





# Product information



# ■ SYSTEM TECHNOLOGY FOR THE DOOR















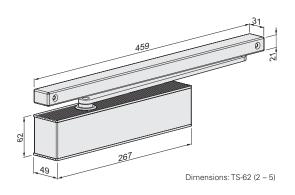






# **Product characteristics**

Closing force (continuously adjustable)	Size acc. to EN	2 – 5 <b>F</b>
Door width	≤ 1.250 mm	
Dimensions (incl. mounting plate)	Length in mm Depth in mm Height in mm	267 49 62
Mounting plate acc. to	EN 1154 (supplementary shee	et 1)
Hinge side and hinge	e-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 / D	IN	EN 1154
Meets requirements	PMR ERP DIN 18040	DIN SPEC 1104
Suitable for fire- and	smoke control doors	F
Certified according to	EU-Directive	C€









# ECO **Newton** TS-62 • Highlights at a glance



■ Yes - No

■ Option















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



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



Body + ECOclic: White RAL 9016



Body + ECOclic: Black RAL 9005



Body + ECOclic: Brown RAL 8014

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



Under-lintel angle



Under-lintel angle





### **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.

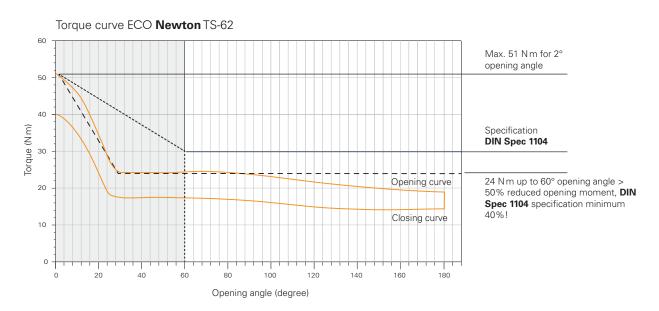
The opening torque required reduces tangibly.

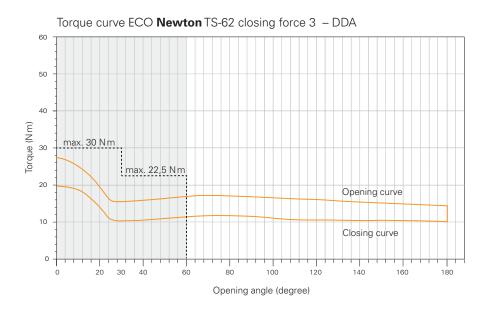
With its intelligent gearing design, the ECO Newton TS-62 achieves a performance which is ideal when opening and closing as well as being very efficient. The forces which arise when a door is opened are reduced to a minimum, without any compromises on the reliability of the door closing. For the user, 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 guickly drops and with high efficiency:

DIN Spec 1104, German version CEN/TR 15894 DIN 18040 - Barrier free building

England: France: BS 8300:2001 DDA **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.
- ECOcover<sup>2</sup>: 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	arm,	er bod witho rail B		Colour		Article number
TS-62 B (2 – 5)	Silver	RAL 9006*	306254AB1A01010	TS-6	62 B	(2 – 5)	Silver	RAL 9006*	356254AB1A00210
TS-62 B (2 – 5)	White	RAL 9016	306254AB3E01010	TS-6	62 B	(2 – 5)	White	RAL 9016	356254AB3E00210
TS-62 B (2 – 5)	Brown	RAL 8014	306254AB3D01010	TS-6	62 B	(2 – 5)	Brown	RAL 8014	356254AB3D00210
TS-62 B (2 – 5)	Black	RAL 9005	306254AB3G01010	TS-6	62 B	(2 – 5)	Black	RAL 9005	356254AB3G00210

# Hinge-opposite side

# with / without slide rail B

# TS-62 G (2 – 5)





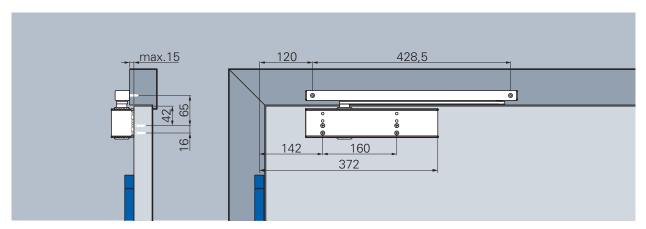
Closer body with arm and slide rail B	Colour		Article number	Closer bod arm, witho slide rail B	,	Colour		Article number
TS-62 G (2 – 5)	Silver	RAL 9006*	306264AB1A01010	TS-62 G	(2 – 5)	Silver	RAL 9006*	306264AB1A00210
TS-62 G (2 – 5)	White	RAL 9016	306264AB3E01010	TS-62 G	(2 – 5)	White	RAL 9016	306264AB3E00210
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



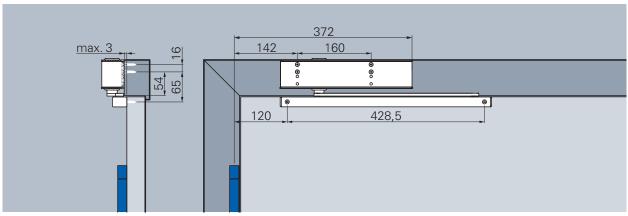


# Hinge side

Mouting 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°.

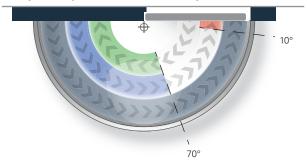
#### Back-check

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

# Delay 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  $\textbf{Newton}\,\text{TS-62},$  hinge side

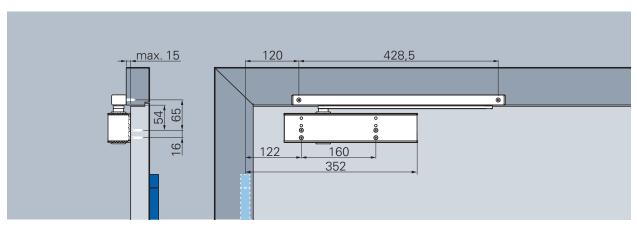






# Hinge opposite side

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°

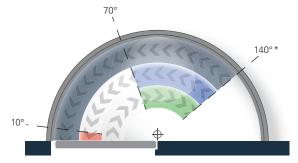
## Back-check

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



<sup>\*</sup>Varies according to door thickness and type of hinge.

ECO Schulte GmbH & Co. KG Iserlohner Landstraße 89 D-58706 Menden

Telefon: +492373/9276-0 Fax: +492373/9276-40

info@eco-schulte.de www.eco-schulte.de