



Door closer technology

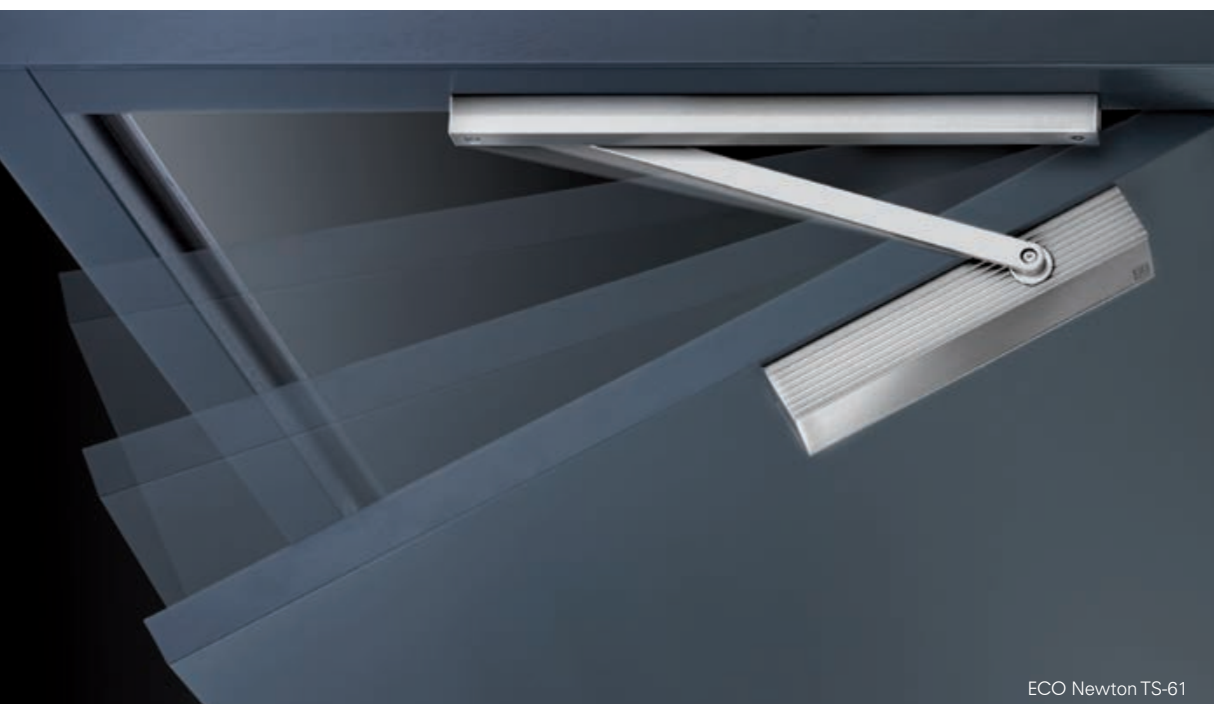


Door closer technology

**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-61 EN	 / 	5–6 continuously	from the front	adjustable	from the front	optional	yes / yes ⁷
TS-61 EN	 / 	2–5 continuously	from the front	adjustable	from the front	optional	yes / yes ⁷
TS-51 EN	 / 	1–4 continuously	from the front	adjustable	from the front	–	yes / yes ⁷
TS-41 EN	 / 	1–4 continuously	from the side	fixed	from the side	–	yes / yes
TS-31 EN	 / 	1–3 continuously	from the side	fixed	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 EN	 / 	1–5 continuously (6)	from the side	fixed	from the side	–	yes / yes
TS-20 EN	 / 	3 / 5	from the side	fixed	from the side	–	yes / yes
TS-15 EN	–	2 / 3 / 4 / 5	from the side	–	from the side	–	yes / yes
TS-14 EN	–	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

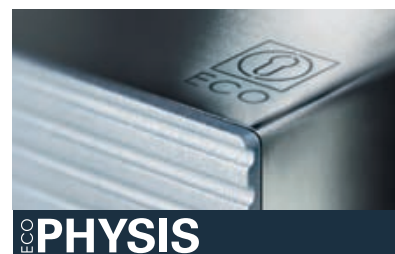
Two units for the entire building

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).



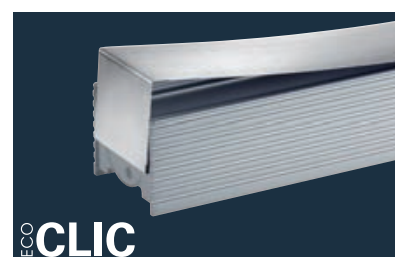
Combination of elegant materials

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.



Intelligent stainless steel cover

ECOcllic 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.



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.



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.



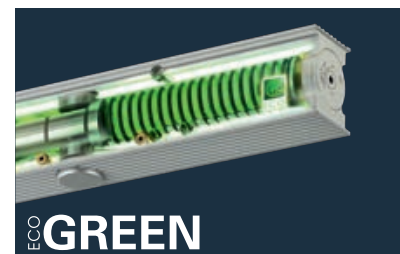
Stainless steel full cover

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.

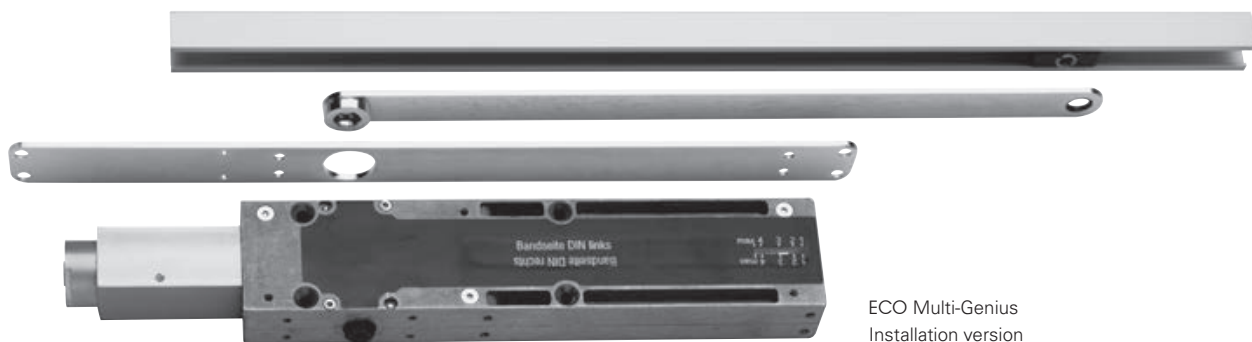


Standardized quality

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.



The integration specialist: ECO Multi-Genius



ECO Multi-Genius
Installation version

The aesthetics of integration

This door closer makes itself invisible. The ECO Multi-Genius 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 Multi-Genius is the ideal easy-use door closer with a high level of user convenience - plus a unique opening angle of 165°.



The ECO Multi-Genius 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 ≥ 40 mm. The principle works with an eccentrically controlled pull mechanism and microhydraulic damping unit which guarantee optimum user convenience. A visible closing power display (**in line with EN 1154 A**) enables you to set the desired closing force before installation. The closing speed and hydraulic latching have an infinitely variable adjustment even after installation.

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 II System overview

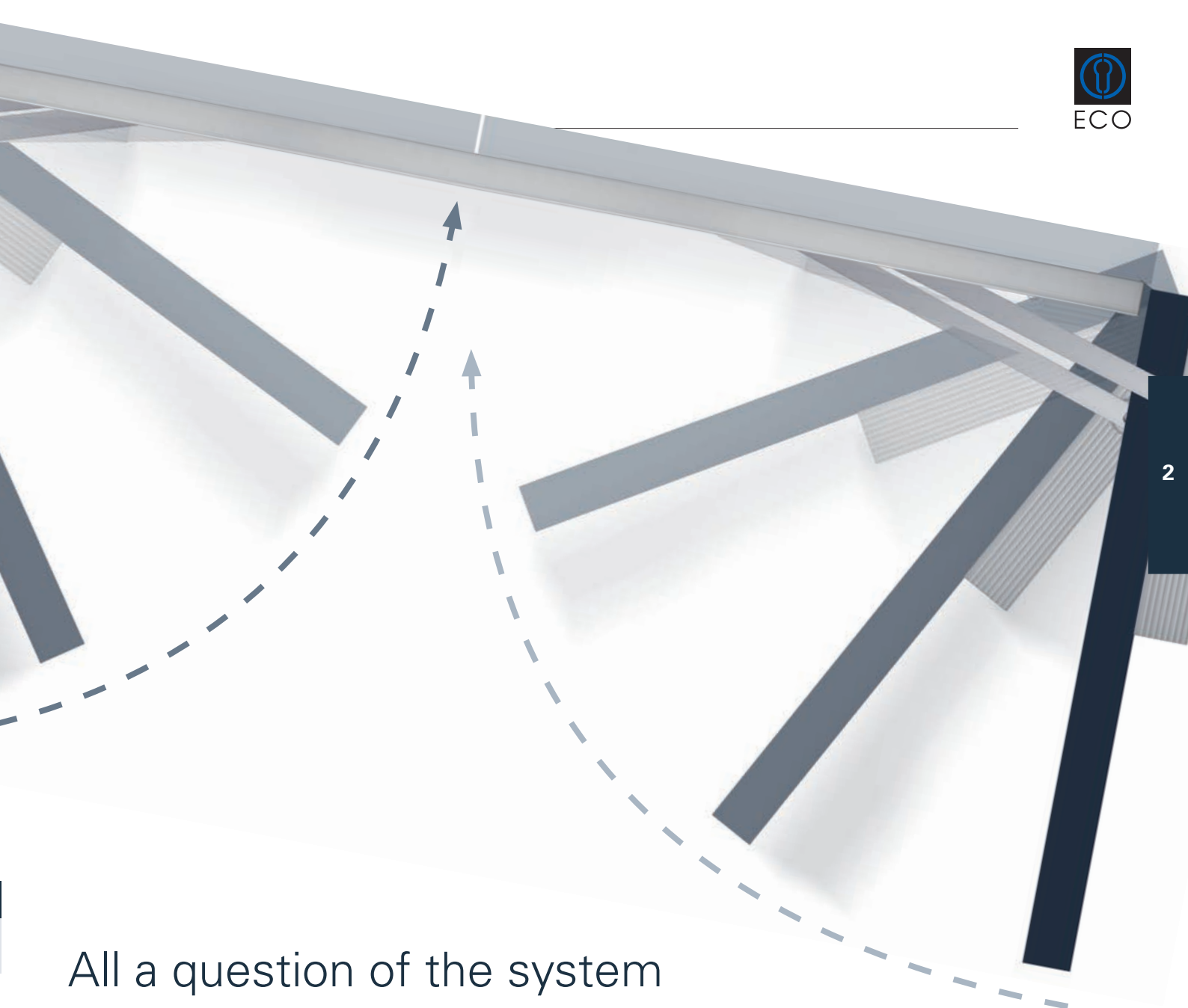
Slide rails for single-leaf doors

Description	Tests ¹	Function	Max. door leaf width	Max. hold-open angle	Type of mounting ²
EFR	 / 	Electromagnetic hold open and integrated smoke detector (230V)	1.400 mm	145°	BS
EFR-BG	 / 	Electromagnetic hold open and integrated smoke detector (230V) - hinge-opposite side	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	 / 	Closing sequence selector (SR)	2.800 mm	115° *	BS
SR BG	 / 	Closing sequence selector (SR) - hinge-opposite side	2.500 mm	–	BG
SR BGX		Closing sequence selector (SR) for special door dimensions - hinge-opposite side	2.500 mm	95° *	BG
SR-EFR	 / 	Closing sequence selector (SR) with hold-open function and integrated smoke detector (230V)	2.800 mm	145° / 130°	BS
SR-EFR -Short-	 / 	Closing sequence selector (SR) with hold-open function RSZ hinge-opposite side	1.700 mm	145° / 130°	BS
SR-EFR BG	 / 	Closing sequence selector (SR) with hold-open function and integrated smoke detector (230V) - hinge-opposite side	2.500 mm	95° / 95°	BG
SR-EFR BG -Short-	 / 	Closing sequence selector (SR) with hold-open function and integrated smoke detector (230V) - hinge-opposite side	1.700 mm	95° / 95°	BG

Legende: 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.

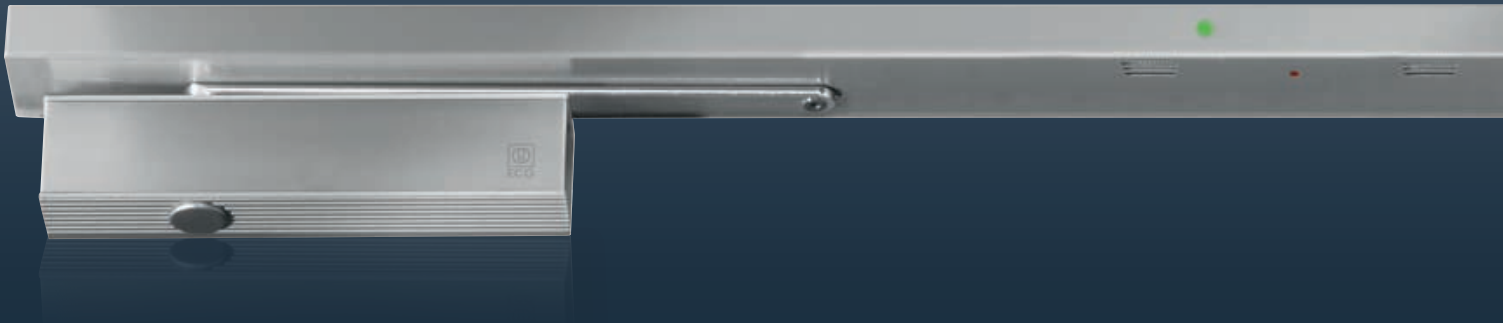
Life-saving - if the worst comes to the worst



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



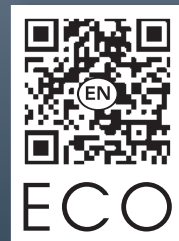
1. Design

- 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

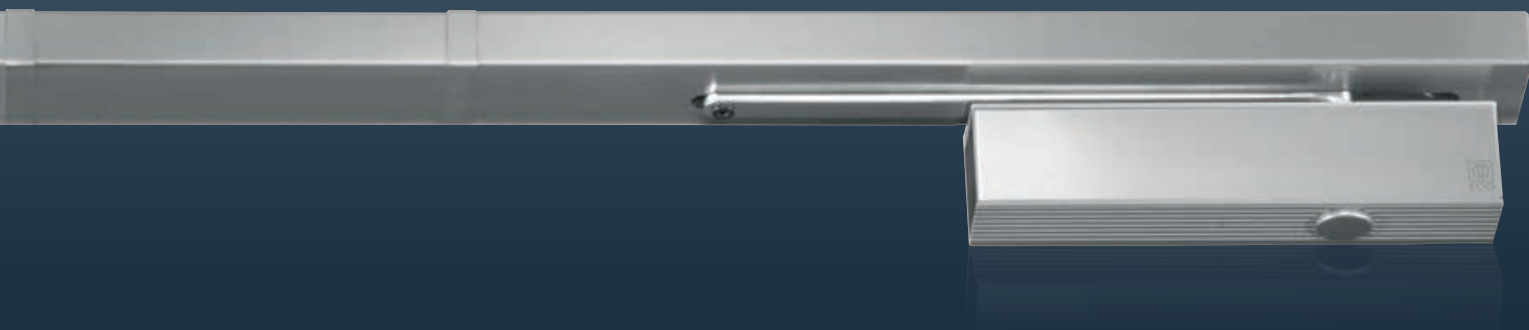


2. Technique

- 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

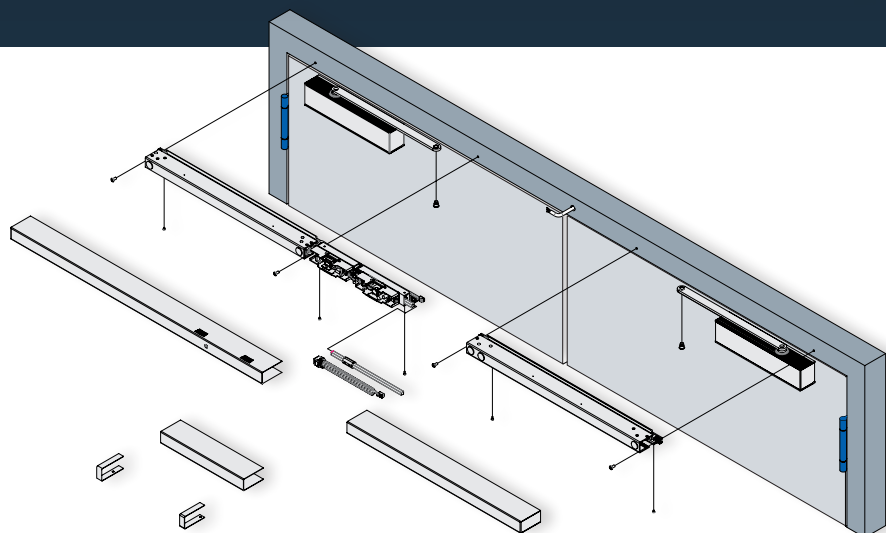


Scan QR-Code and view the
movie of our new
mounting technology



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

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