

**⚠** Papiersablonen können sich durch Luftfeuchtigkeit verändern. Verbindlich sind daher nur die Maßangaben. Paper templates might distort due to air moisture. Only the indicated measurements are therefore obligatory. Les gabarits en papier peuvent avoir des dimensions modifiées par l'humidité de l'air. Seules les côtes mentionnées doivent être respectées.

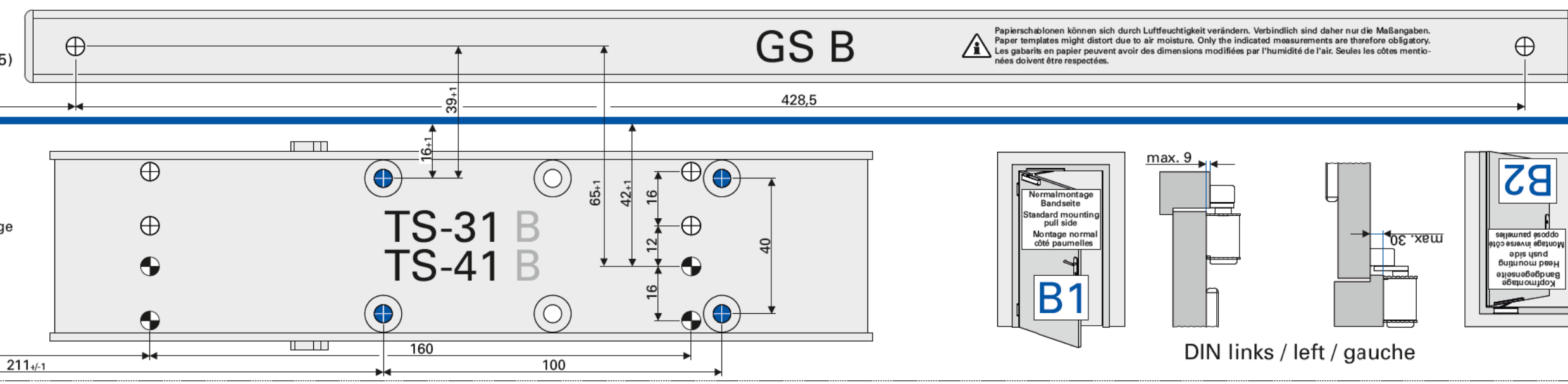
# GS B

Ø 2,5  
Ø 4,2 (M5)

120 $\pm$ 1

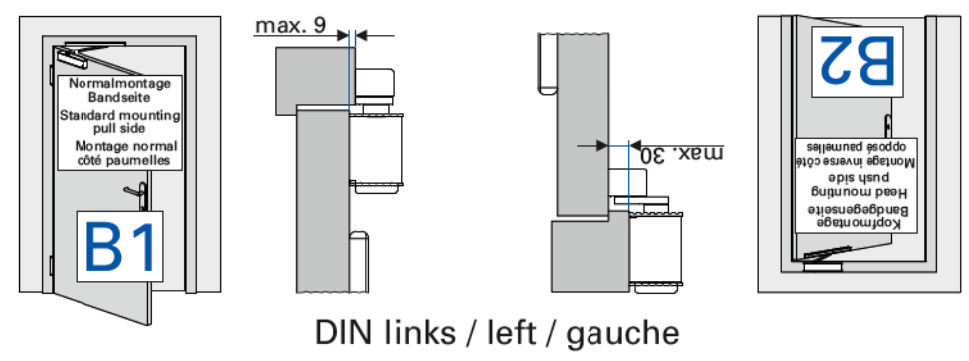
39 $\pm$ 1

428,5



Bohrungen für Montageplatte  
Drillings for mounting plate  
Alésage pour platine de montage

Bohrungen für Direktmontage  
Drillings for direct mounting  
Alésage pour montage direct



## TS-31 EN 1-3 TS-41 EN 1-4

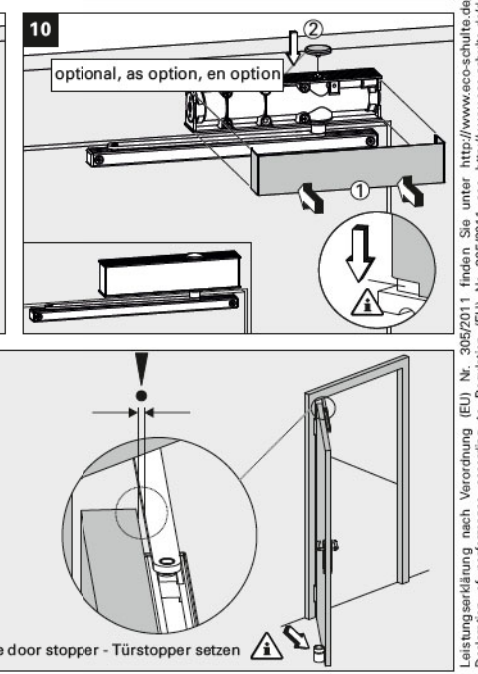
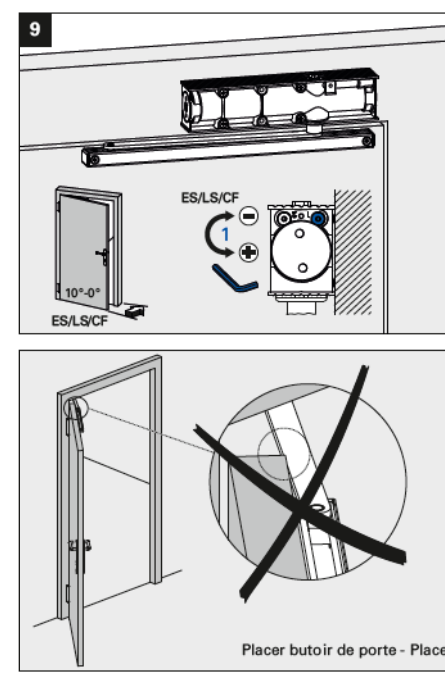
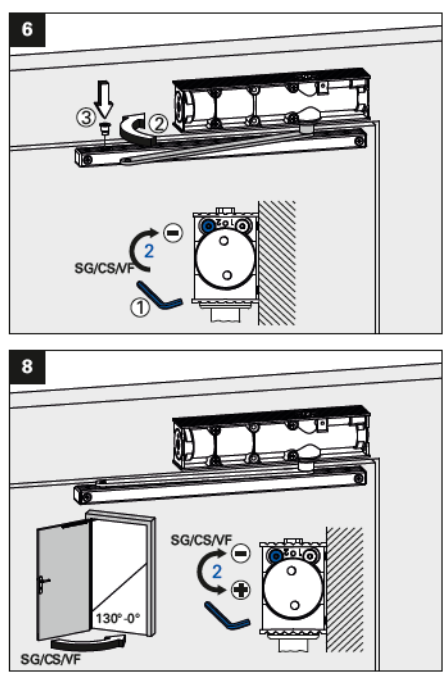
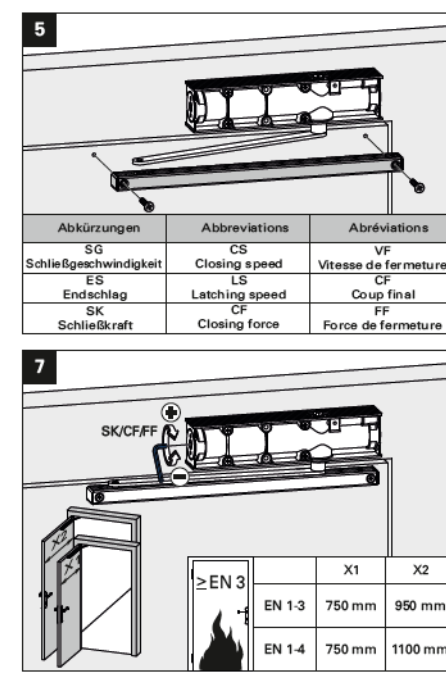
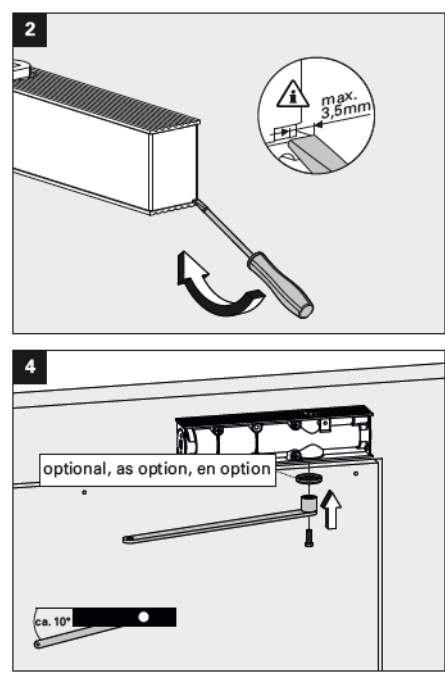
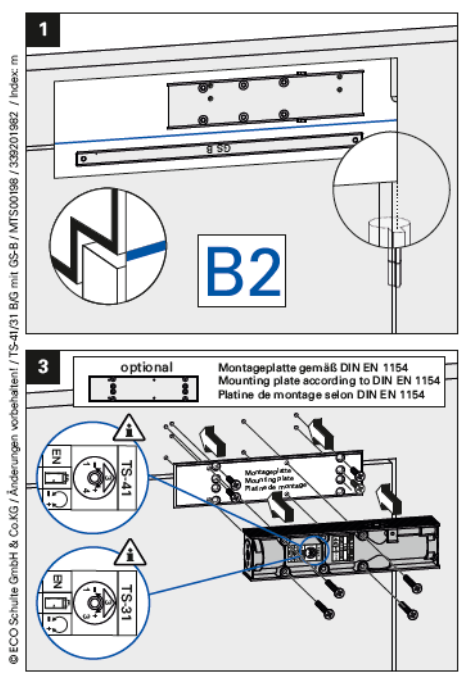
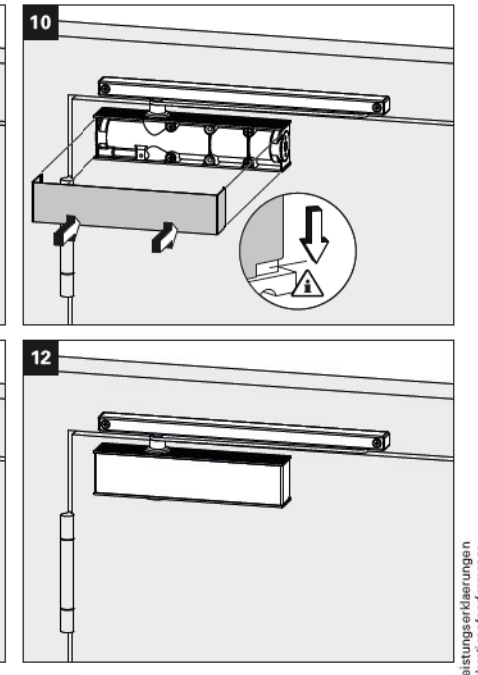
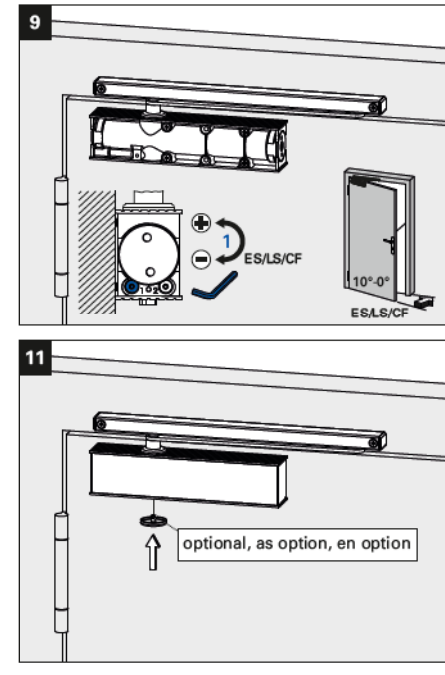
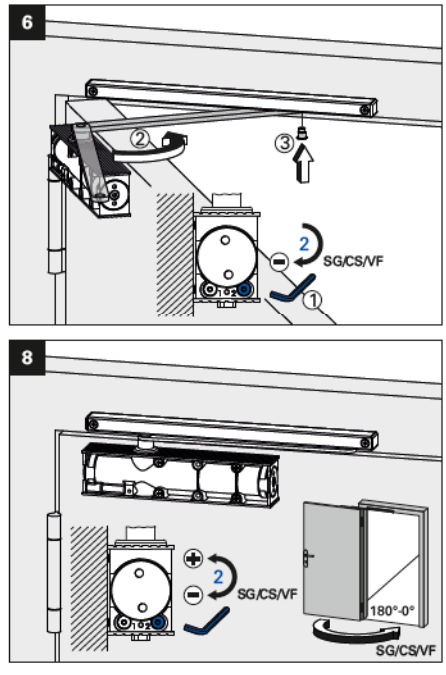
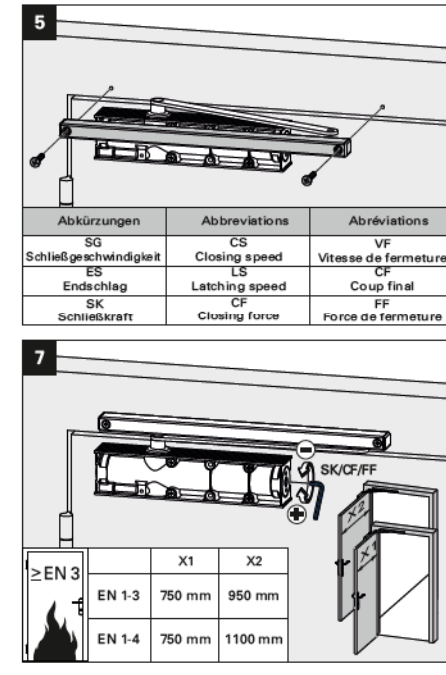
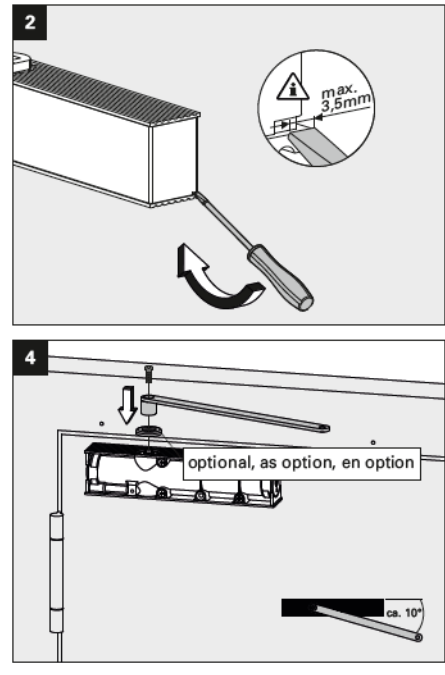
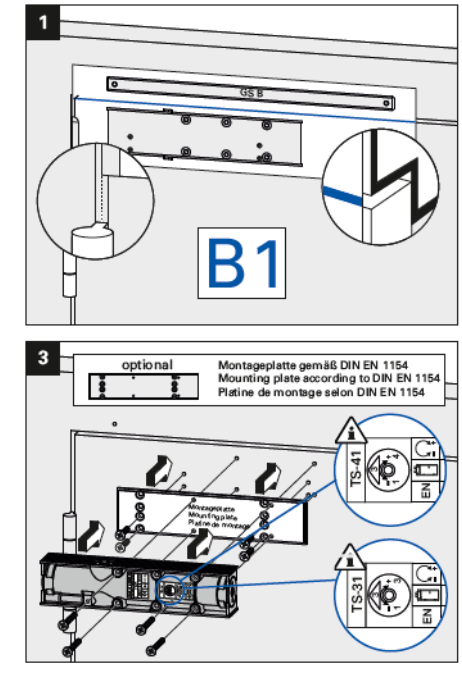


CE	ECO Schulte GmbH & Co. KG Iserlohner Landstraße 89 D-58706 Menden	17
	0432-CPR-00099-09	EN 1154:1996+A1:2002 / AC:2006
		4 8 1-3 1 1 3
		4 8 1-4 1 1 3

Türschließergröße Door closer size Force de ferme porte	Max. Türbreite Max. door width Largeur de porte max.	Umdrehungen Rotations Rotations
TS-31 EN 1-3 #1	750 mm	-11
#2	850 mm	-6
#3	950 mm	0

Türschließergröße Door closer size Force de ferme porte	Max. Türbreite Max. door width Largeur de porte max.	Umdrehungen Rotations Rotations
TS-41 EN 1-4 #1	750 mm	-7
#2	850 mm	-4
#3	950 mm	0
#4	1100 mm	+5

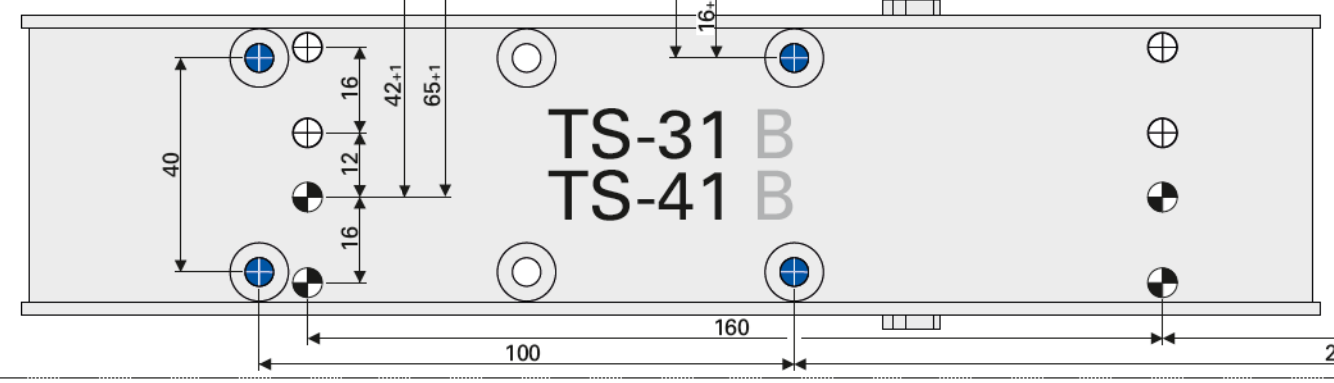
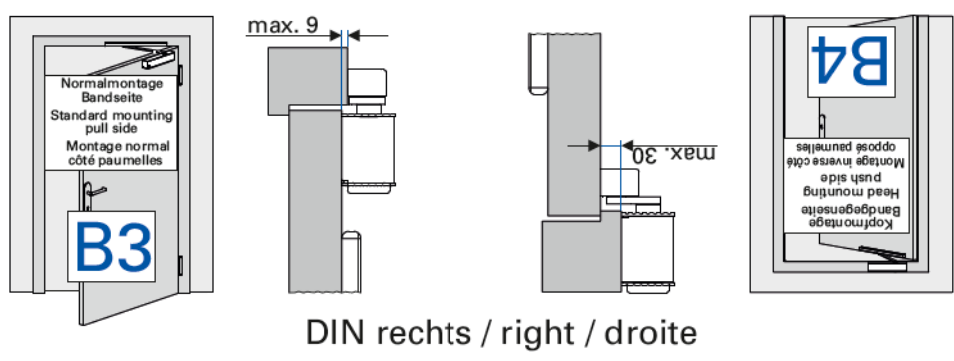
**⚠** Für die Montage dürfen ausschließlich Originalteile des Herstellers verwendet werden. Die Montagearbeiten müssen gemäß Anleitung von einer qualifizierten Person durchgeführt werden. Bei Nichtbeachtung entfällt jeglicher Garantieanspruch. Diese Anleitung ist vom Monteur nach der Montage an den Betreiber weiterzugeben!  
Only original parts have to be used. The assembly has to be made by a qualified person according to the mounting instruction. In case of non-respect the guarantee is invalid. This instruction is to be handed over to the operator by the fitter after assembly!  
Impérativement utiliser la notice de montage fournie par le fabricant. La mise en œuvre et le montage doivent être exécutés par du personnel qualifié. Le non respect de ces règles annule catégoriquement tout droit de garantie. Cette instruction est à remettre par le poseur à l'exploitant après montage.





Papiersablonen können sich durch Luftfeuchtigkeit verändern. Verbindlich sind daher nur die Maßangaben.  
 Paper templates might distort due to air moisture. Only the indicated measurements are therefore obligatory.  
 Les gabarits en papier peuvent avoir des dimensions modifiées par l'humidité de l'air. Seules les côtes mentionnées doivent être respectées.

# GS B



- Bohrungen für Montageplatte  
Drillings for mounting plate  
Alésage pour platine de montage
- Bohrungen für Direktmontage  
Drillings for direct mounting  
Alésage pour montage direct

## TS-31 EN 1-3 TS-41 EN 1-4



CE	ECO Schulte GmbH & Co. KG Iserlohner Landstraße 89 D-58706 Menden	17
	0432-CPR-00099-09	EN 1154:1996+A1:2002 / AC:2006

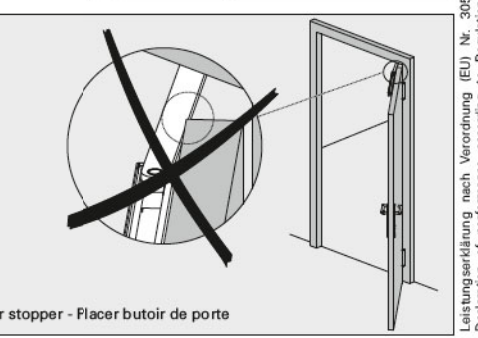
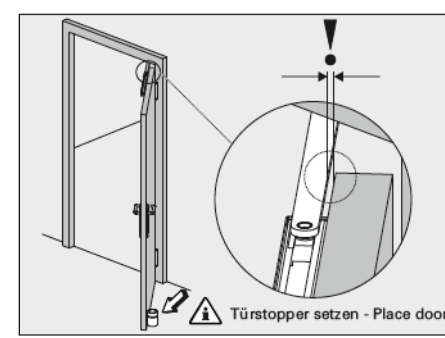
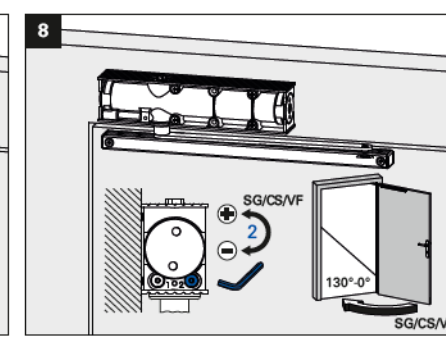
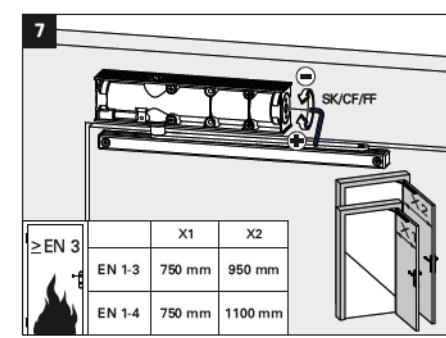
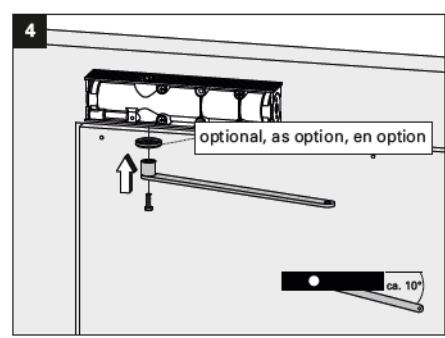
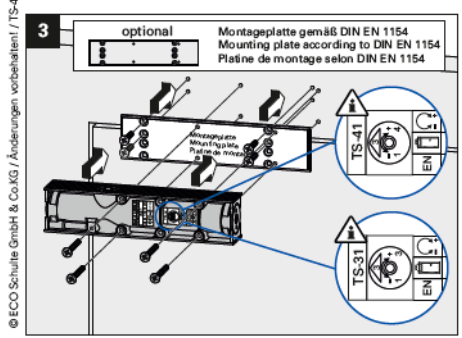
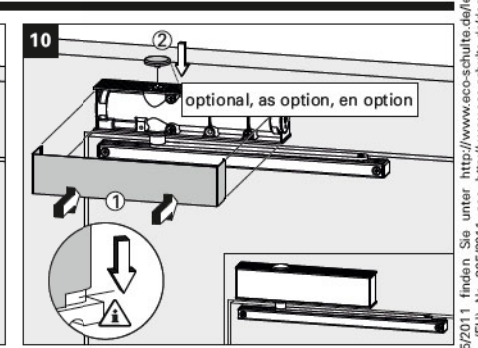
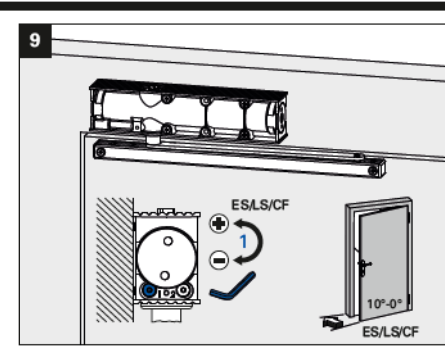
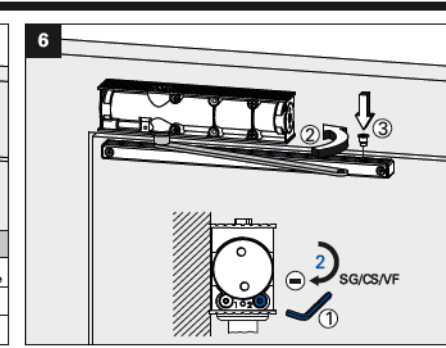
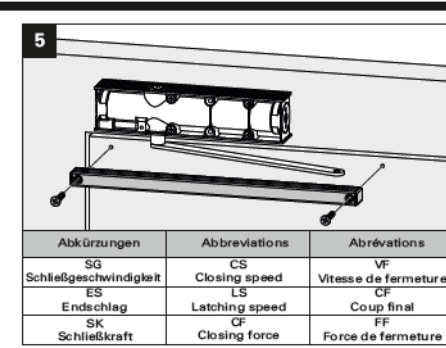
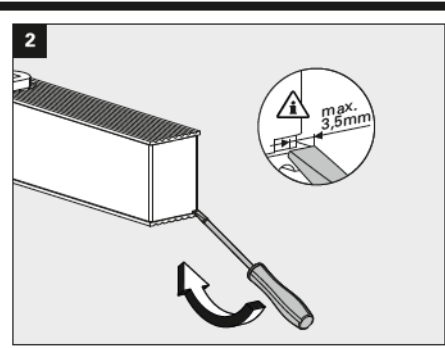
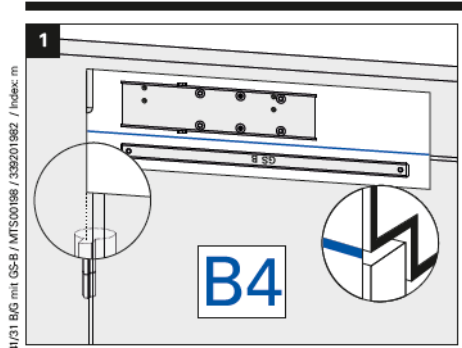
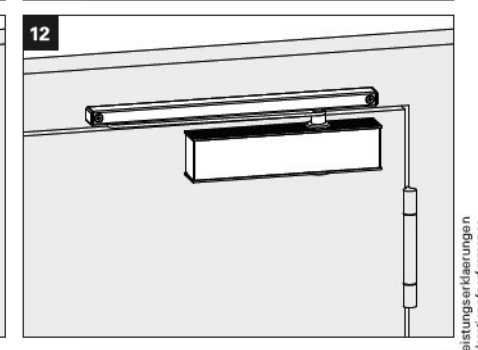
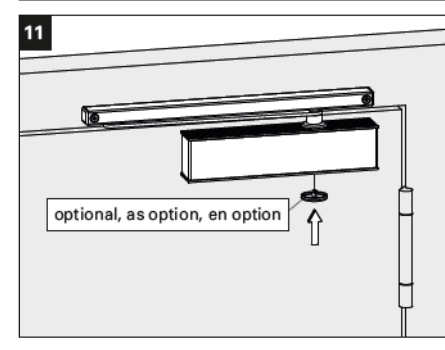
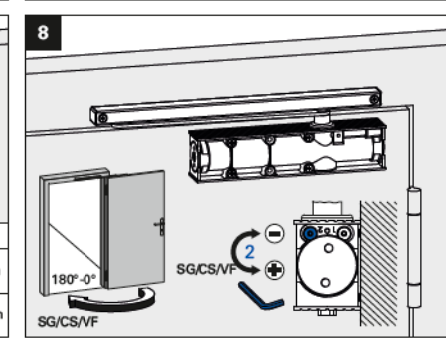
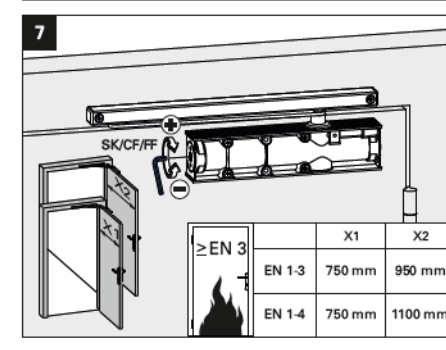
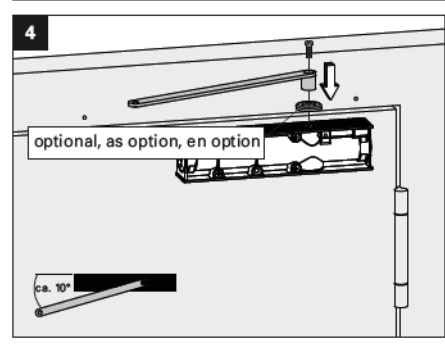
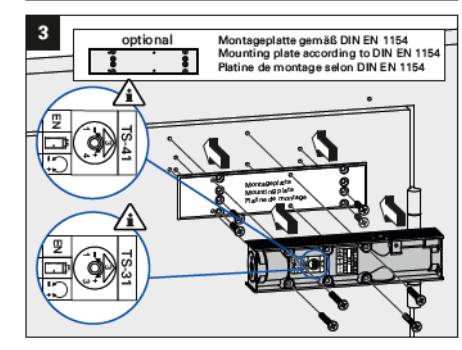
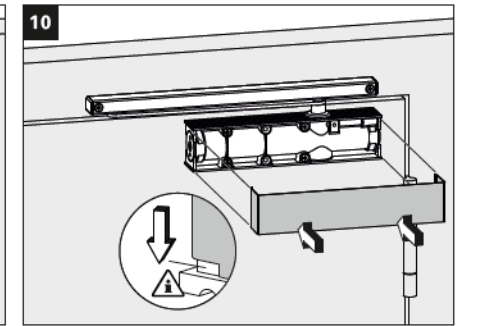
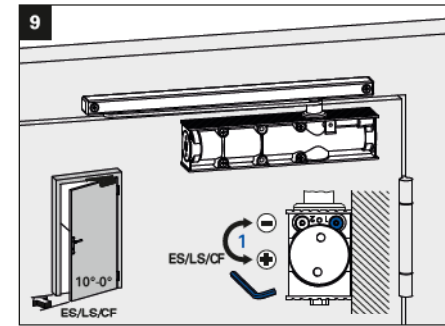
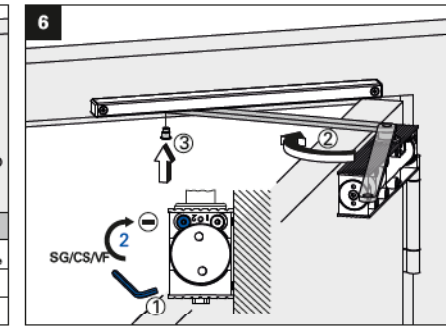
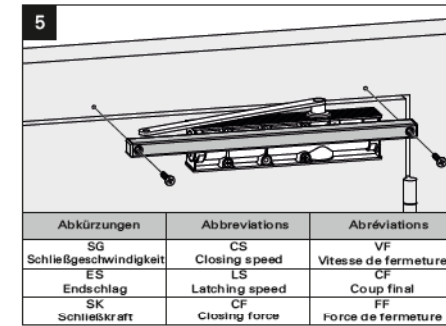
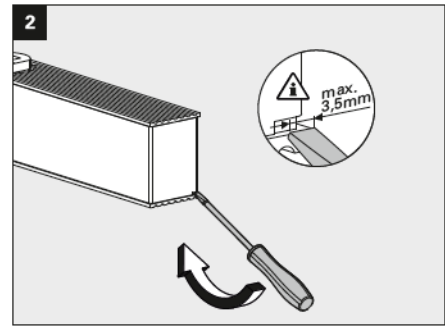
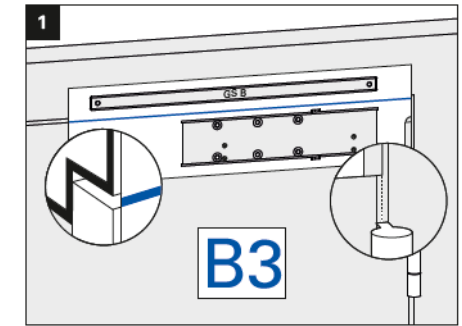
Türschließergröße Door closer size Force de fermette	Max. Türbreite Max. door width Largeur de porte max.	Umdrehungen Rotations Rotations
TS-31 EN 1-3 #1	750 mm	-11
#2	850 mm	-6
#3	950 mm	0

Türschließergröße Door closer size Force de fermette	Max. Türbreite Max. door width Largeur de porte max.	Umdrehungen Rotations Rotations
TS-41 EN 1-4 #1	750 mm	-7
#2	850 mm	-4
#3	950 mm	0
#4	1100 mm	+5

Für die Montage dürfen ausschließlich Originalteile des Herstellers verwendet werden. Die Montagearbeiten müssen gemäß Anleitung von einer qualifizierten Person durchgeführt werden. Bei Nichtbeachtung entfällt jeglicher Garantieanspruch. Diese Anleitung ist vom Monteur nach der Montage an den Betreiber weiterzugeben!

Only original parts have to be used. The assembly has to be made by a qualified person according to the mounting instruction. In case of non-respect the guarantee is invalid. This instruction is to be handed over to the operator by the fitter after assembly!

Impérativement utiliser la notice de montage fournie par le fabricant. La mise en œuvre et le montage doivent être exécutés par du personnel qualifié. Le non respect de ces règles annule catégoriquement tout droit de garantie. Cette instruction est à remettre par le poseur à l'exploitant après montage.



Ø 2,5  
Ø 4,2 (M5)

# GS B

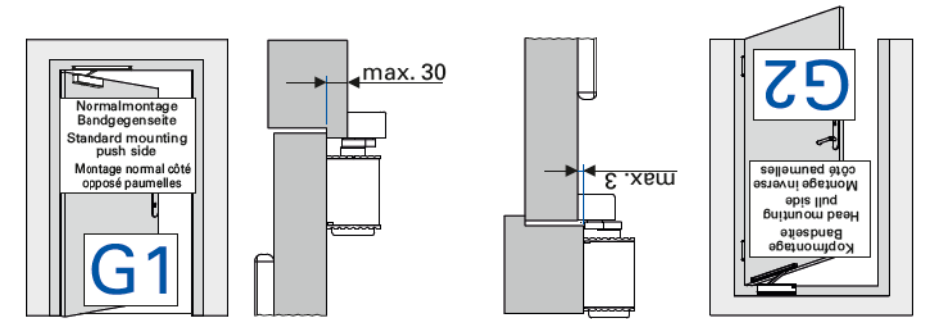
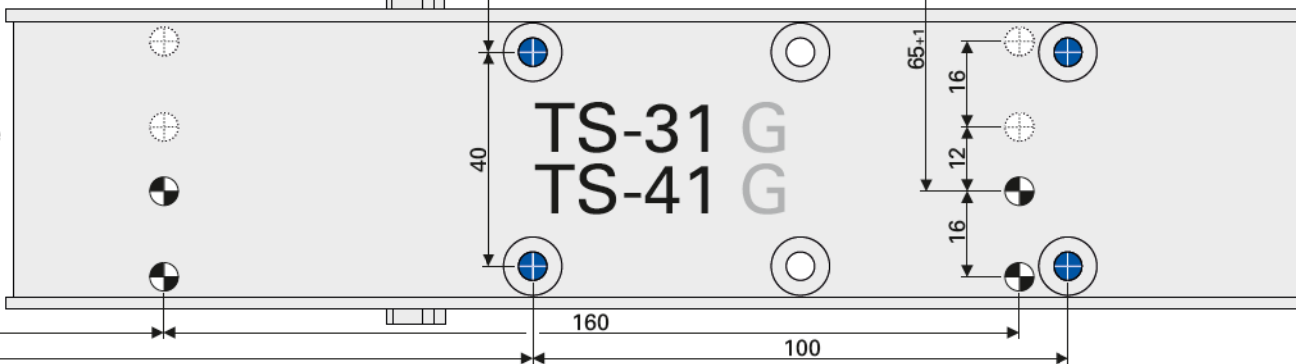
**!** Papiersablonen können sich durch Luftfeuchtigkeit verändern. Verbindlich sind daher nur die Maßangaben. Paper templates might distort due to air moisture. Only the indicated measurements are therefore obligatory. Les gabarits en papier peuvent avoir des dimensions modifiées par l'humidité de l'air. Seules les côtes mentionnées doivent être respectées.

G2

Bohrungen für Montageplatte  
Drillings for mounting plate  
Alésage pour platine de montage

Bohrungen für Direktmontage  
Drillings for direct mounting  
Alésage pour montage direct

20 122 $\pm$ 1 191 $\pm$ 1



DIN rechts / right / droite



TS-31 EN 1-3  
TS-41 EN 1-4

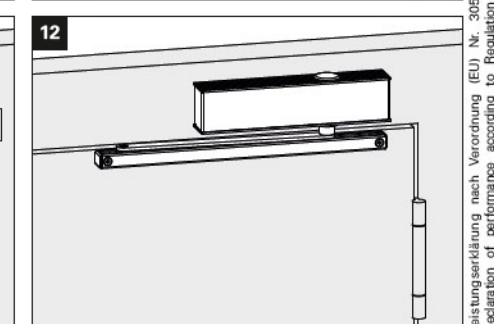
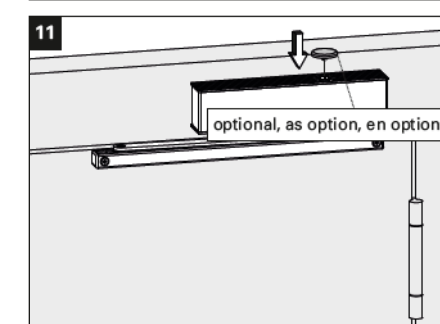
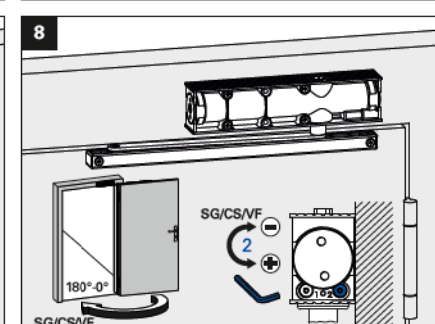
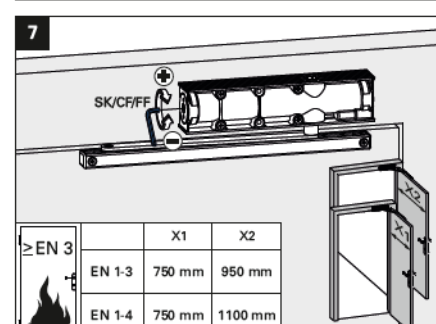
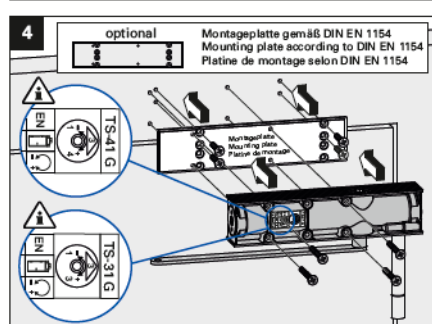
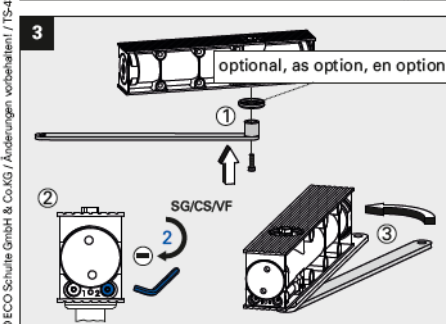
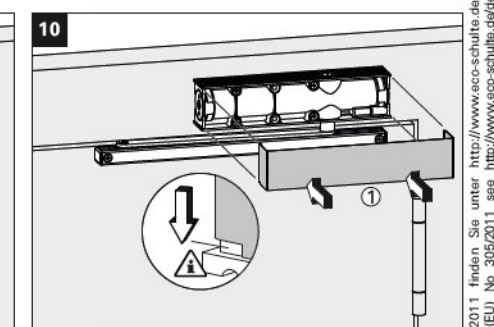
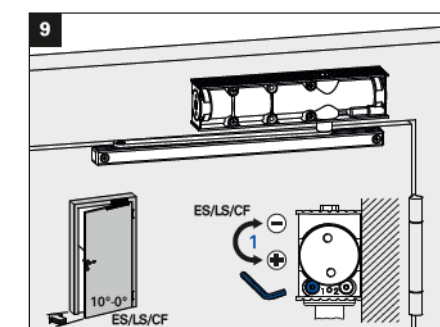
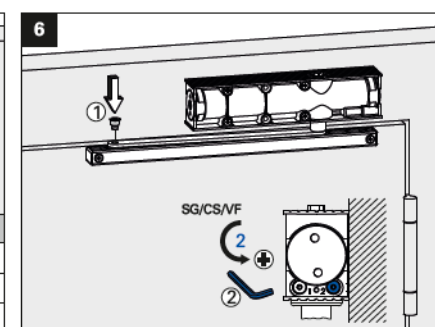
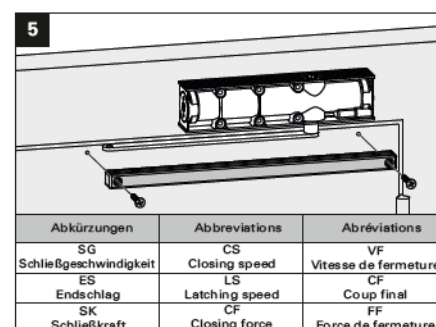
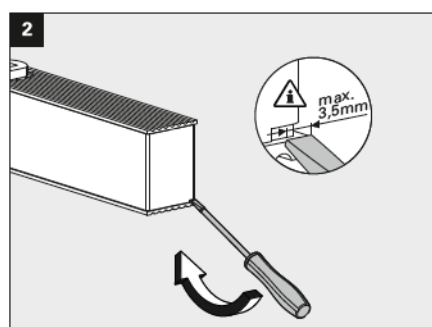
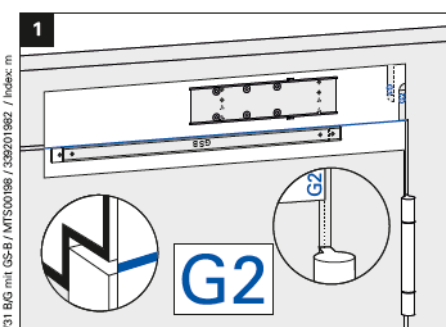
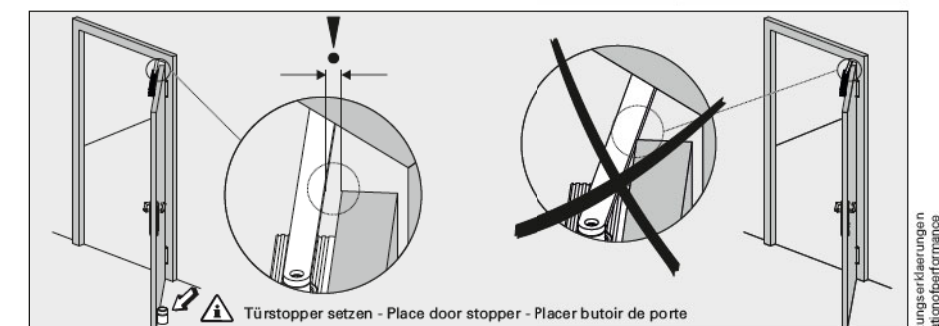
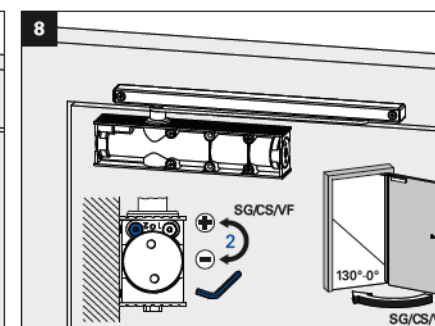
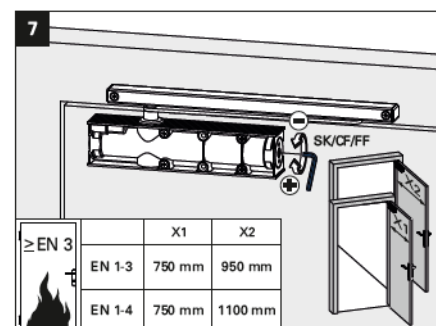
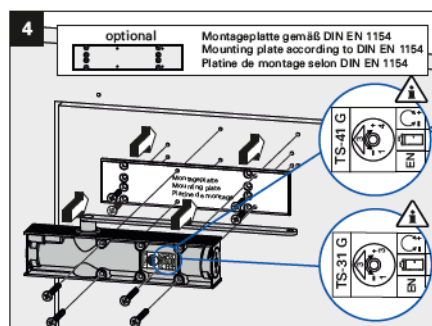
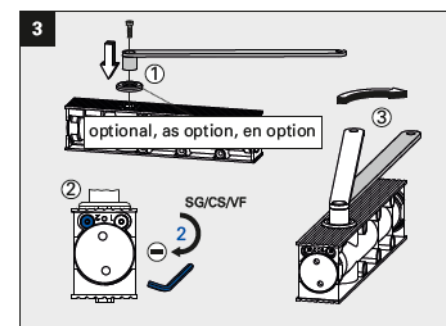
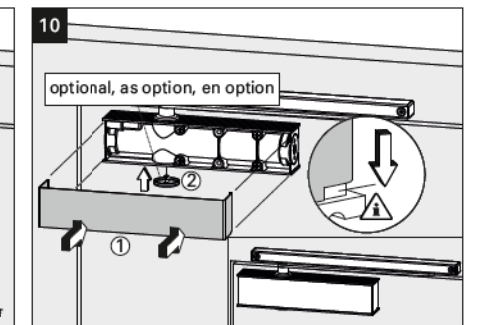
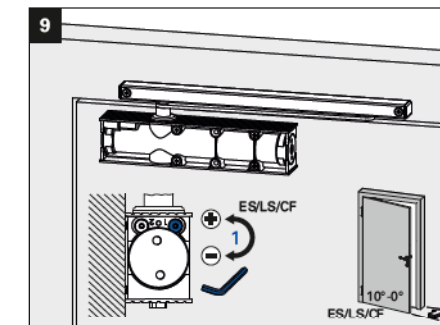
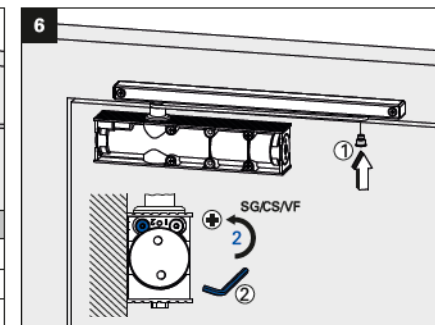
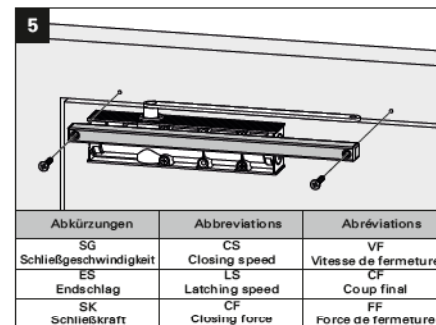
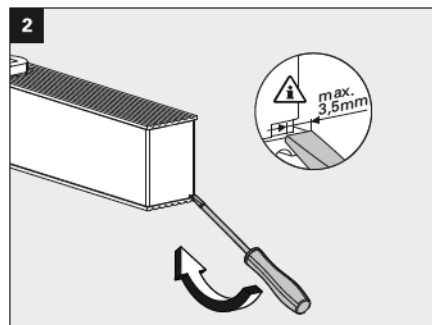
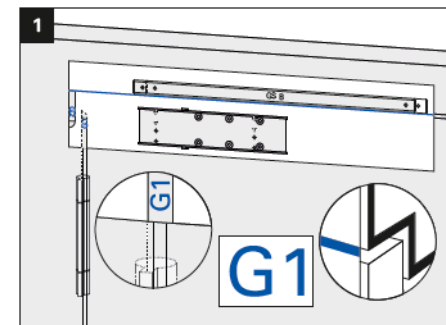


CE	ECO Schulte GmbH & Co. KG Iserlohner Landstraße 89 D-58706 Menden	17
	0432-CPR-00099-09 EN 1154:1996+A1:2002 / AC:2006	4 8 1-3 1 1 3 4 8 1-4 1 1 3

Türschließergröße Door closer size Force de ferme porte	Max. Türbreite Max. door width Largeur de porte max.	Umdrehungen Rotations Rotations
TS-31 EN 1-3 #1	750 mm	-11
#2	850 mm	-6
#3	950 mm	0

Türschließergröße Door closer size Force de ferme porte	Max. Türbreite Max. door width Largeur de porte max.	Umdrehungen Rotations Rotations
TS-41 EN 1-4 #1	750 mm	-7
#2	850 mm	-4
#3	950 mm	0
#4	1100 mm	+5

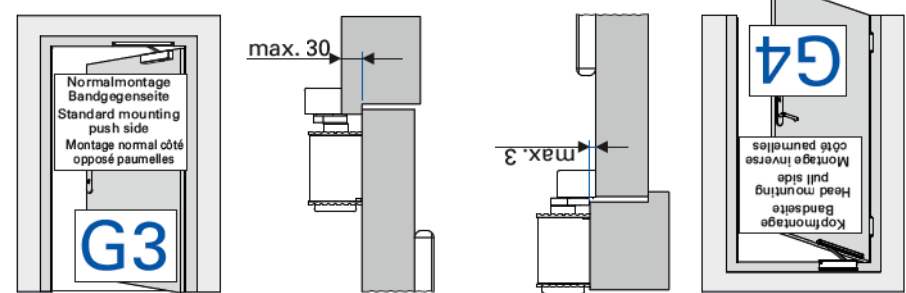
**!** Für die Montage dürfen ausschließlich Originalteile des Herstellers verwendet werden. Die Montagearbeiten müssen gemäß Anleitung von einer qualifizierten Person durchgeführt werden. Bei Nichtbeachtung entfällt jeglicher Garantieanspruch. Diese Anleitung ist vom Monteur nach der Montage an den Betreiber weiterzugeben!  
Only original parts have to be used. The assembly has to be made by a qualified person according to the mounting instruction. In case of non-respect the guarantee is invalid. This instruction is to be handed over to the operator by the fitter after assembly!  
Impérativement utiliser la notice de montage fournie par le fabricant. La mise en œuvre et le montage doivent être exécutés par du personnel qualifié. Le non respect de ces règles annule catégoriquement tout droit de garantie. Cette instruction est à remettre par le poseur à l'exploitant après montage.



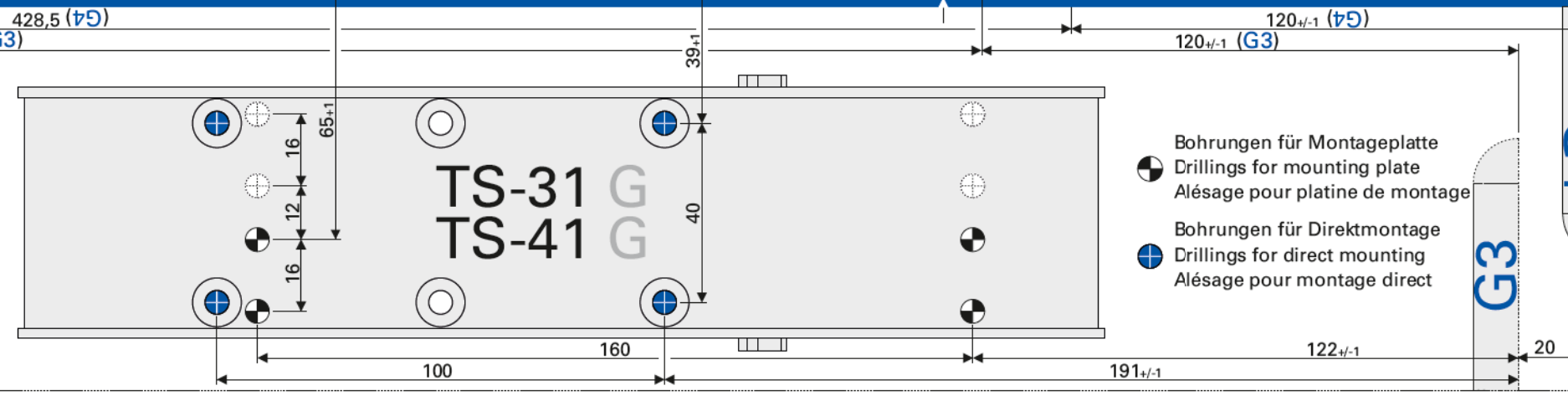
Papiersablonen können sich durch Luftfeuchtigkeit verändern. Verbindlich sind daher nur die Maßangaben.  
 Paper templates might distort due to air moisture. Only the indicated measurements are therefore obligatory.  
 Les gabarits en papier peuvent avoir des dimensions modifiées par l'humidité de l'air. Seules les côtes mentionnées doivent être respectées.

# GS B

Ø 2,5  
 Ø 4,2 (M5)



DIN links / left / gauche



Bohrungen für Montageplatte  
 Drillings for mounting plate  
 Alésage pour platine de montage

Bohrungen für Direktmontage  
 Drillings for direct mounting  
 Alésage pour montage direct

## TS-31 EN 1-3 TS-41 EN 1-4



CE	ECO Schulte GmbH & Co. KG Iserlohner Landstraße 89 D-58706 Menden	17
	0432-CPR-00099-09	EN 1154:1996+A1:2002 / AC:2006

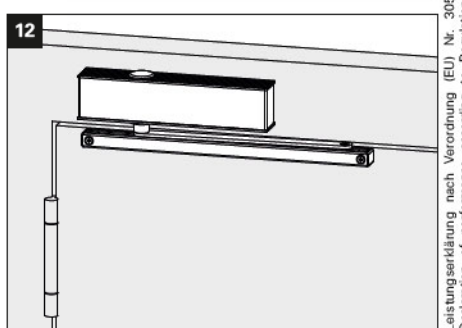
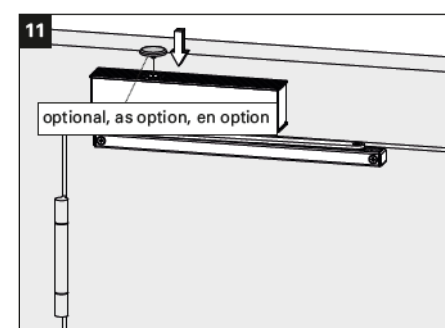
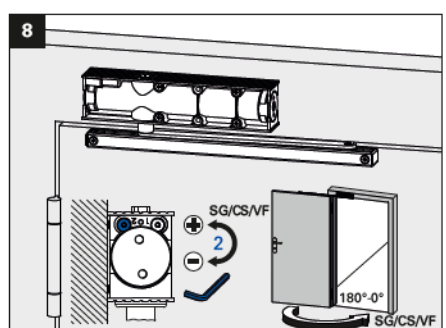
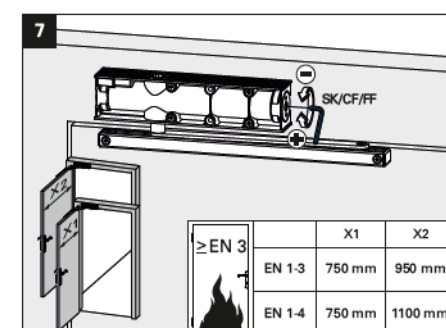
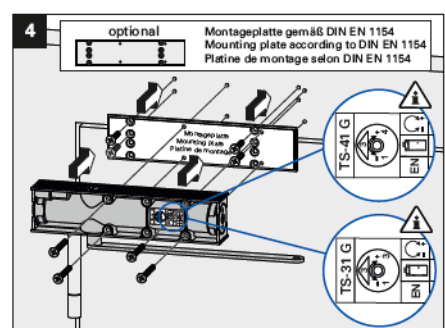
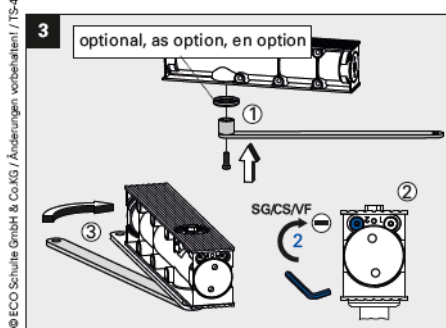
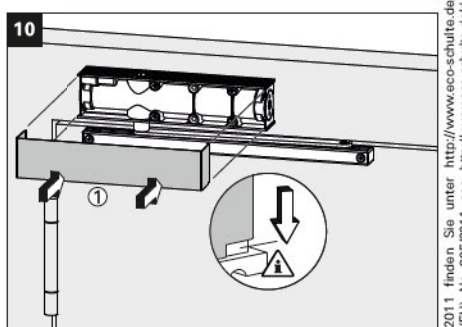
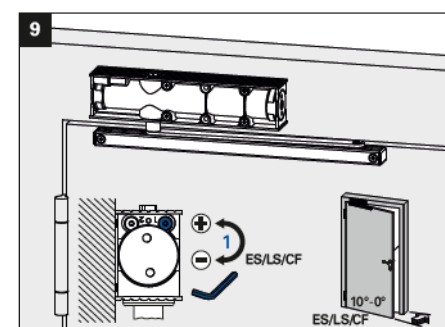
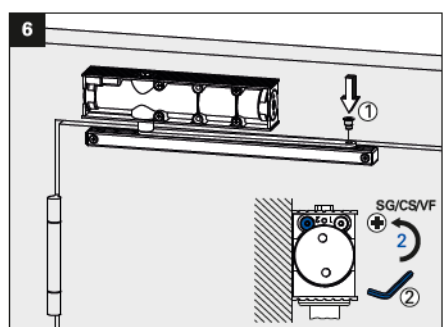
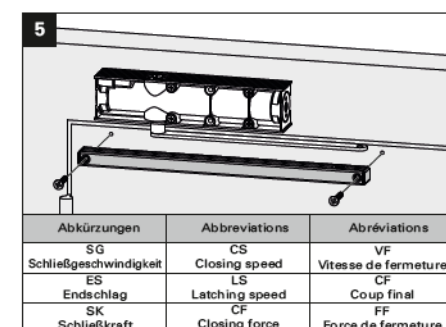
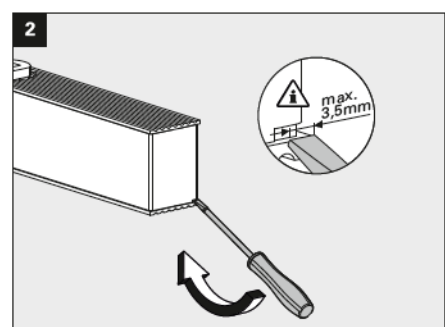
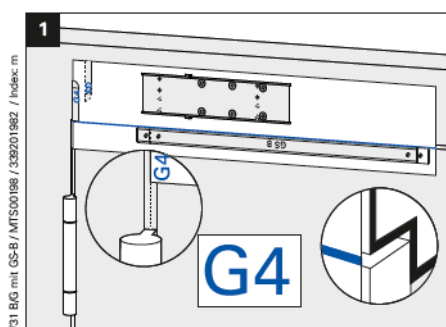
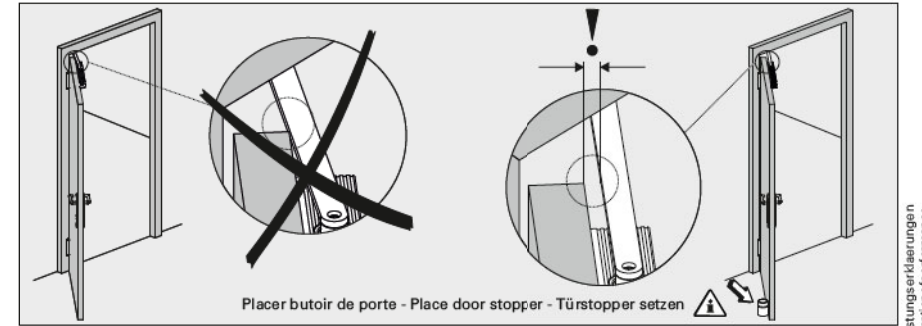
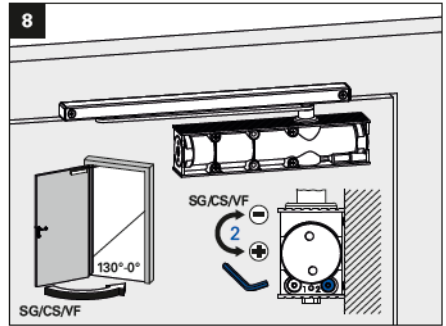
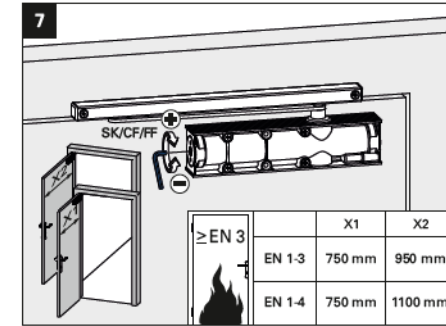
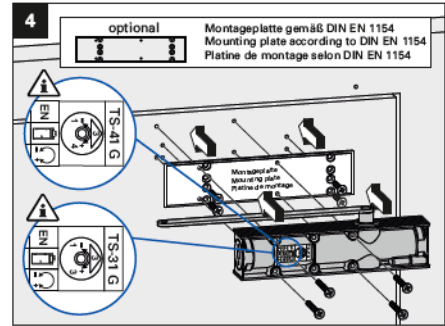
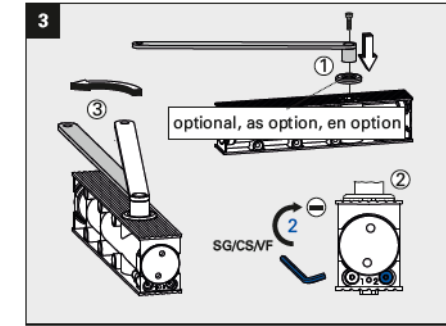
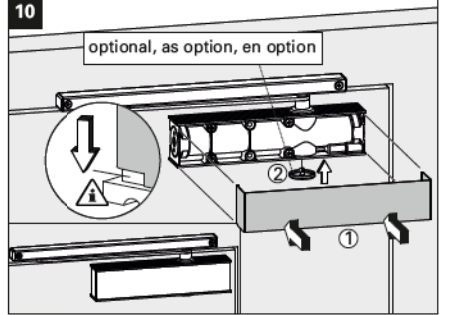
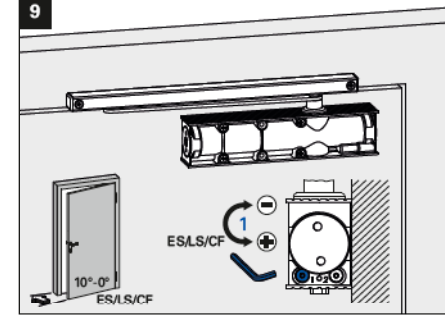
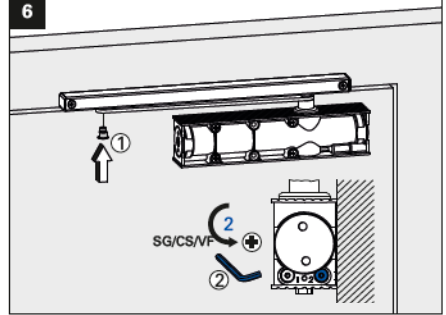
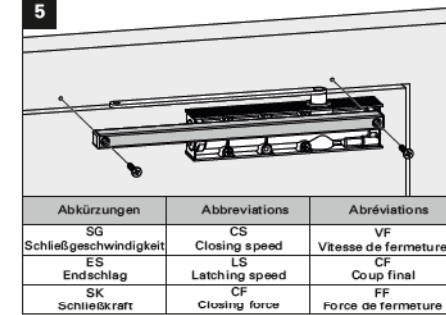
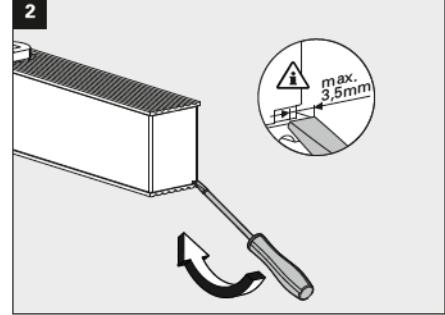
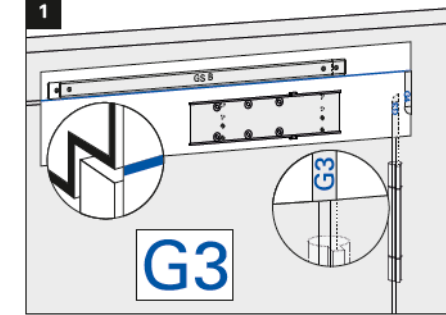
Türschließergröße Door closer size Force de ferme porte	Max. Türbreite Max. door width Largeur de porte max.	Umdrehungen Rotations Rotations
TS-31 EN 1-3 #1	750 mm	-11
#2	850 mm	-6
#3	950 mm	0

Türschließergröße Door closer size Force de ferme porte	Max. Türbreite Max. door width Largeur de porte max.	Umdrehungen Rotations Rotations
TS-41 EN 1-4 #1	750 mm	-7
#2	850 mm	-4
#3	950 mm	0
#4	1100 mm	+5

Für die Montage dürfen ausschließlich Originalteile des Herstellers verwendet werden. Die Montagearbeiten müssen gemäß Anleitung von einer qualifizierten Person durchgeführt werden. Bei Nichtbeachtung entfällt jeglicher Garantiesanspruch. Diese Anleitung ist vom Monteur nach der Montage an den Betreiber weiterzugeben!

Only original parts have to be used. The assembly has to be made by a qualified person according to the mounting instruction. In case of non-respect the guarantee is invalid. This instruction is to be handed over to the operator by the fitter after assembly!

Impérativement utiliser la notice de montage fournie par le fabricant. La mise en œuvre et le montage doivent être exécutés par du personnel qualifié. Le non respect de ces règles annule catégoriquement tout droit de garantie. Cette instruction est à remettre par le poseur à l'exploitant après montage.



# Care notes

High-grade stainless steel



The term high-grade stainless steel is used to describe certain particularly corrosion-resistant and hygienic steels. Their surface is non-porous and requires no additional sealing. It cannot flake and micro-organisms and dirt do not adhere to it. Despite all of this, it still requires care! High-grade stainless steel has properties which make it the ideal material in endless areas of application:

- High corrosion resistance
- Heatproof
- Completely recyclable
- Suitable for use with foodstuffs
- High stability

## Care Notes, high-grade stainless steel

General care: Stainless steel is an easy-care material, but it is not completely maintenance-free. Rinsing with clear, preferably luke-warm water at regular intervals and subsequent wiping with a soft cloth are indispensable.

As a fundamental rule, never use any abrasive cleaning agents. The milder the cleaning agent the better. They should contain no hydrochloric acid, chlorine etc! Sticky food residue is best removed with aqueous cleaners, grease and oil with alkaline cleaners containing surfactants and/or special acidic cleaners. Grease and grease-bonded pigment dirt can normally be removed easily with neutral detergents or all-purpose cleaners.

## Mechanical Cleaning

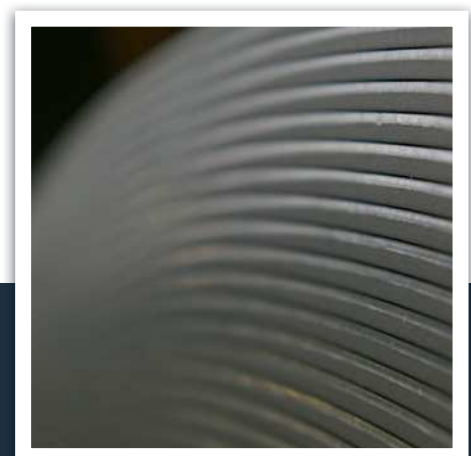
Stainless steel surfaces can be easily washed with a wet cloth, brushed or moist wiped. Please make sure that you choose the right mechanical cleaning product, however. Microfibre cloths are recommended. Allow the stainless steel cleaning agent, e.g. spray, to soak in briefly, then wipe the surface with the cloth in the direction of polishing. If you are dealing with coarser dirt on large surfaces, it is best to use a brush with natural bristles or special high-grade stainless steel brushes. Some nylon brushes contain abrasive objects and are unsuitable.

## Finger marks and handprints on stainless steel surfaces

All stainless steel surfaces that are touched often should be cleaned regularly and disinfected before applying a stainless steel care product. The cleaning agent and disinfectant should be added to preferably warm water.

Stainless steel - identification table						
European Norm	European Norm	Germany	USA	Unified Numbering System	Japan	China
Material no.	DIN / EN identification	Colloquial speech	ASTM * (AISI)	UNS**	JIS	China
1.4301	X 5 CrNi18-10	V2A	304	S30400	SUS 304	18 / 10
1.4404	X 5 CrNiMo17-12-2	V4A	316	S31600	SUS 316	17 / 12

\* **ASTM** formerly known as the American Society for Testing and Materials (ASTM)  
 \*\* The **UNS** number (short for "Unified Numbering System for Metals and Alloys")



# Care notes

Aluminium



Because it very quickly forms a thin oxide layer when it comes in contact with air, aluminium has a dull, silver-grey appearance. This oxide layer makes aluminium very corrosion resistant. It is a very soft and malleable metal which can be rolled into a thin film. Aluminium is the third most common element in the earth's crust and only occurs in a chemically bonded condition. It is a good electric conductor.

- High corrosion resistance
- Heat resistance
- Completely recyclable
- Suitable for use with foodstuffs

## Care Notes, aluminium

Aluminium is a non-ferrous metal and can corrode in the same way as steel. When this happens, however, unlike steel and iron, an oxide layer is formed which protects the surface below from further corrosion. When the oxide forms, however other substances (salts, acids) also have a disintegrating effect on the material which make a coating of corroded aluminium surfaces necessary.

Although aluminium has a very smooth surface, grease and oil can adhere easily to it. For this reason, aluminium parts must always be degreased very thoroughly. Wear gloves so as not to leave any finger marks after cleaning!

## Mechanical Cleaning

Dust, stains and light dirt can be removed easily with lukewarm water. Tougher stains, such as plaster and cement residue, can be removed easily by adding a few drops of a conventional cleaning agent to the water. Avoid dry cleaning at all costs as this can scratch the surface. We recommend an anodized aluminium cleaner for all anodized surfaces.

## Finger marks and handprints on aluminium surfaces

All aluminium surfaces that are touched often should be cleaned regularly and disinfected before applying an aluminium care product. The cleaning agent and disinfectant should be added to preferably warm water.

# Care notes

Nylon



ECO fittings made of high-quality nylon are the latest trend, particularly with the young generation and in modern buildings. Available in numerous decorative colours, nylon fittings offer the opportunity to set contrasting accents in the home. The material polyamide combines a number of positive properties which help to withstand the high wear and tear to which the fittings are subjected. With distinct shapes and the wide variety of accessory articles in the nylon range, ECO can offer the suitable accoutrements for every door.

- High corrosion resistance
- Particularly high stability
- Highest possible light fastness
- High wear and tear resistance
- Hygienic and harmless to health
- Resistant to electrostatic charging in hot and cold temperatures

## Care notes, nylon

One special advantage of nylon is the minimal level of care and cleaning it requires. Dirt can be removed quickly and easily with a little bit of mild soapy water. Special nylon cleaners are recommended for more severe dirt, but the amount of time required here is relatively low too.

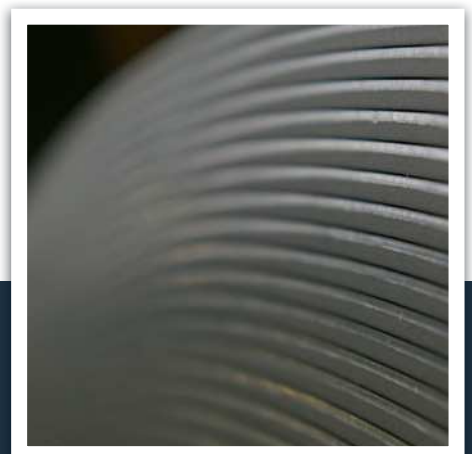
To protect or clean plastic, it is best to use warm water and a standard commercial cleaner such as "green soap". Only small amounts of this get the surface clean again and ready for treatment with a care product. There are a whole lot of these on the market, so you can't help but find the right one in a specialized dealership. In most cases, all you have to do is rub them on and polish them off, thereby freshening up the nylon and increasing its resistance.

## Mechanical Cleaning

Simply remove normal dirt with water and a gentle household detergent. Never wipe away dry dirt as this can scratch the surface. It can also cause an electrostatic charge in the nylon which attracts even more dirt. Special cleaning agents help to remove tough stains.

## Finger marks and handprints on plastic

All nylon surfaces that are touched often should be cleaned regularly and disinfected before applying a nylon care product. The cleaning agent and disinfectant should be added to preferably warm water.



# Care notes

## General Information

Just to be on the safe side, try out your preferred cleaning agent at a non-visible place (e.g. the inside) before using it for the first time.

**The fundamental rule for all materials is to clean off dust with a wet cloth – never rub it off dry!**

### Care tips for powder-coated metal surfaces

Powder-coated surfaces are affected by environmental and atmospheric conditions. Regular cleaning maintains the decorative appearance and provides better protection against environmental influences. Warm water with some standard commercial washing up liquid added is recommended for keeping surfaces clean. Please do not use cleaners with scouring agents or any abrasive cloths or pads as these can destroy the coated surface.

### How to take proper care of your ECO lock

Profile cylinders and other moving parts should be treated with resin-free oil once or twice a year. Please do not use graphite! If need be, moving parts can also be greased.

### How to take proper care of your ECO hinge plate

OBX door hinges from ECO are maintenance-free, so please do not apply any oil or grease! In this way, your doors and fittings will maintain their value and attractive appearance for a long time with a minimum of effort.