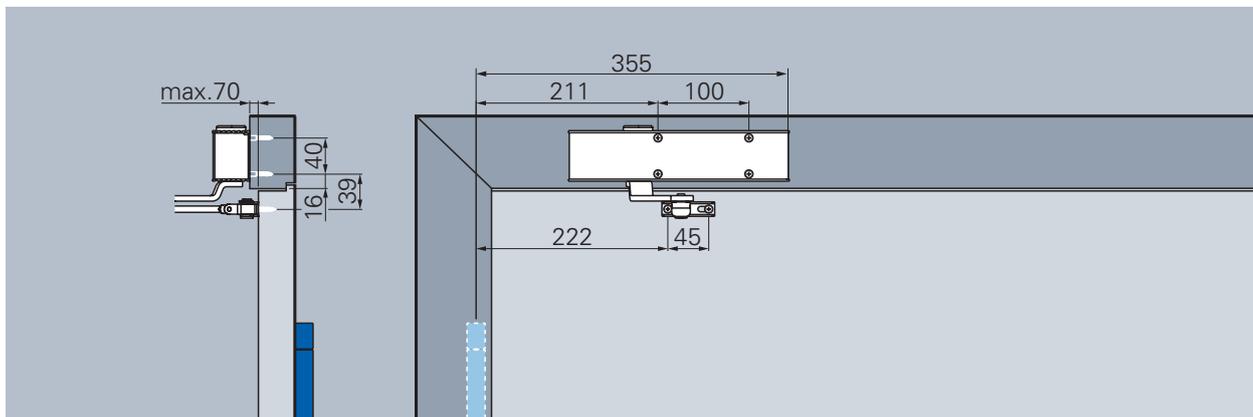
Default delivery condition: size 3

Hinge-opposite side

Illustration DIN right door, DIN left laterally reversed



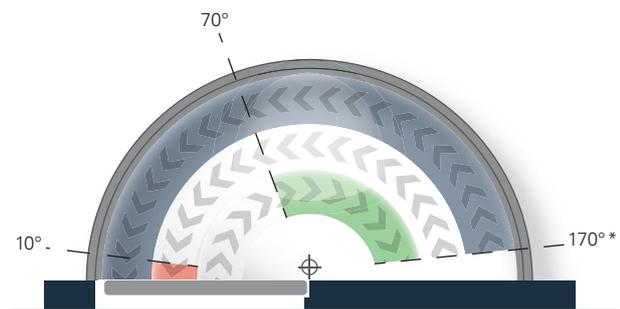
Head mounting, hinge-opposite side (with mounting plate, with DIN holes)



Head mounting, hinge-opposite side (direct mounting, without mounting plate)

- **Closing speed**
 Continuously adjustable closing speed from approx. 170°* to 0°
- **Latching speed**
 Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 0°
- **Back-check (constant)**
 Reduces the opening speed starting at 70° and avoids the slamming of the door. Back-check fixed

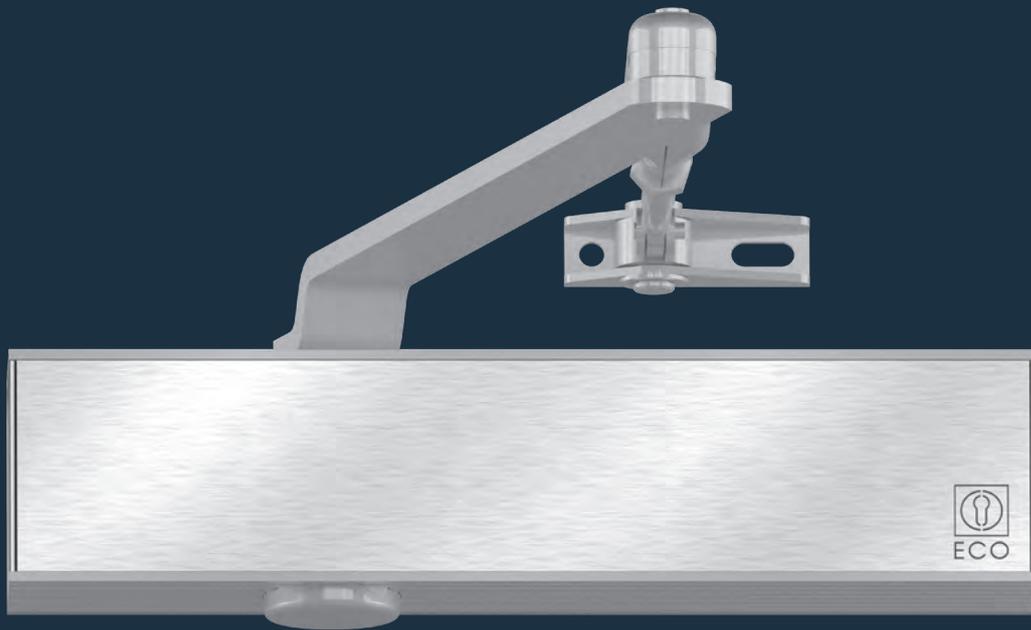
Closing force diagram ECO Newton TS-50, hinge-opposite side



*Varies according to door thickness and type of hinge

A door stopper for opening limit is a must!

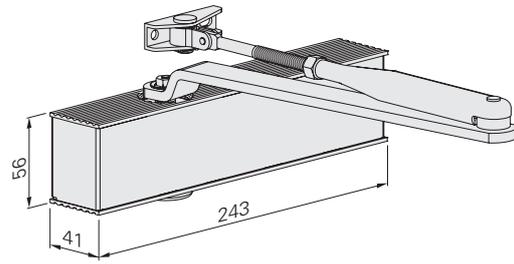
ECO **Newton** TS-20



Product characteristics

Closing force (stepwise adjustable)	Size acc. to EN	2/3/5
Door width	acc. to EN ≤ 1.250 mm	■
Dimensions (incl. mounting plate)	Length in mm	243
	Depth in mm	41
	Height in mm	56
Mounting plate acc. to EN 1154 (supplementary sheet 1)		□
Hinge side and hinge-opposite side		■
DIN left / right		■
Back-check (constant)		■
Latching speed (continuously adjustable)		■
Closing speed (continuously adjustable)		■
Delayed action (continuously adjustable)		-
Tested acc. to EN	EN 1154	
Suitable for fire- and smoke control doors	F	
Certified according to EU-Directive	CE	

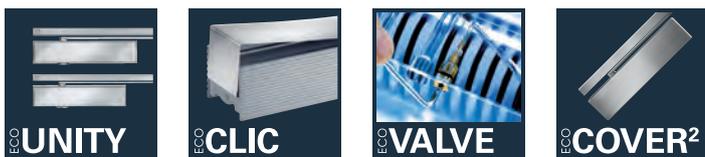
- Yes
- No
- Option



Dimensions: TS-20

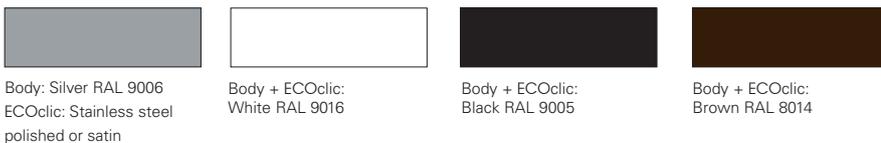


ECO Newton TS-20 ■ Highlights at a glance



*optional

Details regarding the ECO Newton Highlights can be found in the intro of this chapter.



The standard arm is always delivered in the same colour as the ordered door closer body.



Order information

ECO **Newton** TS-20 ▪ Door closer with standard arm

Product information

Closing force 2 / 3 / 5, tested acc. to **EN 1154** (for door widths up to 1.250 mm) adjustable by moving the door closer. Latching speed and closing speed continuously adjustable. Back-check constant. Same version DIN left and DIN right. Mounting height only 41 mm. Weight: 1.320g. Max. door opening angle: 180°

- **ECOunity:** The ECO **Newton** closer portfolio covers all door dimensions with only two basic closer units.
- **ECOcllic:** The stainless steel cover encloses the aluminium body with the power of spring steel and conceals all of the adjusting elements, thus securing the closer against unauthorized access.
- **ECOvalve:** Simple, high-precision and permanently secure adjustment of all parameters of the closing process with one conventional Allen key.
- **ECOcover²:** Optional stainless steel cover for the ECO **Newton** door closers.
- **ECOgreen:** The intelligent construction and carefully planned use of materials help considerably to save resources

Hinge side: standard mounting on the door leaf. Hinge-opposite site: head mounting on door frame.

New packaging:

TS-20 Standard: (Standard mounting set) incl. door closer body, standard arm, paper template and fixing material.
 TS-20 DIN: (Mounting acc. DIN holes) Set with door closer body, standard arm, incl. mounting plate, mounting instructions, paper template and fixing material.

Article numbers



Door closer with standard arm, without mounting plate	Colour	Article number	Door closer with standard arm, incl. mounting plate	Colour	Article number
TS-20 Standard (2/3/5)	Silver RAL 9006*	302052F11A71010	TS-20 DIN (3/5)	Silver RAL 9006*	302052F11A71090
TS-20 Standard (2/3/5)	White RAL 9016	302052F11E71010	TS-20 DIN (3/5)	White RAL 9016	302052F11E71090
TS-20 Standard (2/3/5)	Brown RAL 8014	302052F11D71010	TS-20 DIN (3/5)	Brown RAL 8014	302052F11D71090
TS-20 Standard (2/3/5)	Black RAL 9005	302052F11G71010	TS-20 DIN (3/5)	Black RAL 9005	302052F11G71090

*Door closer body in silver RAL 9006, ECOcllic in stainless steel satin, polished on request

ECO **LINE**



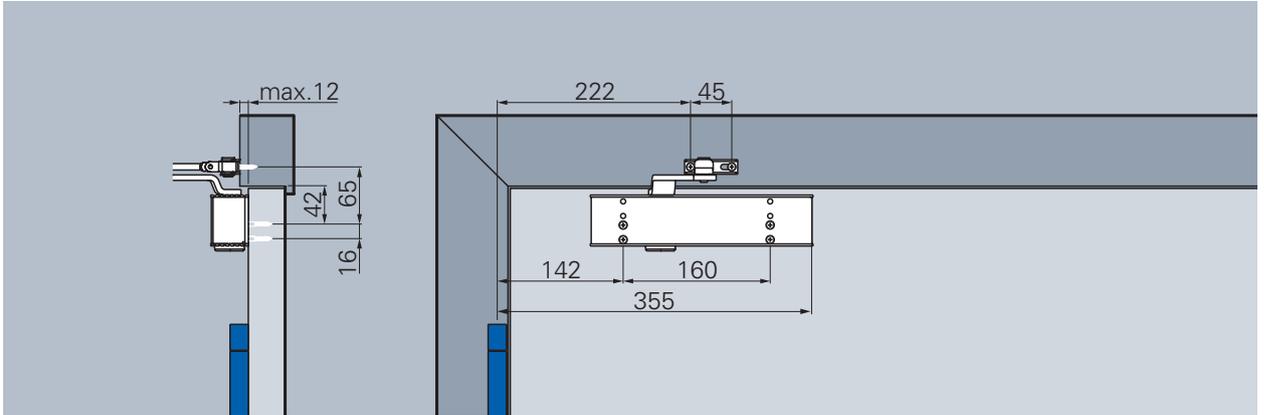
ECO Newton Highlights in detail.

Uniform edges and colour design:

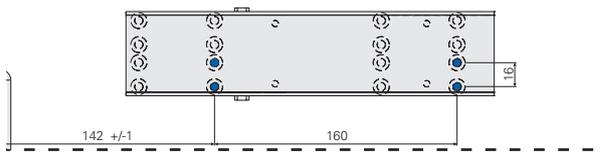
The mounted slide rail and door closer are flush when the door is closed. The colours of all materials are perfectly matched - right down to the end caps of the slide rail. In this way, ECO Newton door closers can be integrated harmoniously into every design context.

Hinge side

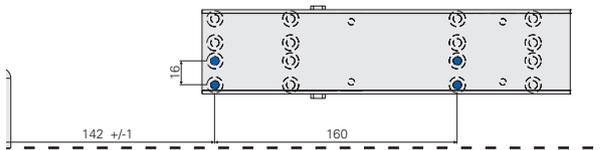
Illustration DIN left door, DIN right laterally reversed



Standard mounting, hinge side (with mounting plate, DIN-holes)

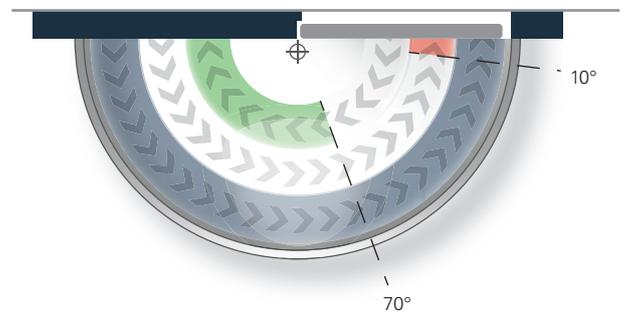


Closing force EN 3



Closing force EN 5

Closing force diagram ECO Newton TS-20, hinge side



Closing speed

Continuously adjustable closing speed from approx. 180° to 0°

Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 0°

Back-check (constant)

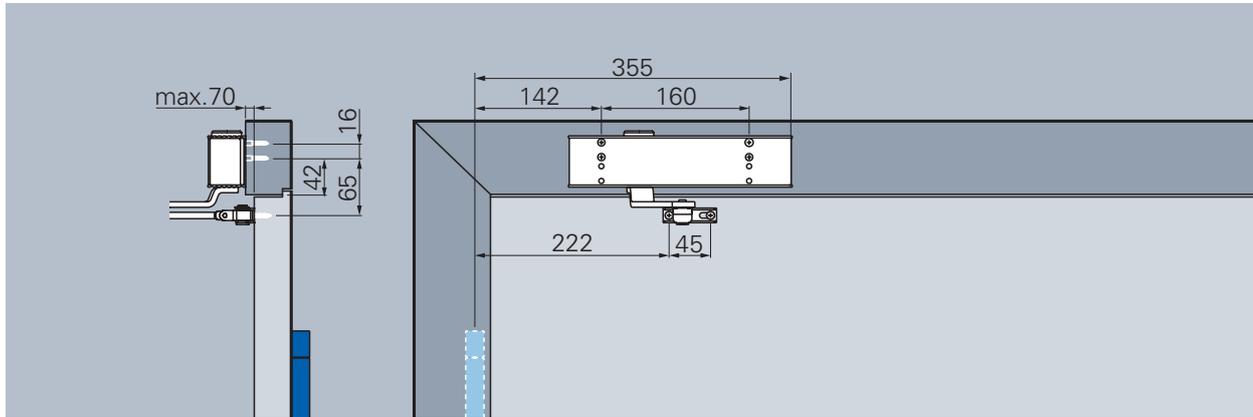
Reduces the opening speed starting at 70° and avoids the slamming of the door. Back-check fixed

Closing forces

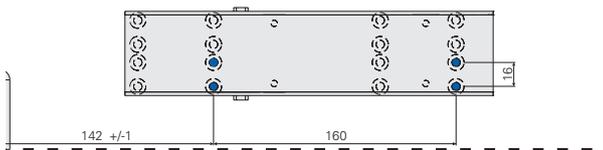
The closing forces 3 or 5 are reached by moving the door closer on the mounting plate. Additional drilling is not necessary.

Hinge-opposite side

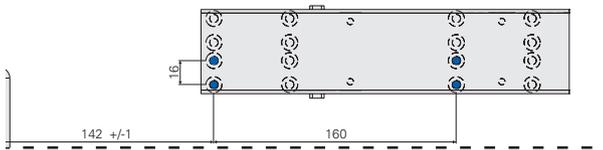
Illustration DIN right door, DIN left laterally reversed



Head mounting, hinge-opposite side (with mounting plate, DIN-holes)

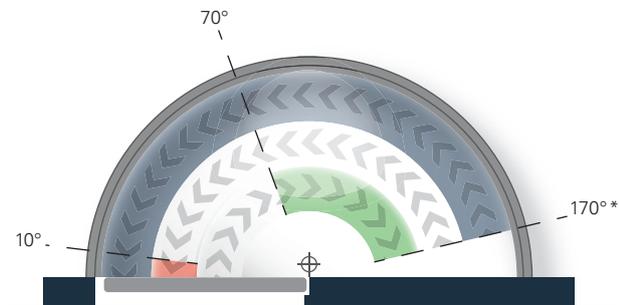


Closing force EN 3



Closing force EN 5

Closing force diagram **Newton TS-20**, hinge-opposite side



Closing speed

Continuously adjustable closing speed from approx. 170°* to 0°

Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 0°

Back-check (constant)

Reduces the opening speed starting at 70° and avoids the slamming of the door. Back-check fixed

Closing forces

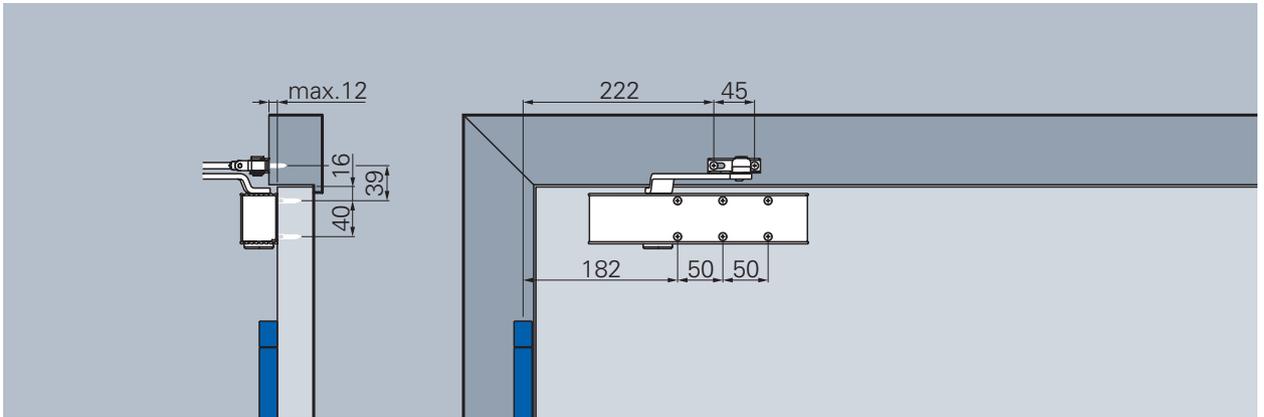
The closing forces 3 or 5 are reached by moving the door closer on the mounting plate. Additional drilling is not necessary.

*Varies according to door thickness and type of hinge

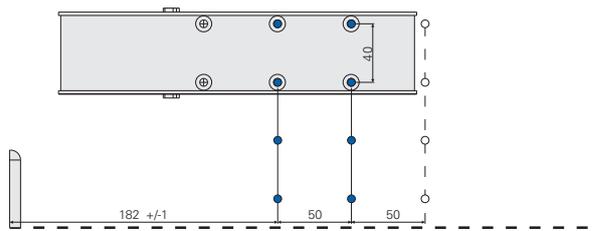
A door stopper for opening limit is a must!

Hinge side

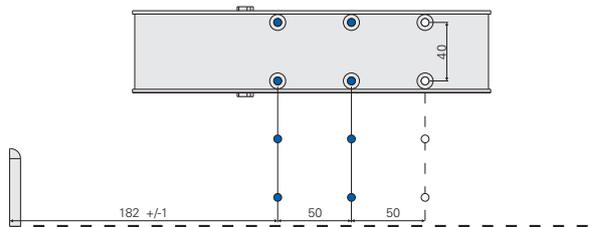
Illustration DIN left door, DIN right laterally reversed



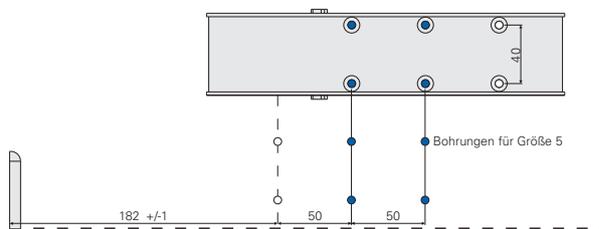
Standard mounting, hinge side (direct mounting, without mounting plate)



Closing force EN 2



Closing force EN 3

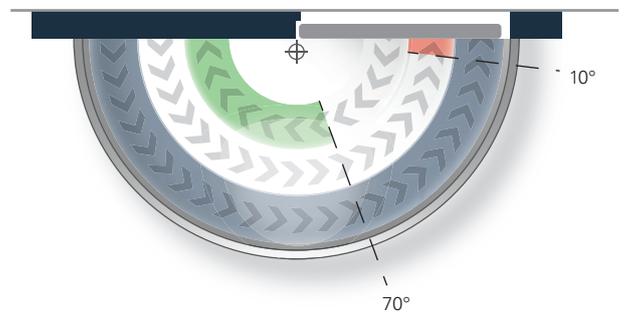


Closing force EN 5

Closing forces

The different sizes are reached by moving the door closer on the door leaf. Additional drilling only necessary for size **EN 5**.

Closing force diagram ECO **Newton** TS-20, hinge side



Closing speed

Continuously adjustable closing speed from approx. 180° to 0°

Latching speed

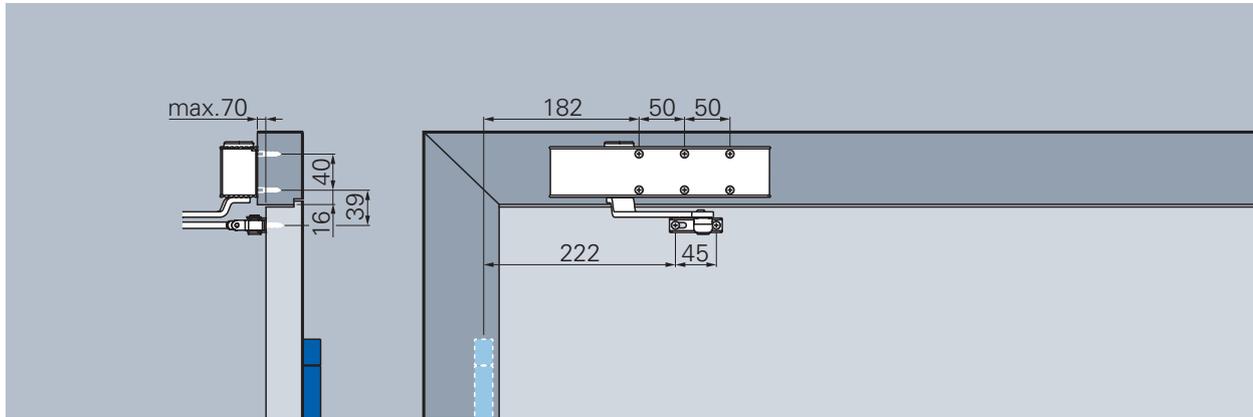
Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 0°

Back-check (constant)

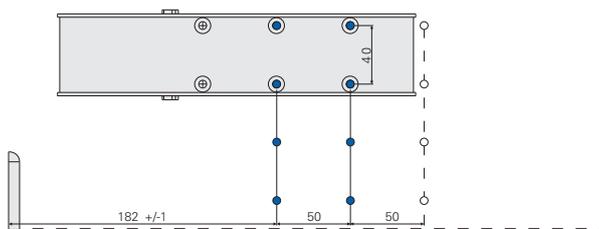
Reduces the opening speed starting at 70° and avoids the slamming of the door. Back-check fixed

Hinge-opposite side

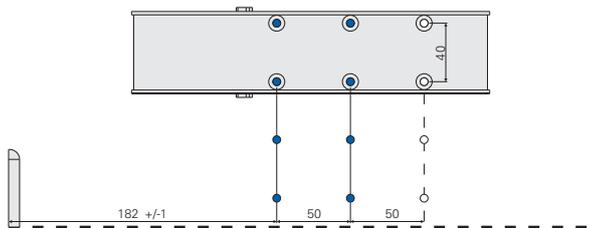
Illustration DIN right door, DIN left laterally reversed



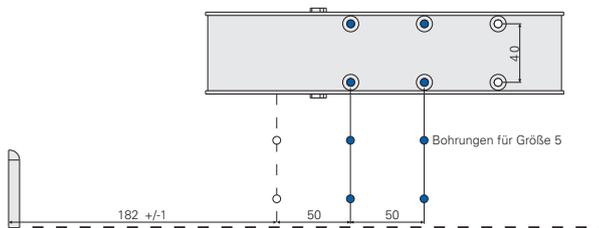
Head mounting, hinge-opposite side (direct mounting, without mounting plate)



Closing force EN 2



Closing force EN 3

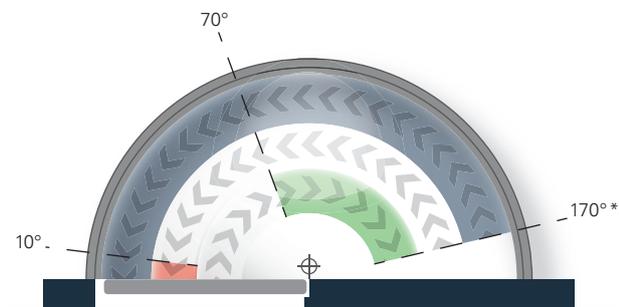


Closing force EN 5

Closing force

The different sizes are reached by moving the door closer on the door leaf. Additional drilling only necessary for size EN 5.

Closing force diagram **Newton TS-20**, hinge-opposite side



Closing speed

Continuously adjustable closing speed from approx. 170°* to 0°

Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 0°

Back-check (constant)

Reduces the opening speed starting at 70° and avoids the slamming of the door. Back-check fixed

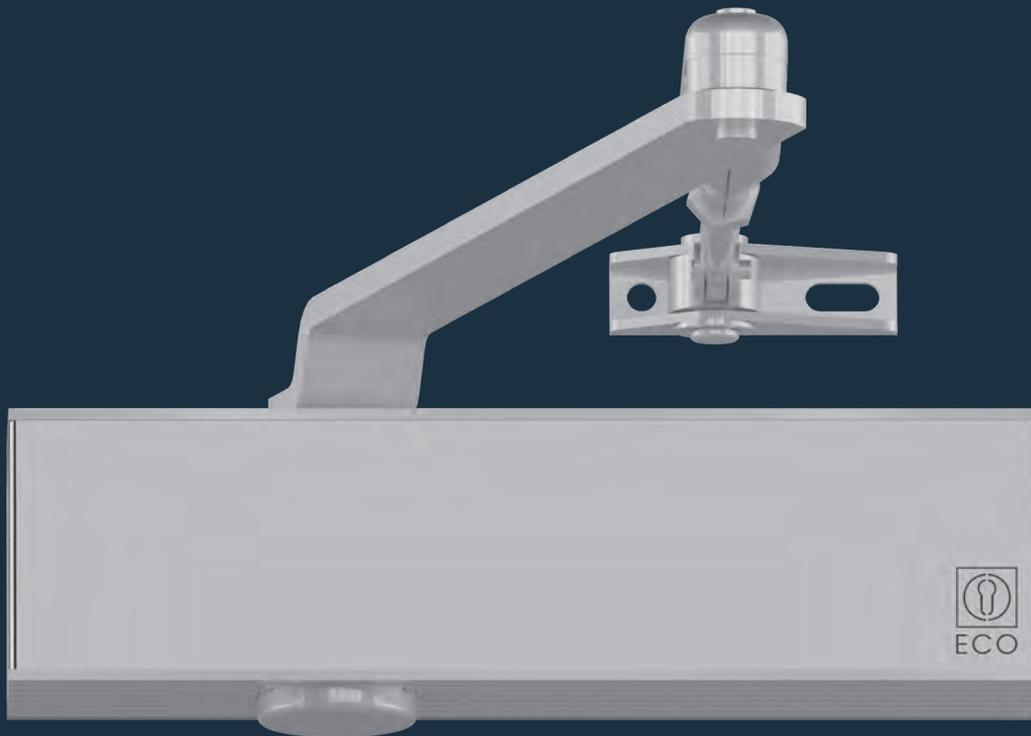
Note!:

Back-check out of order for head-mounting / mounting on hinge-opposite side

*Varies according to door thickness and type of hinge

A door stopper for opening limit is a must!

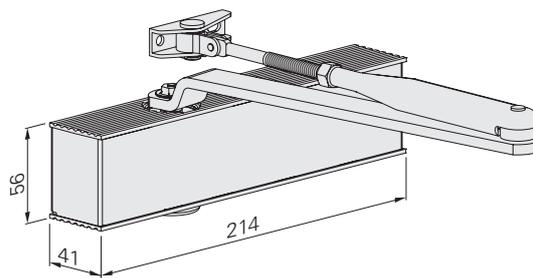
ECO **Newton** TS-14 EN



Product characteristics

Closing force	Size acc. to EN	2/3/4
Door width	≤ 1.100 mm	■
Dimensions	Length in mm	214
	Depth in mm	41
	Height in mm	56
Mounting plate		□
Hinge side and hinge-opposite side		■
DIN left / right		■
Latching speed (adjustable from the side)		■
Closing speed (adjustable from the side)		■
Tested acc. to EN		EN 1154
Suitable for fire- and smoke control doors		F
Certified according to EU-Directive		CE

- Yes
- No
- Option



Dimensions: TS-14 EN



ECO Newton TS-14 EN ■ Highlights at a glance



Details regarding the ECO Newton Highlights can be found in the intro of this chapter.



The standard arm is always delivered in the same colour as the ordered door closer body.

! Different closing forces are reached by moving the door closer on the door leaf.



Under-lintel angle for door closers from page 188.



Adaptor profiles from page 187.



Angle bracket for parallel arm from page 189.

Order information

ECO **Newton TS-14 EN** ▪ Door closer with standard arm

Product information

- Closing force 2 / 3 / 4 (with mounting plate 3 / 4) acc. to EN (for door width up to 1.100 mm)
Adjustable by moving the door closer
- Latching speed and closing speed continuously adjustable from the side
- Same version DIN left and DIN right
- Mounting height only 41 mm
- Maximum door opening angle: 180°
- Mounting type hinge side – standard mounting (lead mounting)
- Mounting type hinge-opposite side – head mounting (frame mounting)

Article numbers



Door closer with standard arm	Colour		Article number		Mounting plate for TS-14 EN	Colour		Article number	
TS-14 EN (2/3/4)	Silver	RAL 9006	5030039305		MPL-14 EN (3/4)	Silver	RAL 9006	5030040766	
TS-14 EN (2/3/4)	White	RAL 9016	5030039306		MPL-14 EN (3/4)	White	RAL 9016	5030040768	
TS-14 EN (2/3/4)	Black	RAL 9005	5030039307		MPL-14 EN (3/4)	Black	RAL 9005	5030040769	

ECO **CLIC**



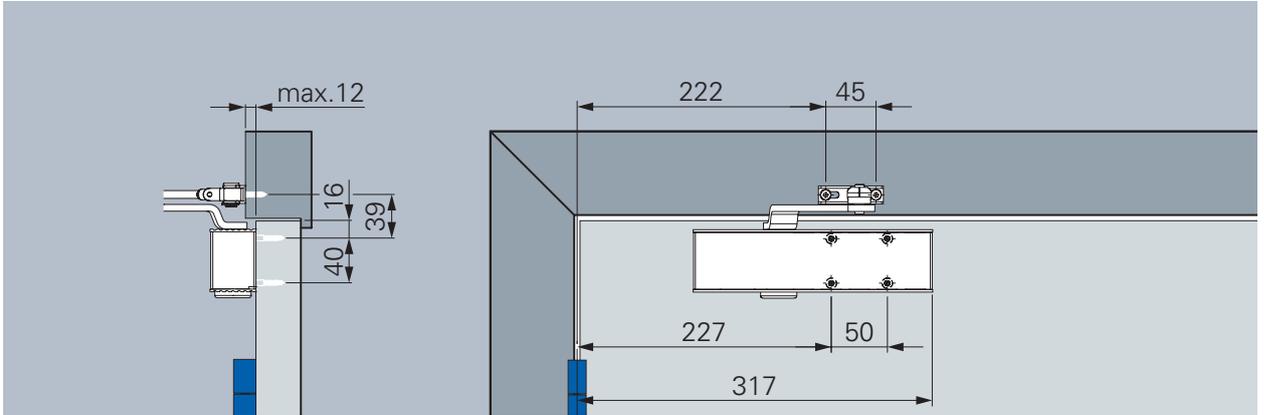
ECO Newton Highlights in detail.

Intelligent stainless steel cover:

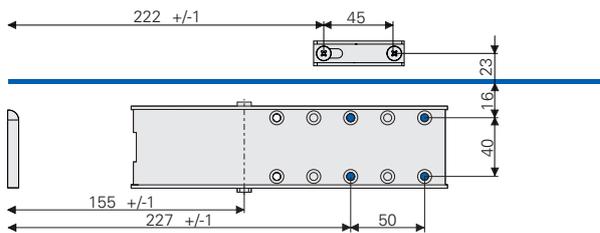
ECOclic envelops the aluminium body unit with the power of spring force. The cover conceals all of the adjusting elements and cannot be removed without tools, thus securing the closer against unauthorized access.

Hinge side

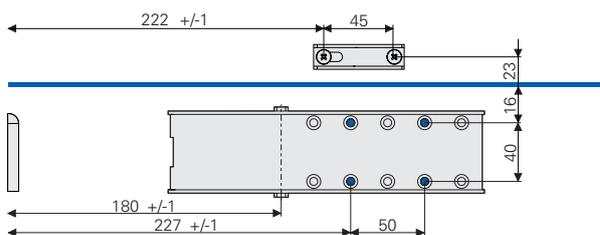
Illustration DIN left door, DIN right laterally reversed



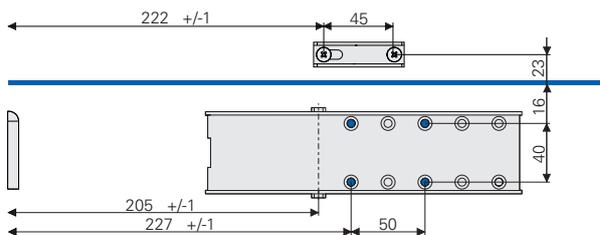
Standard mounting, hinge side (EN 3, direct mounting, without mounting plate)



Closing force EN 2



Closing force EN 3



Closing force EN 4

Closing force diagram ECO Newton TS-14 EN, hinge side



■ Closing speed

Continuously adjustable closing speed from approx. 180° to 0°

■ Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure.

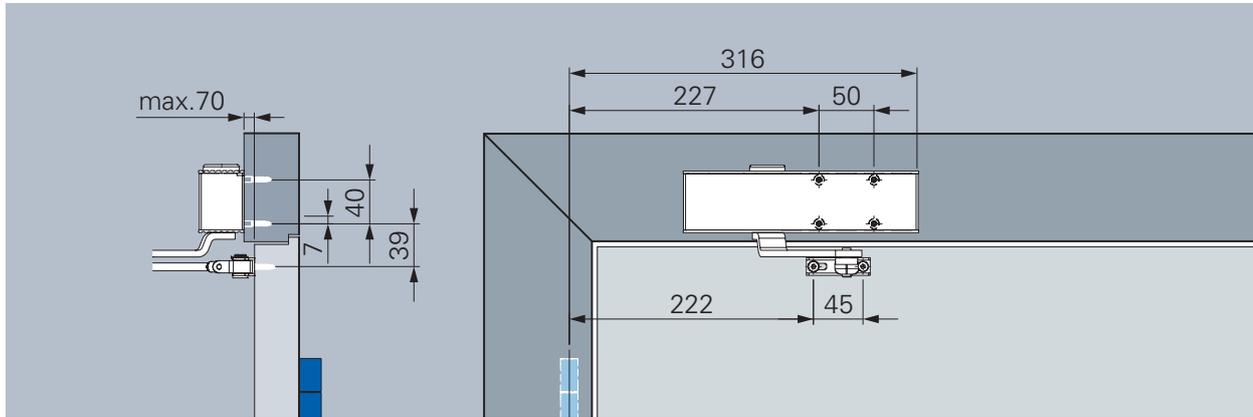
Continuously adjustable, works between 10 to 0°

Closing forces

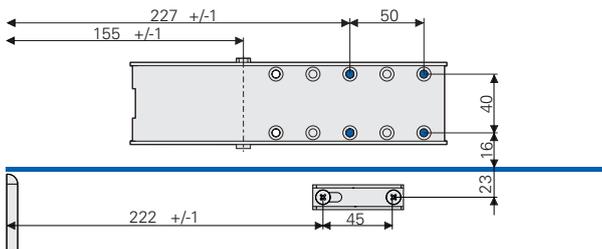
The different sizes are reached by moving the door closer on the door leaf.

Hinge-opposite side

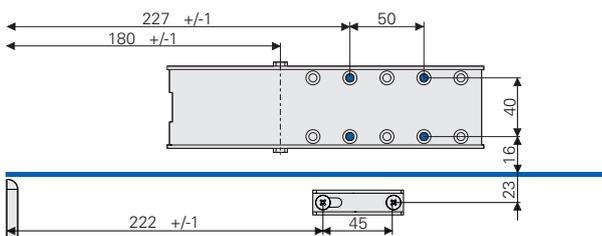
Illustration DIN right door, DIN left laterally reversed



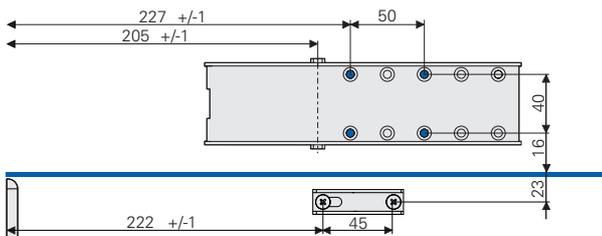
Head mounting, hinge-opposite side (EN 3, direct mounting, without mounting plate)



Closing force EN 2



Closing force EN 3



Closing force EN 4

Closing forces

The different sizes are reached by moving the door closer on the door frame.

Closing force diagram ECO Newton TS-14 EN, hinge-opposite side



Closing speed

Continuously adjustable closing speed from approx. 170°* to 0°

Latching speed

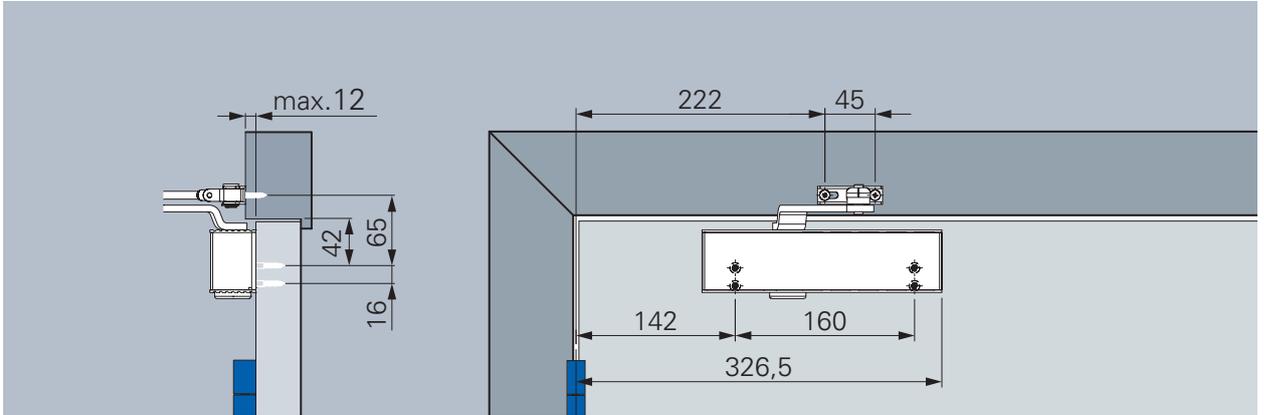
Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 0°

*Varies according to door thickness and type of hinge

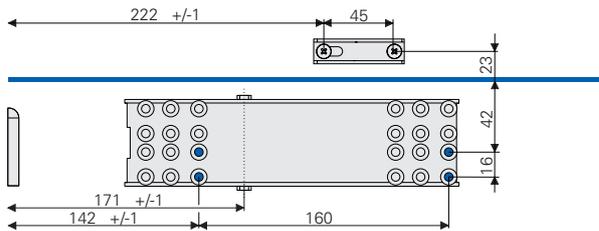
A door stopper for opening limit is a must!

Hinge side

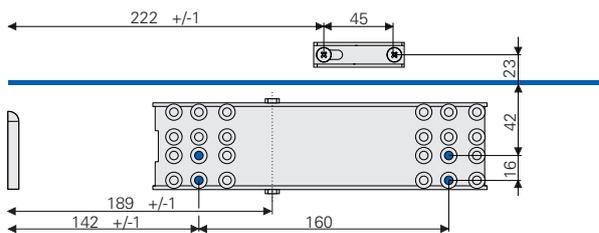
Illustration DIN left door, DIN right laterally reversed



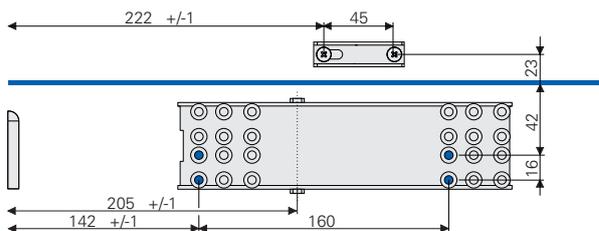
Standard mounting, hinge side (with mounting plate, DIN-holes)



Closing force EN 2



Closing force EN 3



Closing force EN 4

Closing force diagram ECO Newton TS-14 EN, hinge side



Closing speed

Continuously adjustable closing speed from approx. 180° to 0°

Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure.

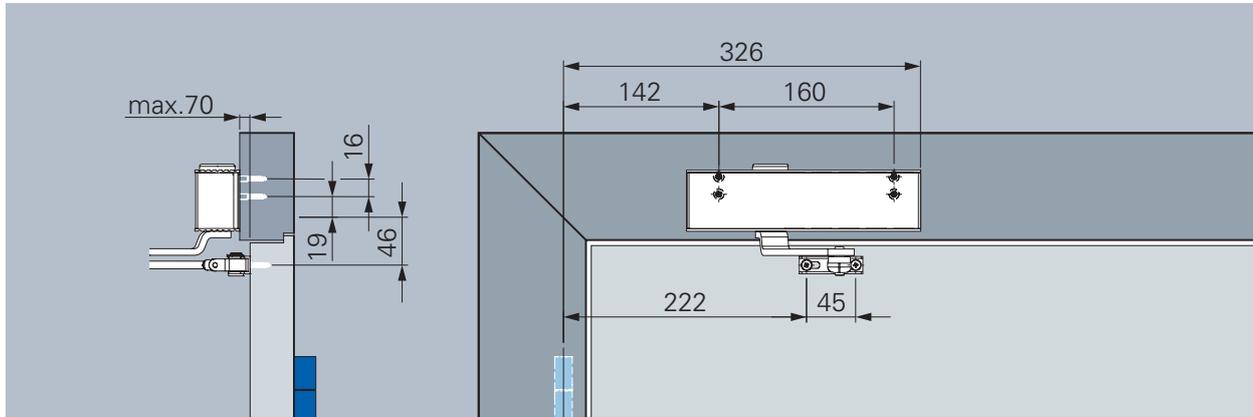
Continuously adjustable, works between 10 to 0°

Closing forces

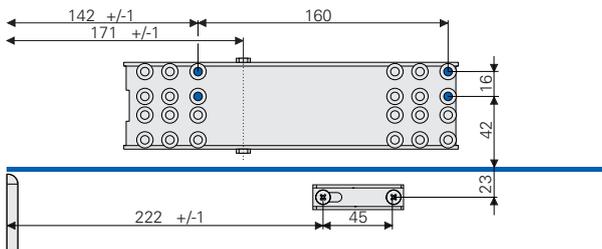
The different sizes are reached by moving the mounting plate on the door leaf.

Hinge-opposite side

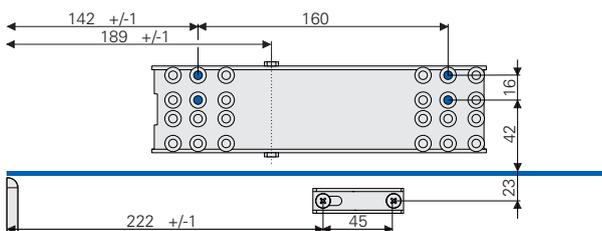
Illustration DIN right door, DIN left laterally reversed



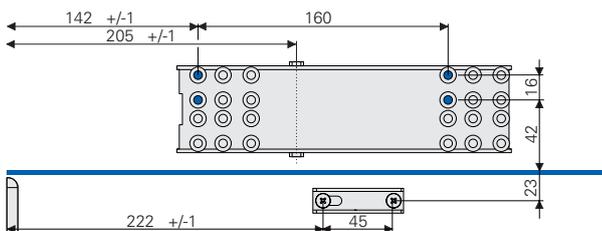
Head mounting, hinge-opposite side (with mounting plate, DIN-holes)



Closing force EN 2



Closing force EN 3



Closing force EN 4

Closing forces

The different sizes are reached by moving the mounting plate on the door frame.

Closing force diagram ECO Newton TS-14 EN, hinge-opposite side



Closing speed

Continuously adjustable closing speed from approx. 170°* to 0°

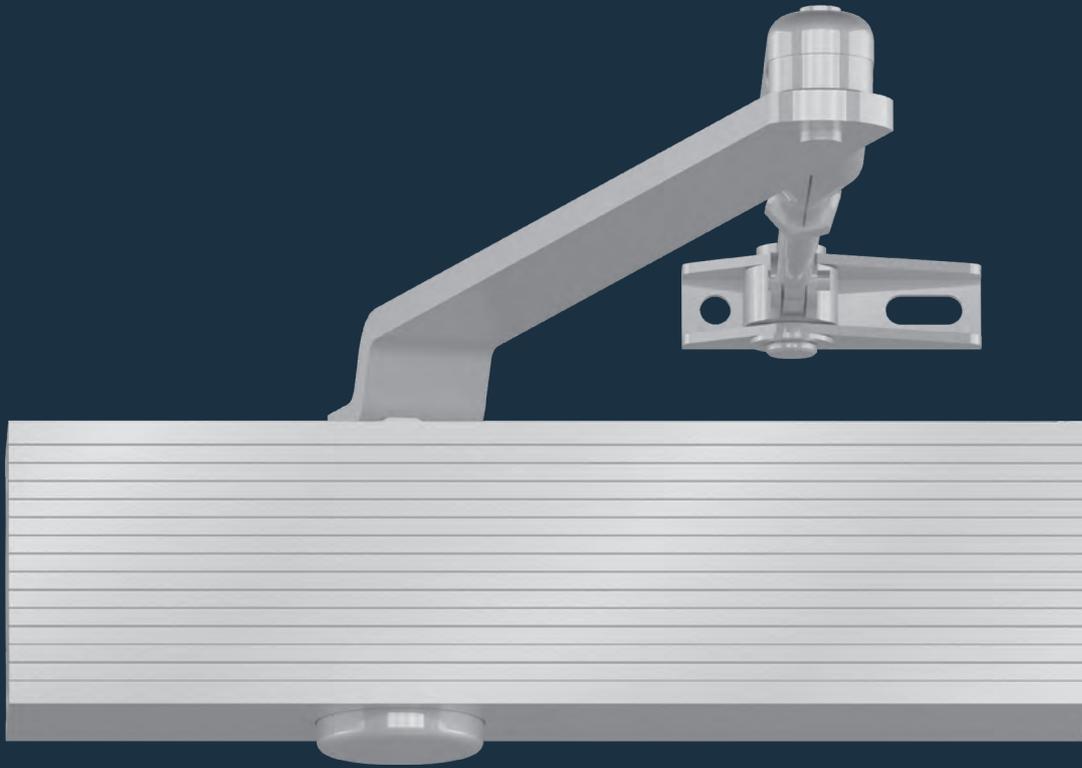
Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 0°

*Varies according to door thickness and type of hinge

A door stopper for opening limit is a must!

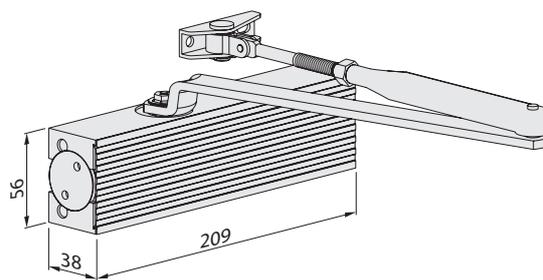
ECO **Newton** TS-15



Product characteristics

Closing force	Size acc. to EN	2/3/4/5
Door width	≤ 1.250 mm	■
Dimensions	Länge in mm Bautiefe in mm Höhe in mm	209 38 56
Mounting plate		-
Hinge side and hinge-opposite side		■
DIN left / right		■
Latching speed (adjustable from the side)		■
Closing speed (adjustable from the side)		■

- Yes
- No
- Option



Dimensions: TS-15

2



! The different door closer sizes for the type TS-15 are reached by moving the door closer on the door leaf.



Body: Silver RAL 9006
ECOcllic: Stainless steel polished or satin



Body + ECOcllic: White RAL 9016



Body + ECOcllic: Black RAL 9005



Body + ECOcllic: Brown RAL 8014

The standard arm is always delivered in the same colour as the ordered door closer body.

ECO Newton TS-15 with standard arm:



Under-lintel angle for door closer from page 188.



Adaptor profiles from page 187.



Angle bracket for parallel arm mounting from page 189.

Order information

ECO **Newton TS-15** ■ Door closer with standard arm

Product information

- Closing force 2 / 3 / 4 / 5 acc. to EN (for door width up to 1.250 mm)
Adjustable by moving the door closer.
- Latching speed and closing speed continuously adjustable from the side
- Same version DIN left and DIN right
- Mounting height only 38 mm
- Maximum door opening angle: 180°

Article numbers



Door closer with standard arm		Colour		Article number	Door closer without standard arm		Colour		Article number
TS-15	(2/3/4/5)	Silver	RAL 9006	301552E11A71000	TS-15	(2/3/4/5)	Silver	RAL 9006	351552E11A00010
TS-15	(2/3/4/5)	White	RAL 9016	301552E11E71000	TS-15	(2/3/4/5)	White	RAL 9016	351552E11E00010
TS-15	(2/3/4/5)	Brown	RAL 8014	301552E11D71000	TS-15	(2/3/4/5)	Brown	RAL 8014	351552E11D00010
TS-15	(2/3/4/5)	Black	RAL 9005	301552E11G71000	TS-15	(2/3/4/5)	Black	RAL 9005	351552E11G00010

ECO VALVE



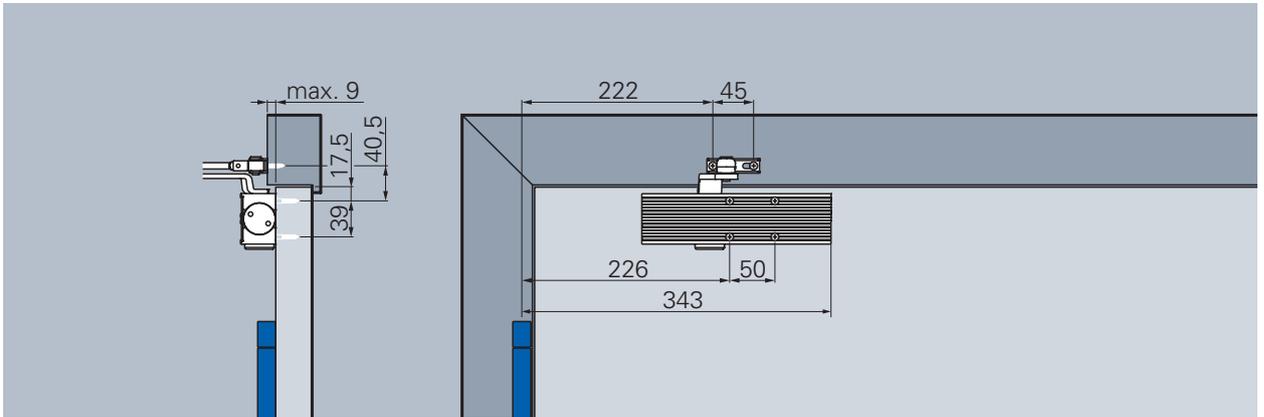
ECO Newton Highlights in detail.

New ECOvalve technology:

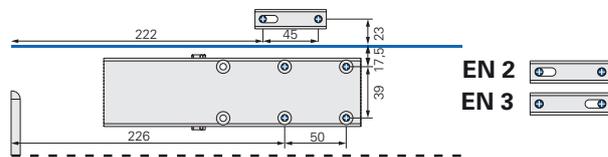
The new ECOvalve technology offers a wide and precisely adjustable setting range. This means the simple, high-precision and permanently secure adjustment of all parameters of the closing process with one conventional Allen key. As with all ECO Newton door closers, the closing speed and latching are regulated via the ECOvalve as a standard feature.

Hinge side

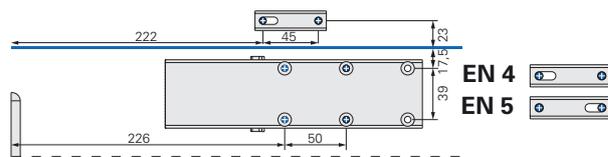
Illustration DIN left door, DIN right laterally reversed



Standard mounting, hinge side (EN 5)



Closing force EN 2/3



Closing force EN 4/5

Closing forces

The different sizes are reached by moving the door closer on the door leaf and by turning the standard arm reception by 180°.

Closing force diagram ECO **Newton TS-15**, hinge side



Closing speed

Continuously adjustable closing speed from approx. 180° to 0°

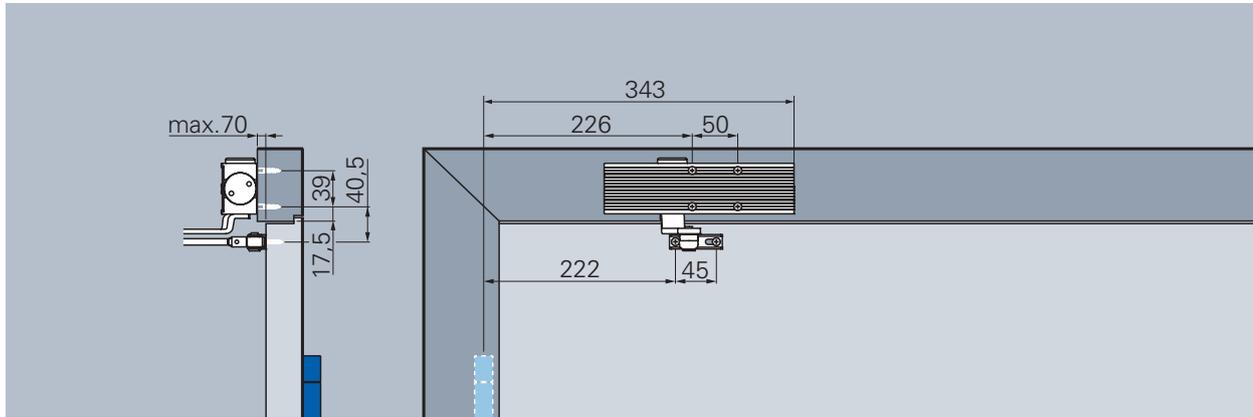
Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure.

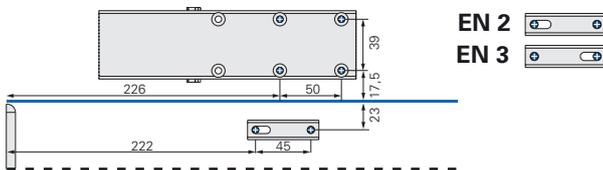
Continuously adjustable, works between 10 to 0°

Hinge-opposite side

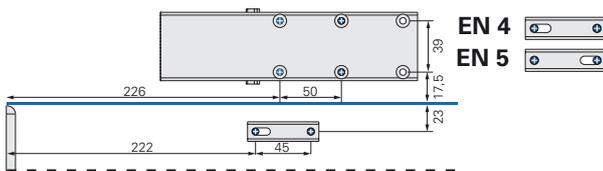
Illustration DIN right door, DIN left laterally reversed



Head mounting, hinge-opposite side (EN 5)



Closing force EN 2/3



Closing force EN 4/5

Closing forces

The different sizes are reached by moving the door closer on the door leaf and by turning the standard arm reception by 180°.

Closing force diagram ECO **Newton TS-15**, hinge-opposite side



Closing speed

Continuously adjustable closing speed from approx. 170°* to 0°

Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure.

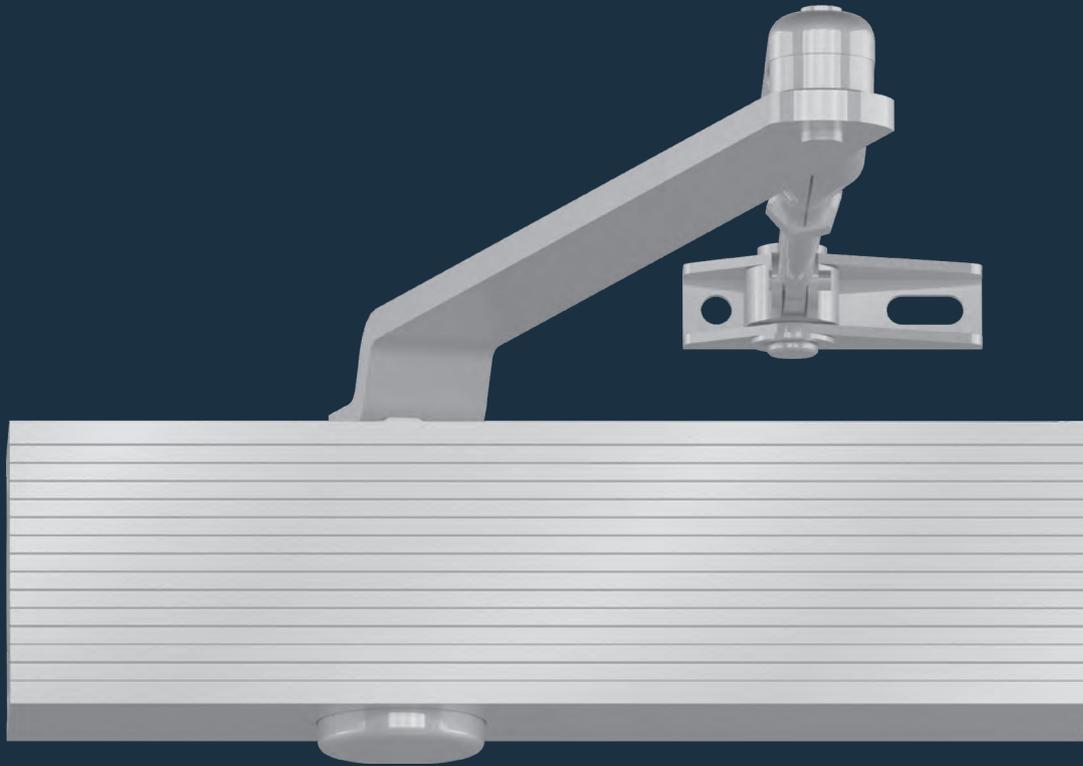
Continuously adjustable, works between 10 to 0°

Note:

*Varies according to door thickness and type of hinge

A door stopper for opening limit is a must!

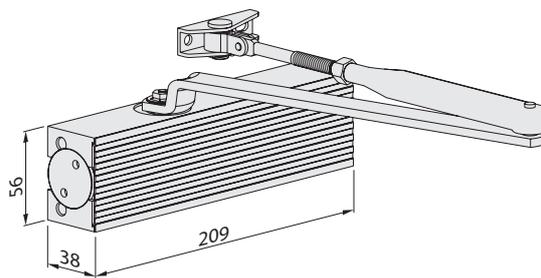
ECO **Newton** TS-14



Product characteristics

Closing force	Size acc. to EN	1/2/3/4
Door width	≤ 1.100 mm	■
Dimensions	Length in mm	209
	Depth in mm	38
	Height in mm	56
Mounting plate		-
Hinge side and hinge-opposite side		■
DIN left / right		■
Latching speed (adjustable from the side)		■
Closing speed (adjustable from the side)		■

- Yes
- No
- Option



Dimensions: TS-14



! The different sizes are reached by moving the door closer on the door leaf.



Body: Silver RAL 9006
ECOcllic: Stainless steel polished or satin



Body + ECOcllic: White RAL 9016



Body + ECOcllic: Black RAL 9005



Body + ECOcllic: Brown RAL 8014

The standard arm is always delivered in the same colour as the ordered door closer body.



Under-lintel angle for door closer from page 188.



Adaptor profiles from page 187.



Angle bracket for parallel arm mounting from page 189.

Order information

ECO **Newton TS-14** ■ Door closer with standard arm

Product information

- Closing force 1 / 2 / 3 / 4 acc. to EN (for door width up to 1.100 mm)
Adjustable by moving the door closer.
- Latching speed and closing speed continuously adjustable from the side
- Same version DIN left and DIN right
- Mounting height only 38 mm
- Maximum door opening angle: 180°

Article numbers



Door closer with standard arm	Colour	Article number	Door closer without standard arm	Colour	Article number
TS-14 (1/2/3/4)	Silver RAL 9006	301452E11A71010	TS-14 (1/2/3/4)	Silver RAL 9006	351452E11A00010
TS-14 (1/2/3/4)	White RAL 9016	301452E11E71010	TS-14 (1/2/3/4)	White RAL 9016	351452E11E00010
TS-14 (1/2/3/4)	Brown RAL 8014	301452E11D71010	TS-14 (1/2/3/4)	Brown RAL 8014	351452E11D00010
TS-14 (1/2/3/4)	Black RAL 9005	301452E11G71010	TS-14 (1/2/3/4)	Black RAL 9005	351452E11G00010

Autostadt VW, Wolfsburg,
Germany



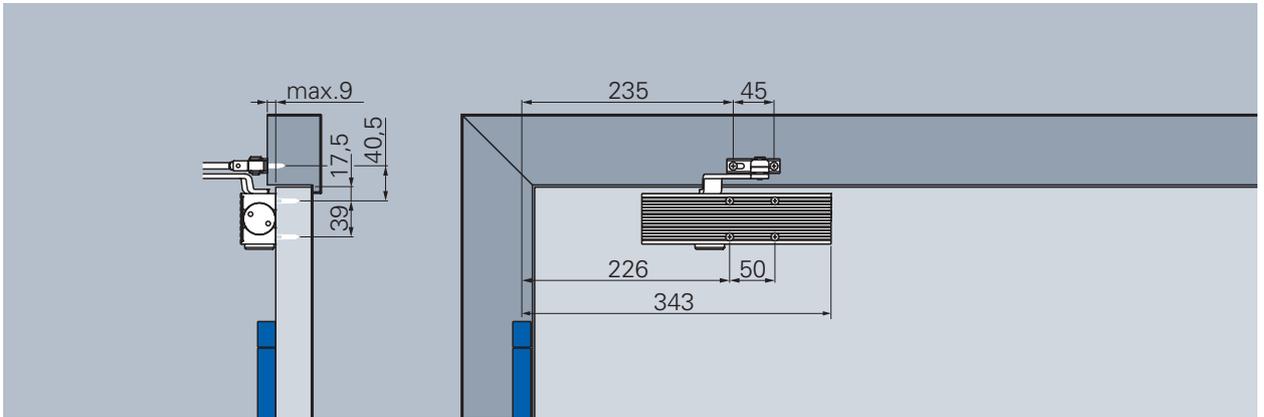
ECO Newton All a question of the system.

The new ECO Newton door closers are a part of the comprehensive ECO Schulte door fittings system. ECO Schulte thinks in terms of complete solutions and is one of the very few system providers dealing in all aspects of the door. From hinges to handles and from locking technology to single and double-leaf door closing systems, the company provides all safety relevant components from a single source. A unique, logical overall concept in regard to technology, function, form and service:

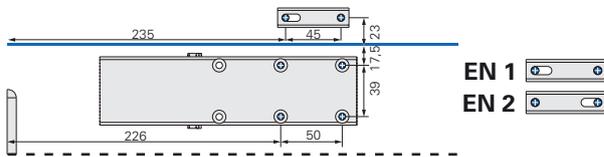
Because safety is inseparable.

Hinge side

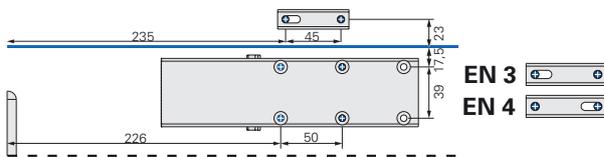
Illustration DIN left door, DIN right laterally reversed



Standard mounting, hinge side (EN 3)



Closing force EN 1/2



Closing force EN 3/4

Closing forces

The different sizes are reached by moving the door closer on the door leaf and by turning the standard arm reception by 180°.

Closing force diagram ECO **Newton TS-14**, hinge side



Closing speed

Continuously adjustable closing speed from approx. 180° to 0°

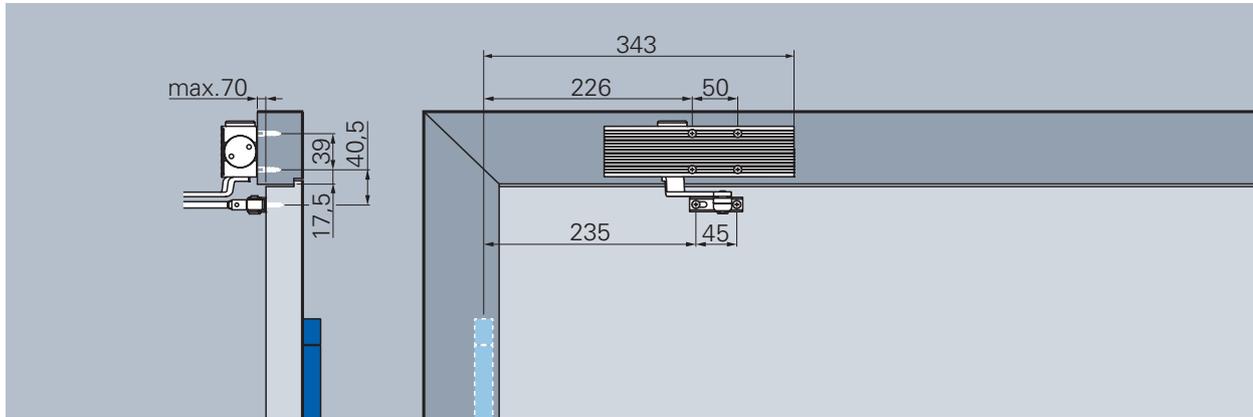
Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure.

Continuously adjustable, works between 10 to 0°

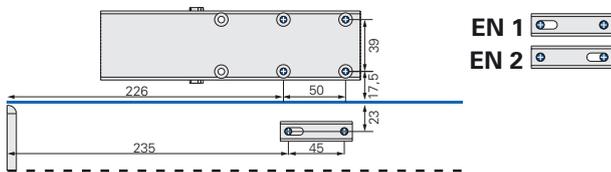
Hinge-opposite side

Illustration DIN right door, DIN right laterally reversed



Head mounting, hinge-opposite side (EN 3)

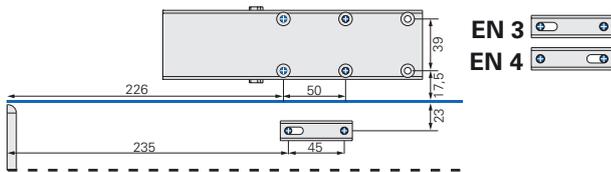
2



EN 1 
EN 2 

Closing force diagram ECO Newton TS-14, hinge-opposite side

Closing force EN 1/2



EN 3 
EN 4 

Closing force EN 3/4



Closing speed

Continuously adjustable closing speed from approx. 170°* to 0°

Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 0°

Closing forces

The different sizes are reached by moving the door closer on the door leaf and by turning the standard arm reception by 180°.

*Varies according to door thickness and type of hinge

A door stopper for opening limit is a must!

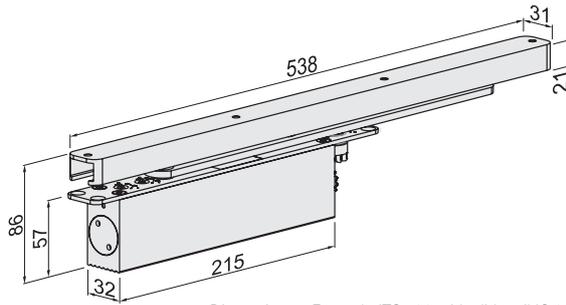
ECO ITS 420



Product characteristics

Closing force (with closing force display, continuously adjustable)	Size acc. to EN	2 – 4
Door width	≤ 1.100 mm	■
Dimensions	Length in mm	215
	Depth in mm	32
	Height in mm	57
DIN left / right		■
Latching speed (continuously adjustable)		■
Closing speed (continuously adjustable)		■
max. door opening angle (*depends on the notch of the door / a door stopper for opening limit is a must!)		120°*
Tested acc. to EN		EN 1154
Suitable for fire- and smoke control doors (no permission for head mounting on hinge-opposited side, concealed ITS)		F
Certified according to EU-Directive		CE
Construction of accessible buildings		DIN 18040

- Yes
- No
- Option



Dimensions: Example ITS 420 with slide rail IS 21



ITS 420

The ITS 420 is specially designed for light interior doors weighing up to 80 kg with a max. opening angle of 120°. Thanks to its transmission construction, it can be used as a DIN left or DIN right pendulum closer. The closing force is adjusted from above and adjustment is also possible after the door has been installed.

Order information

ECO ITS 420 ■ Concealed door closer

Product information

- ITS 420 for use in wooden doors, profile frame doors made of aluminium/steel and doors made of sheet steel starting from ≤ 40 mm door thickness. The very slim design (depth 32mm) enables an unproblematic and invisible mounting in the door leaf without any additional reinforcement
- The strongly decreasing opening moment allows an easier opening of the door
- Adjustment of closing force, even in mounted condition
- Easy handling of adjusting the closing speed and latching speed, even in mounted condition
- Default delivery condition with pre-adjustment of size **EN 3** and slide rail IS, optionally in 30 x 20 mm or 20 x 12 mm

Scope of Delivery:

Closer body, lock plate, arm, pivot screw and spacer

Article numbers



ITS 420 (incl. arm)	Rebate space (nut length)	Article number
ITS 420	8 – 12 mm	358040M00O00210
ITS 420	12 – 16 mm	358040M00O00211

Torque curve ECO ITS 420

The ECO ITS 420 meets all european standards for construction of accessible buildings with requirements for smooth-running doors with strongly decreasing opening moment and high efficiency.

Germany:

DIN Spec 1104, German version CEN/TR 15894

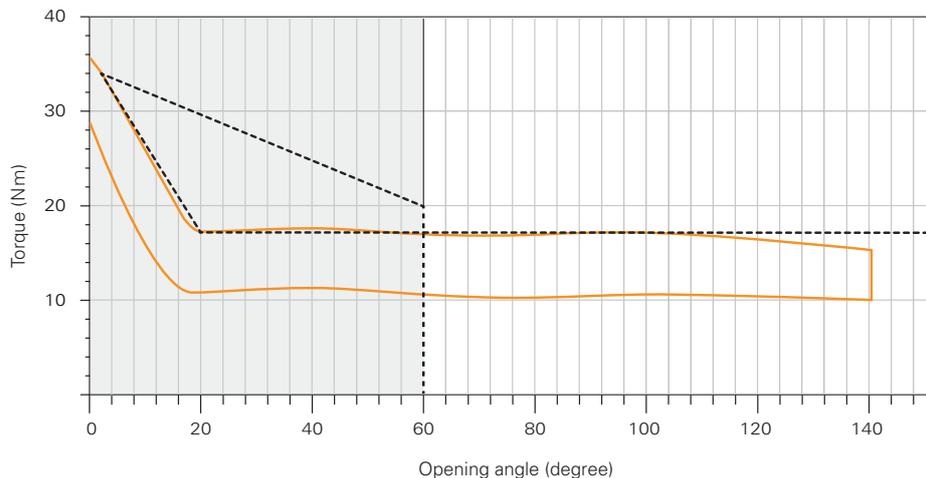
DIN 18040- Barrier free building (up to EN 4)

England:

BS 8300:2001 DDA

France:

PMR





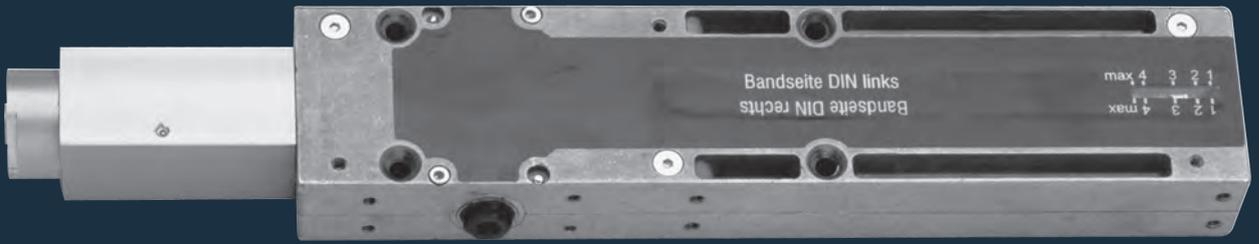
Milleniumtower, Vienna,
Austria

ECO Schulte **Worldwide trust.**

Whether under our own trademark or as an OEM partner product of renowned door manufacturers: Solutions from ECO Schulte make doors functional all over the world.

All over the planet, builders and investors are realizing demanding projects together with architects and planners. Clever solutions for doors are always in demand. Our philosophy of system security and reliability in the door is to be found just as much in contemporary architecture as in impressive hotels, public buildings, private residences, royal castles, private apartments and stadia.

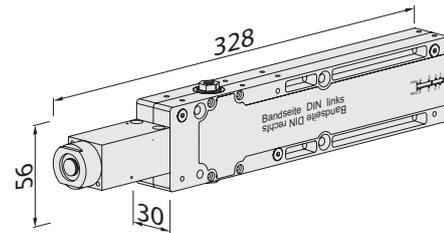
ECO ITS Multi-Genius



Product characteristics

Closing force (with closing force display, continuously adjustable)	Size acc. to EN	1 – 4	2 – 5
Door width	≤ 1.100 mm	■	■
acc. to EN	≤ 1.250 mm	-	■
Dimensions (incl mounting plate for Multi-Genius)	Length in mm	328	328
	Depth in mm	30	30
	Height in mm	56	56
DIN left / right		■	■
Latching speed (continuously adjustable)		■	■
Closing speed (continuously adjustable)		■	■
Door opening angle (*depending on the fold geometry)		140 – 165°*	
Tested acc. to EN		EN 1154	
Suitable for fire- and smoke control doors (no permission for head mounting on hinge-opposed sidet, concealed ITS)		F	
Certified according to EU-Directive		CE	

- Yes
- No
- Option



Dimensions: ITS Multi-Genius



ECO Multi-Genius ■ We've got the knack!

With a simple 180° rotation of the micro-hydraulic damping unit (only 12ml of oil), the ITS Multi Genius can be used for DIN left and DIN right doors. The visible display eases the exact adjustment of the closing force to the door dimensions before installation. Owing to the integrated eccentric link pull, the door can be opened without larger efforts of force. The construction of the ITS Multi-Genius ensures that the opening moment is falling rapidly. The result is a problem-free comwithting of the door which can be opened easily!

Order information

ECO ITS Multi-Genius ■ Concealed door closer

Product information

- ITS Multi-Genius for use in wooden doors, profile frame doors made of aluminium/steel and doors made of sheet steel starting from ≥ 40 mm door thickness. The very slim design (depth 30 mm) enables an unproblematic and invisible mounting in the door leaf without any additional reinforcement.
- Hydraulic cylinder containing only 12 ml oil has a huge advantage when it comes to the use in fire-protection doors
- The strongly decreasing opening moment allows an easier opening of the door
- Visible closing force display. A continuous adjustment of the closing force is possible before installation
- Easy handling of adjusting the closing speed and latching speed, even in mounted condition.
- Default delivery condition with pre-adjustment of size **EN 3** and slide rail IS, optionally in 30 x 20 mm or 20 x 12 mm

Scope of Delivery:

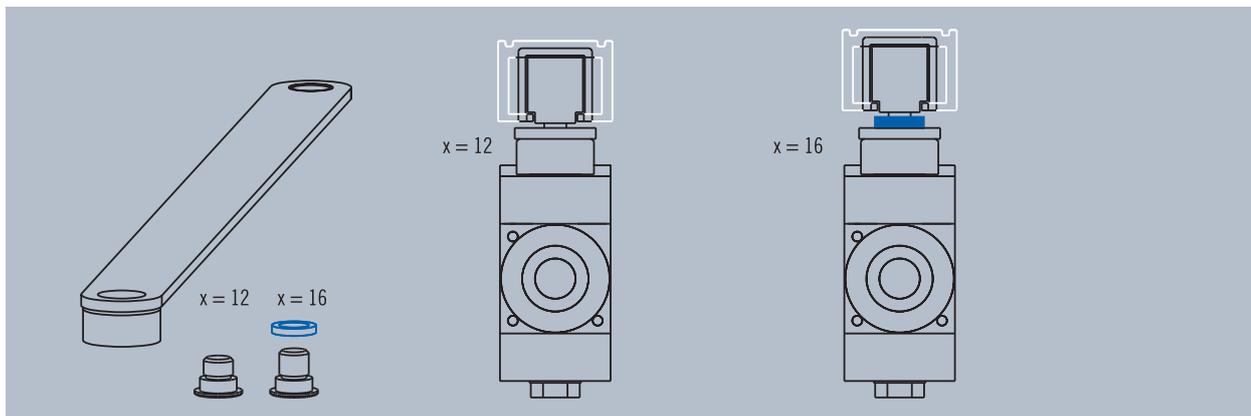
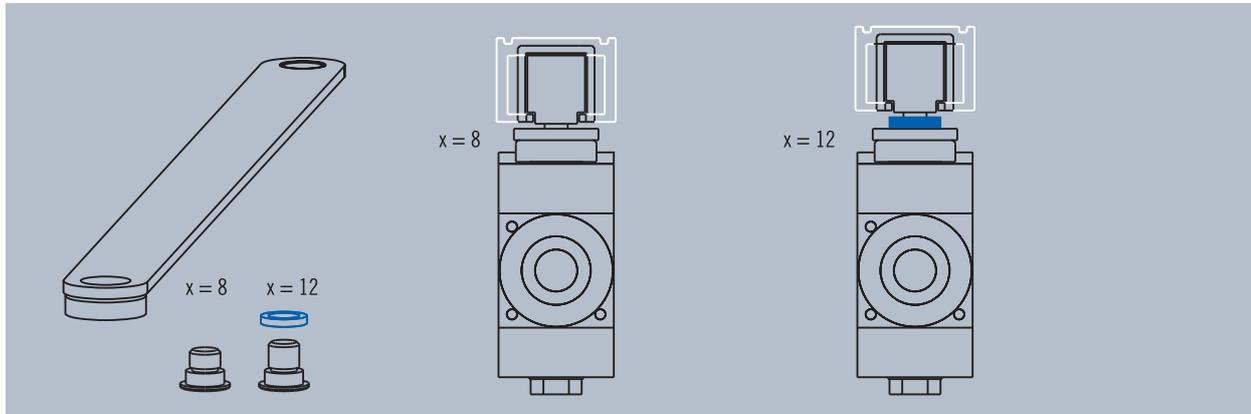
Closer body, lock plate, arm, pivot screw and spacer

Article numbers



ITS Multi-Genius (incl. arm)	Rebate space (nut length)	Article number
ITS M-G (1 - 4)	8 - 12 mm	358038M00O00210
ITS M-G (1 - 4)	12 - 16 mm	358038M00O00211
ITS M-G (2 - 5)	8 - 12 mm	358038A00O00210
ITS M-G (2 - 5)	12 - 16 mm	358038A00O00211

Rebate spaces (nut lengths)

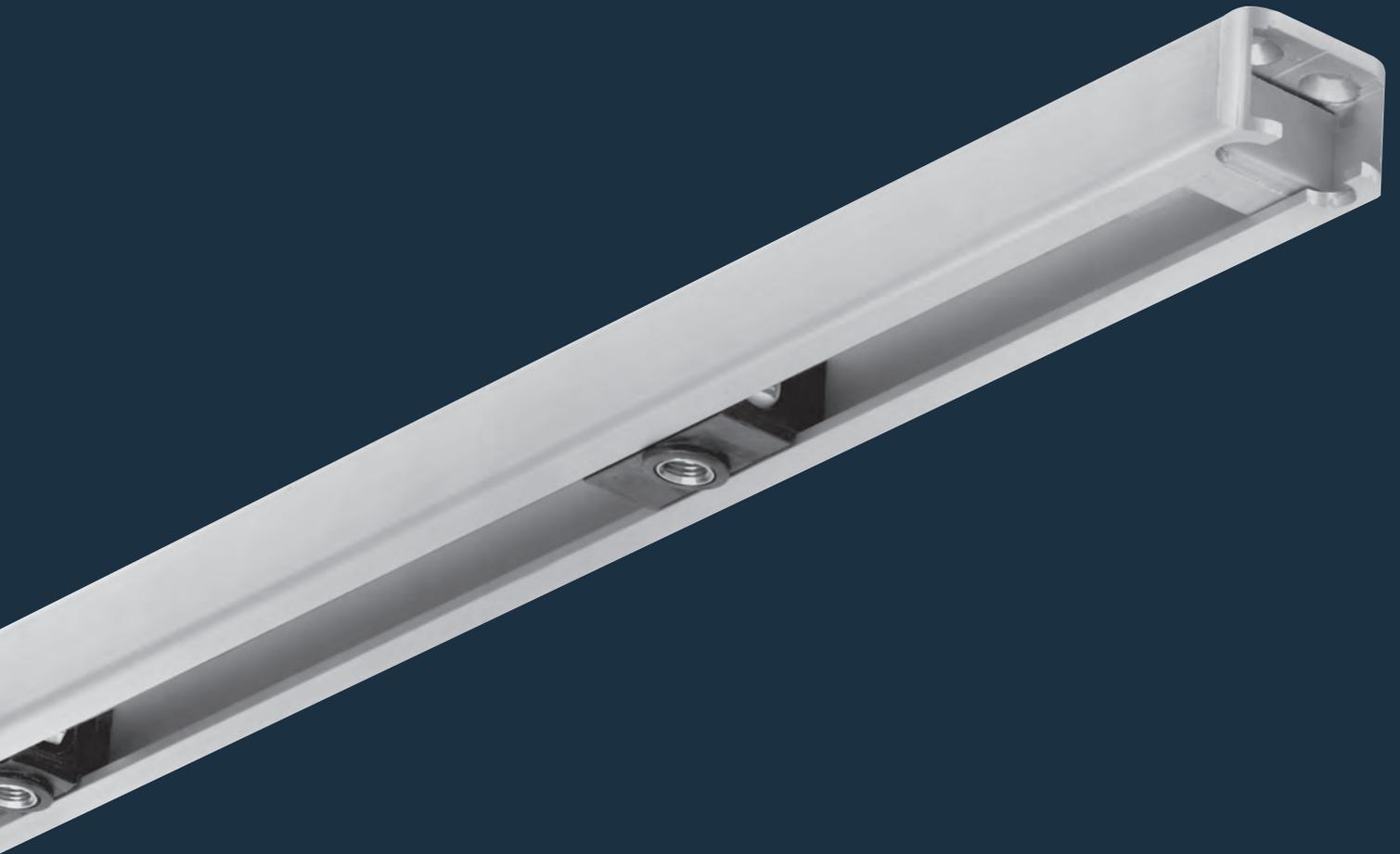


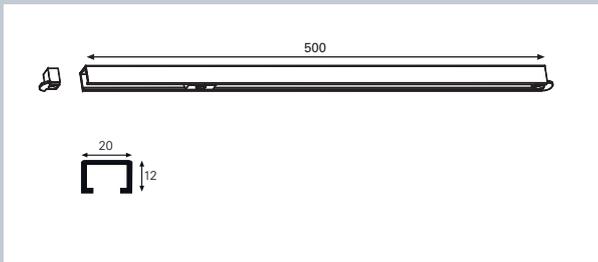
The integrated ITS Multi-Genius door closer system can be used in different door profiles with different rebate space measurements. This is enabled by different counterflap lengths (x) on the arm.

Scope of Delivery : Closer body, arm, pivot screw including spacer (inset spacer optional)
The closer body remains unchanged

Please mention the correct counterflap length when ordering slide rails for Multi-Genius.

ECO **ITS** slide rails





IS 12

Slide rail IS

for ITS 420 and ITS Multi-Genius

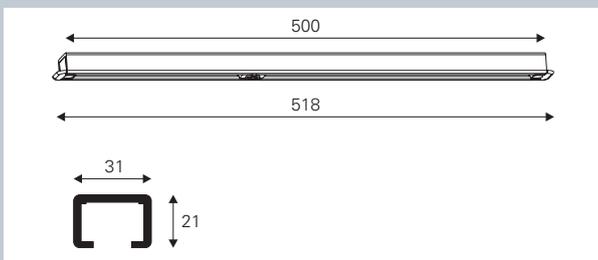
- **Slide rail height:** available in 12mm height
- **Scope of Delivery:**
Slide rail IS and fixing material

■ Slide rail IS:

Is tested in combination with ITS 420 and ITS Multi-Genius according to **EN 1154** for the use in fire- and smoke control doors.

Slide rail IS	Profile	Article number
IS 12	20 x 12 mm	35010000092021

Delivery without arm, which is part of the door closer



Mounting slide rail IS 21

IS 21

Slide rail IS

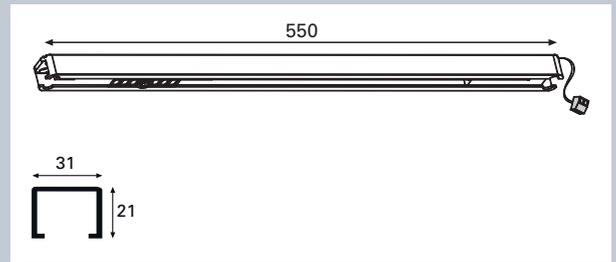
for ITS 420 and ITS Multi-Genius

(mechanical hold open optional)

- **Same execution: DIN left and DIN right**
- **Scope of delivery:**
Slide rail IS 21 and fixing material
- Variant **IS 21 FKL-E** is delivered with a mechanical hold open (hold open adjustable). The hold open angle ist adjustable from 80° to 130°
- **IS 21 FKL-E** is not permitted for use in fire- and smoke control doors

Slide rail IS 21	Profile	Article number	Slide rail IS 21 FKL-E	Profile	Article number
IS 21	31 x 21 mm	350141000098000	IS 21 FKL-E	31 x 21 mm	350141000098600

Delivery without arm, which is part of the door closer



Mounting slide rail IS-EF

IS-EF

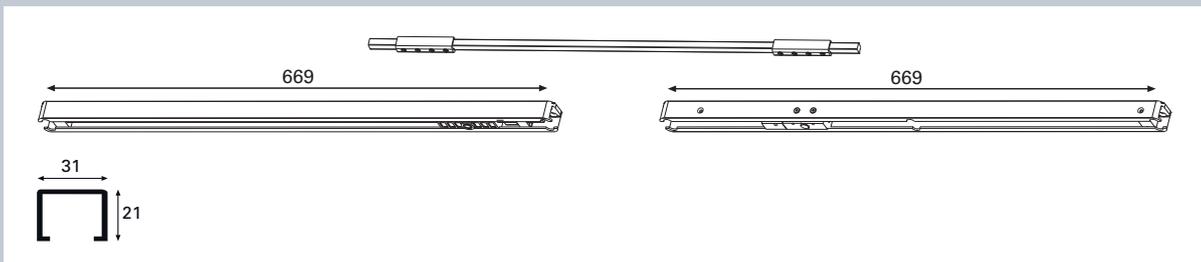
Slide rail IS with electromagnetic hold-open for ITS 420 and ITS Multi-Genius

- **Power consumption:**
24 V DC maximum 1,8 Watt
- **Same execution: DIN left and DIN right**
- **Scope of delivery:**
Slide rail IS-EF, fixing material
- **Slide rail IS-EF:**
Is allowed for the use on fire- and smoke-control doors in combination with ITS 420 and ITS Multi-Genius. Tested acc. to **EN 1155** and allowed to be used as hold open device with ECO RSZ (approved by DIBt).

- **Electromagnetic hold-open:**
Adjustable from 70° to 110°. In case of fire the hold-open function is being released and the door is being closed by the door closer. The action is controlled by the external smoke inducting system ECO RSZ. (Accessories Page 192).

Slide rail IS	Profile	Article number
IS-EF 31	31 x 21 mm	350100000097210

Delivery without arm, which is part of the door closer



Mounting slide rail IS-SR und IS-SR-EF (Illustration DIN left, DIN right laterally reversed)



IS-SR

Slide rail with closing sequence control for ITS 420 and ITS Multi-Genius

- **Same execution: DIN left and DIN right**
- **Arms:** Three different counterflap length for the exact adaptation to the rebat space of the door.
- **Scope of delivery:**
Slide rail closing sequence control IS-SR
fixing material
- **The slide rail closing sequence control IS-SR:**
Is tested in combination with ITS 420 and ITS Multi-Genius according to **EN 1158** for the use in fire- and smoke control doors

- **The closing sequence control:**
Ensures that the door leaves are closing in the correct order. E.g.: the passive leaf first, the active leaf last. When opening the passive leaf, chocks in the active leaf slide rail (mechanical independent from the hydraulics of the door closer) make sure that the active leaf stops as soon as the passive leaf is opened.

Slide rail IS	Profile	Article number
IS-SR 31	31 x 21 mm	35M220000AK1401

Delivery without arm, which is part of the door closer

IS-SR-EF

EN 1155 EN 1158 F CE

Slide rail closing sequence control with electromagnetic hold-open for ITS 420 and ITS Multi-Genius

- **Power consumption:**
24 V DC, maximum 1,8 Watt.
- **Same execution: DIN left and DIN right**
- **Arms:** Three different counterflap length for the exact adaptation to the rebat space of the door.
- **Scope of delivery:**
Slide rail closing sequence control IS-SR-EF
Fixing material
- **The slide rail closing sequence control IS-SR-EF:**
Is allowed for the use on fire- and smoke-control doors in combination with ITS 420 and ITS Multi-Genius. Tested according to **EN 1155** and **EN 1158** and allowed to be used as hold open device with ECO RSZ (approved by DiBt)

- **The closing sequence control:**
The closing sequence selector ensures that the door leaves are closing in the correct order. E.g.: the passive leaf first, the active leaf last.
- **Electromagnetic hold-open:**
Adjustable from 70° to 110°, hold-open in the passive leaf (IS-SREF-1S), active leaf is held open via the door coordinator. In case of fire, the door coordinator releases and the door is being closed. This action is controlled by the external smoke inducting system ECO RSZ. (Accessories Page 192).

Slide rail IS	Profile	Article number
IS-SR-EF 31	31 x 21 mm	35M220000AK3401

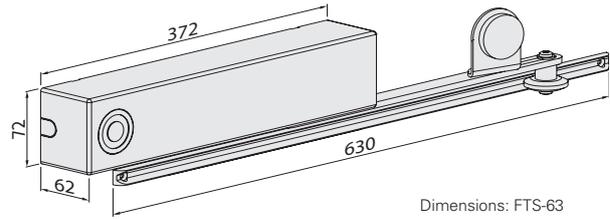
Delivery without arm, which is part of the door closer

ECO **FTS**-63 / R

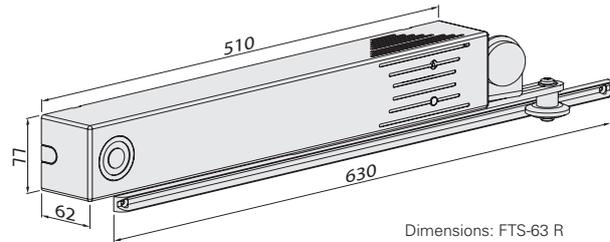


Product characteristics		FTS-63	FTS-63 R
Closing force (continuously adjustable)	Size acc. to EN	1 – 4 5 – 6	1 – 4 5 – 6
	Door width acc. to EN	≤ 1.100 mm	1 – 4
	≤ 1.400 mm	5 – 6	5 – 6
Dimensions (incl. mounting plate)	Length in mm	372	510
	Depth in mm	62	62
	Height in mm	72	77
DIN left / right (Please order the required variant)		■	■
Latching speed (continuously adjustable)		■	■
Back-check (continuously adjustable)		■	■
Closing speed (continuously adjustable)		■	■
Door opening angle		85° - 115°*	
Tested acc. to EN		EN 1155	
Suitable for fire- and smoke control doors		F	
Certified according to EU-Directive		CE	
*depending on door construction			

- Yes
- No
- Option



Dimensions: FTS-63



Dimensions: FTS-63 R



ECO FTS-63 / R ■ ... for special applications

With the FTS-63 / R hold-open door closer, ECO Schulte has developed a product for use in special-purpose buildings. Accordingly, the hold-open door closer is used mainly in retirement homes, kindergartens, schools, hospitals and other buildings in which doors have to be opened and closed with as little force as possible.

The FTS-63 / R is designed in such a way that an electromagnet holds the arm of the door closer in the open position. This means that the door is separated from the hold-open system, thus guaranteeing the free-running function. In combination with a separate and/or integrated smoke switching system, the magnet is deactivated either automatically or by means of a manual switch when smoke is detected, so that the door closer can assume its normal function and the arm closes the door.

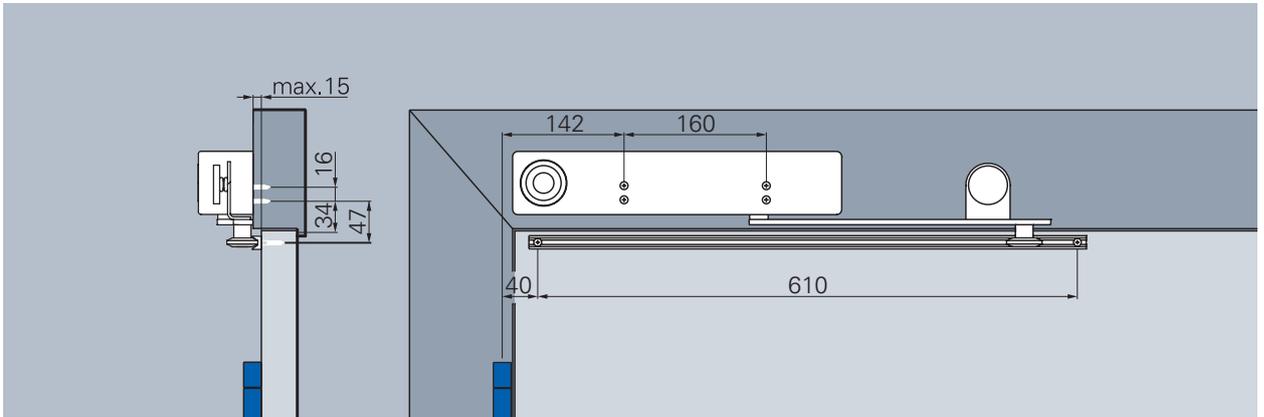
The FTS-63 / R is available in two sizes 1 – 4 and 5 – 6 (tested acc. to **EN 1155**) for doors with max. 1.400 mm width.

For double-leaf doors, the FTS 63-R can be combined with the closing sequence control ECO SR-BG (with pivot hinge on the active leaf and TS 61/41 on the passive leaf). The free-running function is only active for the active leaf, the passive leaf does not have any hold-open or free-running function and closes automatically.

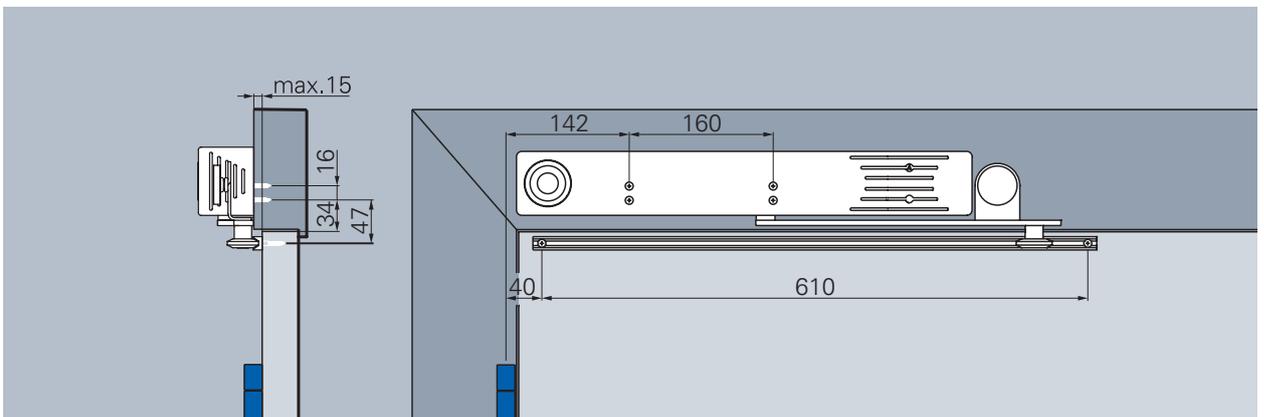
According to the DIBt (German Construction Technology Institute) guidelines for hold-open systems for fire-retarding and smoke protection doors, a red manual switch with the inscription "Close Door" must be installed in a clearly visible, easily accessible place in their immediate proximity. More information on page 193.

Mounting

Illustration DIN left door, DIN right laterally reversed



Standard mounting, hinge side – FTS-63



Standard mounting, hinge side – FTS-63 R

Closing speed

Continuously adjustable closing speed from 115° to 0°.

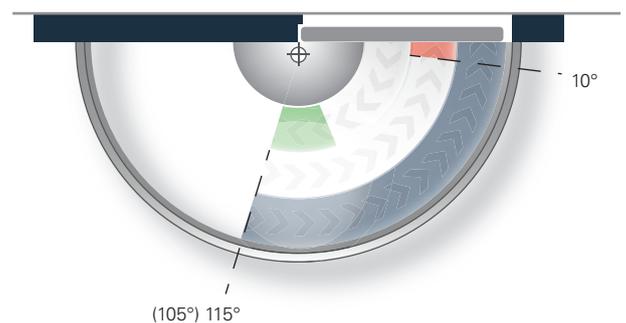
Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10 to 0°

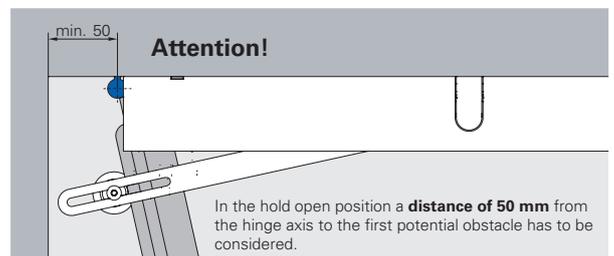
Back-check

Reduces the opening speed starting at 70° and avoids the slamming of the door. Back-check fixed

Closing force diagram FTS, hinge side




Closing force:	
Continuously adjustable	min. size 1 max. size 4
resp.	
Continuously adjustable	min. size 5 max. size 6
Default delivery condition:	size 3



Attention!

In the hold open position a **distance of 50 mm** from the hinge axis to the first potential obstacle has to be considered.

Order information

ECO FTS-63 /-63 R ■ Product description

Door closer with free-swinging function ECO FTS-63

- The free-swinging function is activated by locking the arm when opening once
- Opening angle, depending on notch of the door: 85°- 115° (115°- 145° on request)
- External power supply 24 V DC, in order to connect to an external smoke detector
- Closing force, closing speed, back check and latching speed continuously adjustable
- Head-mounting on hinge side, guiding rail on door leaf (optional)
- Adaptor profiles and axis extension for special structural conditions available (page 189)

Door closer with free-swinging function ECO FTS-63 R

- The free-swinging function is activated by locking the arm when opening once
- Integrated smoke detector
- Opening angle, depending on notch of the door: 85°- 115° (115°- 145° on request)
- Power supply 230 V AC
- Closing force, closing speed, back-check and latching speed continuously adjustable
- Head-mounting on hinge side, guiding rail on door leaf (optional)
- Adaptor profiles and axis extension for special structural conditions available (page 189)

According to the DIBt (German Construction Technology Institute) guidelines for hold-open systems for fire-retarding and smoke protection doors, a red manual switch with the inscription "Close Door" must be installed in a clearly visible, easily accessible place in their immediate proximity. More information on page 193.

FTS-63 / R



Door closer without smoke detector	Colour	DIN	Article number
FTS-63 (1 – 4)	Stainless steel satin	DIN left	306153AB5Q05051
FTS-63 (1 – 4)	Stainless steel satin	DIN right	306153AB5Q05052
FTS-63 (5 – 6)	Stainless steel satin	DIN left	306153CB5Q05001
FTS-63 (5 – 6)	Stainless steel satin	DIN right	306153CB5Q05002



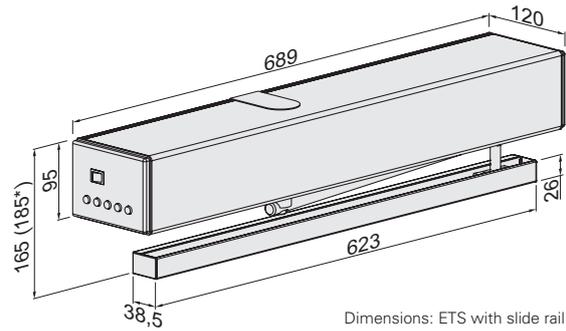
Door closer with smoke detector	Colour	DIN	Article number
FTS-63 R (1 – 4)	Stainless steel satin	DIN left	306153AB5Q05151
FTS-63 R (1 – 4)	Stainless steel satin	DIN right	306153AB5Q05152
FTS-63 R (5 – 6)	Stainless steel satin	DIN left	306153CB5Q05017
FTS-63 R (5 – 6)	Stainless steel satin	DIN right	306153CB5Q05018

ECO ETS

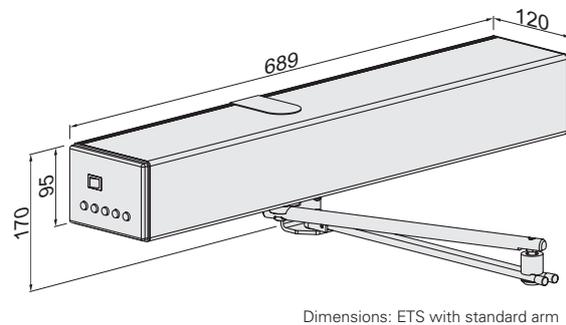


Product characteristics		ETS 73	ETS 64-R
Closing force (continuously adjustable)	Size acc. to EN	3 – 7	3 – 6
Door width acc. to EN	Interior doors ≤ 1.600 mm	■	
	Fire protection doors ≤ 1.400 mm		■
Dimensions (incl. mounting plate)	Length in mm	690	690
	Depth in mm	120	120
	Height in mm	95	95
Ambient temperature		-15 to +50° C	
Relative humidity		max. 85%	
Power consumption		max. 560 W (Stand-by 4 W)	
DIN left / right		■	■
Opening speed adjustable		max. 40°/s	
Closing speed adjustable when mains operated, fixed when power failure		max. 40°/s	
Hold-open time adjustable		0 - 60s	
Maximum door opening angle		105°	
Tested acc. to EN		DIN 18650	DIN 18263-4
		EN 16005	DIN 18650 EN 16005
Suitable for fire- and smoke control doors		-	F (DiBt)
Certified according to EU-Directive		CE	

■ Yes
 - No
 □ Option



* For rebated doors use the long plug
(included in the scope of delivery)



ECO ETS ■ Harmonic door movement – motor-driven opening – controlled closure

The new ECO ETS is a powerful, silent, electric motor drive for heavy interior and exterior doors with a weight of up to 400 kg (250 kg for fire- and smoke control doors). Suitable for new installations as well as retrofits.

Versions and functions:

- Slide rail push (hinge side) and pull (hinge-opposite side)
- Standard arm push (hinge-opposite side)
- Single and double-leaf systems, completely covered
- Integrated, concealed closing sequence control for fire- and smoke control doors (inside continuous cover)
- Integrated, concealed smoke detector (integrated in the cover, also retrofittable (DiBt, EN 54-7))
- Adjustable spring closing force (in non-electric mode)
- Easy operation with illuminated keys in the side panel (Automatic-Permanent Operation-Manual-Exit-Night)
- All-pole disconnectable main switch integrated in the side panel
- Push + Go function, easy response
- Adjustable starting force and closing force increase (push into the lock)
- Adjustable activation delay (motor lock, closing sequence)
- Plug + Play, set-up of functions with LCD display
- Low energy operation without security sensors
- Very low Stand-by consumption (4 Watt)
- Switchable wind load compensation, maximum wind speed 80 km/h (320 Pa)
- Switchable acoustic signalling of opening- and/or closing movement

1. Force - up to 250 kg for EN 7 (up to 400 kg for EN 4)

The ECO ETS has a strong power unit that safely opens and closes door leafs up to 250 kg in weight and up to 1.600 mm in width (EN 7)

This provides secure automation for external doors that may experience strong wind loads as well as heavy fire protection doors

With its integrated, high-performance switching power supply (24 V, 2 A output power) several external operating and safety elements, and even motorised locks, can be supplied. This way external power supplies can be omitted in many applications.

In addition to these parameters, the ETS, with its new electromotive power unit, is extremely quiet and has a well engineered, harmonious movement. It is these properties that make the ETS such an all-rounder for public buildings, hospitals, elderly homes and clinics.



2. Model with slide rail on hinge side and hinge-opposite side / also fire protection!

The ETS can be combined as follows:

Lintel installation with standard arm, hinge-opposite side push

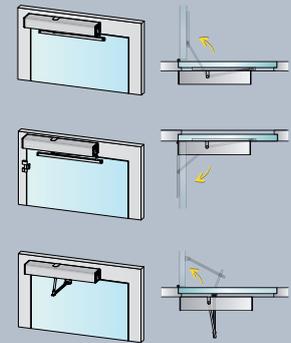
Lintel installation with slide rail, hinge-opposite side push

Lintel installation with slide rail, hinge side pull

All mounting options are available in both standard and fire protection variations.

This gives planners and architects a comprehensive range of design options with sliding rails for all assembly applications, whether that is hinge side or hinge-opposite side, T0 or fire- / smoke protection!

For door manufacturers it also opens up new possibilities for the production of fire- or smoke protection doors.



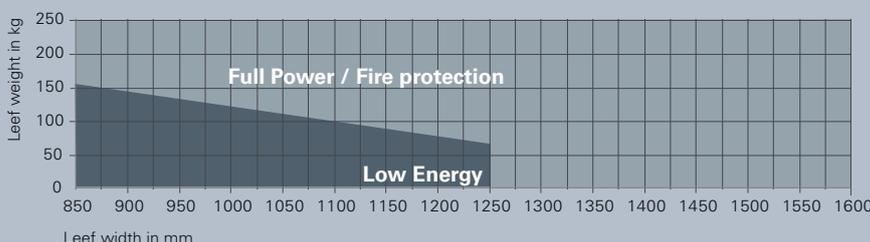
3. Low energy and full power in a single power unit

The ETS can be set for two functions on site with one and the same drive. An additional upgrade card is not necessary:

Low Energy and Full Power

The Full Power setting enables automation in heavy, highly frequented public doors, for example, with quick movement sequences. To do this, a surveillance of the movement area with safety sensors is necessary.

The Low Energy setting is specially developed for private households or office and work areas with limited public frequency. Safety sensors can be dispensed with here, there are limitations, however, on door weights and movement speed.



4. Fire and smoke protection / Inverse function / Interlock function

The ETS model ETS 64-R is approved as a hold-open device for fire and smoke protection doors. In combination with a lintel switch it triggers the fire protection closer in the case of an alarm (smoke activated) or power failure.

The inverse function has been specially developed for smoke extraction from buildings. The fire/smoke protection function is reversed here when the alarm is triggered, which means that the door is opened by spring force to enable a smoke extraction. This is also ensured with a power cut, so an emergency power supply is not necessary. This inverse function has already been pre-installed at ETS and is consequently also adjustable on site.

The interlock function regulates the complex automation sequences of double doors in safety areas (controlled and directional flow control).

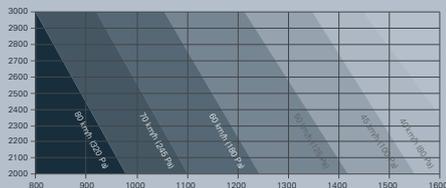


2

5. Wind load compensation

The wind load control is there to adapt the smooth operation of outer doors to different air pressure conditions (to wind force 9, for example (or 320 Pa) / with a door size of 900 x 2,400 mm). A briefly occurring increased wind load (e.g. a strong gust) is recognised by the drive. The control now calculates the additional motor performance for amplifying or retarding the drive, so the door can operate in a virtually unimpeded way.

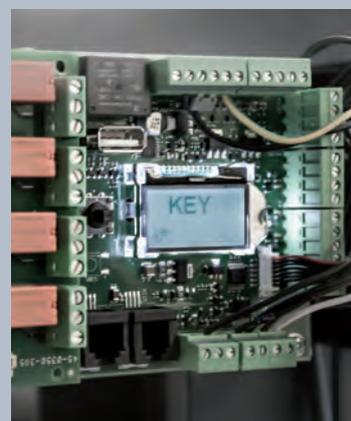
The strength of the wind load depends on the size of the door and the type of arm deployed. For doors that open outwards in areas with regularly increased wind loads (in coastal areas for example) the normal arm (pushing on the hinge-opposite side) should be used as far as possible.

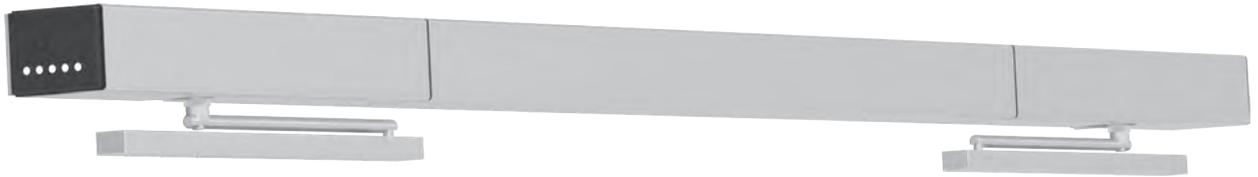


6. Simple assembly and service

The ETS has a simple, user-friendly setting function for all parameters. This is provided by the display panel with joystick function on the control board. A menu style checklist makes it easy to configure the initial operation on site. All parameters can also be configured at a later date or to suit any new operational requirements (password protected) with no need for an external control module or laptop.

This makes the ETS particularly interesting for assembly and service companies, who do not want to have to use a specific external programming device or special software for every type of drive.





Double-leaf revolving door Type ECO ETS 64-R IRM-SRI (GSZ) (with integrated door control and integrated smoke sensor)

ECO ETS 73 / ETS 64-R ■ Product description

Single lead drives (without arms)



Single-leaf drives	Colour	Article number
ETS 73	Stainless steel	338501548010000
ETS 64-R	Stainless steel	358501548021000
ETS 64-R (GSD)	Stainless steel	358501548023000
ETS 64-R IRM	Stainless steel	on request
ETS 64-R IRM (GSD)	Stainless steel	on request

Arm variants for ETS



Slide rail for ETS	Colour	Article number
GS-ETS 620*	Stainless steel	358501547120010
GS-ETS 830**	Stainless steel	338501547120020

* Mounting GSZ or GSD (up to 30 mm lintel depth / fire protection)

** Mounting GSZ, GSD or on door leaf (up to 200 mm lintel depth / no fire protection)



Standard arms for ETS (up to 250 mm lintel depth)	Colour	Article number
NG-ETS 250*	Stainless steel	358501547110020
NG-ETS 400**	Stainless steel	358500547190010

* For lintel depth up to 250 mm (fire protection)

** For lintel depth up to 400 mm (no fire protection)

Double-leaf drives (complete sets)



Double-leaf drives	Colour	Article number
ETS 64-R IRM-SRI (NG)	Stainless steel	308501450548037
ETS 64-R IRM-SRI (GSD)	Stainless steel	308501450548039
ETS 64-R IRM-SRI (GSZ)	Stainless steel	308501450548050

Complete set consisting of:

- 1 ETS 64-R IRM (passive leaf, DIN left = DIN right)
- 1 ETS 64-R (active leaf)
- Assembly set SRI (DIN left = DIN right)
- Middle cladding set
- 2 mounting plates
- 2 arms
- CAN-Kabel
- HAT 02

Please order any safety elements to provide additional protection at contact points and closing edges at the same time.

Sensor strips or Flatscan in compliance with DIN 18650 and EN 16005!

Please order any accessories, such as ceiling smoke sensors, sensor strips and control devices, separately (from page 200).

NG = Version standard arms pushing (head mounting on hinge-opposite side)

GSD = Version for slide rails pushing (head mounting on hinge-opposite side)

GSZ = Version for slide rails pulling (standard mounting on hinge side)

IRM = Integrated smoke detector

SRI = Integrated closing sequence control

Order check list - ETS

Pos.	Type of arm	Fire protection		Leaf		Bedix		Taster		Radar		Radio		Sicherheitselemente			Emergency off		E-opener		RSK	
		yes	no	1	2	yes	no	internal	external	internal	external	yes	no	Sensor bar	Finger protection	Flatscan	yes	no	yes	no	yes	no

Hardware



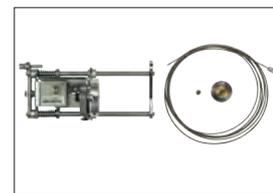
Drive



Slide rail



Standard arm



Integrated closing sequence control (SRI)

Operating elements



Bedix (external operation and programming element)



Button with large surface area GFT



Radar



Remote control

Security elements



Sensor strips



Finger protection



Flatscan



Emergency off

Lock accessories



E-opener



RSK

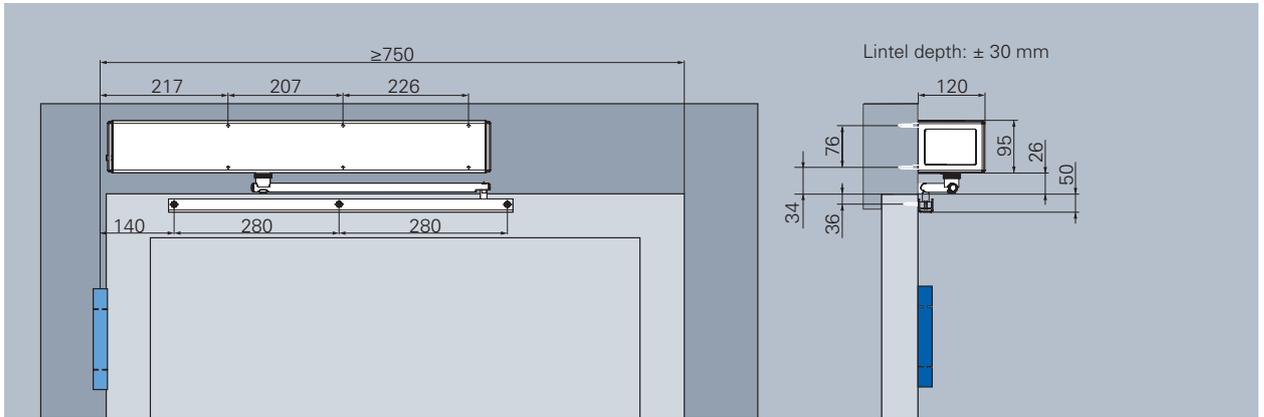


Strike plate



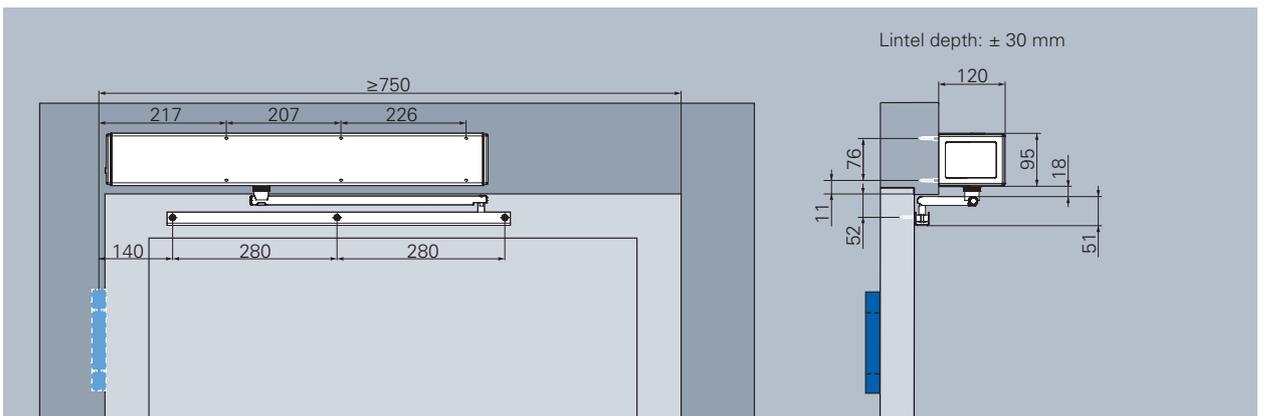
Motor locks

Installation drawing ETS 73 single leaf



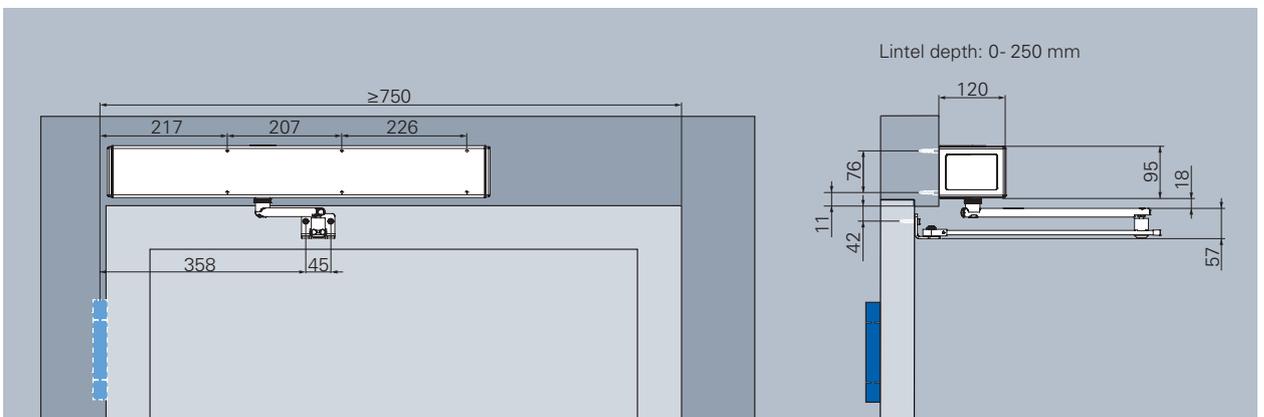
ETS 73 Head mounting hinge side with slide rail (pull)

With 13mm axle pin and long sliding bolt (included in the scope of delivery).



ETS 73 Head mounting hinge-opposite side with slide rail (push)

With standard axle pin and short sliding bolt.

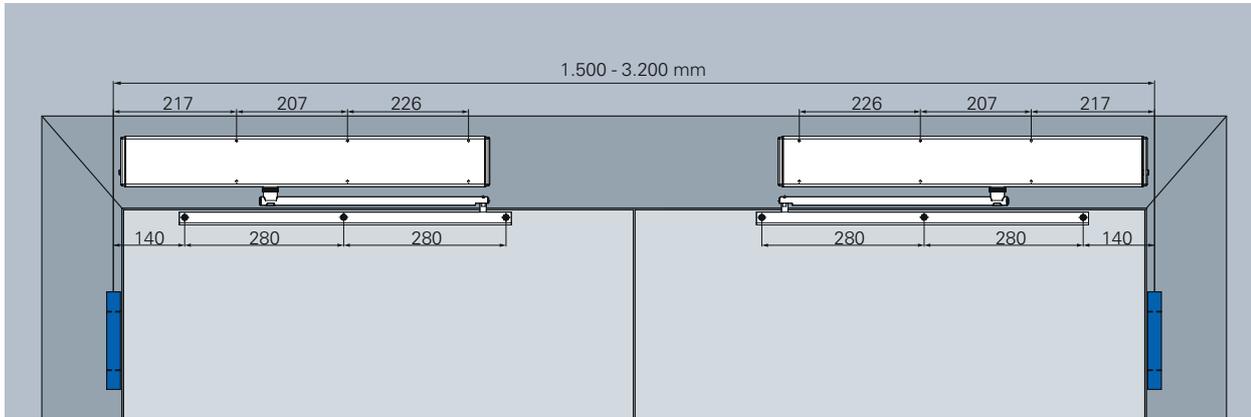


ETS 73 Head mounting hinge-opposite side with standard arm (push)

With standard axle pin.

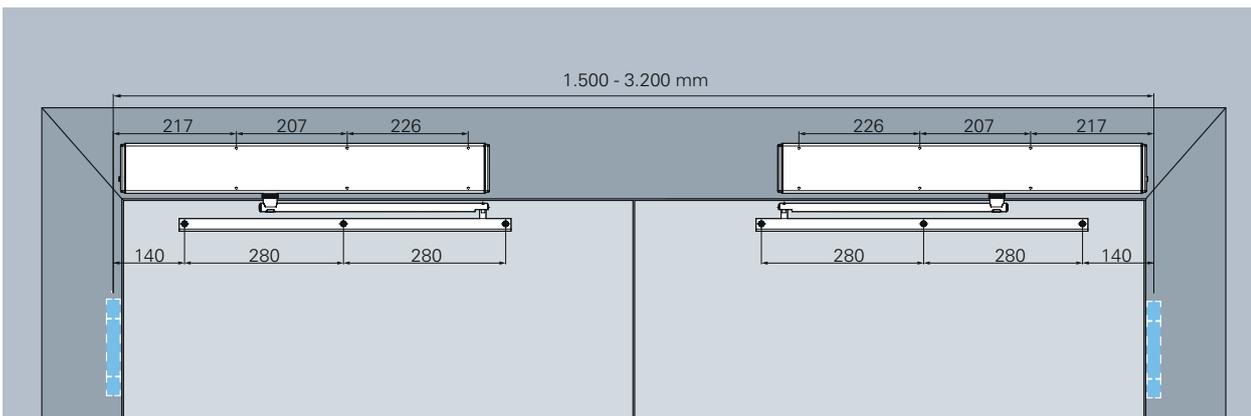
Installation drawing ETS 73 double leaf

2



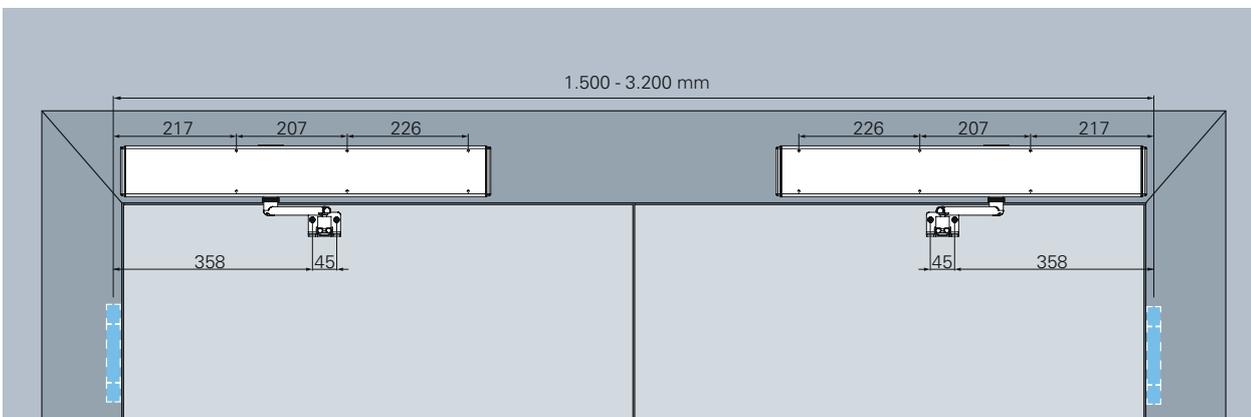
ETS 73 Head mounting hinge side with slide rail (pull)

With 13mm axle pin and long sliding bolt (included in the scope of delivery).



ETS 73 Head mounting hinge-opposite side with slide rail (push)

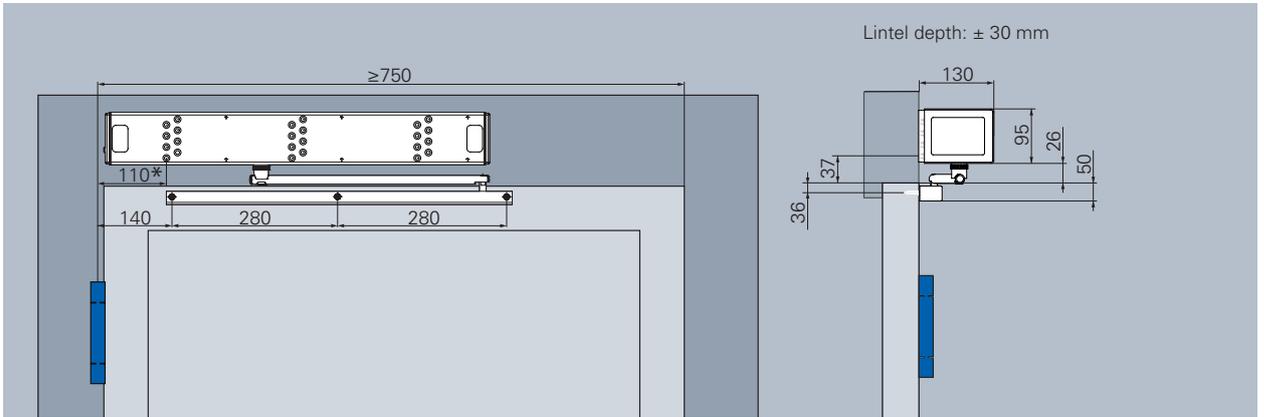
With standard axle pin and short sliding bolt.



ETS 73 Head mounting hinge-opposite side with standard arm (push)

With standard axle pin.

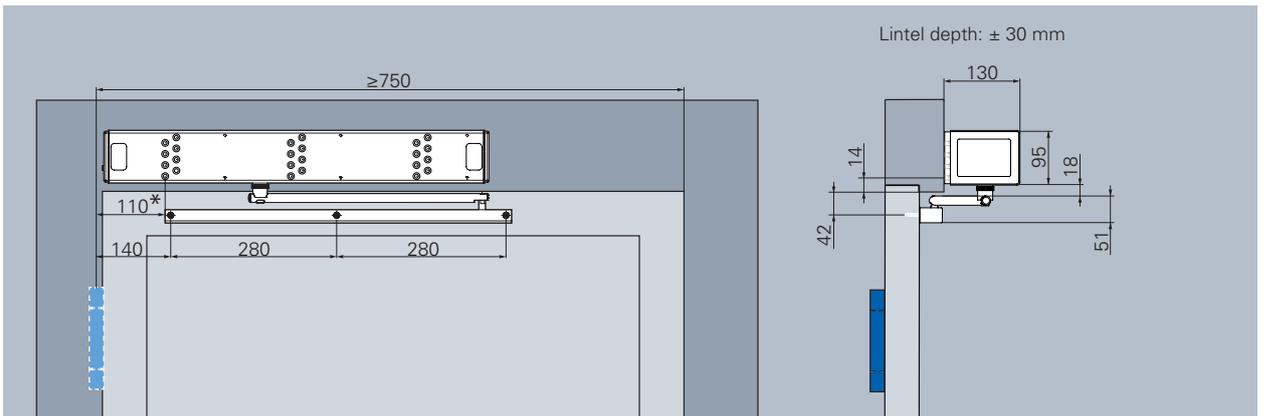
Installation drawing ETS 64-R single leaf



ETS 64-R – Single leaf head mounting hinge side with slide rail (pull) and mounting plate

With 13mm axle pin and long sliding bolt.

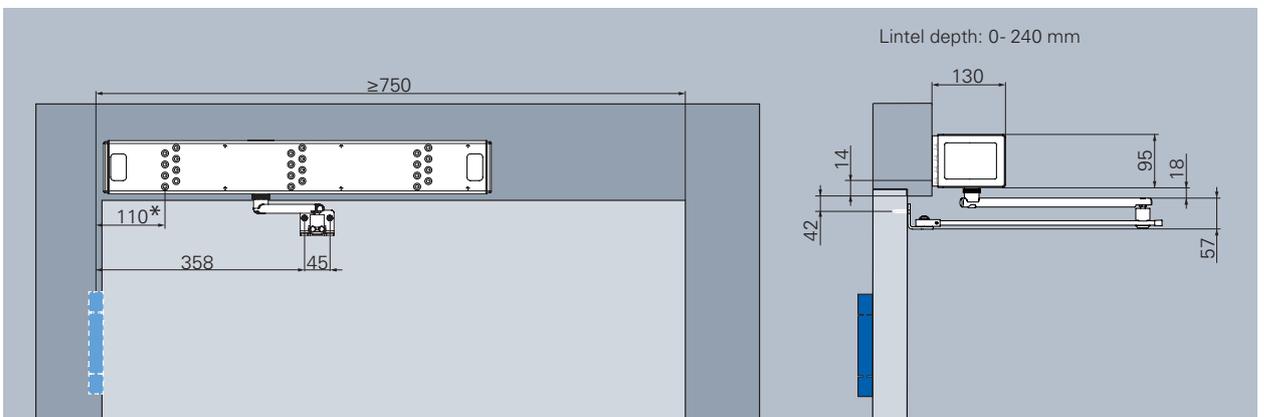
* Reference dimension- all further holes must be drilled according to the specifications of the door or profile manufacturer.



ETS 64-R – Single leaf head mounting hinge-opposite side with standard arm (push) and mounting plate

With standard axle pin and short sliding bolt.

* Reference dimension- all further holes must be drilled according to the specifications of the door or profile manufacturer.



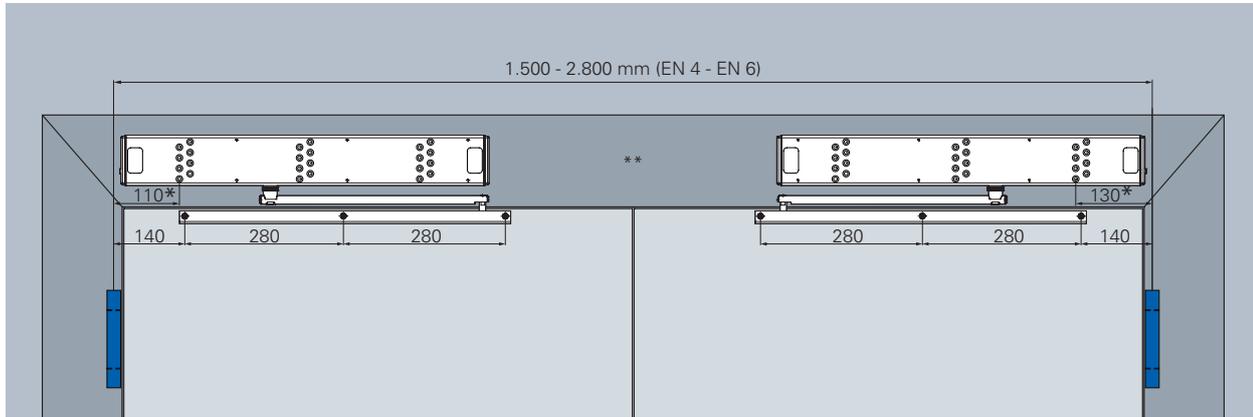
ETS 64-R – Single leaf head mounting hinge-opposite side with slide rail (push) and mounting plate

With standard axle pin.

* Reference dimension- all further holes must be drilled according to the specifications of the door or profile manufacturer.

Installation drawing ETS 64-R double leaf

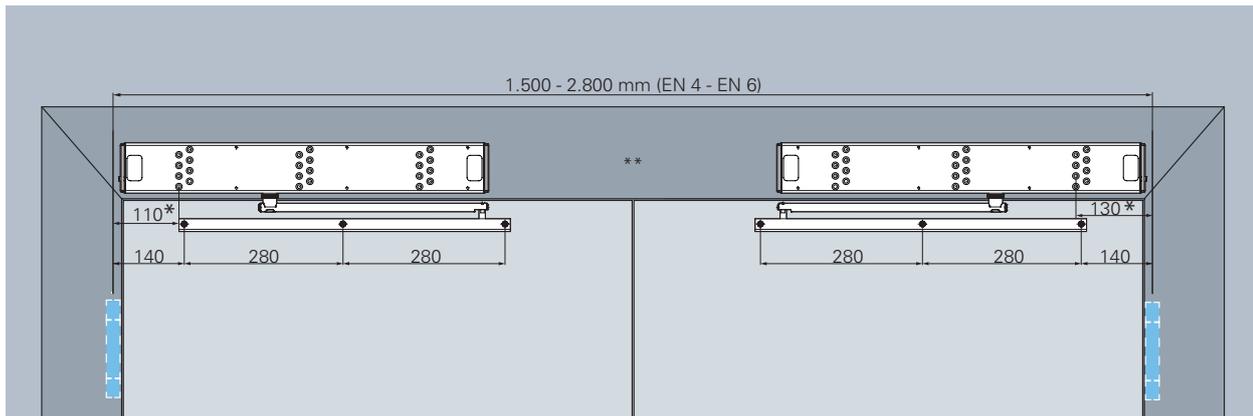
2



ETS 64-R – Double leaf head mounting hinge side with slide rail (pull) and mounting plate

* Reference dimension- all further holes must be drilled according to the specifications of the door or profile manufacturer. For rebated doors please use the long pins (included in the scope of delivery). All information in brackets can vary according to the clamp (clamp-13 or clamp +20)

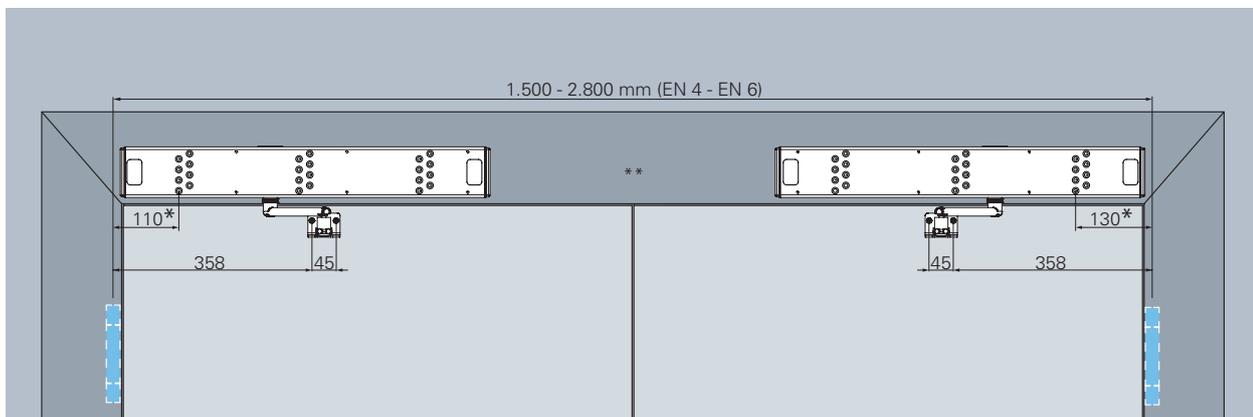
** Optionally available with integrated door control and middle cladding.



ETS 64-R – Double leaf head mounting hinge-opposite side with slide rail (push) and mounting plate

* Reference dimension- all further holes must be drilled according to the specifications of the door or profile manufacturer.

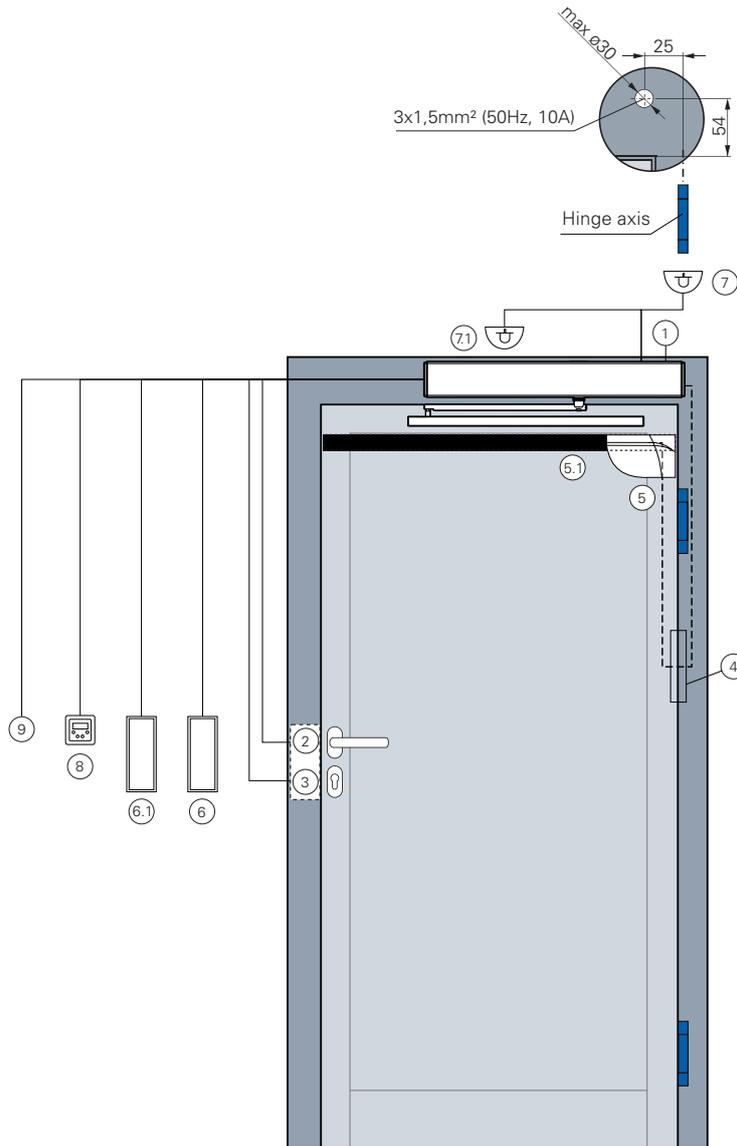
** Optionally available with integrated door control and middle cladding.



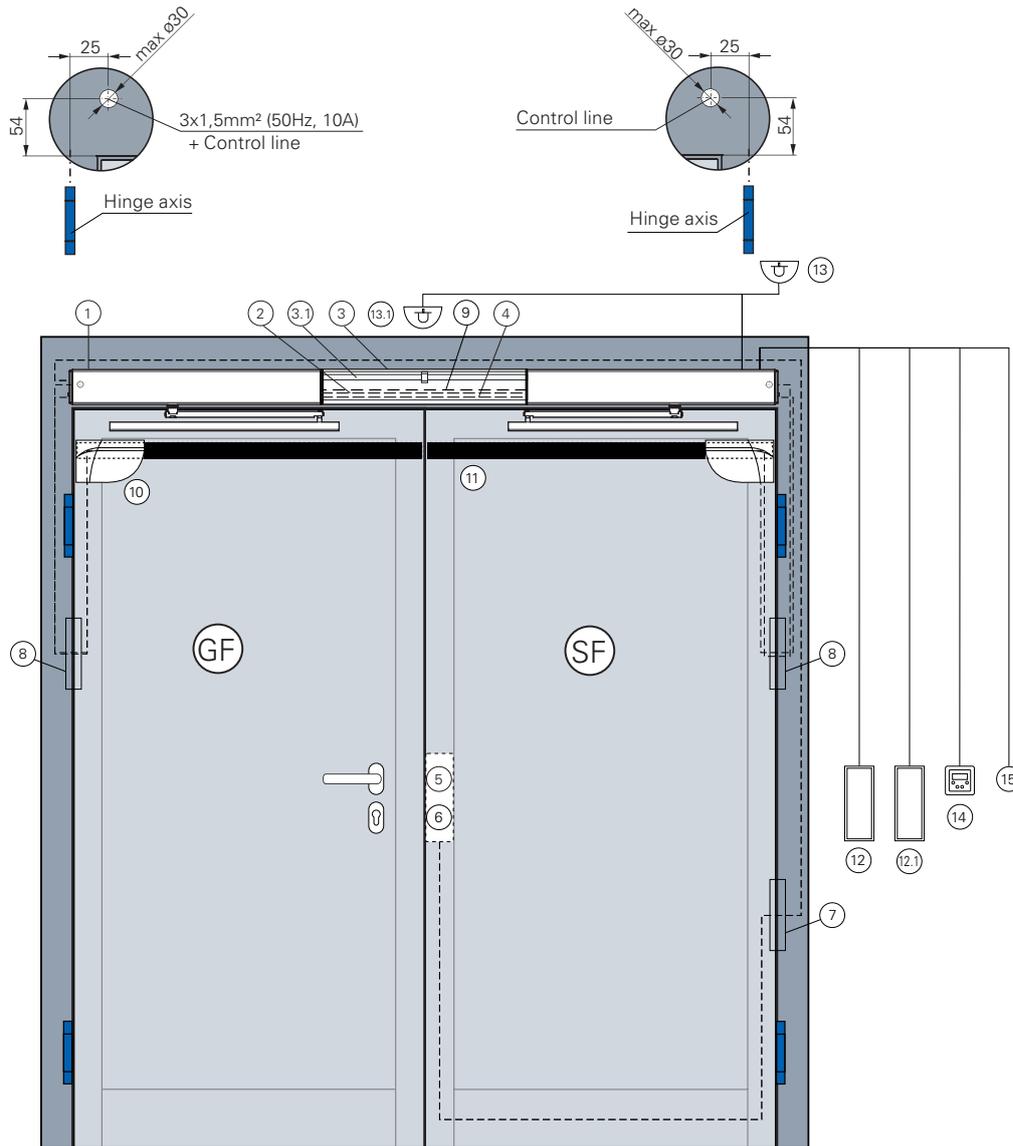
ETS 64-R – Double leaf head mounting hinge-opposite side with standard arm (push) and mounting plate

* Reference dimension- all further holes must be drilled according to the specifications of the door or profile manufacturer. For rebated doors please use the long pins (included in the scope of delivery). All information in brackets can vary according to the clamp (clamp-13 or clamp +20)

** Optionally available with integrated door control and middle cladding.



Pos.	Drawing	Cabel	Comment
1	Power supply	NYM 3 x 1,5mm²	Drive must be supplied with 230V
2	E-opener 24V DC 100% duty cycle, catch diode	J-Y(ST)Y 4 x 0,6 or 0,8mm²	Cable installed in advance (or concealed)
3	Dead bolt contact switch	J-Y(ST)Y 4 x 0,8mm²	Cable installed in advance (or concealed)
4	Internal cable transition	for security element	Optional, in advance
5	Flatscan set	Cable from ECO	internal cabling in advance, otherwise cable installed externally with cable transition
5.1	Sensor stripe set	Cable from ECO	internal cabling in advance, otherwise cable installed externally with cable transition
6	Button with large surface area (internal)	J-Y(ST)Y 4 x 0,6 or 0,8mm²	Concealed socket, cable installed in advance
6.1	Button with large surface area (external)	J-Y(ST)Y 4 x 0,6 or 0,8mm²	Concealed socket, cable installed in advance
7	Radar (internal), for example BS – (50cm above the hinges)	J-Y(ST)Y 4 x 0,6 or 0,8mm²	Cable installed in advance (or concealed)
7.1	Radar (external), for example BGS – (Center of the door)	J-Y(ST)Y 4 x 0,6 or 0,8mm²	Cable installed in advance (or concealed)
8	Bedix-program selector switch	J-Y(ST)Y 4 x 0,6 or 0,8mm²	Concealed socket, cable installed in advance
9	Alternative control element	J-Y(ST)Y 4 x 0,6 or 0,8mm²	Concealed socket, cable installed in advance

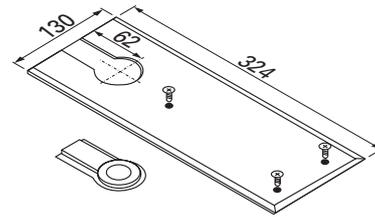


Pos.	Drawing	Cable	Comment
1	Power supply active leaf (GF)	NYM 3 x 1,5mm ²	Both drives must be supplied with 230V
2	Power supply bridge to the passive leaf (SF)	NYM 3 x 1,5mm ²	Bridge for power supply of the passive leaf
3	Middle cladding	-	optional
3.1	Closing sequence control (SRI)	Closing sequence control	optional, closing sequence control
4	CAN cable for control of closing sequence regulation (for T0 doors) and communication of the doors	Included in the scope of delivery ECO (CAN-Cable)	Cable installed in the frame (in advance) or in the continuous drive cladding (optional)
5	E-opener 24V DC 100% ED, catch diode	4 x 0,6 or 0,8mm ² installed to Master	Cable installed in advance in the passive leaf up to the Master
6	Dead bolt contact switch	4 x 0,8 mm ² installed to Master	Cable installed in advance in the passive leaf up to the Master
7	Internal cable transition	for E-opener and RSK	optional, in advance
8	Internal cable transition	for security elements	optional, in advance
9	ECO dual locking or E-opener in the passive leaf (SF)	for E-opener 4 x 0,6mm ² installed to Slave	Cable installed in the frame in advance up to the Slave-drive
10	Flatscan Set	Cable from ECO, installed to Master – GF / installed to Slave – SF	internal cabling in advance, otherwise cable installed externally with cable transition
11	Sensor bar Set	Cable from ECO, installed to Slave – SF installed to Master – GF	internal cabling in advance, otherwise cable installed externally with cable transition
12	Button with large surface area (internal)	4 x 0,6 or 0,8mm ² installed to Slave	Concealed socket, cable installed in advance
12.1	Button with large surface area (external)	4 x 0,6 or 0,8mm ² installed to Slave	Concealed socket, cable installed in advance
13	Radar (internal) for example BS – (50cm above the hinges)	4 x 0,6 or 0,8mm ² installed to Slave	Cable installed in advance (or concealed)
13.1	Radar (external) for example BGS- (Center of the door)	4 x 0,6 or 0,8mm ² installed to Slave	Cable installed in advance (or concealed)
14	Bedix-program selector switch	4 x 0,6 or 0,8mm ² installed to Slave	Concealed socket, cable installed in advance
15	Alternative control element	4 x 0,6 or 0,8mm ² installed to Slave	Concealed socket, cable installed in advance

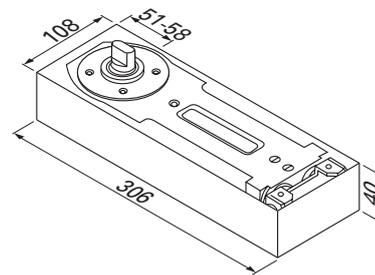


Product characteristics		BTS 843	BTS 844
Closing force (with closing force display, continuously adjustable)	Size acc. to EN	3	4
Door width acc. to EN	≤ 950 mm	■	■
	≤ 1.100 mm	-	■
Door weight acc. to EN	maximum in kg	120	150
Dimensions (incl. mounting plate)	Length in mm	306	306
	Depth in mm	108	108
	Height in mm	40	40
Latching speed (adjustable)		■	■
Closing speed (adjustable)		■	■
Hold open 90° or 105° not fire proved (continuously adjustable)		□	□
DIN left / right		■	■
Door opening angle		130°	
Tested acc. to EN		EN 1154	
Suitable for fire- and smoke control doors (no permission when using with hold-open)		F	
Certified according to EU-Directive		CE	

■ Yes
- No
□ Option



Dimensions: Cover



Dimensions: Cement case



ECO BTS ■ ... flattens itself!

The BTS-FH floor spring is distinguished by its particularly flat design which makes it the ideal door closer for single-leaf latching and swinging doors. The overall height of only 40 mm enables easy installation.

The BTS-FH is available in size 3 and size 4. It is tested acc. to **EN 1154** and therefore meets all requirements.

Closing speed

Continuously adjustable closing speed from approx. 130° to 10°

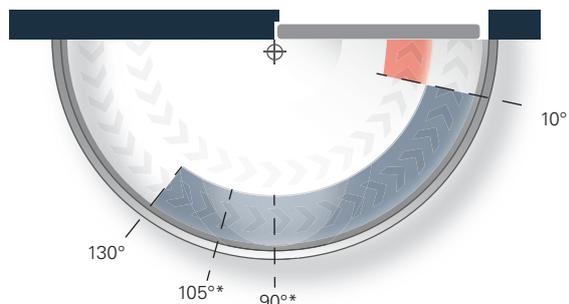
Latching speed

Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 10° to 0°

* Mechanical hold open (optional)

Depending on the version, the BTS can be ordered without, with 90° or with 105° hold open angle. The door can be snapped in the mechanical hold open when opened and simply overpressed.

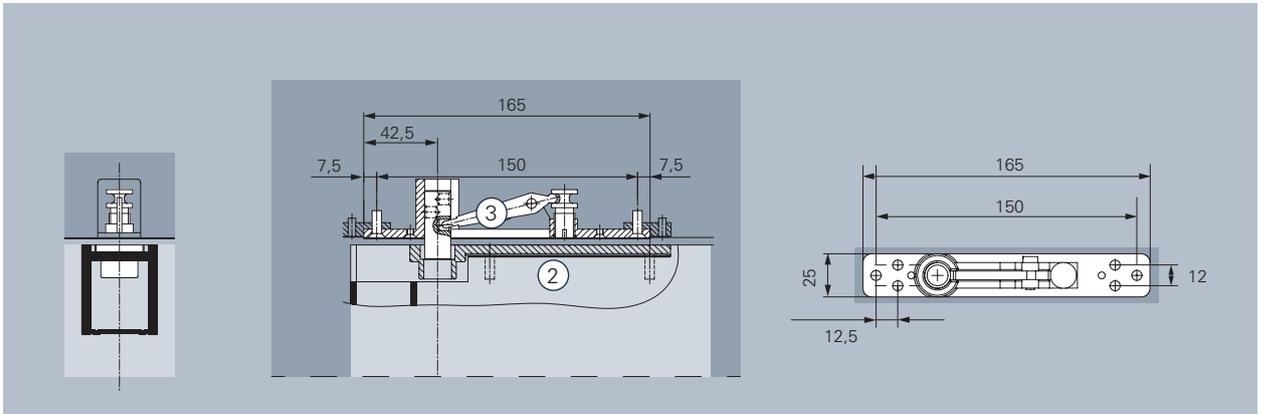
Closing force diagram BTS, hinge side



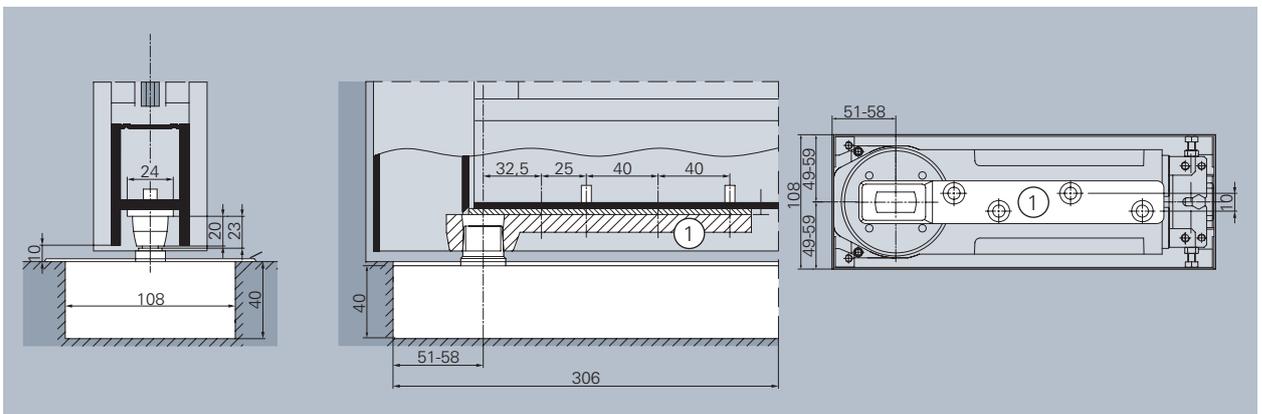
! Mechanical hold open not allowed with fire- and smoke control doors!

Installation drawing for swing doors

Illustration DIN left door, DIN right laterally reversed



Frame mounting, pick-up element on top



Ground mounting

ECO BTS ■ Product description

Accessorie set ZP for single leaf swing doors

Adjustable pivot hinge with needle bearing

- with adjustable guide pin
- maximum bridging dimension 20 mm
- incl. lower pick-up element for BTS axis
- Material: Galvanized steel

Mounting:

After the components have been mounted on the door, the door is placed on the BTS-axis. The upper face plate is then adjusted under the guide pin (The door must be opened while doing this). By moving the adjusting screw the guide pin is fixed in the needle bearing of the face plate.

- ① Slide rail for metal and wooden doors
- ② Reception for pivot hinge
- ③ Adjustable pivot hinge



Illustration: Accessorie set ZP

Accessories

Swing doors / Pivot hinges

For unrebated wooden swing doors

The pick-up elements are mounted on the door fold above and below according to the DIN direction. The upper hinge guide is mounted on the fold. The BTS lays outside the door axis.

- Material: Galvanized steel, with stainless steel covering
- incl. Hinge guide pin

(Please mind the suitable DIN direction when ordering)



Illustration: Top pick-up element (Example: DIN left)



Illustration: Below pick-up element (Example: DIN right)

Article numbers



Door closer FH 843	Hold open	Article number	Door closer FH 844	Hold open	Art.-Nr.
FH 843 (3)	–	3037048000O10020	FH 844 (4)	–	3037048000O20020
FH 843 (3)	90°	3037048000O10023	FH 844 (4)	90°	3037048000O20023
FH 843 (3)	105°	3037048000O10024	FH 844 (4)	105°	3037048000O20024

(Door closer body without spindle, please order the suitable exchange spindle with your order)



Exchange spindle	Article number	Exchange spindle	Article number
Standard 3 mm	3037048000O30010	Axis extension 20 mm	3037048000O30014
Axis extension 5 mm	3037048000O30011	Axis extension 25 mm	3037048000O30015
Axis extension 10 mm	3037048000O30012	Axis extension 30 mm	3037048000O30016
Axis extension 15 mm	3037048000O30013		



Accessories	Article number
Assembly set for swing door	307048000O30004
Pair of pivot hinges DIN left	307048000O30005
Pair of pivot hinges DIN right	307048000O30006

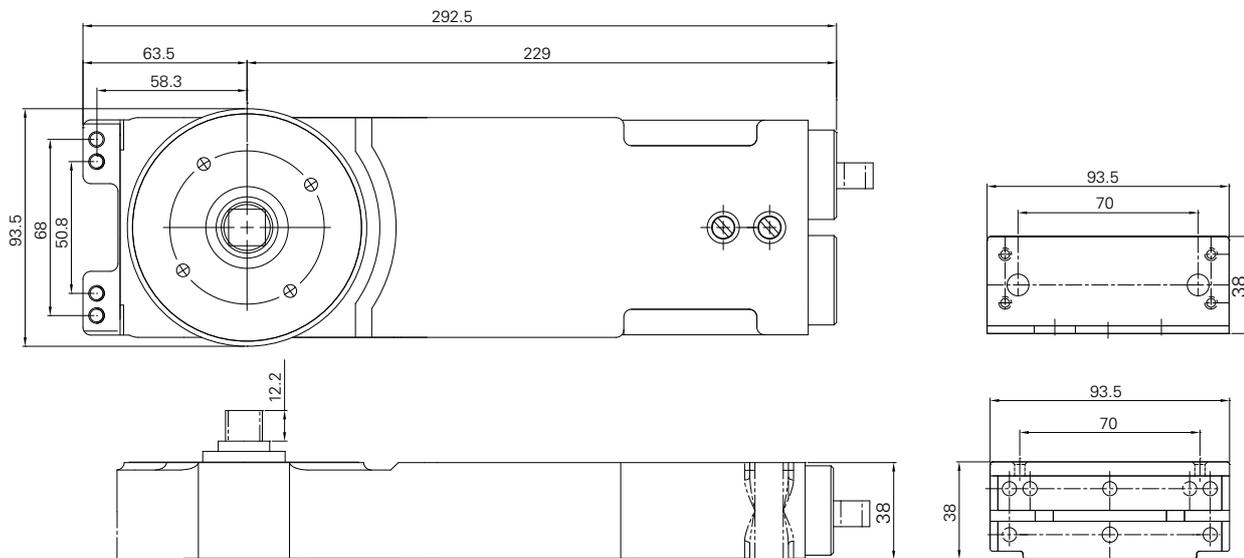
ECO RTS 42



Product characteristics

Closing force (with closing force display, continuously adjustable)	Size acc. to EN	2 – 4
Door width acc. to EN	≤ 1100 mm	■
Door weight	maximum in kg	120
Dimensions	Length in mm	292,5
	Depth in mm	93,5
	Height in mm	38
Latching speed (15 – 0°) (adjustable)		3- 10 sec.
Closing speed (110 – 15°) (adjustable)		3- 50 sec.
Closing force in 0° position		40 Nm
Hold open 90° or 105°		□
DIN left / right		■
Door opening angle		130°
Tested acc. to EN		EN 1154

- Yes
- No
- Option

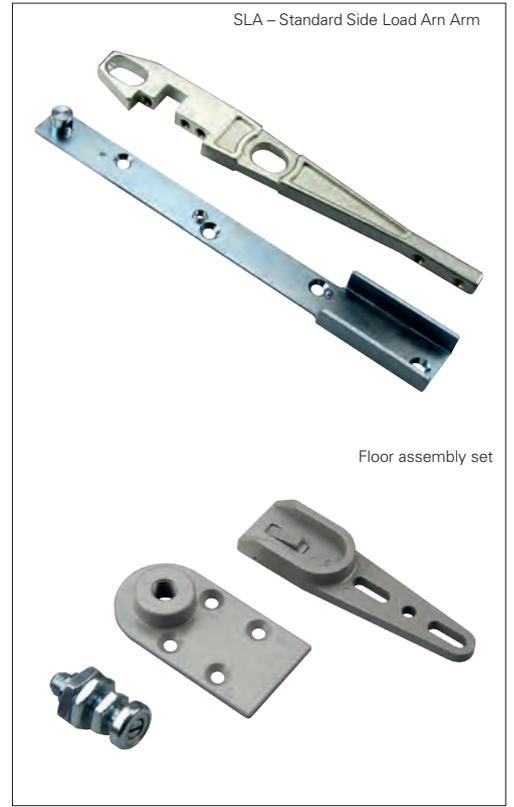
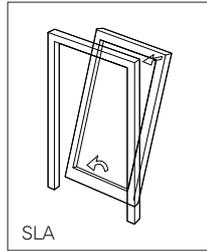
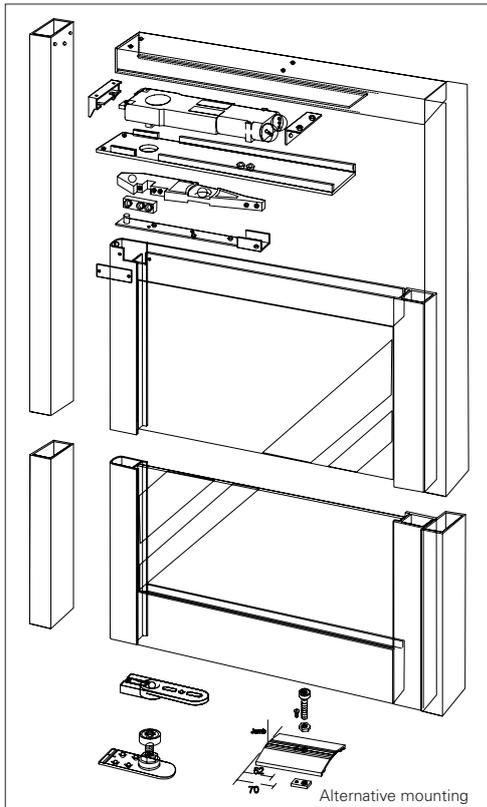


ECO RTS 42 ▪ Meeting architectural standards invisibly

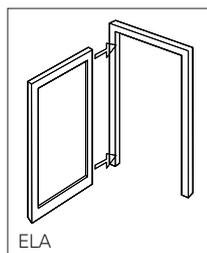
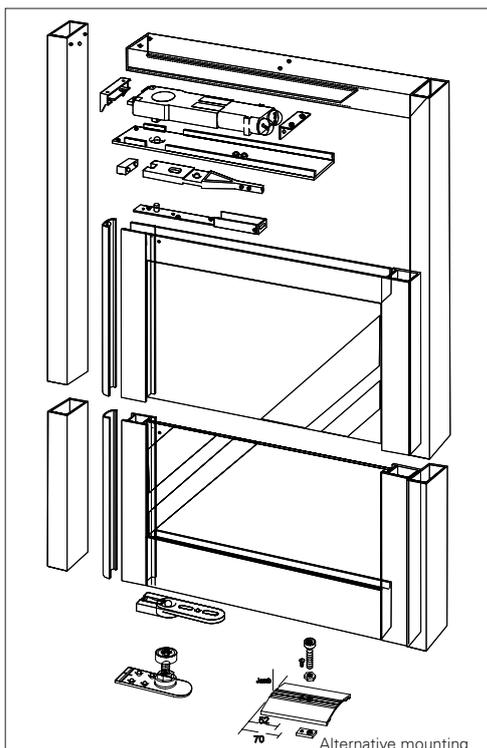
The transom closer RTS 42 is a double acting door closer which is installed invisibly inside the frame. The small size ensures an easy start up as well as more mounting possibilities inside the frame. The different accessories make two different types of installation possible. The transom closer is available in size 4. It is tested acc. to **EN 1154** and therefore meets all necessary requirements for various customer groups.



ECO RTS 42 ▪ Side Load Arm Installation (SLA)



ECO RTS 42 ▪ End Load Arm Installation (ELA)



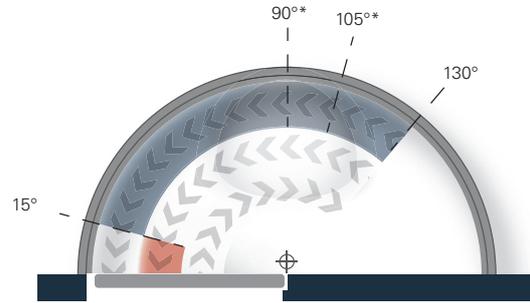
ECO RTS 42 ▪ Closing force diagram

Latching speed
Increases the closing speed and thus the safe closing of the door, for example to overcome door seals, door locks and high air pressure. Continuously adjustable, works between 15 to 0°

Closing speed
Continuously adjustable closing speed from approx. 130° to 15°

* **Mechanical hold open (optional)**
Depending on the version, the RTS 42 can be ordered without, with 90° or with 105° hold open angle. The door can be snapped in the mechanical hold open when opened and simply overpressed.

Closing force diagram RTS 42



!
Mechanical hold open not allowed with fire- and smoke control doors!

Article numbers



Transom closer RTS	Hold open	Article number
RTS 42-0 SLA	without	306048000O40210
RTS 42-90 SLA	90°	306048000O40211
RTS 42-105 SLA	105°	306048000O40212
RTS 42-0 ELA	without	306048000O40310
RTS 42-90 ELA	90°	306048000O40311
RTS 42-105 ELA	105°	306048000O40312

Flughafen München,
Deutschland

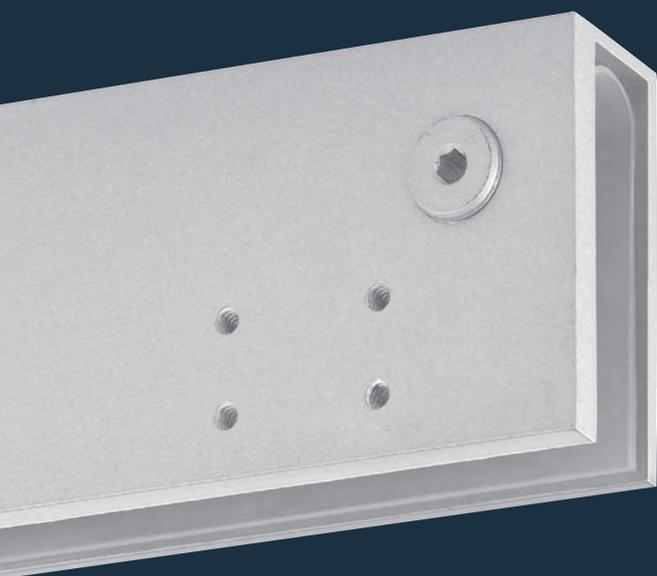


ECO Schulte Worldwide trust.

For years, ECO products have been used everywhere in the world where quality, reliability and safety are important. ECO systems obtained acceptance by the connection of functionality and design.

We would like to take this opportunity to say how much we appreciate the trust ECO products enjoy throughout the world. We regard this as a challenge to meet the future requirements of our customers and of the market through continuous further development and demand-oriented production.

ECO Accessories



ECO MOUNT

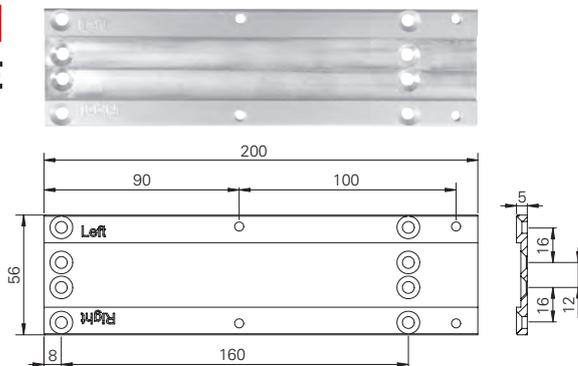
The special feature of the ECO **Newton** assembly system is that the mounting plate is completely concealed by the aluminium body of the closer, thus making it invisible. The mounting plate has standardized drill holes which guarantee time-saving, secure and simple attachment. Same version DIN left / right!



EN 1154

F

CE



for ECO Newton TS-62

with DIN holes

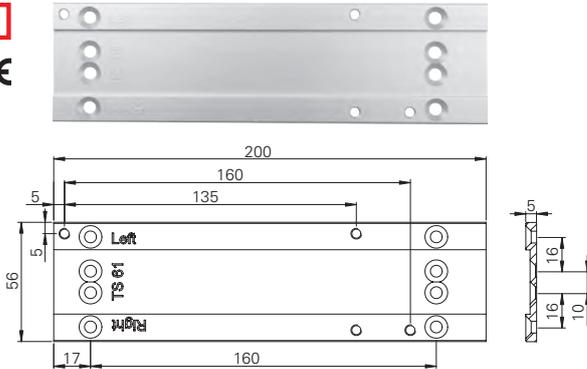
Acc, to **EN 1154**, supplementary sheet 1.

Mounting plate	Colour / Material	Article number
TS-62	Aluminium F1, anodized	339600017

EN 1154

F

CE



for ECO Newton TS-61

with DIN holes

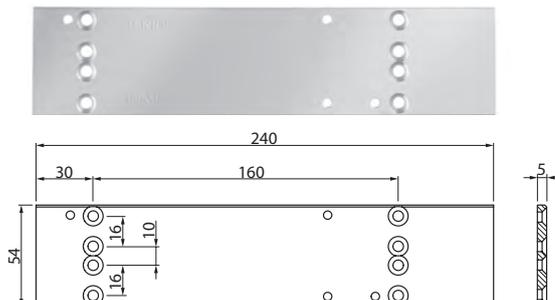
Acc, to **EN 1154**, supplementary sheet 1.

Mounting plate	Colour / Material	Article number
TS-61	Aluminium F1, anodized	300300310000000

EN 1154

F

CE



for ECO Newton TS-51

with DIN holes

Acc, to **EN 1154**, supplementary sheet 1.

Mounting plate	Colour / Material	Article number
TS-51	Aluminium F1, anodized	30960010

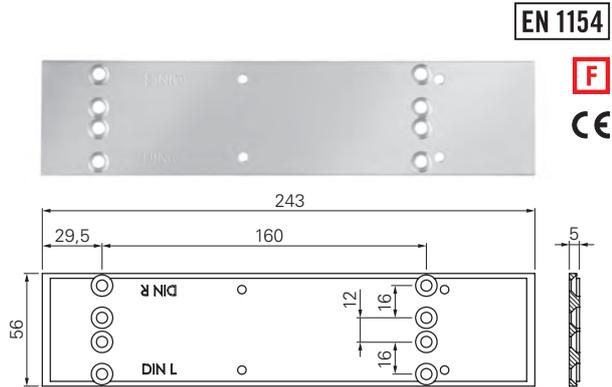
for ECO Newton TS-41, TS-31, TS-50

with DIN holes

After mounting the sides of the mounting plate is still visible.

Acc. to **EN 1154**, supplementary sheet 1, only with slide rail B and TS-50.

Mounting plate	Colour / Material	Article number
TS-41, TS-31, TS-50	Aluminium F1, anodized	30960011
TS-41, TS-31, TS-50	White RAL 9016	30960011E
TS-41, TS-31, TS-50	Brown RAL 8014	30960011D
TS-41, TS-31, TS-50	Black RAL 9005	30960011G



EN 1154



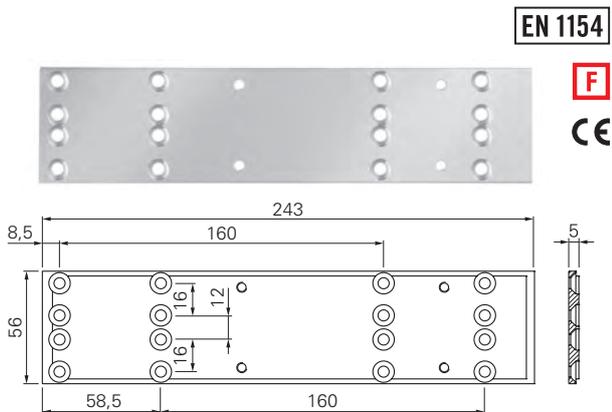
for ECO Newton TS-20

with DIN holes

Acc. to **EN 1154**, supplementary sheet 1.

Mounting plate	Colour / Material	Article number
TS-20	Aluminium F1, anodized	30960012

for ECO Newton TS-14/15 on request.



EN 1154



ECO COVER²

The full cover is an optional stainless steel covering for the ECO Newton door closers and related slide rails. The overall appearance is perfected by a lever arm with a stainless steel look. A cover on the closer body is available for standard arm closers.

ECOcover² can be ordered as set on request.



for the door closer body for ECO Newton TS-62, TS-61, TS-51, TS-41, TS-31, TS-50, TS-20

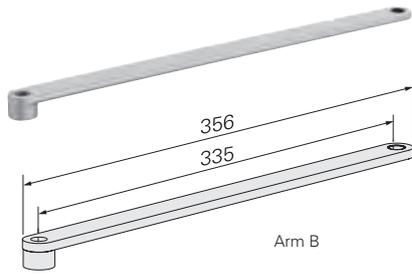
Surface: Stainless steel satin

Fullcover for ECO Newton	Material	Article number	Fullcover for ECO Newton	Material	Article number
TS-62/61/51	Stainless steel satin	350400052Q00001	TS 41/31/50/20	Stainless steel satin	350400054Q00001

for the slide rail

Surface: Stainless steel satin or polished

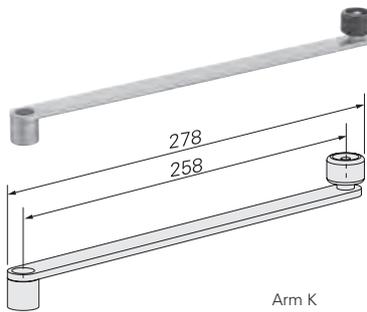
Fullcover for	Material	Article number
Slide rail B	Stainless steel satin	350400050Q00001



Arm B

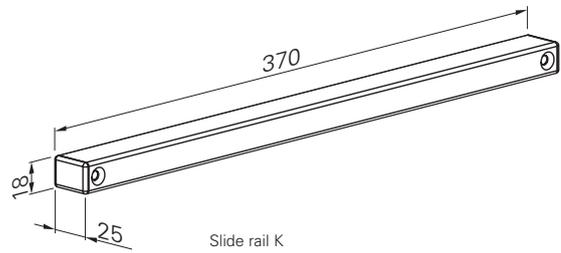
Arm B for ECO Newton	Colour / Material	Article number	Arm B for ECO Newton	Colour / Material	Article number
TS-62	Silver RAL 9006	33S6200013	TS-61/51	Silver RAL 9006	30S6100013
TS-62	White RAL 9016	33S6200008	TS-61/51	White RAL 9016	30S6100008
TS-62	Brown RAL 8014	33S6200004	TS-61/51	Brown RAL 8014	30S6100004
TS-62	Black RAL 9005	33S6200002	TS-61/51	Black RAL 9005	30S6100002
TS-62	Stainless steel optics	33S6200046	TS-61/51	Stainless steel optics	30S6100046

Arm B for ECO Newton	Colour / Material	Article number
TS-41/31	Silver RAL 9006	30S1100013
TS-41/31	White RAL 9016	30S1100008
TS-41/31	Brown RAL 8014	30S1100004
TS-41/31	Black RAL 9005	30S1100002
TS-41/31	Stainless steel optics	30S1100000Q1



Arm K

Arm K for ECO Newton	Colour	Article number
TS-41/31	Silver RAL 9006	on request
TS-41/31	White RAL 9016	on request
TS-41/31	Brown RAL 8014	on request
TS-41/31	Black RAL 9005	on request



Slide rail K

Slide rail K for ECO Newton	Colour	Article number
GS K Si	Silver RAL 9006	350150000A00000
GS K W	White RAL 9016	350150000E00000
GS K Br	Brown RAL 8014	350150000D00000
GS K S	Black RAL 9005	350150000G00000

Arm ITS

Arm ITS	DIN	Article number	Arm ITS	DIN	Article number
ITS 420 (8-12)	DIN left	33S42A0843L	ITS MG (8-12)	DIN left / right	3396502443
ITS 420 (8-12)	DIN right	33S42A0843R	ITS MG (12-16)	DIN left / right	3396502643
ITS 420 (12-16)	DIN left	33S42A1243L			
ITS 420 (12-16)	DIN right	33S42A1243R			

Accessories – Standard arm, Hold-open arm



Standard arm

Standard arm

Steel zinc-plated

Standard arm	Colour	Article number	Standard arm	Colour	Article number
ECO Newton TS-20/50	Silver RAL 9006	350100000A70004	ECO Newton TS-14/15	Silver RAL 9006	350100000A700002
ECO Newton TS-20/50	White RAL 9016	350100000E70004	ECO Newton TS-14/15	White RAL 9016	350100000E700002
ECO Newton TS-20/50	Brown RAL 8014	350100000D70004	ECO Newton TS-14/15	Brown RAL 8014	350100000D700002
ECO Newton TS-20/50	Black RAL 9005	350100000G70004	ECO Newton TS-14/15	Black RAL 9005	350100000G700002



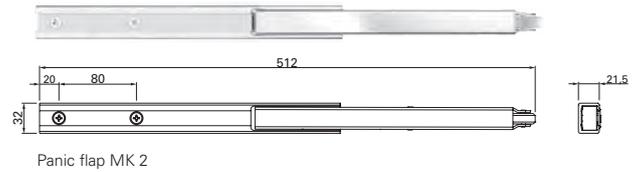
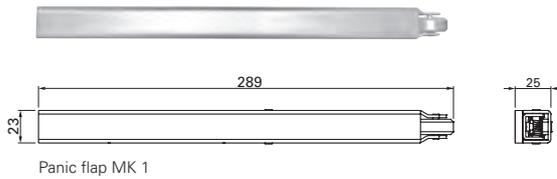
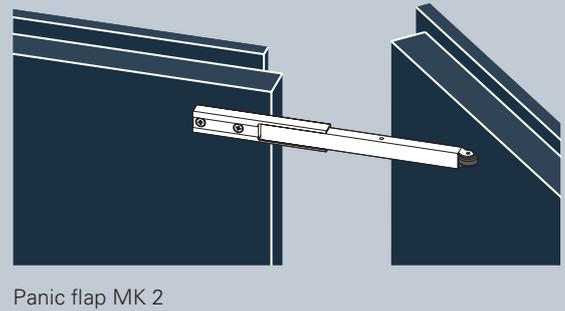
Hold-open arm

Hold-open arm

The hold-open offers an additional hold-open function to fix the door. Steel zinc-plated. Hold-open angle 70°- 130°. Hold-open force adjustable.

Not allowed for the use on fire-protection doors

Hold-open arm	Colour	Article number	Hold-open arm	Colour	Article number
ECO Newton TS-20/50	Silver RAL 9006	350100000A77000	ECO Newton TS-14/15	Silver RAL 9006	350100000A77000
ECO Newton TS-20/50	White RAL 9016	350100000E77000	ECO Newton TS-14/15	White RAL 9016	350100000E77000
ECO Newton TS-20/50	Brown RAL 8014	350100000D77000	ECO Newton TS-14/15	Brown RAL 8014	350100000D77000
ECO Newton TS-20/50	Black RAL 9005	350100000G77000	ECO Newton TS-14/15	Black RAL 9005	350100000G77000



Panic flap MK

The closing sequence ensures that the active and passive leaf are closing in the correct order, e.g. the passive leaf first, active leaf last. The function of the closing sequence is only given if the active leaf is opened up to a certain angle. If the passive leaf is opened first (full panic version), the panic flap ensures

that also the active leaf opens to such extend that the closing sequence can control the active leaf. Material: steel with nylon roll, zinc-plated (silver colour) Tested by the material testing office (MPA-NRW).

Panic flap	Colour / Material	Article number	Panic flap	Colour / Material	Article number
MK 1	Steel zinc-plated	306107024300080	MK 2 (for SR-Hinge-opposite side)	Steel zinc-plated	306107331300225



EN 1158

SR Basis 2

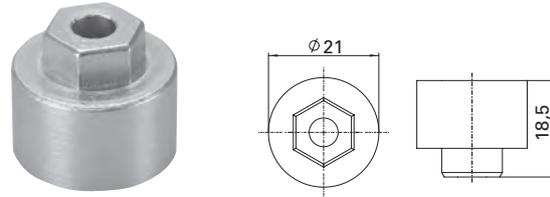
- **Leaf weight:** max. 200 kg per leaf
- **Leaf width:** up to 1.600 mm per leaf
- **Space required above the door:** min. 30 mm
- **Scope of delivery:** incl. 2 support brackets
- **Attention!**
Only in combination with door closers (hydraulically damped closing)!
- **Closing sequence control:**
The closing sequence ensures that the active and passive leaf are closing in the correct order, e.g. the passive leaf first, active leaf last. Tested acc. to **EN 1158**.

Closing sequence control	Colour / Material	Article number
SR Basis 2	Steel zinc-plated	336107000000080

Adaptor for arm 13 mm
ECO Newton TS-61/51

In order to extend the distance between door closer and slide rail by 13 mm

- Use in combination with ECO adaptor profile
- Delivery contains extended screw
- (for short passive leaves)



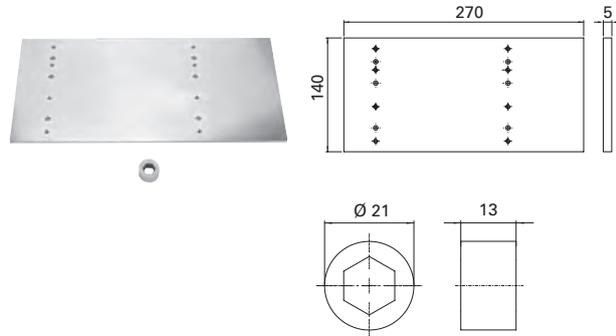
Adaptor for arm 13 mm	Colour / Material	Article number
Adaptor	Steel zinc-plated	35900007
Adaptor	Silver RAL 9006	35900007A
Adaptor	White RAL 9016	35900007E
Adaptor	Brown RAL 8014	35900007D
Adaptor	Black RAL 9005	35900007G

Accessorie set tandem

ECO Newton TS-61 (EN 5 – 6)

Consisting of special mounting plate and adaptor for 2 x ECO Newton TS-61 (5 – 6).

Accessorie set tandem	Material	Article number
Accessories set tandem	Steel zinc-plated	350100000051000

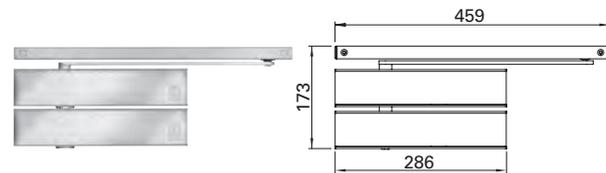


Complete set tandem door closer (EN 7 – 8)

Consisting of 2 x ECO Newton TS-61 (5 – 6)

- incl. mounting plate,
- 1 x Arm,
- 1 x Slide rail B,
- 1 x Accessorie set tandem

Complete set	Colour / Material	Article number
Tandem door closer (EN 7-8)	Steel zinc-plated	306158HB1O01000
Tandem door closer (EN 7-8)	Silver RAL 9006	356158HB1A00500
Tandem door closer (EN 7-8)	White RAL 9016	356158HB1E00500
Tandem door closer (EN 7-8)	Brown RAL 8014	356158HB1D00500
Tandem door closer (EN 7-8)	Black RAL 9005	356158HB1G00500



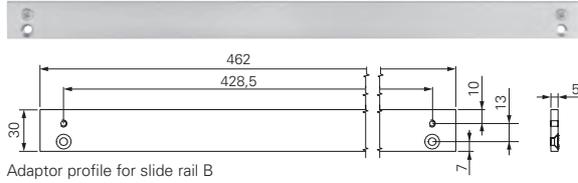
Glass clamping device for
ECO Newton TS-51, TS-20, TS-31, TS-41
and TS-50

Clamping device made of aluminium for fixing an ECO door closer onto a glass door

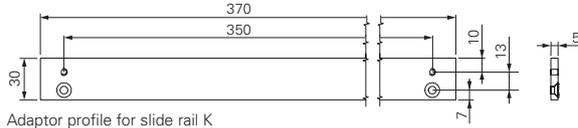
- Suitable for 8-10 mm glass (ESG)
- Same execution DIN left and DIN right
- Including threaded holes for the door closer



Glass clamping device	Colour / Material	Article number	Glass clamping device	Colour / Material	Article number
for TS-51	Silver RAL 9006	350310600A00000	for TS-20, TS-31, TS-41, TS-50	Silver RAL 9006	350340600A00000
for TS-51	White RAL 9016	350310600E00000	for TS-20, TS-31, TS-41, TS-50	White RAL 9016	350340600E00000
for TS-51	Brown RAL 8014	350310600D00000	for TS-20, TS-31, TS-41, TS-50	Brown RAL 8014	350340600D00000
for TS-51	Stainless steel optics	350310600Q00000	for TS-20, TS-31, TS-41, TS-50	Stainless steel optics	350340600Q00000



Adaptor profile for slide rail B



Adaptor profile for slide rail K



Adaptor profile for standard mounting door closer with slide rail

Adaptor profile 30 hinge side for slide rails B, K, EFR, SR (SR-EF) and SR EFR

For installation of the slide rail on the hinge side on profile frame door constructions as well as over-rebated wooden doors with slim steel frames.

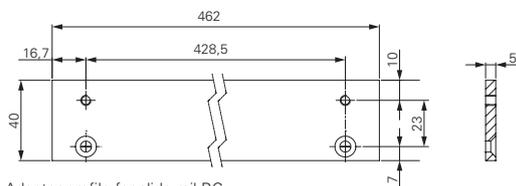
Adaptor profile hinge side	Dimensions	Colour / Material	Article number	Adaptor profile hinge side	Dimensions	Colour / Material	Article number
ADP 30 GS B	428,5 mm	Steel zinc-plated	350300R00A00000	ADP 30 GS K	350 mm	Steel zinc-plated	350300S00A00000
ADP 30 GS B	428,5 mm	Silver RAL 9006	on request	ADP 30 GS K	350 mm	Silver RAL 9006	on request
ADP 30 GS B	428,5 mm	White RAL 9016	350300R00E00000	ADP 30 GS K	350 mm	White RAL 9016	on request

Adaptor profile hinge side	Colour / Material	Article number	Adaptor profile hinge side	Colour / Material	Article number
ADP 30 EFR	Steel zinc-plated	350300T60O00000	ADP 30 SR (SR-EF)	Steel zinc-plated	350300T10O00000
ADP 30 EFR	Silver RAL 9006	350300T60A00000	ADP 30 SR (SR-EF)	Silver RAL 9006	350300T10A00000
ADP 30 EFR	White RAL 9016	350300T60E00000	ADP 30 SR (SR-EF)	White RAL 9016	350300T10E00000

Adaptor profile hinge side	Colour / Material	Article number	Adaptor profile hinge side	Colour / Material	Article number
ADP 30 SR-EFR	Steel zinc-plated	350300T70O00000	ADP 30 ECO SR III	Steel zinc-plated	on request
ADP 30 SR-EFR	Silver RAL 9006	350300T70A00000	ADP 30 ECO SR III	White RAL 9016	on request
ADP 30 SR-EFR	White RAL 9016	350300T70E00000			



Adaptor profile for slide rail BG



Adaptor profile for slide rail BG



Adaptor profile for slide rail SR BG active leaf



Adaptor profile for slide rail SR BG passive leaf

Adaptor profile 40 hinge-opposite side for slide rail BG, EFR BG (short) and SR BG (SR BGX)

For installation of the slide rail on the hinge-opposite side on profile frame door constructions as well as over-rebated wooden doors with slim steel frames.

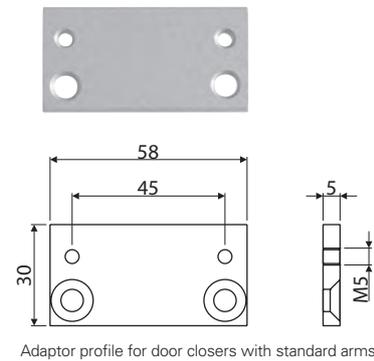
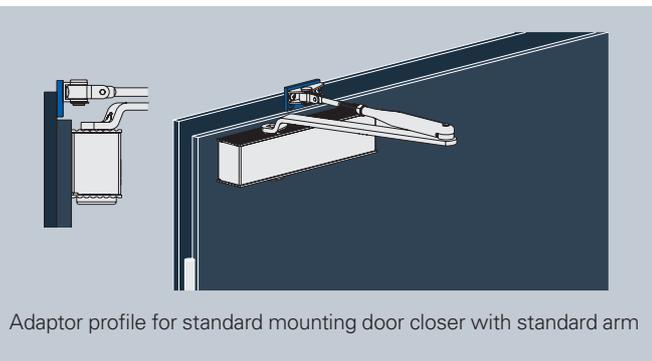
Adaptor profile hinge-opposite side	Colour / Material	Article number	Adaptor profile hinge-opposite side	Colour / Material	Article number
ADP 40 GS BG	Steel zinc-plated	350300A05O00000	ADP 40 EFR BG (short)	Steel zinc-plated	350300T91O00000
ADP 40 GS BG	Silver RAL 9006	350300A05A00000	ADP 40 EFR BG (short)	Silver RAL 9006	350300T91A00000
ADP 40 GS BG	White RAL 9016	350300A05E00000	ADP 40 EFR BG (short)	White RAL 9016	350300T91E00000

Adaptor profile hinge-opposite side	Colour / Material	Article number	Adaptor profile hinge-opposite side	Colour / Material	Article number
ADP 40 SR BG (SR BGX)	Steel zinc-plated	350300T50O00000	ADP 40 SR-EFR BG	Steel zinc-plated	on request
ADP 40 SR BG (SR BGX)	Silver RAL 9006	350300T50A00000	ADP 40 SR-EFR BG	Silver RAL 9006	on request
ADP 40 SR BG (SR BGX)	White RAL 9016	350300T50E00000	ADP 40 SR-EFR BG	White RAL 9016	on request

Mounting profiles for special mountings

Mounting base plate for adaption on on-site available drill dimensions.

Mounting profile für special mounting Geze	Material	Article number
SP-EF (G)	Steel zinc-plated	5030013393
SP-SR-III (G)	Aluminium anodized	on request
SP-SR-II (G)	Steel zinc-plated	350300U20O00000
SP-SR-EF (G)	Steel zinc-plated	5030013401
SP-SR-EFR (G)	Steel zinc-plated	350300U50O00000



Adaptor profile for door closer with standard arm
ECO **Newton TS-50/20/15/14**

For installation of the standard arm and the hold open arm on the hinge side on profile frame door constructions as well as over-rebated wooden doors with slim steel frames.

Adaptor profile TS-50/20/15/14	Dimensions	Colour / Material	Article number
ADP door closer with standard arm	58 mm	Silver RAL 9006	350300A00A000000
ADP door closer with standard arm	58 mm	White RAL 9016	350300A00E000000
ADP door closer with standard arm	58 mm	Brown RAL 8014	350300A00D000000
ADP door closer with standard arm	58 mm	Black RAL 9005	350300A00G000000
ADP door closer with standard arm	58 mm	Steel zinc-plated	350300A00O000000

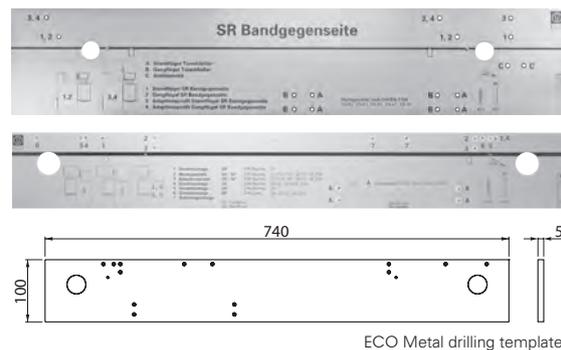
ADP = Adaptor profile

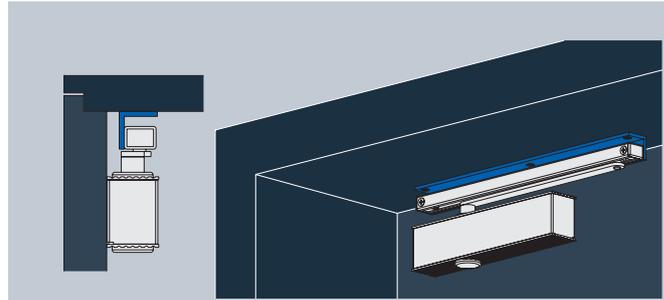
ECO Metal drilling template

for direct drilling of the fixing holes to the door

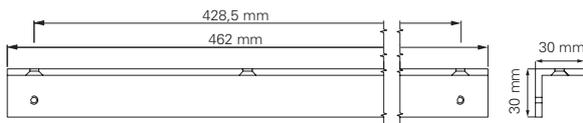
- **Material:** Aluminium with drilling bushings
- Drill holes for ECO door closers, slide rails and standard arms
- **DIN left** and **DIN right**, including inscription of the drill holes

ECO Metal drilling template	Material	Article number
MBS-BS	Aluminium	3BGS20000000000
MBS-BG	Aluminium	3BGS40000000000
MBS-BS III	Aluminium	on request
MBS-BS III	Aluminium	on request





Under-lintel angle for standard mounting door closer with slide rail

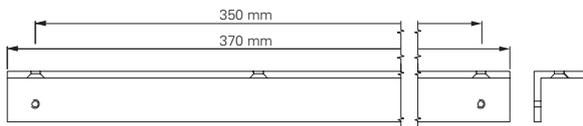


Under-lintel angle for slide rail BG

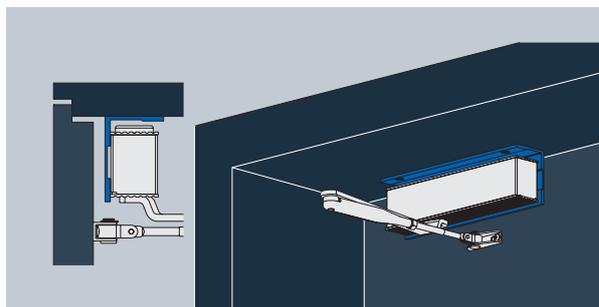
Under-lintel angle for slide rail BG, K, EF BG, EFR BG, SR BG (SR BGX), SR-EFR BG

For standard mounting installation of the slide rail on hinge-opposite side for doors with deep four lintels. Under-lintel angle made of aluminium.

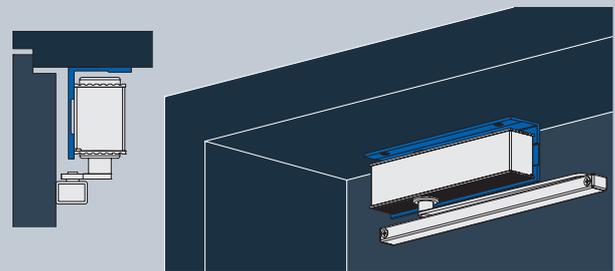
Under-lintel angle	Material	Article number
SFW GS BG	Aluminium	350300J00A00000
SFW GS K	Aluminium	300340E00A00000
SFW GS EF BG	Aluminium	350300R00O00000
SFW GS EFR BG	Aluminium	350300R80O00000
SFW GS SR BG (SR BGX)	Aluminium	350300K50O00001
SFW GS SR-EFR BG	Aluminium	350300K55O00001



Under-lintel angle for slide rail K



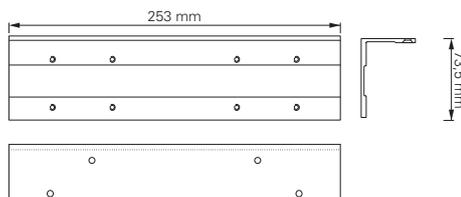
Under-lintel angle for head mounting door closer with standard arm (l.) or door closer with slide rail (r.)



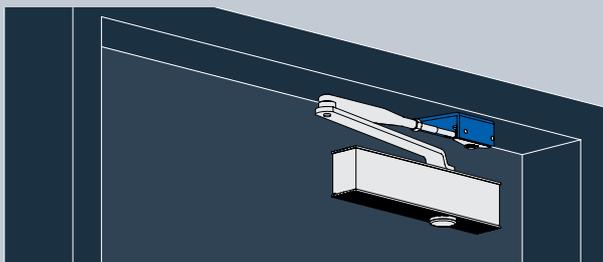
Under-lintel angle

for door closers with slide rails / standard arms

For head mounting of the door closer on hinge-opposite side for doors with deep door lintels. Under-lintel angle made of aluminium



Under-lintel angle	Article number
ECO Newton TS-61	350310E00A00000
ECO Newton TS-51	350320E00A00000
ECO Newton TS-41/31/50/20	300330E00A00000



Angle bracket parallel arm mounting door closer with standard arm

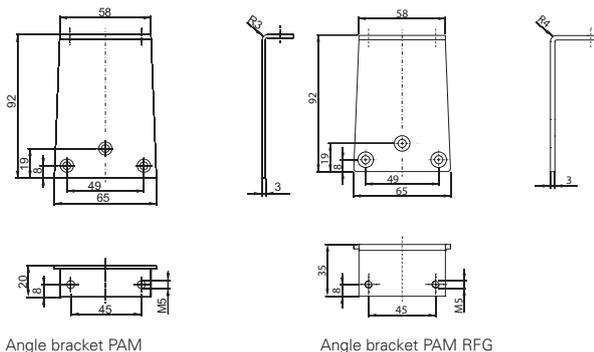


Angle bracket parallel arm mounting for ECO Newton TS-50/20/15/14

For mounting the standard arm on the hinge-opposite side on profile frame constructions as well as over-rabated wooden doors with slim steel frames.

- Not permitted to use on fire-and smoke control doors.

Angle bracket PAM	Colour	Article number
Angle bracket	Silver RAL 9006	350300B00A00000
Angle bracket RFG	Silver RAL 9006	350300B00A00000

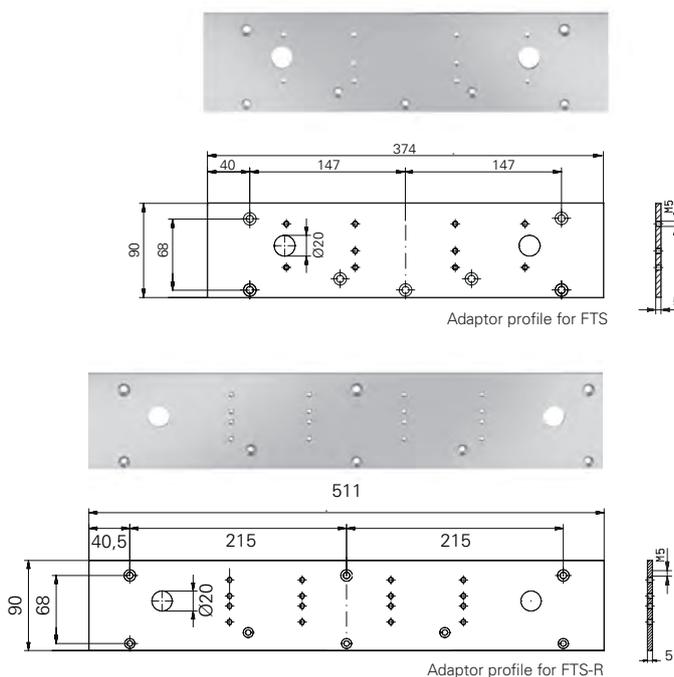


Adaptor profile

for **steel frame installation of FTS 63 and FTS 63 R**

For installation of the FTS on small steel frame door constructions.

Adaptor profile	Material	Article number
FTS-63	Aluminium	350300M00A00001
FTS-63 R	Aluminium	350300M00A00000

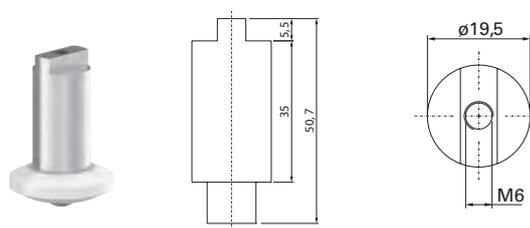


Axis bolt extension FTS (ADV)

Accessorie set ADV for lengthening of the distance from the lever to the guide roller (eg, for mounting FTS on the steel frame)

Extension 20 mm

Axis bolt extension	Article number
ADV-FTS	35911914





Accessories set FKL-E

Adjustable hold open for slide rail B with integrated buffer.

Not permitted for the use in fire protection!

Hold open for doors with slide rail closers **EN 2 – EN 5**, hold open continuously adjustable

Hold open angle adjustable between 70° – 130°. The adjusting limits the max. opening angle

- Suitable for slide rail B

Mechanical hold open FKL-E	Article number
FKL-E	5030019724



Accessories set SR-FKL

Mechanical hold open for belated assembly in slide rail SR.

Not permitted for the use in fire protection!

30 x 21 mm. Hold open angle adjustable from 80° - 110°. For exterior doors under wind load and heavy doors, the holding force decreases accordingly

- Suitable for slide rail SR
- For light doors up to **EN 3**

SR-FKL	DIN direction	Leaf	Article number
FKL-SR-BS-DL-GF	DIN left	GF	5030053810
FKL-SR-BS-DL-SF	DIN left	SF	5030013416
FKL-SR-BS-DR-GF	DIN right	GF	5030053809
FKL-SR-BS-DR-SF	DIN right	SF	5030013415



Accessories set SR-FKL-BG (BGX)

Mechanical hold open for belated assembly in slide rail SR BGX.

Not permitted for the use in fire protection!

30 x 21 mm. Hold open angle of max. 110° adjustable. For exterior doors under wind load and heavy doors, the holding force decreases accordingly

- Suitable for slide rail SR BGX
- For light doors up to **EN 3**

SR-FKL-BG (BGX)	DIN direction*	Leaf	Article number
FKL-SR-BG-DL-GF	DIN left	GF	5030016905
FKL-SR-BG-DL-SF	DIN left	SF	5030013414
FKL-SR-BG-DR-GF	DIN right	GF	5030016907
FKL-SR-BG-DR-SF	DIN right	SF	5030013413

*The specification of the DIN direction of the SR BG always refers to the DIN direction of the door in question. A doors DIN direction is always specified from the hinge side. If the door is DIN left, so is it the SR-BG-DIN left, resp. the FKL-SR-BG-DL.

Accessories – Mechanical hold open

Accessories set MÖB I GS Basis*

Mechanically adjustable opening limit for the slide rail B (Basis) The opening angle can be locked by moving the MÖB in the slide rail. 30 x 20 mm.



Mechanically adjustable opening limit	Article number
ÖB-GS-B	350100000054000

ECO pivot hinge 31

Pivot hinge with stainless steel cover ECO **Newton** TS-31 (body empty, without spring and oil), mounting plate, arm for slide rail B with four edges



Mechanically adjustable opening limit	Article number
Pivot hinge 31	353111000A00000

ECO pivot hinge MÖB 31 with door stopper function*

Free-running pivot hinge with adjustable opening limit. Opening angle can be adjusted between 80- 130° by moving the MOL in the slide rail. The door shock is absorbed by the rubber part and thus takes over the door stopper function if no floor stopper can be installed.

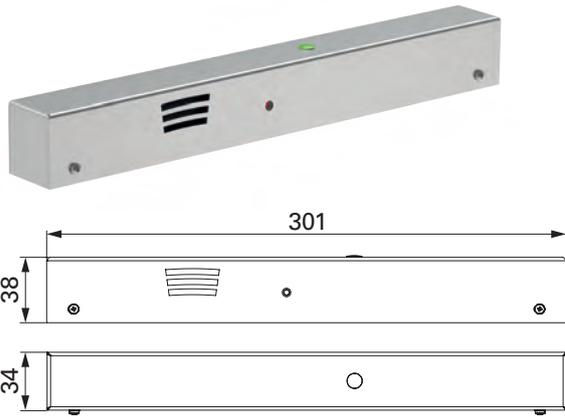
Consisting of:

- Pivot hinge with stainless steel cover ECO **Newton** TS-31 (body empty, without spring and oil)
- Mounting plate
- Slide rail B with mechanically adjustable opening limiter (MÖB)
- Arm for slide rail B with four edges



Mechanically adjustable opening limit	Article number
Pivot hinge MÖB 31 with mechanically adjustable opening limit	303111000A01010

 *To be used on light interior doors only. Normal use of door is recommended. Incorrect use or heavy doors increases the load on the hinges! Standard mounting pull side or push side (using an under-lintel angle). Installation according to DIN holes acc. to EN.

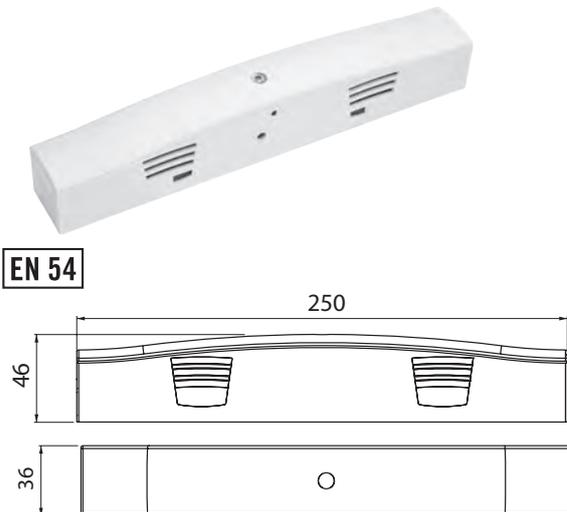


ECO RSZ III

External smoke inducing system for use with ECO hold open devices **EF, EF-BG, SR-EF, SR-EF-BG, ITS-EF** und **ITS-SR-EF** and Electromagnetic door retainer **THM** (see page 196). Consisting of smoke detector, power supply unit, interrupt button and continuous cover

- **Input voltage:** 230 V AC, 21 VA
- **Output voltage:** 24 V DC
- **Output rated current:** 460 mA

Smoke inducing system	Colour / Material	Article number
ECO RSZ III	Silver RAL 9006	5030051344
ECO RSZ III	White RAL 9016	5030052058
ECO RSZ III	Stainless steel	5030051343

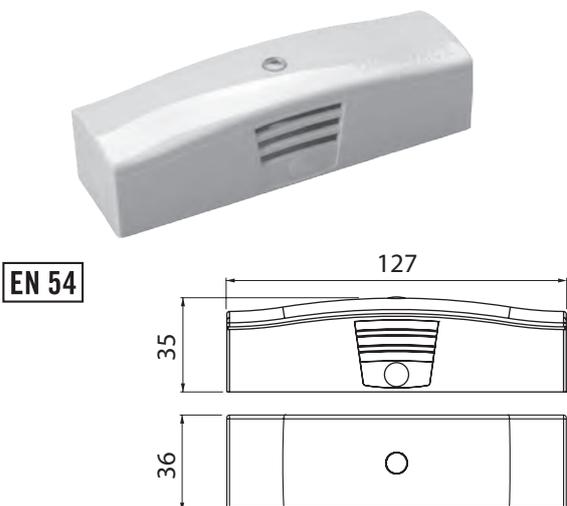


RSZ kompakt

Smoke inducing system consisting of smoke detector, power supply unit and integrated inspection button.

- For connection to customer's locking devices acc. to Hekatron approval
- **Input voltage:** 24 V DC
- **Output rated current:** 460 mA

Smoke inducing system	Colour	Article number
RSZ kompakt si	Silver RAL 9006	5030052354
RSZ kompakt ws	White RAL 9016	5030052353



FSZ kompakt

Hold open device control unit.

- Adjustable alarm storage and line monitoring
- **All-in-one:** Power supply, triggering device and alarm storage in one device
- Downward compatible to predecessor products and line networks
- Output for hold-open devices and additional floating alarm output
- Operating and status display visible from the outside
- Design-oriented installation, e.g. below ceilings or in niches
- Tested according to the latest DIBt test specifications and **DIN EN 14637**
- **Input voltage:** 230 V AC
- **Output voltage:** 24 V DC
- **Output rated current:** 460 mA

Hold open device control unit	Colour	Article number
FSZ kompakt ws	White RAL 9016	5030052416

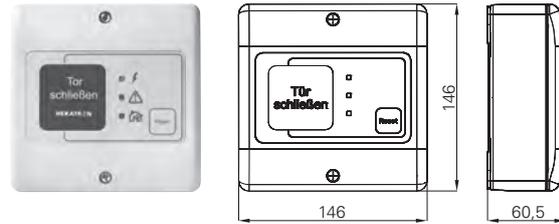
Accessories for hold open devices

FSZ Basis

Hold open device control unit incl. integrated interrupt button, alarm memory and reset button. Suitable for connection of external hold open devices, smoke detectors and alarm transmitters.

- **Acc. to DIN EN 14637**
- **Input voltage:** 230 V AC, 13,8 VA
- **Output voltage :** 24 V DC, max. 400 mA

Hold open device control unit	Colour	Article number
FSZ Basis	White RAL 9016	33FSZ5400020101

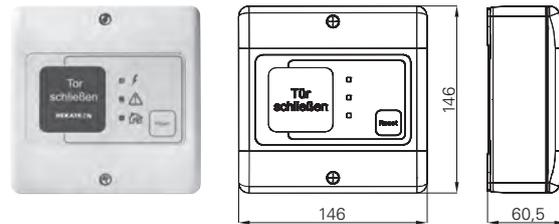


FSZ Pro

Hold open device control unit incl. integrated interrupt button, alarm memory and reset button. Suitable for connection of external hold open devices, smoke detectors and alarm transmitters.

- **Acc. to DIN EN 14637**
- **Input voltage:** 230 V AC, 13,8 VA
- **Output voltage :** 24 V DC, max. 900 mA

Hold open device control unit	Colour	Article number
FSZ Pro ws	White RAL 9016	503005215

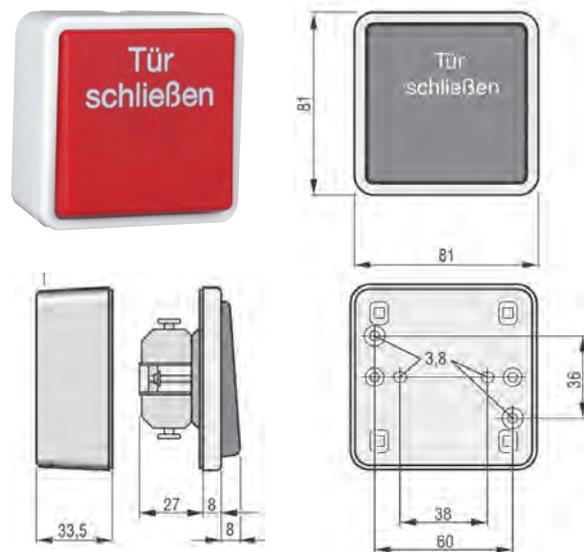


HAT 02

Interrupt button for mounting in dry rooms. Used to manually release the hold open device acc. to DIBt directives

- **Mounting:** Top-mountend / concealed
- **Contact:** Opener
- **Switch voltage:** Max. 30 V DC
- **Switch flow:** Max. 1 A
- **Degree of protection:** IP 20

Interrupt button	Article number
HAT 02	5030000748

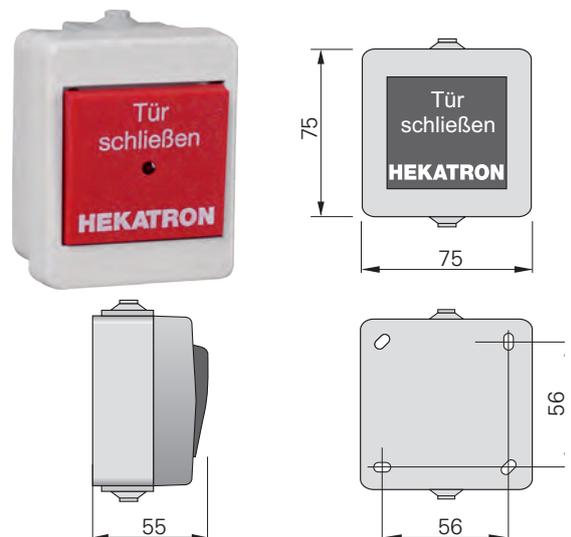


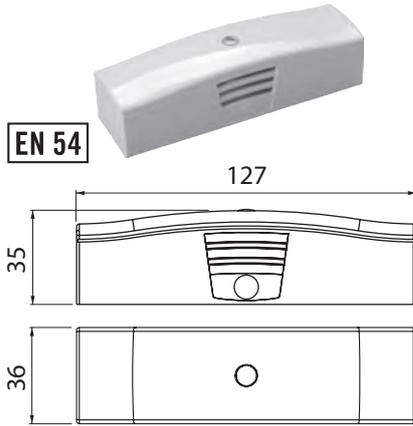
HAT 03

Interrupt button for mounting in dry rooms. Used to manually release the hold open device acc. to DIBt directives

- **Mounting:** Top-mountend
- **Contact:** Opener
- **Switch voltage:** Max. 30 V DC
- **Switch flow:** Max. 1 A
- **Degree of protection:** IP 44

Interrupt button	Article number
HAT 03	50300615359



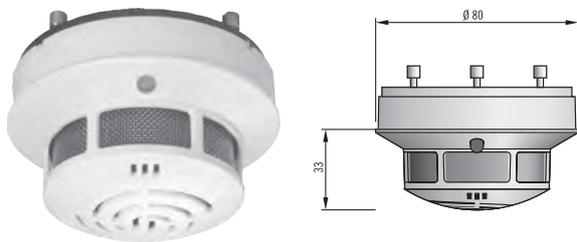


EN 54

Smoke switch ORS 142 ECO (lintel detector)

- for use as a separate fall detector or as a spare part (circuit board) for the ECO FSA
- **Function:** Scattered light
- **Alarm threshold tracking:** acc. to EN 54 part 7
- **Release temperature:** 70°C ± 5° C
- **Operating voltage:** 18 to 24 V DC
- **Power consumption:** at 28 V DC max. 22 mA
- **Degree of protection:** IP 42
- **Ambient temperature:** -20°C to +75° C
- incl. cover RZO

ORS 142 ECO (lintel detector)	Colour	Article number
Smoke switch ORS 142 ECO	Silver RAL 9006	5030022730
Smoke switch ORS 142 ECO	White RAL 9016	3550005722



EN 54

ORS 142 Ceiling smoke switch

- with optional line monitoring according to DIN EN 14637
- **Alarm threshold tracking:** acc. to EN 54, part 7
- **Release temperature:** 70° C
- **Operating voltage:** 18 – 28 V DC
- **Power consumption:** at 28 V DC, at rest 22 mA, at an alarm 11 mA, at a disruption 16 mA,
- **Relay contact:** Opener
- **Degree of protection:** IP 42
- **Ambient temperature:** -20° C to +60° C

Ceiling smoke switch	Colour	Article number
ORS 142	White RAL 9010	5030042528



EN 54

ORS 142 Set

For optional line monitoring according to DIN EN 14637

Set consists of:

- 2 x ORS 142
- 2 x Mounting plate 143 A
- 1 x Terminating resistor AM 142

Ceiling smoke switch	Colour	Article number
ORS 142 Set	White RAL 9010	5030042530



EN 54

TDS 247 Thermo switch

- **Fire detection:** acc. to EN 54, part 5
- **Release temperature:** 54° C - 65° C
- **Operating voltage:** 18 – 28 V D
- **Power consumption :** at 28 V DC; at rest 22 mA, at an alarm 11 mA, at a disruption 16 mA
- **Relay contact:** Opener
- **Switch voltage:** 30 V DC
- **Switch flow:** 1 A
- **Breaking capacity:** 30 W
- **Degree of protection:** IP 42
- **Ambient temperature:** -20° C to +80° C

Thermo switch	Colour	Article number
TDS 247	White RAL 9010	5030000759

Accessories for hold open devices

ORS 143 A mounting plate for ORS 142

For top-mounting of smoke switch ORS 142.

- with magnet for optional activation of line monitoring

Mounting plate for ORS 142	Colour	Article number
ORS 143 A	White RAL 9010	5030000752



ORS 143 AF mounting plate for ORS 142

Top-mounting of smoke switch ORS 142 in moist rooms.

- with magnet for optional activation of line monitoring

Mounting plate for ORS 142	Colour	Article number
ORS 143 AF	White RAL 9010	5030015344



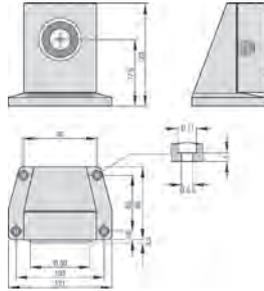
ORS 143 UH mounting plate for ORS 142

Installation of smoke switch ORS 142 in hollow ceilings.

- with magnet for optional activation of line monitoring

Mounting plate for ORS 142	Colour	Article number
ORS 143 UH	White RAL 9010	5030000753

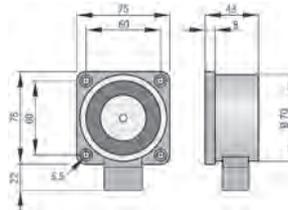




Electromagnetic door retainer THM 413

- **Operating voltage:** 24 V DC
- **Power input:** 63 mA
- **Power consumption:** 1,5 W
- **Holding force:** 490 N
- **Duty rating:** 100%
- **Degree of protection:** IP 40

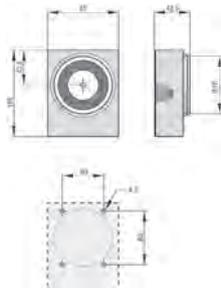
Electromagnetic door retainer	Holding force (Newton)	Article number
THM 413	490 N	356500002



Electromagnetic door retainer THM 425/THM 425-1

- **Operating voltage:** 24 V DC
- **Power input:** 63 mA
- **Power consumption:** 1,5 W
- **Duty rating:** 100%
- **Degree of protection:** IP 40

Electromagnetic door retainer	Holding force (Newton)	Article number
THM 425	686 N	356500016
THM 425-1	1372 N	356500020



Electromagnetic door retainer THM 433/THM 433-1

- **Operating voltage:** 24 V DC
- **Power input:** 63 mA
- **Power consumption:** 1,5 W
- **Duty rating:** 100%
- **Degree of protection:** IP 40

Electromagnetic door retainer	Holding force (Newton)	Article number
THM 433	490 N	356500096
THM 433-1	1372 N	356500097

Electromagnetic door retainer THM 439 with swivel head

- **Operating voltage:** 24 V DC
- **Power input:** 63 mA
- **Power consumption:** 1,5W
- **Duty rating:** 100%
- **Degree of protection:** IP 40



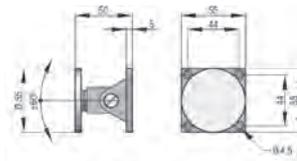
Electromagnetic door retainer	Holding force (Newton)	Article number
THM 439/185 (185 mm)	490 N	356500127
THM 439/335 (335 mm)	490 N	356500128
THM 439/485 (485 mm)	490 N	356500129

Electromagnetic door retainer THM 440

- **Operating voltage:** 24 V DC
- **Power input:** 63 mA
- **Power consumption:** 1,5W
- **Duty rating:** 100%
- **Degree of protection:** IP 40



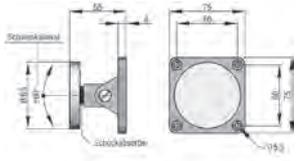
Electromagnetic door retainer	Holding force (Newton)	Article number
THM 440	490 N	356500109



Anchor plate AFS 55 – flexible anchor
Suitable for THM 413, 433, 439 and 440

- **Anchor plate:** Ø 55 mm x 5 mm
- **Angular freedom:** ± 60°

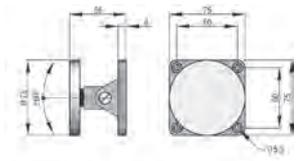
Anchor plate	Article number
AFS 55	356500102



Anchor plate AFS 65 – flexible anchor
Suitable for THM 425, 425-1, 433-1

- **Anchor plate:** Ø 65 mm x 5 mm
- **Angular freedom:** ± 60°

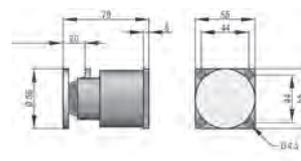
Anchor plate	Article number
AFS 65	356500178



Anchor plate AFS 75 – flexible anchor
Suitable for THM 425, 425-1 and 433-1

- **Anchor plate:** Ø 75 mm x 5 mm
- **Angular freedom:** ± 60°

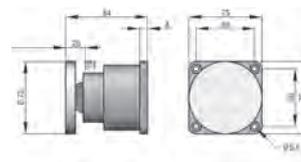
Anchor plate	Article number
AFS 75	356500103



Anchor plate ATS 55 – Telescopic anchor
Suitable for THM 413, 433, 439 and 440

- **Anchor plate:** Ø 55 mm x 5 mm
- **Swept volume:** 20 mm

Anchor plate	Article number
ATS 55	356500100



Anchor plate ATS 75 – Telescopic anchor
Suitable for THM 425, 425-1 and 433-1

- **Anchor plate:** Ø 75 mm x 5 mm
- **Swept volume:** 20 mm

Anchor plate	Article number
ATS 75	356500101

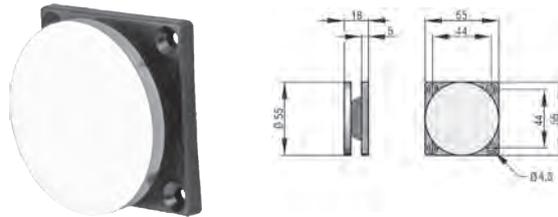
Accessories for hold open devices

Anchor plate ASS 55

Suitable for THM 413, 433, 439 and 440

- **Anchor plate:** Ø 55 mm x 5 mm
- **Rubber-based support:** 8 mm
- **Angular freedom:** 20°

Anchor plate	Article number
ASS 55	356500023

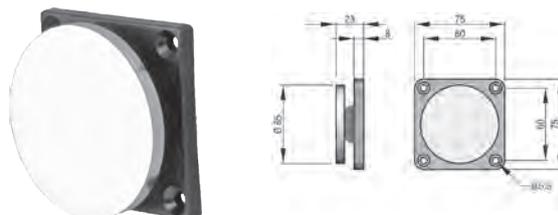


Anchor plate ASS 65

Suitable for THM 425

- **Anchor plate:** Ø 65 mm x 5 mm
- **Rubber-based support:** 8 mm
- **Angular freedom:** 20°

Anchor plate	Article number
ASS 65	356500024

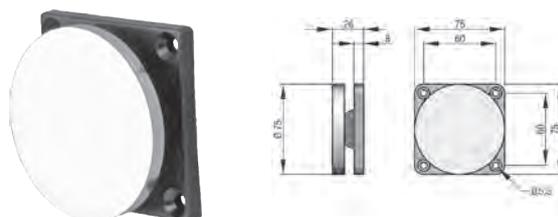


Anchor plate ASS 75

Suitable for THM 425-1

- **Anchor plate:** Ø 75 mm x 5 mm
- **Rubber-based support:** 8 mm
- **Angular freedom:** 20°

Anchor plate	Article number
ASS 75	356500025



ECO Test gas P-250

Test gas for operation test (simulating the smoke detection) of the smoke switches / smoke buttons. Free from halogenated carbon hydride (FCKW or other)

ECO Test gas P-250	Article number
Test gas P-250	356900250



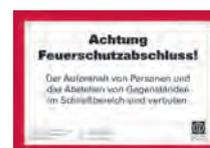
Approval set for ECO hold open devices

consisting of:

- Maintenance book
- Maintenance instructions
- Admission resp. ABG
- Admission sign
- Identification plates

(Maintenance book acc. to DIBt and **DIN 14677**)

Approval set for ECO hold open devices	Article number
Approval set II (ECO FSA Z-6.500-2290)	5030042852
Approval set III (ECO FTS 63-R)	5030017334
Approval set IV (FSA with RSZ Hekatron)	5030000749





Mounting plate for ETS (MPL)

Necessary for fire-rated doors as well as mounting on brickwork and small frames

Mounting plate	Article number
MPL ETS	358500450548358



Door stop for ETS (OA)

Will be mounted as additional mechanical door stop and can be used with standard or slide arms (not possible in combination with clamp piece short)

Door stop	Article number
OA ETS	358500450548106



Clamp piece (axis extension)

For use at special mountings

Clamp piece (axis extension)	Article number
KS short (-13 mm)	358500450548124
KS 20 (+20 mm)	358500450548125
KS 50 (+50 mm)	358500450548126



Middle cladding set

Consisting of mounting profile, stainless steel cladding and accessories. V-ETS set 1 length 1.200 mm for double leaf doors up to 2.600 mm. V-ETS-X will be shortened factory made on customer request (please specify hinge gap)

Cladding	Total length	Article number
V-ETS	1.200 mm	358500450548214
V-ETS-X	on customer request	on request



Integrated closing sequence control (SRI)

Kit for retrofitting a double leaf hold open device ETS 64-R with an integrated, mechanical closing sequence control. Approved by DiBt. Middle cladding set required

Integrated closing sequence control	Article number
SRI	338500450548154

Relay board (RSP)

Relay print (plug board) for retrofitting to the control board of ETS. 4 freely configurable relays for control of acoustic or optical signal generators or the signaling of the door status (e.g. open, close, locked, error)

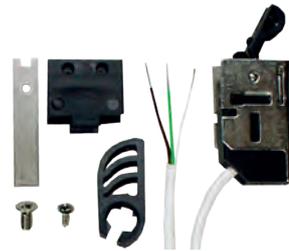
- Belated mounting possible



Relay board	Article number
RSP	5030014720

Dead bolt switch contact (RSK)

Dead bolt switch contact for installation in the closing plate. Switches the power unit off as soon as the lock is mechanically locked. This prevents a failure of the power unit when locking. Includes 6 m cable.



Dead bolt switch contact	Article number
Dead bolt switch contact (RSK)	5030019315

Standard opener with smoke protection approval

For use on smoke protection doors or doors without fire protection requirements. Door openers with red connection blocks are designed for 12 or 24 Volt (each +/- 15%) continuous operation.

Standard opener with smoke protection approval	Article number
A-5002-B	5030014724
A-5002-FB (Latch guide)	5030023741



Fire protection door opener

For use on doors with fire protection requirements. Door openers with red connection blocks are designed for 12 or 24 Volt (each +/- 15%) continuous operation.

Fire protection door opener	Article number
FT-502-B	5030014726
FT-502-FB (Latch guide)	5030036502





Control device D-BEDIX for ETS

The duty type can be chosen directly using D-BEDIX. The most important door settings can be carried out easily. Duty types, menu settings and possible mistakes are clearly represented on the display.

Control device	Article number
D-BEDIX	358500063514215



Flip-switch with a large surface area (GFT)

- Funktion: Door "open"
- Operating voltage: 250 V AC / 30 V DC
- Power consumption: max. 10 A AC / 2 A DC
- Degree of protection: IP 40
- Dimensions: 174 x 93 mm

Switch with a large surface area	Colour	Article number
GFT ECO AP/UP	White like RAL 9016	5030045153



Contactless flat pushbutton (BFT)

- Suitable for outdoor use
- Degree of protection: IP 65
- Reacts to approximation from approx. 10 cm
- incl. stainless steel sign 80 x 80 mm
- Indirectly illuminated (24 V from ETS)
- vandal-proof

Contactless flat pushbutton	Article number
BFT (Concealed mounting)	5030024865
BFT (Top-mounting, incl. stainless steel top mounting socket)	5030024866



Contactless motion detector (Magic Switch)

- only for indoor use
- reacts to approximation from 10cm up to 50 cm
- adjustment of detection field with potentiometer
- incl. KS-coverage 84 x 84 mm
- suitable for concealed mounting

Contactless motion detector	Article number
Magic Switch (white with hand symbol)	5030033582
Top-mounting socket for Magic Switch (white)	5030026428

Operating and safety elements

Radar „Eagle One“

Radar-motion detector as opening pulse generator for automatic doors, direction-sensitive
Incl. pre-assembled connection cable, 5 m length.

Radar	Article number
Radar BEA „Eagle One“	5030027729
Rain cover ORA for „Eagle One“	5030033583

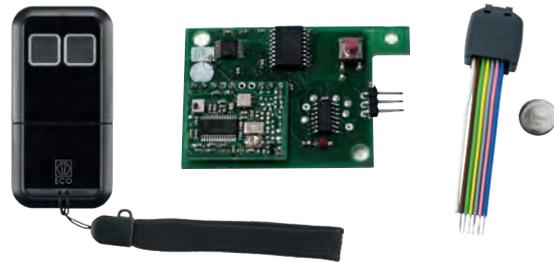


Remote control set for ETS

for remote control of the drive and thus, for handi-capped accessible opening of the door
Remote print for easy plug in on the control board of the ETS.

Radio remote control with range up to 10 m.

Remote control	Article number
Remote set (plug-in platina incl. radio remote control)	5030014727
Additional radio remote control	5030014699
Concealed mounting- radio receiver RCJ01	5030026336
Built in radio transmitter RTS03 (for example in GFT-ECO)	5030026335
4 channel Radio remote control (for RCJ01)	5030049002



Sensor strips

Active infrared sensor for automatic doors.
Secures the pedestrian traffic area. Stops and reverses when detecting obstacles.

- Incl. cable and overlying, flexible cable transition.
- **Set III** consists of 2 sensor strips per leaf (BEA), up to max. 1.200 mm
- **Set IV** consists of 2 sensor strips per leaf (BEA), up to max. 1.600 mm

Sensor strip	Article number
Set III	5030019133
Set IV	5030018592
Rain cover (for outdoor use) for sensor strips up to 1.100 mm	5030030550
Rain cover (for outdoor use) for sensor strips up to 1500 mm	5030034175
FS-foor adaptor (6mm drilling) (clamp block + slave cable)	5030041660



DIN 18650 **EN 16005**

Rain cover

Flatscan

Sensor for swing doors, to cover the whole leaf width and height on hinge and hinge-opposite side, as well as the secondary closing edges.

- Laser Scanner (Light transit time measurement)
- Power supply 12-24 V AV DC $\pm 15\%$
- Power consumption ≤ 2 W
- Degree of protection: IP 54
- Dimensions: 142 x 55 x 23 mm
- Set consists of 2 sensors for hinge and hinge-opposite side

Sensor	Colour	Article number
Flatscan set	White RAL 9010	5030033586
Flatscan set	Black RAL 9005	5030033585
Flatscan set	Silver RAL 9006	5030033584
Weather roof (metal)* for Flatscan (piece)	Black RAL 9017	5030041861



DIN 18650 **EN 16005**

*protection against rain or radar

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