

It all hinges on excellence.

**SIMONSWERK**



## **EVO**

The self-closing knuckle hinge system for doors

# Content

## EVO – the self-closing knuckle hinge system for doors

---

			<b>Wall-glass installation</b>
06	<b>EV 835E10 N</b>	120 kg	for single action heavy-duty and outer glass doors
07	<b>EV 835E10 N SOL</b>	100 kg	for single action residential and heavy-duty glass doors
08	<b>EV 835E11 N</b>	120 kg	for single action heavy-duty and outer glass doors

---

			<b>Glass-glass installation</b>
09	<b>EV 835E50</b>	100 kg	for single action residential, heavy-duty and outer glass doors
10	<b>EV 835E50 SOL</b>	100 kg	for single action residential and heavy-duty glass doors
11	<b>EV 835E51</b>	100 kg	for single action residential, heavy-duty and outer glass doors

---

12	<b>Finishes</b>		
----	-----------------	--	--

---

13	Service		
----	---------	--	--

---

## EVO – the self-closing knuckle hinge system for doors

A successful architectural concept must be well thought out in design and function down to the last detail. An elegant detail that supports such a concept in an exemplary manner is EVO, the door hinge for single-action glass doors. Thank to its elegant knuckle hinge look in combination with its integrated hydraulic self-closing system this door hinge is predestined for commercial and upmarket residential buildings. However, the door hinge is also excellently suited for separating specific areas in medical practices or in high-quality residential buildings, such as large flats with a lot of space.

### **EVO – the advantages at a glance**

- for indoor use and outdoor areas that are protected from driving rain
- load capacity up to 120 kg
- hydraulic hinge system
- adjustable closing speed
- constant damping control
- opening angle up to 180°



## Aesthetic quality and functionality in every detail

Thanks to the hydraulics housed in EVO, a reduced design of the hinge becomes reality and enhances the maximum effect of the door leaf itself. It is suitable for both interior and exterior applications protected from driving rain.

### **The patented technical concept**

The integrated hydraulic damping system ensures a smooth and controlled closing process. The doors can be realized with door push handles or with suitable latch lock and counter box. The latch of the lock is quietly and safely pulled into the strike plate which prevents damage to the glass, door hinges and lock, as well as noise pollution. A continuous adjustment on the hinge allows the individual adjustment of the closing speed to any door weight, any door width and the walking speed of the user.

### **Versatility is the key**

EVO is available in a wide range of finishes and therefore excellently suited for separating specific areas in medical practices or in high-quality residential buildings, such as large flats with a lot of space.



## EVO

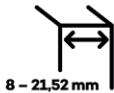
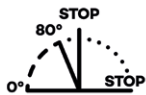
### EV 835E10 N

for single action (wall-glass) heavy-duty and outer glass doors

hydraulic hinge      suitable for doors with stop      up to 120 kg

#### Product features

- hydraulic hinge
- for use with wall-glass combinations
- for single action doors
- with closing speed adjustment
- with constant braking control
- door opens up to +180°
- stop at +90° and +180°
- automatic closing from +80°
- installed on doors with a profil on a stop
- rebate depth from 30 to 50 mm



#### Technical details

load capacity	120.0 kg
rebate depth	30.0–50.0 mm
opening angle	+180°
hold open	+ 90°/+ 180°
automatic closing	+ 80°
glass thickness	8–21.52 mm
temperature resistance	- 15.0 °C to + 40.0 °C
min. door width	800.0 mm
max. door width	1200.0 mm

#### Finish

EV1 satin silver natural, anodized 20 micron (CO 002), satin black anodized (CO 005), imitation satin stainless steel (CO 013), polished Chrome (CO 014), imitation matt chrome liquid electrostatic coated (CO 015), polished gold (CO 016), matt gold (CO 017), RAL 9005 matt liquid electrostatic coated (CO 062), RAL 9010 matt liquid electrostatic coated (CO 088), RAL 9016 matt liquid electrostatic coated (CO 095)

#### Combination

EV 835E10 N SOL

#### Note

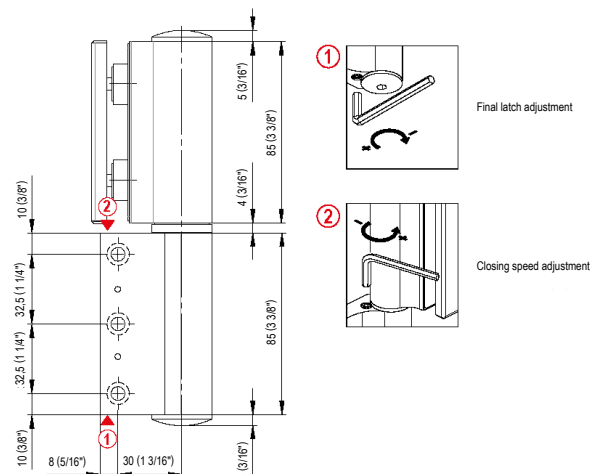
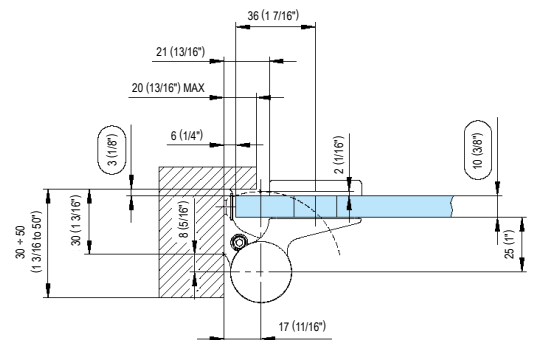
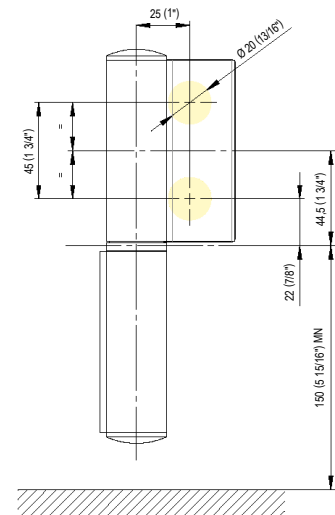
**i** The hinge has a loading and therefore a closing stop is necessary. For installations in particular environments or climate (ex. Wet, acid, saline) consult sales office first.

#### Classification key

EN 1154

3	8	3/6*1	0	1	4
---	---	-------	---	---	---

\*1 Please refer to the notes and explanations on page 13.



Quality marks





## EVO

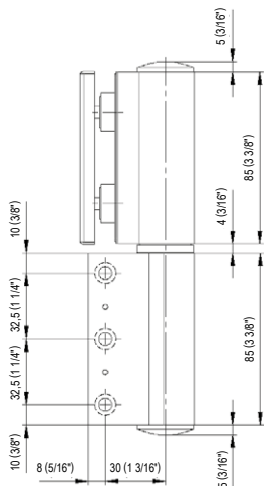
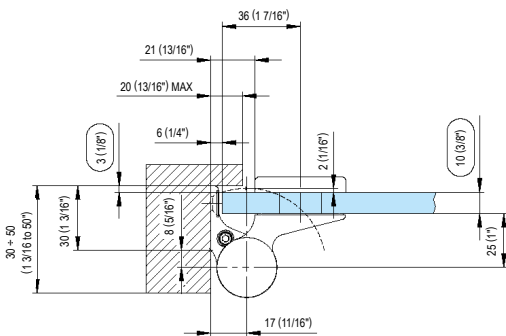
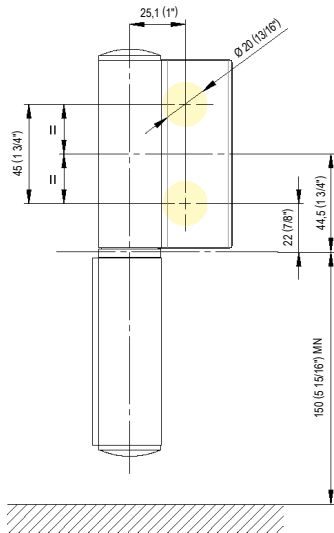
### EV 835E10 N SOL

for single action (wall-glass) residential and heavy-duty glass doors

free hinge	suitable for doors with stop	up to 100 kg
------------	------------------------------	--------------

#### Product features

- free hinge
- for use with wall-glass combinations
- for single action doors
- to be matched with EV 835E10 N - EV 835E11 N
- installed on doors with a profil on a stop
- rebate depth from 30 to 50 mm



#### Technical details

load capacity	100.0 kg
rebate depth	30.0–50.0 mm
opening angle	+180°
glass thickness	8–21.52 mm
min. door width	800.0 mm
max. door width	1000.0 mm

#### Finish

EV1 satin silver natural, anodized 20 micron (CO 002), satin black anodized (CO 005), imitation satin stainless steel (CO 013), polished Chrome (CO 014), imitation matt chrome liquid electrostatic coated (CO 015), polished gold (CO 016), matt gold (CO 017), RAL 9005 matt liquid electrostatic coated (CO 062), RAL 9010 matt liquid electrostatic coated (CO 088), RAL 9016 matt liquid electrostatic coated (CO 095)

#### Combination

EV 835E10 N, EV 835E11 N

## EVO

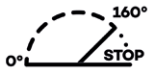
### EV 835E11 N

for single action (wall-glass) heavy-duty and outer glass doors

hydraulic hinge      suitable for doors with stop      up to 120 kg

#### Product features

- hydraulic hinge
- for use with wall-glass combinations
- for single action doors
- with closing speed adjustment
- with constant braking control
- door opens up to +180°
- stop at +180°
- automatic closing from +160°
- installed on doors with a profil on a stop
- rebate depth from 30 to 50 mm



#### Technical details

load capacity	120.0 kg
rebate depth	30.0–50.0 mm
opening angle	+180°
hold open	+ 180°
automatic closing	+ 160°
glass thickness	8–21.52 mm
temperature resistance	- 15.0 °C to + 40.0 °C
max. door width	800.0 mm
min. door width	1200.0 mm

#### Finish

EV1 satin silver natural, anodized 20 micron (CO 002), satin black anodized (CO 005), imitation satin stainless steel (CO 013), polished Chrome (CO 014), imitation matt chrome liquid electrostatic coated (CO 015), polished gold (CO 016), matt gold (CO 017), RAL 9005 matt liquid electrostatic coated (CO 062), RAL 9010 matt liquid electrostatic coated (CO 088), RAL 9016 matt liquid electrostatic coated (CO 095)

#### Combination

EV 835E10 N SOL

#### Note

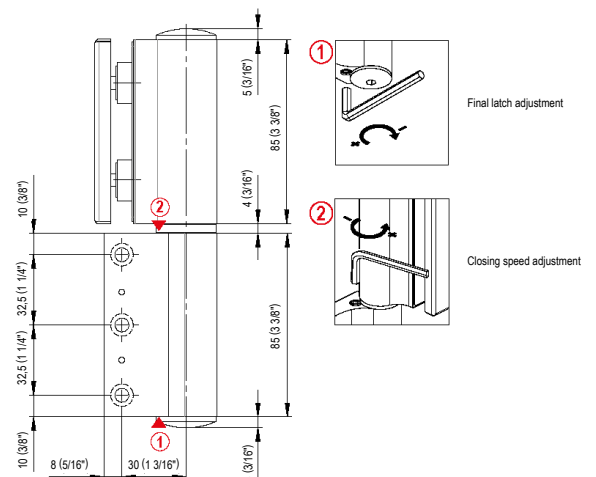
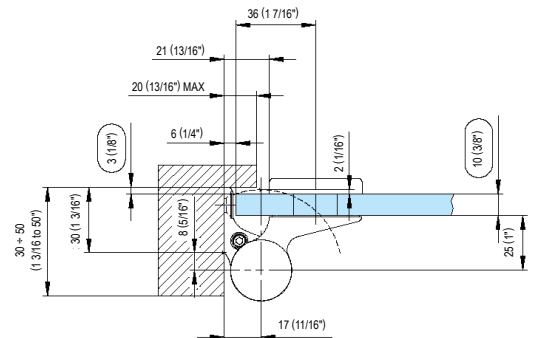
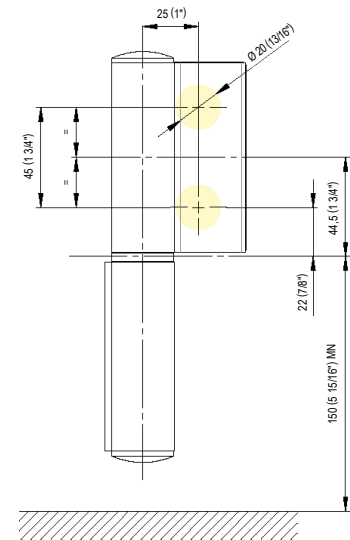
**i** The hinge has a loading and therefore a closing stop is necessary. For installations in particular environments or climate (ex. Wet, acid, saline) consult sales office first.

#### Classification key

EN 1154

3	8	3/6*1	0	1	4
---	---	-------	---	---	---

\*1 Please refer to the notes and explanations on page 13.



Quality marks





# EVO

## EV 835E50

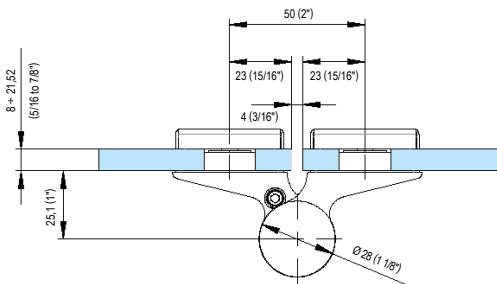
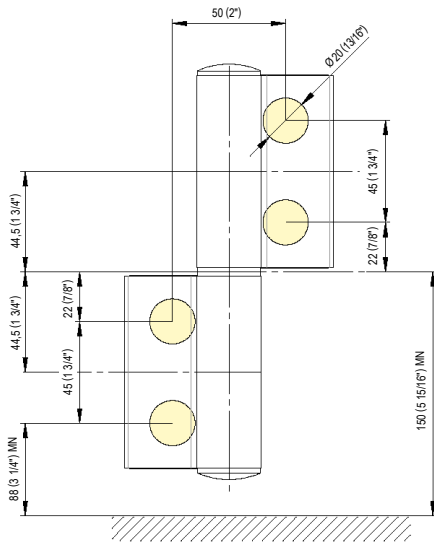
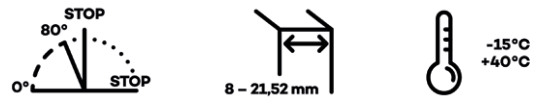
for single action (glass-glass) residential, heavy-duty and outer glass doors



hydraulic hinge	suitable for doors with stop	up to 100 kg
-----------------	------------------------------	--------------

### Product features

- hydraulic hinge
- for use with glass-glass combinations
- for single action doors
- with closing speed adjustment
- with constant braking control
- door opens up to +180°
- stop at +90° and +180°
- automatic closing from +80°
- installed on doors with a profil on a stop



### Technical details

load capacity	100.0 kg
opening angle	+180°
hold open	+ 90°/+ 180°
automatic closing	+ 80°
glass thickness	8-21.52 mm
temperature resistance	- 15.0 °C to + 40.0 °C
max. door width	800.0 mm
min. door width	1000.0 mm

### Finish

EV1 satin silver natural, anodized 20 micron (CO 002), satin black anodized (CO 005), imitation satin stainless steel (CO 013), polished Chrome (CO 014), imitation matt chrome liquid electrostatic coated (CO 015), polished gold (CO 016), matt gold (CO 017), RAL 9005 matt liquid electrostatic coated (CO 062), RAL 9010 matt liquid electrostatic coated (CO 088), RAL 9016 matt liquid electrostatic coated (CO 095)

### Combination

EV 835E50 SOL

### Note

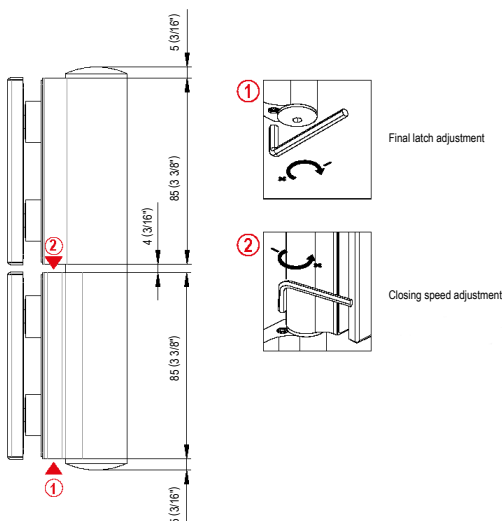
**i** The hinge has a loading and therefore a closing stop is necessary. For installations in particular environments or climate (ex. Wet, acid, saline) consult sales office first.

### Classification key

EN 1154

3	8	3/6*1	0	1	4
---	---	-------	---	---	---

\*1 Please refer to the notes and explanations on page 13.



Quality marks



# EVO

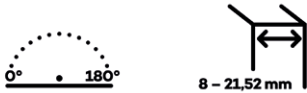
## EV 835E50 SOL

for single action (glass-glass) residential and heavy-duty glass doors

**free hinge**      **suitable for doors with stop**      **up to 100 kg**

### Product features

- free hinge
- for use with glass-glass combinations
- for single action doors
- to be matched with EV 835E50 - EV 835E51



### Technical details

load capacity	100.0 kg
opening angle	+180°
glass thickness	8-21.52 mm
max. door width	800.0 mm
min. door width	1000.0 mm

### Finish

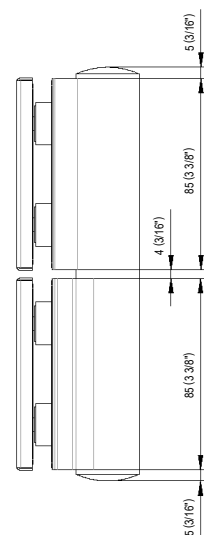
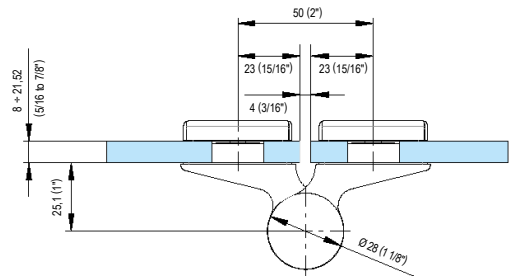
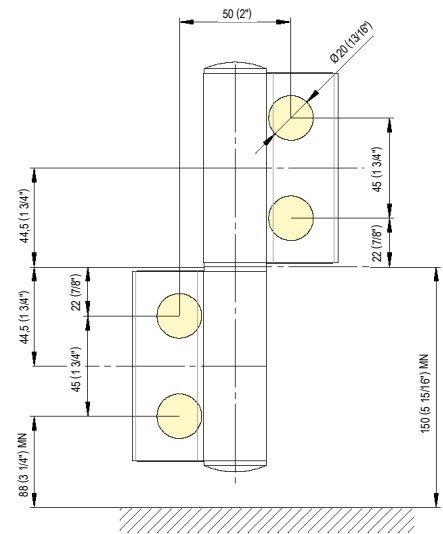
EV1 satin silver natural, anodized 20 micron (CO 002), satin black anodized (CO 005), imitation satin stainless steel (CO 013), polished Chrome (CO 014), imitation matt chrome liquid electrostatic coated (CO 015), polished gold (CO 016), matt gold (CO 017), RAL 9005 matt liquid electrostatic coated (CO 062), RAL 9010 matt liquid electrostatic coated (CO 088), RAL 9016 matt liquid electrostatic coated (CO 095)

### Combination

EV 835E50, EV 835E51

### Note

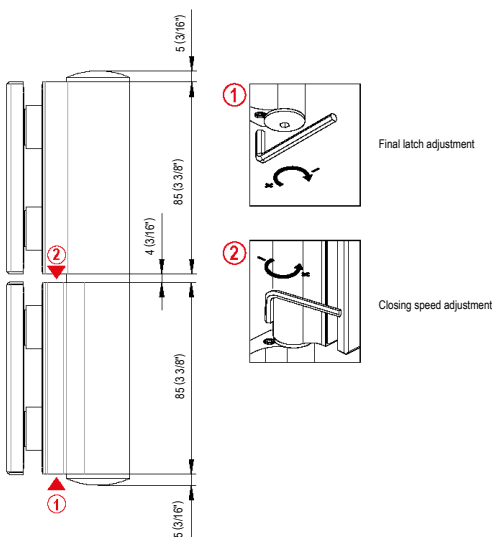
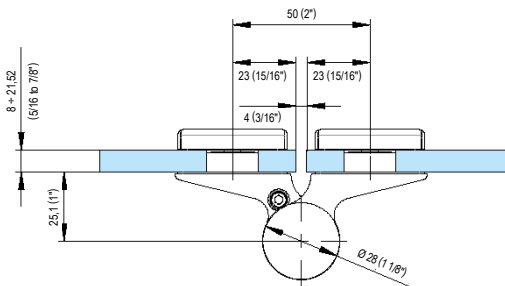
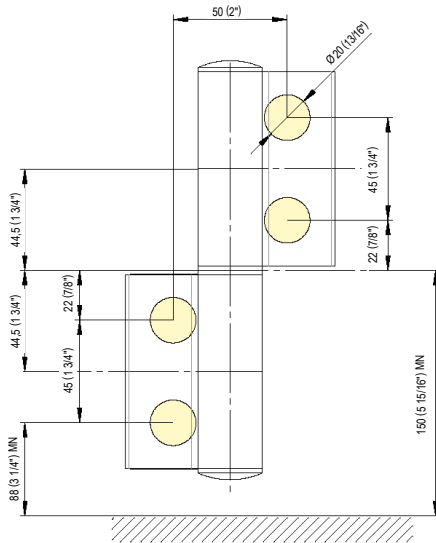
**i** The hinge has a loading and therefore a closing stop is necessary. For installations in particular environments or climate (ex. Wet, acid, saline) consult sales office first.



# EVO

## EV 835E51

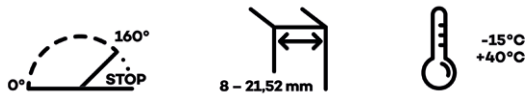
for single action (glass-glass) residential, heavy-duty and outer glass doors



hydraulic hinge | suitable for doors with stop | up to 100 kg

### Product features

- hydraulic hinge
- for use with glass-glass combinations
- for single action doors
- with closing speed adjustment
- with constant braking control
- door opens up to +180°
- stop at +180°
- automatic closing from +160°
- installed on doors with a profil on a stop



### Technical details

load capacity	100.0 kg
opening angle	+180°
hold open	+ 180°
automatic closing	+ 160°
glass thickness	8-21.52 mm
temperature resistance	- 15.0 °C to + 40.0 °C
max. door width	800.0 mm
min. door width	1000.0 mm

### Finish

EV1 satin silver natural, anodized 20 micron (CO 002), satin black anodized (CO 005), imitation satin stainless steel (CO 013), polished Chrome (CO 014), imitation matt chrome liquid electrostatic coated (CO 015), polished gold (CO 016), matt gold (CO 017, RAL 9005 matt liquid electrostatic coated (CO 062), RAL 9010 matt liquid electrostatic coated (CO 088), RAL 9016 matt liquid electrostatic coated (CO 095)

### Combination

EV 835E50 SOL

### Note

**i** The hinge has a loading and therefore a closing stop is necessary. For installations in particular environments or climate (ex. Wet, acid, saline) consult sales office first.

### Classification key

EN 1154

3	8	3/6*1	0	1	4
---	---	-------	---	---	---

\*1 Please refer to the notes and explanations on page 13.

Quality marks

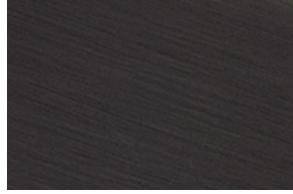


# Finishes

## Standard finishes



EV1 satin silver natural, anodized 20 micron (CO 002)



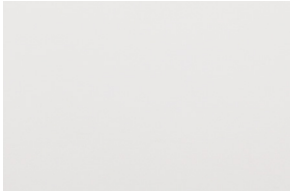
Satin black anodized (CO 005)



Imitation satin stainless steel (CO 013)



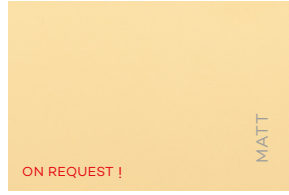
polished Chrome (CO 014)



Imitation matt chrome liquid electrostatic coated (CO 015)



polished gold (CO 016)



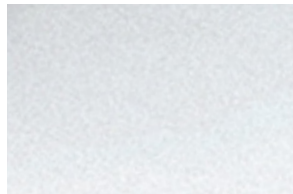
matt gold (CO 017)



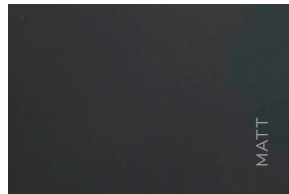
Brushed stainless steel (CO 031)



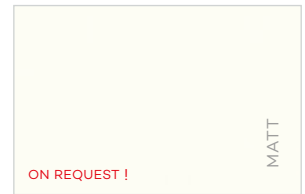
Polished stainless steel (CO 032)



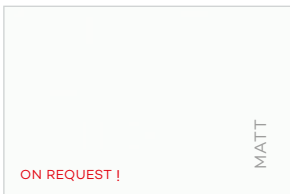
Polished (CO 047)



RAL 9005 matt liquid electrostatic coated (CO 062)



RAL 9005 matt liquid electrostatic coated (CO 088)

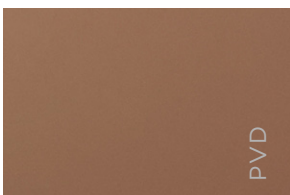


RAL 9016 matt liquid electrostatic coated (CO 095)



COL02 | Finish Folder

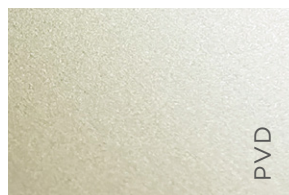
## Special finishes



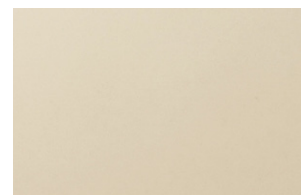
Polished bright bronze (CO 066)



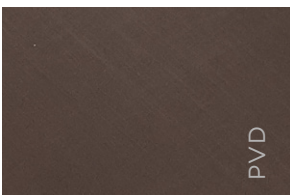
Satin mat bronze (CO 067)



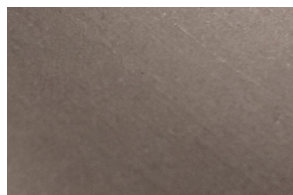
Polished bright champagne (CO 068)



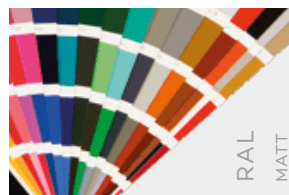
Satin mat champagne (CO 069)



Polished bright gunmetal grey (CO 070)



Satin mat gunmetal grey (CO 071)



RAL | Liquid electrostatic coated



COL03 | Special Finish Folder

### PVD – Physical Vapour Deposition

Metal coating that ensures: exceptional resistance to abrasion, resistance to oxidation, innovative and durable colouring.

Ask our sales dept for minimum order, for a quotation and delivery time.

## Explanations

---

### **General explanations on the classification key used in accordance with EN 1154:2006 for door closing devices with controlled closing sequence:**

Our self-closing hinge systems are tested and certified in accordance with the EN 1154:2006 standard. As the European standard does not cover all products available on the market for closing doors with a controlled closing sequence, the European standard is not applicable in all respects to self-closing door hinges. Due to their small size, the torques to be achieved deviate from EN 1154:2006 depending on the door dimensions. The third digit of the certification key is therefore split:

The front digit indicates the torques achieved and the efficiency in accordance with EN 1154:2006, the rear digit indicates the maximum door weight in accordance with EN 1154:2006. All other technical characteristics are specified in the technical data sheets.

The closing forces can be influenced by the type of application design by using one to three door hinges with hydraulic closing function per door and eventually add door hinges without hydraulic closing function.

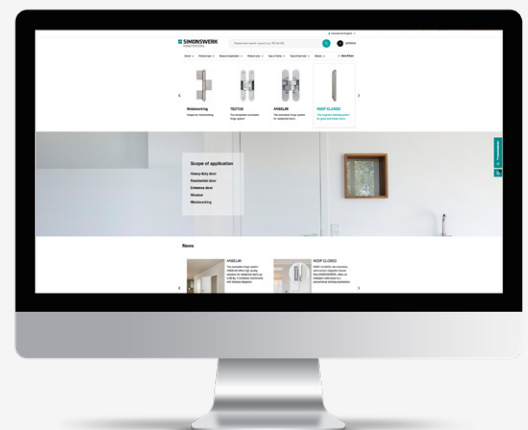
## Service – comprehensive expertise for your daily work

We are happy to provide you with all the documentation you need to determine the most suitable hinge system for your building project. Please contact us: we would be delighted to work with you to choose the best solution – from high-quality standard elements right up to the most complex solutions.

All our brochures and data sheets can be requested in a printed version, or you can simply download them on the spot.

Our friendly and knowledgeable application engineers will be pleased to help you and advise you.

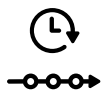
**[www.simonswerk.com](http://www.simonswerk.com)**



## SIMONSWERK GROUP – excellence in product and service

As an internationally operating group of companies, the SIMONSWERK GROUP is the market leader in the area of high-quality hinge systems. With over 900 employees worldwide, we stand for the highest quality standards, constant willingness to innovate and long-lasting customer relationships.

The SIMONSWERK brand combines the entire expertise in hinge systems and unites technical know-how with design standards at the highest level. In addition to innovative product solutions, we offer our customers the best service exactly where it is needed. From personal customer consultations and competent training courses to customised delivery and logistics processes or digital service tools.



### **Over 130 years of experience**

The perfect foundation for continuous growth with experience



### **Internationally successful**

As the market leader, we are constantly expanding our know-how



### **Over 900 employees worldwide**

Every single employee shapes the vision of the SIMONSWERK GROUP



### **Focused product solutions**

With high-quality hinge systems for heavy-duty, residential and entrance doors, we offer product solutions for all applications and materials

**For our customers and partners**

As SIMONSWERK GROUP, we are active in a variety of business models. Both in the construction project business and in cooperation with door manufacturers as well as with hardware dealers and processors, we develop perfect solutions, depending on individual market needs. We will provide our customers and decision-makers with the best possible support as a partner in accordance with their various requirements.



# SIMONSWERK

## EVO

The self-closing knuckle hinge system for doors

### SIMONSWERK GmbH

Bosfelder Weg 5  
33378 Rheda-Wiedenbrück  
Germany

+49 5242 4130

info@simonswerk.de

www.simonswerk.de

Member of the

**SIMONSWERK  
GROUP**

© SIMONSWERK GmbH  
01/2024, 5 800601 0 00001/20  
Subject to technical modifications.

