

Set EPN 900 III with counter hardware short plate



Set consists of

- EPN 900 III ER (also available in aluminium, F1 silver coated)*
- Counter hardware short plate with friction bearing technology (OGL)

Counter hardware handle type D-110 (PZ) Counter hardware knob type K-130 (PZ)

Accessories

- Screw set (please mention door thickness)
- Tube (see length-chart)
- Spindle has to be ordered separately



eel door



Wooden door

			Counter har	dware PZ-72
Set EPN 900 III Stainless steel	Turning angle	EPN 900 III	D-110	K-130
	30°	106961304600080		
PZ-72	40°	106961404600080	106910004600902	106915004600902
	45°	106961454600080		

Further executions and handle types on request.

Accessories



Tube: Stainless steel	Fixing axis (BA) max.	Article number
900 mm	1.067 mm	109506604600070
1.150 mm	1.317 mm	109506614600070
1.500 mm	-	On request

*Manufacturing of special lengths on request and against surcharge possible.

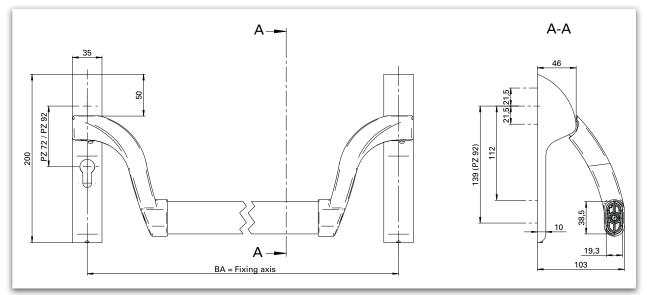
Tube has to be ordered separately.

Please see our details on page 673.



Product characteristics		
Mode of operation	Touchbar Pushbar	-
Finishes	Stainless steel Aluminium F1 coated Coloured coated	•
	900*	
Tube	1.150*	ı
	1.500*	
	PZ-72	•
Lock type	PZ-92	•
	RZ-74	•
	RZ-94	ı
	UG	
DIN left / DIN right useable		•
Suitable for the use on fire- and smoke control doors	F	•
Tested according to DIN / EN	EN 1125 🔀	•
■ Yes - No □ Option		





Dimensions: EPN 900 III with counter hardware security handle sets on short plate

EPN 900 III security handle set on short plate / Pushbar

The arms are highly cranked and enable the use of electronic key cylinders. .

This execution of tube for EPN 900 III has especially been designed for the use with security handle sets on short plate as counter hardware. The norm and drillhole distances for security handle sets as counter hardware have been taken into consideration.

- Tested according to EN 1125, EN 1634, EN 1191
- Can be used according to EN 1125 only in combination with tested lock and door hardware
- Suitable for the use on fire- and smoke control doors according testing
- DIN left / DIN right useable

- Arms highly cranked, suitable in particular for electronic key cylinders and short PZ distances.
- Huge, stable tube (vandalism)
- High-strength screwing of arm and tube
- Finishes:
 - Satin Stainless steel
 - Silver (F1)* coated (on basis of EPN 900 III Stainless steel)
 - Steel zinc-plated and silver (F1) coated
 - Black / red coated* (on basis EPN 900 III Stainless steel)
- Gear unit: steel zinc-plated



Set EPN 900 III with counter hardware security handle short plate



Set consists of

- EPN 900 III ER (also available in aluminium, F1 silver coated)*
- Counter hardware security handle short plate with friction bearing technology (OGL)

Counter hardware handle type D-110 (PZ or ZA) Counter hardware knob type K-130 (PZ or ZA)

Accessories

- Screw set (please mention door thickness)
- Tube (see length-chart)
- Spindle has to be ordered separately



Steel door



Wooden door

		Counter hardware PZ-72 / 14 mm		Counter hardware ZA-72 / 14 mm		
Set EPN 900 III Stainless steel	Turning angle	EPN 900 III	D-110	(€0 (K-130	D-110	K-130
	30°	106961304600099				
PZ-72	40°	106961404600099	102034314600012	102034104600012	102034514600012	102034114600012
	45°	106961454600099				

Further executions and handle types on request.

Accessories



Tube: Stainless steel	Fixing axis (BA) max.	Article number
900 mm	1.067 mm	109506604600070
1.150 mm	1.317 mm	109506614600070
1.500 mm	-	On request

*Manufacturing of special lengths on request and against surcharge possible.

Tube has to be ordered separately.

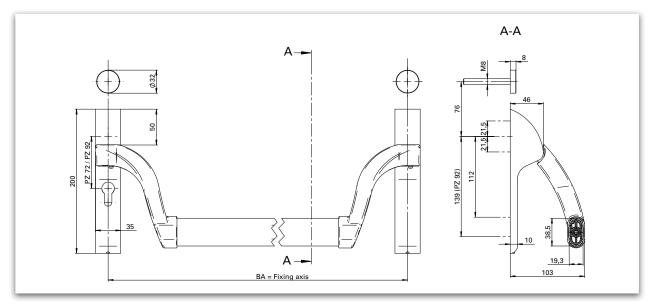
Please see our details on page 673.



Product characteristics	
Mode of operation	Touchbar - Pushbar -
Finishes	Stainless steel Aluminium F1 coated Coloured coated -
	900*
Tube	1.150*
	1.500*
	PZ-72 ■
Lock type	PZ-92 ■
	RZ-74 ■
	RZ-94 ■
	UG ■
DIN left / DIN right useable	
Suitable for the use on fire- and smoke control doors	F -
Tested according to DIN / EN	EN 1125 🖾

- No 🗖 Option





Dimensions: EPN 900 III with counter hardware security handle sets on long plate

Description

EPN 900 III security handle set on long plate / Pushbar

The arms are highly cranked and enable the use of electronic key cylinders.

This execution of tube for EPN 900 III has especially been designed for the use with security handle sets on long plate as counter hardware. The norm and drillhole distances for security handle sets as counter hardware have been taken into consideration.

- Tested according to EN 1125, EN 1634, EN 1191
- Can be used according to EN 1125 only in combination with tested lock and door hardware
- Suitable for the use on fire- and smoke control doors according testing
- DIN left / DIN right useable

- Arms highly cranked, suitable in particular for electronic key cylinders and short PZ distances.
- Huge, stable tube (vandalism)
- High-strength screwing of arm and tube
- Finishes:
 - Satin Stainless steel
 - Silver (F1)* coated (on basis of EPN 900 III Stainless steel)
 - Steel zinc-plated and silver (F1) coated
 - Black / red coated* (on basis EPN 900 III Stainless steel)
- Gear unit: steel zinc-plated





Set EPN 900 III with counter hardware security handle long plate



Set consists of

- EPN 900 III ER (also available in aluminium, F1 silver coated)*
- Counter hardware security handle long plate with friction bearing technology (OGL)

Counter hardware handle type D-110 (PZ or ZA) Counter hardware knob type K-130 (PZ or ZA)

Accessories

- Screw set (please mention door thickness)
- Tube (see length-chart)
- Spindle has to be ordered separately



Steel door



Wooden doo

		Counter hardware PZ / 14 mm		Counter hardware ZA / 14 mm		
Set EPN 900 III Stainless steel	Turning angle	EPN 900 III	D-110	K-130	D-110	K-130
	30°	106961304600099				
PZ-72	40°	106961404600099	106940004600010	106942004600010	106940504600010	106942504600010
	45°	106962304600099				
	30°	106962304600099				
PZ-92	40°	106962404600099	106940014600010	106942014600010	106940514600010	106942514600010
	45°	106962454600099				

Further executions and handle types on request.

Accessories



Tube: Stainless steel	Fixing axis (BA) max.	Article number
900 mm	1.067 mm	109506604600070
1.150 mm	1.317 mm	109506614600070
1.500 mm	-	On request

*Manufacturing of special lengths on request and against surcharge possible.

Tube has to be ordered separately.

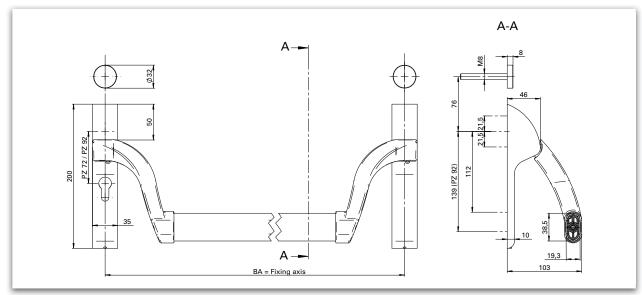
Please see our details on page 673.



Product characteristics		
Mode of operation	Touchbar Pushbar	i
Finishes	Stainless steel Aluminium F1 coated Coloured coated	
	900*	
Tube	1.150*	
	1.500*	0
	PZ-72	
Lock type	PZ-92	
.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	RZ-74	
	RZ-94	
	UG	
DIN left / DIN right useable		
Suitable for the use on fire- and smoke control doors	F	•
Tested according to DIN / EN	EN 1125 🔀	

- No 🗖 Option





Dimensioning: EPN 900 III mit with counter hardware security handle sets on profile frame

Description

EPN 900 III security handle set profile frame / Pushbar

The arms are highly cranked and enable the use of electronic key cylinders.

This execution of tube for EPN 900 III has especially been designed for the use with security handle sets for profile frame doors as counter hardware. The norm and drillhole distances for security handle sets for profile frame doors as counter hardware have been taken into consideration

- Tested according to **EN 1125, EN 1634, EN 1191**
- Can be used according to EN 1125 only in combination with tested lock and door hardware
- Suitable for the use on fire- and smoke control doors according testing
- DIN left / DIN right useable

- Arms highly cranked, suitable in particular for electronic key cylinders and short PZ distances.
- Huge, stable tube (vandalism)
- High-strength screwing of arm and tube
- Finishes:
 - Satin Stainless steel
 - Silver (F1)* coated (on basis of EPN 900 III Stainless steel)
 - Steel zinc-plated and silver (F1) coated
 - Black / red coated* (on basis EPN 900 III Stainless steel)
- Gear unit: steel zinc-plated



Set EPN 900 III with counter hardware security handle profile frame



Set consists of

- EPN 900 III ER (also available in aluminium, F1 silver coated)*
- Counter hardware security handle profile frame with friction bearing technology (OGL)

Counter hardware handle type D-116 (PZ or ZA) Counter hardware knob type K-160 (PZ or ZA)

Accessories

- Screw set (please mention door thickness)
- Tube (see length-chart)
- Spindle has to be ordered separately



Profile frame door

		Counter hardware PZ / 14 mm		Counter hardware ZA / 14 mm		
Set EPN 900 III Stainless steel	Turning angle	EPN 900 III	D-116	FO K-160	D-116	FO K-160
	30°	106961304600099				
PZ-72	40°	106961404600099	106941004600010	106943004600010	106941504600010	106943504600010
	45°	106961454600099				
	30°	106962304600099				
PZ-92	40°	106962404600099	106941014600010	106943014600010	106941514600010	106943514600010
	45°	106962454600099				

Further executions and handle types on request.

Accessories

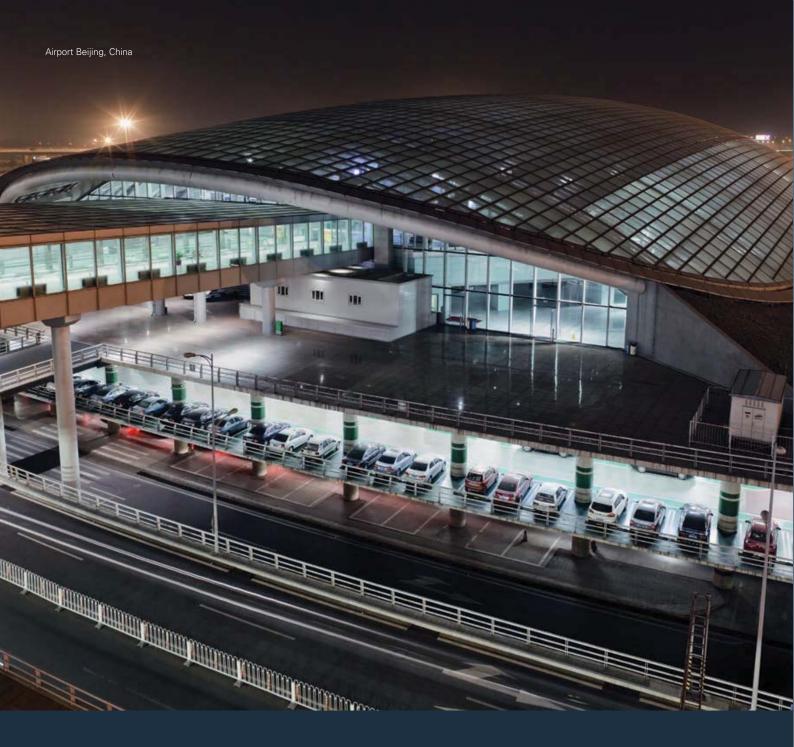


Tube: Stainless steel	Fixing axis (BA) max.	Article number
900 mm	1.067 mm	109506604600070
1.150 mm	1.317 mm	109506614600070
1.500 mm	-	On request

*Manufacturing of special lengths on request and against surcharge possible.

Tube has to be ordered separately.

Please see our details on page 673.



ECO **Panic locking devices**If panic breaks out

Panic bolting technology ensures that people can get out of a danger zone at any time, even in a panic situation. One push on the horizontal activation element is all it takes and the door springs open - irrespective of whether it was locked or not.

ECO unlocking solutions also open up the escape route when a crowd of people press against the door. And even the strength of a child is sufficient to open the door to escape from a fire or toxic smoke.



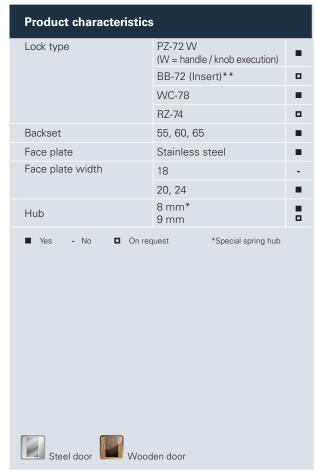
ECO lock technology and panic combinations

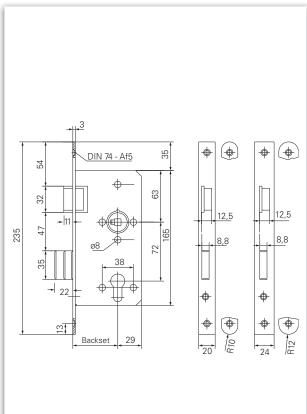












- With closed lock case with 3-fold fastening.
 Lock case zinc-plated
- For interior doors
- Manufactured acc. to **DIN 18251**, class 3
- Dead bolt, nickel-plated, double-turn, Version WC single-turn
- Hub with spring hub in wear-resistance sliding bearing
- Latch bolt nickel-plated with silencing elements
- Special version: Triple latch bolt nickel-plated on request
- Face plate square on request

On request individual plate stamping possible at extra charge.

Dimensioning: GBS 12

GBS 12 • Mortise lock



Face plate			Face plate 20 x 235 mm PZ-72 (W = handle / knob execution)		Face plate 20 x 235 mm WC-78	
Finish	in mm	Form	DIN left DIN right		DIN left	DIN right
	55	round	2012A1AL29BDF13	2012A1AL29BDF14	2012A1EL29BDF11	2012A1EL29BDF12
Stainless Steel	60	round	2012A1AM29BDF13	2012A1AM29BDF14	2012A1EM29BDF11	2012A1EM29BDF12
	65	round	2012A1AN29BDF13	2012A1AN29BDF14	2012A1EN29BDF11	2012A1EN29BDF12

Face plate	Backset Face Plate			4 x 235 mm e / knob execution)	Face plate 24 x 235 mm WC-78	
Finish	in mm	Form	DIN left	DIN right	DIN left	DIN right
	55	round	2012A1AL29aDF13	2012A1AL29aDF14	2012A1EL29aDF11	2012A1EL29aDF12
Stainless Steel	60	round	2012A1AM29aDF13	2012A1AM29aDF14	2012A1EM29aDF11	2012A1EM29aDF12
	65	round	2012A1AN29aDF13	2012A1AN29aDF14	2012A1EN29aDF11	2012A1EN29aDF12
	55	square	2012A1AL29dDF13	2012A1AL29dDF14	-	-
Stainless Steel	60	square	2012A1AM29dDF13	2012A1AM29dDF14	-	-
	65	square	2012A1AN29dDF13	2012A1AN29dDF14	-	-

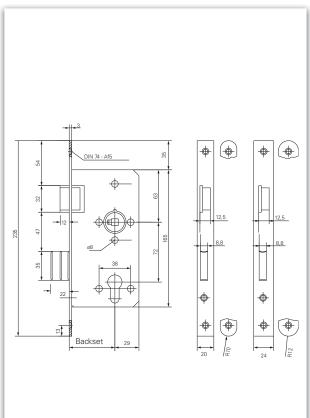
^{**}Please order the BB-insert separately. You can find the BBinsert on page 367.











- With closed lock case with 3-fold fastening.
 Lock case zinc-plated
- For doors with high frequency
- Manufactured acc. to **DIN 18251**, Klasse 4
- Dead bolt, nickel-plated, double-turn
- Latch bolt nickel-plated with silencing elements
- Hub with spring hub in wear-resistance sliding bearing
- With oil channel
- Special version: Triple latch bolt nickel-plated on request
- Face plate square on request

Dimensioning: GBS 15

GBS 15 • Mortise lock



Face plate	Backset Face Plate		Face plate 2 PZ-72 (W = handle	0 x 235 mm / knob execution)	Face plate 20 x 235 mm WC-78	
Finish in mm	Form	DIN left	DIN right	DIN left	DIN right	
	55	round	2015A1AL29BDH13	2015A1AL29BDH14	2015A1EL29BDH11	2015A1EL29BDH12
Stainless Steel	60	round	2015A1AM29BDH13	2015A1AM29BDH14	2015A1EM29BDH11	2015A1EM29BDH12
	65	round	2015A1AN29BDH13	2015A1AN29BDH14	2015A1EN29BDH11	2015A1EN29BDH12

Face plate	Backset	Face Plate	Face plate 2 PZ-72 (W = handle	4 x 235 mm / knob execution)	Face plate 24 x 235 mm WC-78	
Finish in mm	Form	DIN left	DIN right	DIN left	DIN right	
	55	round	2015A1AL29aDH13	2015A1AL29aDH14	2015A1EL29aDH11	2015A1EL29aDH12
Stainless Steel	60	round	2015A1AM29aDH13	2015A1AM29aDH14	2015A1EM29aDH11	2015A1EM29aDH12
	65	round	2015A1AN29aDH13	2015A1AN29aDH14	2015A1EN29aDH11	2015A1EN29aDH12

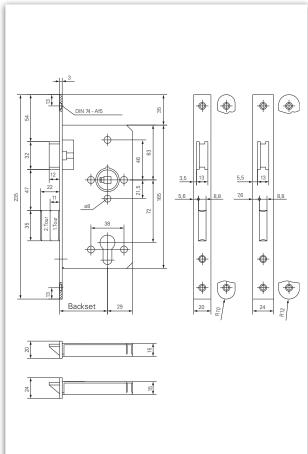
**Please order the BB-insert separately. You can find the BBinsert on page 367.











- With closed lock case with 3-fold fastening.
 Lock case zinc-plated
- For doors with high frequency
- Manufactured acc. to **DIN 18251**, class 3
- Tested and certified according to EN 12 209
- Dead bolt, nickel-plated, double-turn
- Nickel-plated and shiftable latch bolt. Latch bolt can be shifted without opening the lock case.
 With silencing elements
- Hub with spring hub in wear-resistance sliding bearing
- Fire-proof version on request

On request individual plate stamping possible at extra charge.

**Minimum order quantity: 100 pieces.



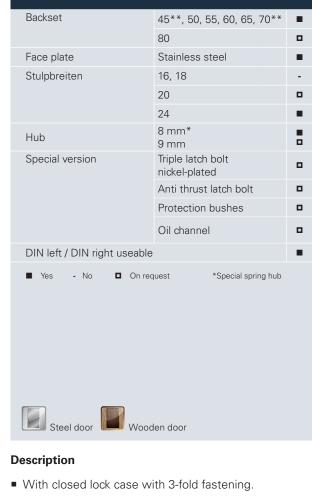


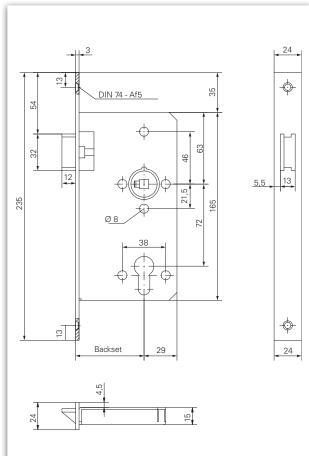
Face plate Finish	Backset in mm	Face Plate Form	Face plate 24 x 235 mm PZ-72 W (W = handle / knob execution)	Face plate 24 x 235 mm BB-72
		Form	DIN left / DIN right	DIN left / DIN right
	45	round	2231A1045000003	2231A3045000002
	50	round	2231A1050000008	2231A3050000003
Stainless	55	round	2231A1055000006	2231A3055000000
Steel	60	round	2231A1060000009	2231A3060000000
	65	round	2231A1065000000	2231A3065000000
	70	round	2231A1070000004	2231A3070000000
	45	square	2231A1045000002	2231A3045000003
	50	square	2231A1050000002	2231A3050000004
Stainless	55	square	2231A1055000003	2231A3055000001
Steel	60	square	2231A1060000008	2231A3060000001
	65	square	2231A1065000002	2231A3065000001
	70	square	2231A1070000003	2231A3070000001

Face plate Finish	Backset in mm	Face Plate Form	Face plate 24 x 235 mm WC-78 DIN left / DIN right	Face plate 24 x 235 mm RZ-74 W (W = handle / knob execution) DIN left / DIN right
	45	round	2231A2045000002	2231A4045000000
	50	round	2231A2050000002	2231A4050000000
Stainless	55	round	2231A2055000002	2231A4055000000
Steel	60	round	2231A2060000008	2231A4060000000
	65	round	2231A2065000000	2231A4065000000
	70	round	2231A2070000000	2231A4070000001
	45	square	2231A2045000003	2231A4045000001
	50	square	2231A2050000003	2231A4050000001
Stainless	55	square	2231A2055000003	2231A4055000001
Steel	60	square	2231A2060000009	2231A4060000001
	65	square	2231A2065000001	2231A4065000001
	70	square	2231A2070000001	2231A4070000002









- Lock case zinc-plated
- For doors with high frequency

Product characteristics

- Manufactured acc. to **DIN 18251**, class 3
- Tested and certified according to EN 12 209
- Nickel-plated and shiftable latch bolt. Latch bolt can be shifted without opening the lock case. With silencing elements
- Hub with spring hub in wear-resistance sliding bearing
- Fire-proof version on request

On request individual plate stamping possible at extra charge.

**Minimum order quantity: 100 pieces.

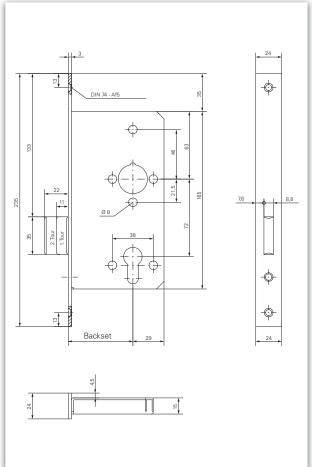


Face plate Finish	Backset in mm	Face Plate Form	Face plate 24 x 235 mm PZ-72 W (W = handle / knob execution) DIN left / DIN right
	45	round	2231C1045000000
	50	round	2231C1050000000
Stainless	55	round	2231C1055000002
Steel	60	round	2231C1060000002
	65	round	2231C1065000000
	70	round	2231C1070000000
	45	square	2231C1045000001
	50	square	2231C1050000001
Stainless	55	square	2231C1055000003
Steel	60	square	2231C1060000003
	65	square	2231C1065000001
	70	square	2231C1070000001









- With closed lock case with 3-fold fastening.
 Lock case zinc-plated
- For doors with high frequency
- Manufactured acc. to **DIN 18251**, class 3
- Tested and certified according to EN 12 209
- Dead bolt, nickel-plated, double-turn
- Fire-proof version on request

On request individual plate stamping possible at extra charge.

**Minimum order quantity: 100 pieces.

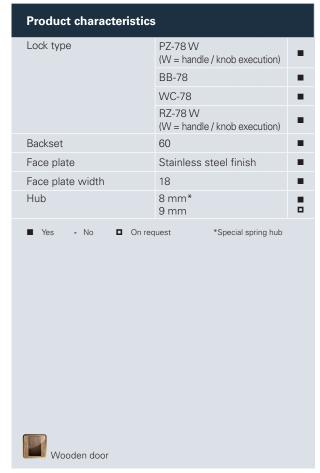
Dimensioning: GBS 31 E

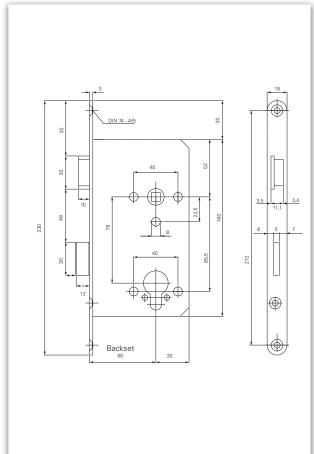


Face plate Finish	Backset in mm	Face Plate Form	Face plate 24 x 235 mm PZ-72 W (W = handle / knob execution) DIN left / DIN right
	45	round	2231E1045000000
	50	round	2231E1050000000
Stainless	55	round	2231E1055000002
Steel	60	round	2231E1060000002
	65	round	2231E1065000000
	70	round	2231E1070000000
	45	square	2231E1045000001
	50	square	2231E1050000001
Stainless	55	square	2231E1055000003
Steel	60	square	2231E1060000003
	65	square	2231E1065000001
	70	square	2231E1070000001









- Mortise lock (Swiss dimensions)
- Dead bolt zinc-plated, single-turn
- Latch bolt with steel delrin
- Zinc-plated lock case

GBS 39 ■ Mortise lock



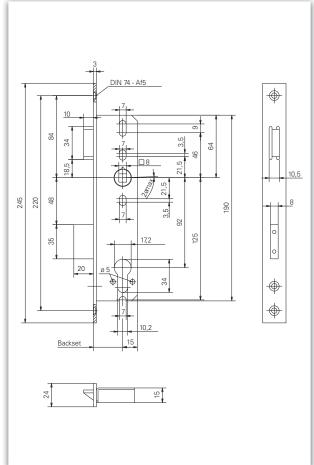
Face plate	Hub	Backset in mm	Face Plate	Face plate 1 PZ-78 W (W = hand	8 x 230 mm le / knob execution)	Face plate 18 x 230 mm RZ-78 W (W = handle / knob execution)		
Finish	111 111111	Form	DIN left	DIN right	DIN left	DIN right		
Stainless Steel	8	60	round	2039aig01u30107	2039aig01u30207	2039aih01 u30107	2039aih01u30207	

Face plate	Hub Backset		Plate		8 x 230 mm -78	Face plate 18 x 230 mm WC-78		
Finish in	in mm	DIN left		DIN right	DIN left	DIN right		
Stainless Steel	8	60	round	2039aic01u30107	2039aic01u30207	2039aif01u30107	2039aif01u30207	









- Mortise lock for profile frame doors
- Shiftable latch bolt
- Safety bolt with rotating steel key-bolts
- Special version on request:
 Latch and deadbolt projecting 5 mm (up to backset 40 mm)



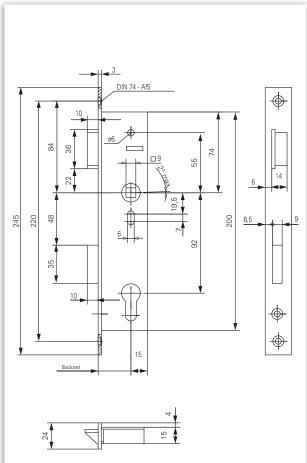
Face plate Finish	Backset in mm	Face Plate Form	Face plate 24 x 245 mm
	25	square	2069A1aE28fK017
	30	square	2069A1aG28fK017
Stainless Steel	35	square	2069A1aH28fK017
	40	square	2069A1al28fK017
	45	square	2069A1aJ28fK017

Face plate Finish	Backset in mm	Face Plate Form	Face plate 24 x 245 mm
	25	square	2069A1aE28fJ017
	30	square	2069A1aG28fJ017
Steel zinc-plated	35	square	2069A1aH28fJ017
	40	square	2069A1al28fJ017
	45	square	2069A1aJ28fJ017









- Mortise lock for single-leaf profile frame doors
- Suitable for fire- and emergency exit doors
- Made completely of fire-resistant materials
- Special version: Dead bolt and latch bolt 3 mm or 5 mm projected
- Single-turn dead bolt

GBS 71 ■ Mortise lock for profile frame doors ■ For fire-and emergency exit doors



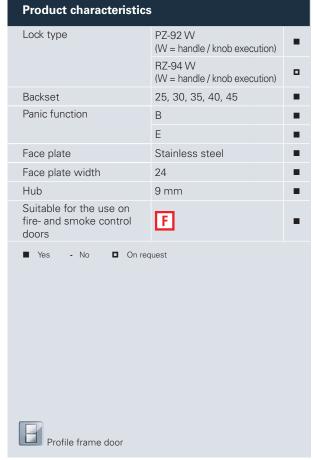
Face plate Backset		Face Plate		4 x 245 mm le / knob execution)	Face plate 24 x 400 mm PZ-92 W (W = handle / knob execution)		
FINISN	Finish in mm	Form	DIN left	DIN right	DIN left	DIN right	
	25	square	2071A2aE40fT013	2071A2aE40fT014	2071A2aE40kT013	2071A2aE40kT014	
	30	square	2071A2aG40fT013	2071A2aG40fT014	2071A2aG40kT013	2071A2aG40kT014	
Stainless Steel	35	square	2071A2aH40fT013	2071A2aH40fT014	2071A2aH40kT013	2071A2aH40kT014	
0.000	40	square	2071A2al40fT013	2071A2al40fT014	2071A2al40kT013	2071A2al40kT014	
	45	square	2071A2aJ40fT013	2071A2aJ40fT014	2071A2aJ40kT013	2071A2aJ40kT014	

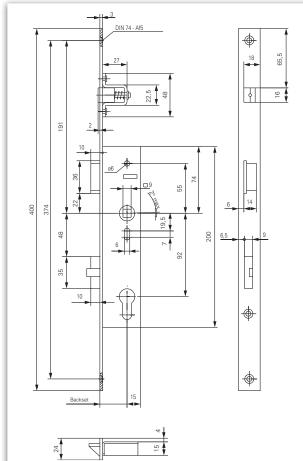
Face plate Backset Finish in mm				4 x 245 mm B / PZ-92	Face plate 24 x 400 mm Function B / PZ-92	
FIIIISII	in mm Form		DIN left	DIN right	DIN left	DIN right
	25	square	2071A2aE40fTP11	2071A2aE40fTP12	2071A2aE40kTP11	2071A2aE40kTP12
	30	square	2071A2aG40fTP11	2071A2aG40fTP12	2071A2aG40kTP11	2071A2aG40kTP12
Stainless Steel	35	square	2071A2aH40fTP11	2071A2aH40fTP12	2071A2aH40kTP11	2071A2aH40kTP12
	40	square	2071A2al40fTP11	2071A2aI40fTP12	2071A2al40kTP11	2071A2al40kTP12
	45	square	2071A2aJ40fTP11	2071A2aJ40fTP12	2071A2aJ40kTP11	2071A2aJ40kTP12

Face plate Backset		Face Plate	Face plate 24 x 245 mm Function E / PZ-92 W (W = handle / knob execution)		Face plate 24 x 400 mm Function E / PZ-92 W (W = handle / knob execution)	
	Form		DIN left	DIN right	DIN left	DIN right
	25	square	2071A2aE40fTQ13	2071A2aE40fTQ14	2071A2aE40kTQ13	2071A2aE40kTQ14
	30	square	2071A2aG40fTQ13	2071A2aG40fTQ14	2071A2aG40kTQ13	2071A2aG40kTQ14
Stainless Steel	35	square	2071A2aH40fTQ13	2071A2aH40fTQ14	2071A2aH40kTQ13	2071A2aH40kTQ14
	40	square	2071A2al40fTQ13	2071A2al40fTQ14	2071A2al40kTQ13	2071A2al40kTQ14
	45	square	2071A2aJ40fTQ13	2071A2aJ40fTQ14	2071A2aJ40kTQ13	2071A2aJ40kTQ14









- Mortise lock for double-leaf profile frame doors
- Suitable for fire- and emergency exit doors
- Made completely of fire-resistant materials
- Special version: Dead bolt and latch bolt 3 mm or 5 mm projected
- Single-turn dead bolt
- Special feature: Adjustable release device for automatically locking the inactive door leaf.
- Related counter lock for passive leaf:
 GBS 73 on page 484.





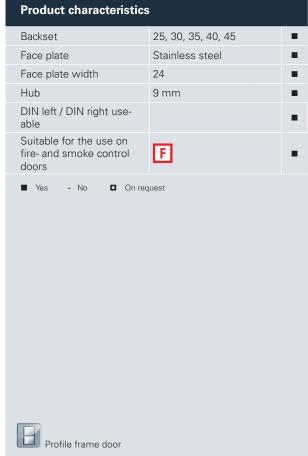
Face plate Finish	Backset in mm	Face Plate Form	Face plate 24 x 400 mm PZ-92 W (W = handle / knob execution) DIN left DIN right		
	25	square	2072A2aE40kT013	2072A2aE40kT014	
	30	square	2072A2aG40kT013	2072A2aG40kT014	
Stainless Steel	35	square	2072A2aH40kT013	2072A2aH40kT014	
	40	square	2072A2al40kT013	2072A2aI40kT014	
	45	square	2072A2aJ40kT013	2072A2aJ40kT014	

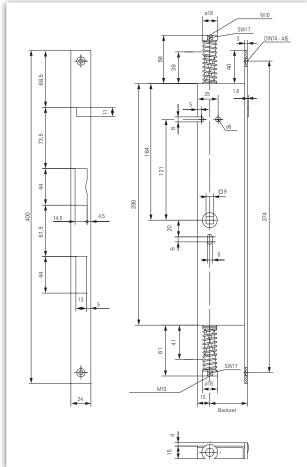
Face plate	Backset	Face Plate	Face plate 24 x 400 mm Function B / PZ-92		
Finish	in mm	Form	DIN left	DIN right	
	25	square	2072A2aE40kTP11	2072A2aE40kTP12	
	30	square	2072A2aG40kTP11	2072A2aG40kTP12	
Stainless Steel	35	square	2072A2aH40kTP11	2072A2aH40kTP12	
	40	square	2072A2al40kTP11	2072A2al40kTP12	
	45	square	2072A2aJ40kTP11	2072A2aJ40kTP12	

Face plate Finish	Backset in mm	Face Plate	Face plate 24 x 400 mm Function E / PZ-92 W (W = handle / knob execution)		
		Form	DIN left	DIN right	
	25	square	2072A2aE40kTQ13	2072A2aE40kTQ14	
	30	square	2072A2aG40kTQ13	2072A2aG40kTQ14	
Stainless Steel	35	square	2072A2aH40kTQ13	2072A2aH40kTQ14	
	40	square	2072A2al40kTQ13	2072A2al40kTQ14	
	45	square	2072A2aJ40kTQ13	2072A2aJ40kTQ14	









- Counter lock for double-leaf profile frame doors
- For fire- and smoke control doors
- Made completely of fire-resistant materials
- Special feature: Adjustable release device for automatically locking the inactive door leaf.
 No additional switch lock needed! Automatical locking of passive leaf adjustable
- Automatic locking of active leaf adjustable
- Related lock for active leaf on page 482.
 Respective accessories on page 515.



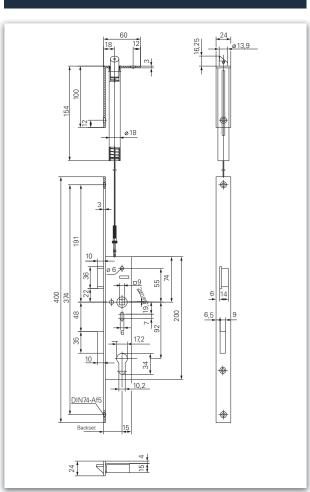
GBS 73 ■ Mortise lock for profile frame doors ■ For fire-and emergency exit doors

Face plate Finish	Backset in mm	Face Plate Form	Face plate 24 x 400 mm Panic function with automatic locking device for inactive door leaf DIN left DIN right	
	25	square	2073X00E40kTM11	2073X00E40kTM12
	30	square	2073X00G40kTM11	2073X00G40kTM12
Stainless Steel	35	square	2073X00H40kTM11	2073X00H40kTM12
Steel	40	square	2073X00I40kTM11	2073X00I40kTM12
	45	square	2073X00J40kTM11	2073X00J40kTM12

Face plate Finish	Backset in mm	Face Plate Form	Face plate 24 x 400 mm Panic function with manual locking device for inactive door leaf DIN left DIN right	
	25	square	2073Y00E40kTM11	2073Y00E40kTM12
	30	square	2073Y00G40kTM11	2073Y00G40kTM12
Stainless Steel	35	square	2073Y00H40kTM11	2073Y00H40kTM12
	40	square	2073Y00I40kTM11	2073Y00I40kTM12
	45	square	2073Y00J40kTM11	2073Y00J40kTM12









- Mortise lock for single or double-leaf fire-proof doors
- Suitable for fire- and emergency exit doors
- Made completely of fire-resistant materials
- Dead bolt and latch bolt flush or 3 mm or 5 mm projected
- Adjustable, with top corner latch-lock as additional locking point. Corner latch lock can also be used independently from the lock
- Corner angle manual on request

GBS 76 ■ Mortise lock for single or double-leaf fire-proof doors

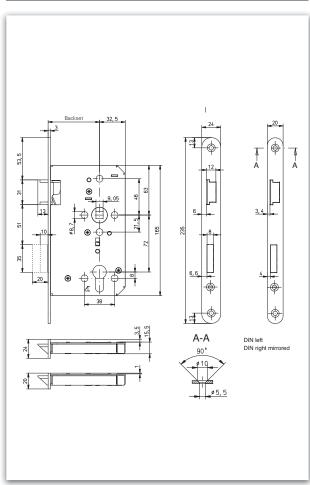
Face plate Backset Finish in mm		Face Plate Form	Face plate 24 x 400 mm PZ-92 W (W = handle / knob execution)		Face plate 24 x 400 mm PZ-92 W (W = handle / knob execution) / With free-running hub (use in double-leaf doors without panic function)	
			DIN left	DIN right	DIN left	DIN right
	25	square	2076A2aE40kT0U3	2076A2aE40kT0U4	2076A2aE80kT0U3	2076A2aE80kT0U4
30	30	square	2076A2aG40kT0U3	2076A2aG40kT0U4	2076A2aG80kT0U3	2076A2aG80kT0U4
Stainless Steel	35	square	2076A2aH40kT0U3	2076A2aH40kT0U4	2076A2aH80kT0U3	2076A2aH80kT0U4
0.001	40	square	2076A2aI40kT0U3	2076A2al40kT0U4	2076A2al80kT0U3	2076A2al80kT0U4
	45	square	2076A2a.I40kT0LI3	2076A2a.I40kT0LI4	2076A2a.I80kT0LI3	2076A2a.I80kT0LI4

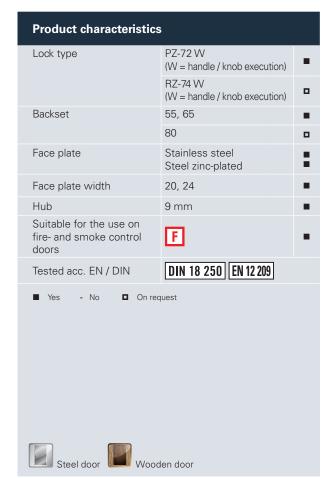
Face plate Finish	Backset in mm	Face Plate	Face plate 24 x 400 mm Function B / PZ-92		
1 1111311		Form	DIN left	DIN right	
	25	square	2076A2aE40kTPU1	2076A2aE40kTPU2	
	30	square	2076A2aG40kTPU1	2076A2aG40kTPU2	
Stainless Steel	35	square	2076A2aH40kTPU1	2076A2aH40kTPU2	
	40	square	2076A2al40kTPU1	2076A2al40kTPU2	
	45	square	2076A2aJ40kTPU1	2076A2aJ40kTPU2	

Face plate Finish	Backset in mm	Face Plate Form	Face plate 24 x 400 mm Function E / PZ-92 W (W = handle / knob execution)		
		101111	DIN left	DIN right	
	25	square	2076A2aE40kTQU3	2076A2aE40kTQU4	
	30	square	2076A2aG40kTQU3	2076A2aG40kTQU4	
Stainless Steel	35	square	2076A2aH40kTQU3	2076A2aH40kTQU4	
	40	square	2076A2al40kTQU3	2076A2al40kTQU4	
	45	square	2076A2aJ40kTQU3	2076A2aJ40kTQU4	









- Mortise lock for fire-proof doors
- Tested and certified acc. to DIN 18250, EN 12 209
- Face plate square on request

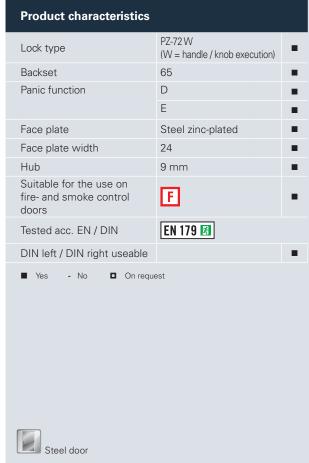


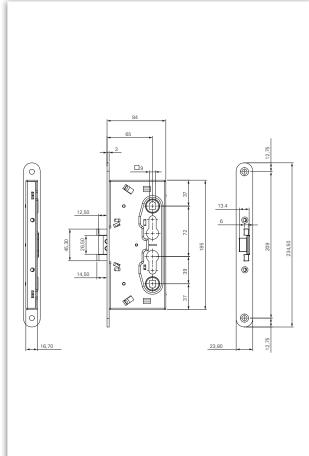
DIN 18 250	EN 12 209	F

Face plate Backset Pla		Face Plate	Face plate 20 x 235 mm PZ-72 W (W = handle / knob execution)		Face plate 24 x 235 mm PZ-72 W (W = handle / knob execution)	
		Form	DIN left	DIN right	DIN left	DIN right
Stainless	55	round	2081_2AL40BK013	2081_2AL40BK014	2081_2AL40aK013	2081_2AL40aK014
Steel satin	65	round	2081_2AN40BK013	2081_2AN40BK014	2081_2AN40aK013	2081_2AN40aK014
Steel	55	round	2081_2AL40BJ013	2081_2AL40BJ014	2081_2AL40aJ013	2081_2AL40aJ014
zinc-plated	65	round	2081_2AN40BJ013	2081_2AN40BJ014	2081_2AN40aJ013	2081_2AN40aJ014









- Mortise lock for fire-proof doors
- Suitable for fire- and emergency exit doors
- Tested and certified acc. to EN 179
- Made completely of fire-resistant materials



DIN 18 250 F

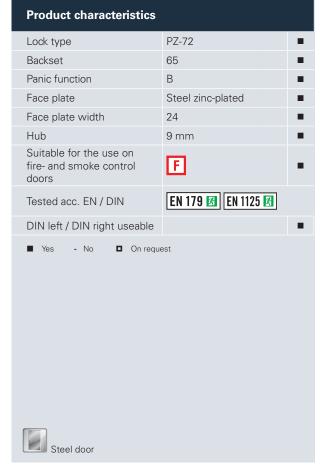
Face plate Finish	Backset in mm	Face Plate Form	Face plate 24 x 235 mm PZ-72 W (W = handle / knob execution) DIN left / DIN right
Steel zinc-plated	65	round	2082aja02m10000

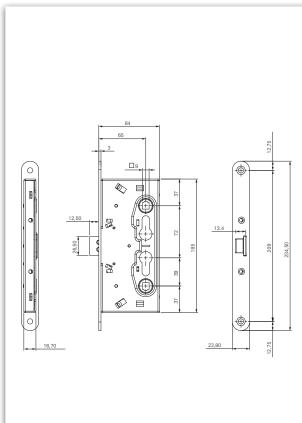
EN 179 🔣	EN 1125 🔀	F	
Face plate Finish	Backset in mm	Face Plate Form	Face plate 24 x 235 mm Function D / PZ-72
			DIN left / DIN right
Stool zine plated	65	round	2092aia02m12000

EN 179 🖪	EN 1125 🖪	F	
Face plate Finish	Backset in mm	Face Plate Form	Face plate 24 x 235 mm Function E / PZ-72 W (W = handle / knob execu- tion)
			DIN left / DIN right
Steel zinc-plated	65	round	2082aja02m14000







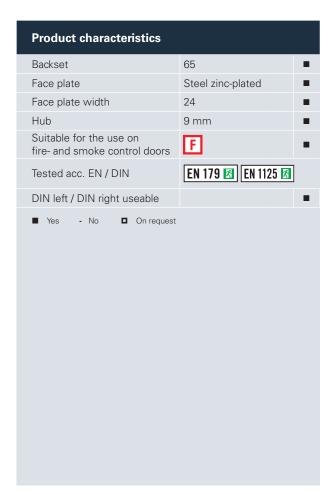


- Mortise lock for fire proof doors
- Suitable for fire- and emergency exit doors
- Tested and certified acc. to EN 179 and EN 1125
- Made completely of fire-resistant materials

Face plate Finish	Backset in mm	Face plate	Face plate 24 x 235 mm Function B / PZ-72 DIN left / DIN right
Steel zinc-plated	65	round	2083aja02m13000

Dimensioning: GBS 83





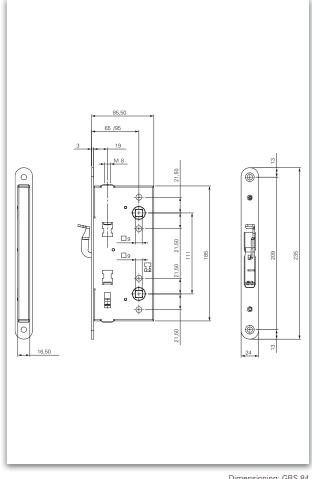


- Counter lock for fire proof doors
- Suitable for fire- and emergency exit doors
- Tested and certified acc. to EN 179 and EN 1125
- Made completely of fire-resistant materials
- Can also be used as manual rebate dead bolt lock (without handle set)

On request individual plate stamping possible at extra charge.

Counter lock

Face plate	Backset	Face	Face plate 24 x 235 mm
Finish	in mm	plate	DIN left / DIN right
Steel zinc-plated	65	round	2084aj002m11000

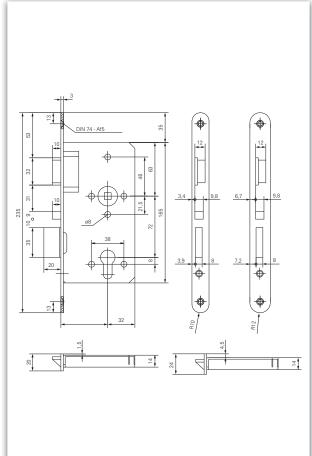


Dimensioning: GBS 84









GBS 90 / GBS 90 F

- Automatic self-engaging panic mortise lock with panic function
- With closed locke case with 3-fold fastening with protection bushes
- Stainless steel dead and latch bolt
- Tested and certified acc. to DIN 18250, EN 12 209
- Automatic locking is effected by closing and consequently engaging the auxilliary latch



GBS 90 **DIN 18 250**

Face plate Finish	Face plate Backset Plate Finish in mm Form		Face plate 2 PZ-72 W (W = hand	0 x 235 mm le / knob execution)	Face plate 24 x 235 mm PZ-72 W (W = handle / knob execution)		
			DIN left	DIN right	DIN left	DIN right	
Stainless	stainless 55		2090aha02h30300	2090aha02h30400	2090aha02m30300	2090aha02m30400	
Steel 65		round	2090aja02h30300	2090aja02h30400	2090aja02m30300	2090aja02m30400	

GBS 90 F **DIN 18 250 F**

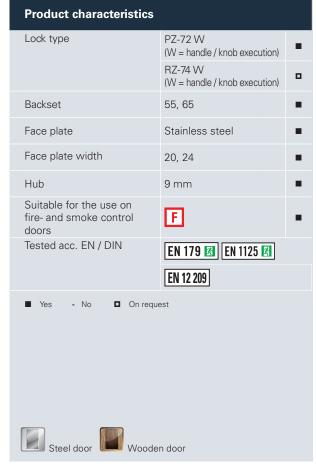
Face plate Backset		Face Plate	Face plate 2 PZ-72 W (W = hand	0 x 235 mm le / knob execution)	Face plate 24 x 235 mm PZ-72 W (W = handle / knob execution)	
FIIIISII	111 111111	in mm Form	DIN left	DIN right	DIN left	DIN right
Stainless	55 round		2090aha08h30300	2090aha08h30400	2090aha08m30300	2090aha08m30400
Steel	65	round	2090aja08h30300	2090aja08h30400	2090aja08m30300	2090aja08m30400

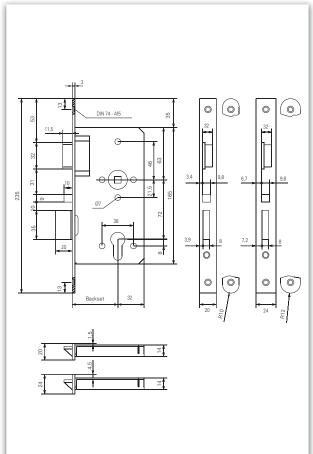
Special functions						
02 / Monitored dead bolt						
03 / Blocked handle on both sid	des, fail safe					
04 / Blocked handle on both sid	des, fail secure					
05 / Handle one side blocked, f	ail safe, B* or G*					
06 / Handle one side blocked, f	ail secure, B* or G*					
08 / 24-V version						
Micro switch						
Gold-plated contacts	max. 15V - 200 mA					
Dead bolt off	Closer					
Dead bolt on	Closer					
Degree of protection	IP 40					
Connection						
Flexible cable, provided by cus	tomer, max. cable diametre 1,5 mm²					
Blocking magnet, divided hub						
Nominal voltage 12V-						
Supply voltage 10,5V- bis 14V-						
Maximum rated input power 100 mA at 12V- =1,2W						
Rel. duty cycle ED	100 %					
Class of insulation	E (T-grenz = 1,2W)					

 B^* = Hinge side G^* = Hinge opposite side









- Automatic self-engaging panic mortise lock
- Suitable for fire-protection doors
- Tested and certified acc. to EN 179, EN 1125 and EN 12 209
- Made completely of fire-resistant materials
- Extras: Handle locking and interrogation of dead bolt position

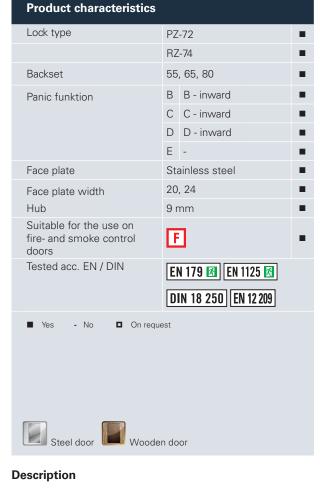


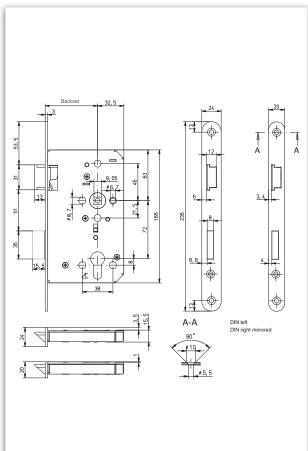
GBS 91 ■ Automatic self-engaging panic mortise lock (AVP) for fire proof doors

Face plate Finish	Backset in mm	Face Plate Form	Face plate 20 x 235 mm PZ-72 W (W = handle / knob execution) DIN left DIN right		Face plate 24 x 235 mm PZ-72 W (W = handle / knob execution) DIN left DIN right	
Stainless	Stainless 55	round	2091aha02h30300	2091aha02h30400	2091aha02m30300	2091aha02m30400
Steel	65	round	2091aja02h30300	2091aja02h30400	2091aja02m30300	2091aja02m30400









- Panic mortise lock
- Tested and certified acc. to EN 179, EN 1125,
 DIN 18 250 and EN 12 209
- For single-leaf wooden and steeldoors as well as fire-protection doors
- Face plate square on request

GBS 92 ■ Panic mortise lock for fire-proof doors



Face plate Backset		Face Plate	Face plate 20 x 235 mm Function B single-leaf / PZ-72		Face plate 20 x 235 mm Function C single-leaf / PZ-72	
		Form	DIN left	DIN right	DIN left	DIN right
	55	round	2092_ha02h33100	2092_ha02h33200	2092_ha02h32100	2092_ha02h32200
Stainless Steel	65	round	2092_ja02h33100	2092_ja02h33200	2092_ja02h32100	2092_ja02h32200
	80	round	2092_ma02h33100	2092_ma02h33200	2092_ma02h32100	2092_ma02h32200

Face plate Backset Finish in mm		Face Plate		20 x 235 mm gle-leaf / PZ-72	Face plate 2 Function E sing	0 x 235 mm gle-leaf / PZ-72
		Form	DIN left	DIN right	DIN left	DIN right
	55	round	2092_ha02h35100	2092_ha02h35200	2092_ha02h34100	2092_ha02h34200
Stainless Steel	65	round	2092_ja02h35100	2092_ja02h35200	2092_ja02h34100	2092_ja02h34200
Steel	80	round	2092_ma02h35100	2092_ma02h35200	2092_ma02h34100	2092_ma02h34200

Face plate Backset Finish in mm		Face Plate		24 x 235 mm gle-leaf / PZ-72		4 x 235 mm gle-leaf / PZ-72
		Form	DIN left	DIN right	DIN left	DIN right
	55	round	2092_ha02m33100	2092_ha02m33200	2092_ha02m32100	2092_ha02m32200
Stainless Steel	65	round	2092_ja02m33100	2092_ja02m33200	2092_ja02m32100	2092_ja02m32200
Steel	80	round	2092_ma02m33100	2092_ma02m33200	2092_ma02m32100	2092_ja02m32200

Face plate Backset		Face Plate		24 x 235 mm gle-leaf / PZ-72		4 x 235 mm gle-leaf / PZ-72
FINISN	Finish in mm		DIN left	DIN right	DIN left	DIN right
	55	round	2092_ha02m35100	2092_ha02m35200	2092_ha02m34100	2092_ha02m34200
Stainless Steel	65	round	2092_ja02m35100	2092_ja02m35200	2092_ja02m34100	2092_ja02m34200
	80	round	2092_ma02m35100	2092_ma02m35200	2092_ma02m34100	2092_ma02m34200

Face plate Finish	Backset	Face Plate	Face plate 20 x 235 mm Function B inward single-leaf / PZ-72		Face plate 24 x 235 mm Function B inward single-leaf / PZ-72	
FINISH	in mm	Form	DIN left	DIN right	DIN left	DIN right
Stainless steel	65	round	2092_ja02h37100	2092_ja02h37200	2092_ja02m37100	2092_ja02m37200

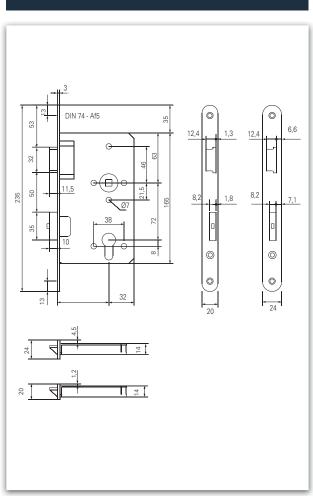
Face plate Finish	Backset	Face Plate	Face plate 20 x 235 mm Function C inward single-leaf / PZ-72		Face plate 24 x 235 mm Function C inward single-leaf / PZ-72	
1 1111311	in mm Fo		DIN left	DIN right	DIN left	DIN right
Stainless steel	65	round	2092_ja02h38100	2092_ja02h38200	2092_ja02m38100	2092_ja02m38200

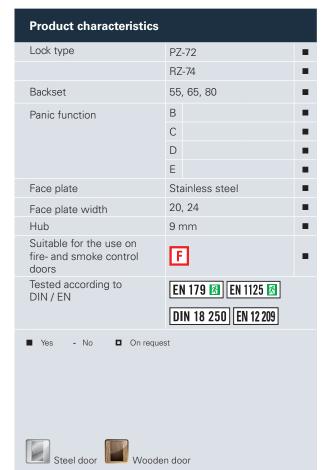
Face plate Finish	Backset	Plate	Face plate 20 x 235 mm Function D inward single-leaf / PZ-72		Face plate 24 x 235 mm Function D inward single-leaf / PZ-72	
1 1111511	in mm	Form	DIN left	DIN right	DIN left	DIN right
Stainless steel	65	round	2092_ja02h39100	2092_ja02h39200	2092_ja02m39100	2092_ja02m39200

Face plate Finish	Backset	Face Plate	Function D / CIL D7		Face plate 24 x 235 mm Function B / CH-RZ	
FIIIISII	in mm	Form	DIN left	DIN right	DIN left	DIN right
Stainless steel	65	round	2092_jd02h33100	2092_jd02h33200	2092_jd02m33100	2092_jd02m33200









- Panic mortise lock
- Tested and certified acc. to EN 179, EN 1125,
 DIN 18 250 and EN 12 209
- For double-leaf wooden and steeldoors as well as fire-protection doors
- Face plate square on request

GBS 93 - Panic mortise lock for fire-proof doors



Face plate Finish	Backset	Face Plate	Face plate 2 Function B dou	0 x 235 mm ble-leaf / PZ-72	Face plate 2 Function C dou	0 x 235 mm ble-leaf / PZ-72
rinisn	in mm	Form	DIN left	DIN right	DIN left	DIN right
	55	round	2093aha02h33100	2093aha02h33200	2093aha02h32100	2093aha02h32200
Stainless Steel	65	round	2093aja02h33100	2093aja02h33200	2093aja02h32100	2093aja02h32200
	80	round	2093ama02h33100	2093ama02h33200	2093ama02h32100	2093ama02h32200

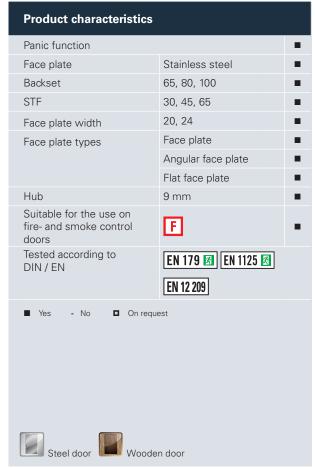
Face plate	Backset	in mm			Face plate 20 x 235 mm Function E double-leaf / PZ-72	
Finish	in mm	Form	DIN left	DIN right	DIN left	DIN right
	55	round	2093aha02h35100	2093aha02h35200	2093aha02h34100	2093aha02h34200
Stainless Steel	65	round	2093aja02h35100	2093aja02h35200	2093aja02h34100	2093aja02h34200
	80	round	2093ama02h35100	2093ama02h35200	2093ama02h34100	2093ama02h34200

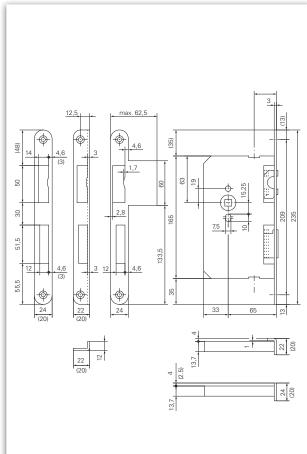
Face plate	Backset	Face Plate		24 x 235 mm able-leaf / PZ-72		4 x 235 mm lble-leaf / PZ-72
Finish	in mm	Form	DIN left	DIN right	DIN left	DIN right
	55	round	2093aha02m33100	2093aha02m33200	2093aha02m32100	2093aha02m32200
Stainless Steel	65	round	2093aja02m33100	2093aja02m33200	2093aja02m32100	2093aja02m32200
- 1- 2-	80	round	2093ama02m33100	2093ama02m33200	2093ama02m32100	2093ama02m32200

Face plate Finish	Backset Face Plate		Backset Plate Function D double-leaf / PZ-72		Face plate 24 x 235 mm Function E double-leaf / PZ-72	
FINISH	in mm	Form	DIN left	DIN right	DIN left	DIN right
	55	round	2093aha02m35100	2093aha02m35200	2093aha02m35400	2093aha02m34200
Stainless Steel	65	round	2093aja02m35100	2093aja02m35200	2093aja02m35400	2093aja02m34200
	80	round	2093ama02m35100	2093ama02m35200	2093ama02m35400	2093ama02m34200









- Panic mortise lock for double-leaf fire-proof doors
- Suitable for fire-protection doors
- Tested and certified acc. to EN 179, EN 1125 and EN 12 209
- Made completely of fire-resistant materials
- Related lock for active leaf GBS 93 on page 500.

(I)

GBS 94 - Panic counter lock for double-leaf fire proof doors

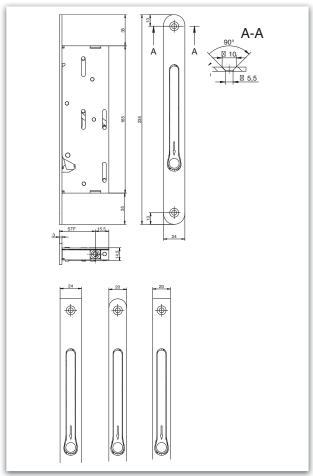
Face plate	Backset	STF			Face plate 24 x 235 mm Face plate		
Finish	in mm		Form	DIN left	DIN right	DIN left	DIN right
	65	30	round	2094aja02h33100	2094aja02h33200	2094aja02m33100	2094aja02m33200
Stainless	80	30	round	2094ama02h33100	2094ama02h33200	2094ama02m33100	2094ama02m33200
Steel	80	45	round	2094ama02h33100	2094ama02h33200	2094ama0233104	2094ama02m33204
	100	65	round	2094aqa02h33100	2094aqa02h33204	2094aqa02h33100	2094aqa02m33200

Face plate	Backset in mm	STF	Face Plate	Face plate 20 : Angular f	x 12 x 235 mm face plate	Face plate 22 : Angular f	x 12 x 235 mm face plate
Finish	in mm		Form	DIN left	DIN right	DIN left	DIN right
	65	30	round	2094aja02v33100	2094aja02v33200	2094aja02w33100	2094aja02w33200
Stainless	80	30	round	2094ama02v33100	2094ama02v33200	2094ama02w33100	2094ama02w33200
Steel	80	45	round	2094ama02v33100	2094ama02v33200	2094ama02w33104	2094ama02w33204
	100	65	round	2094aqa02v33100	2094aqa02v33204	2094aqa02w33100	2094aqa02w33200

Face plate Finish	Backset in mm	STF	Face Plate		85 mm / max. 62,5 mm ce plate	Face plate 22 x 12 x 23 Flat fac	35 mm / max.62,5 mm se plate
FINISH	ın mm		Form	DIN left	DIN right	DIN left	DIN right
	65	30	round	2094aja02x33100	2094aja02x33200	2094aja02x33100	2094aja02x33200
Stainless	80	30	round	2094ama02x33100	2094ama02x33200	2094ama02x33100	2094ama02x33200
Steel	80	45	round	2094ama02x33100	2094ama02x33200	2094ama02x33104	2094ama02x33204
	100	65	round	2094aqa02x33100	2094aqa02x33204	2094aqa02x33100	2094aqa02x33200









- Tested and certified according to EN 12 209
- Fire protection certified
- Control lever Stainless steel
- Secure execution

GBS 94f • Rebate dead bolt lock



Face plate Finish	Backset	Face Plate Form	Face plate 20 x 235 mm
	25	round	2094fb000h30000
	30	round	2094fc000h30000
Stainless	35	round	2094fd000h30000
Steel	40	round	2094fe000h30000
	45	round	2094ff000h30000
	65	round	2094fj000h30000

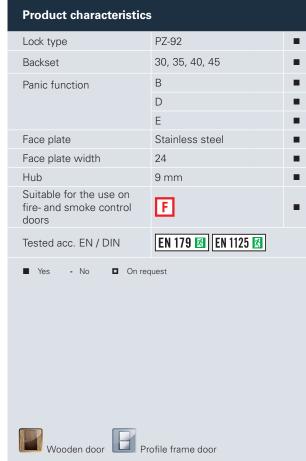
Face plate Finish	Backset	Face Plate Form	Face plate 20 x 235 mm
	25	square	2094fb000f30000
	30	square	2094fc000f30000
Stainless	35	square	2094fd000f30000
Steel	40	square	2094fe000f30000
	45	square	2094ff000f30000
	65	square	2094fj000f30000

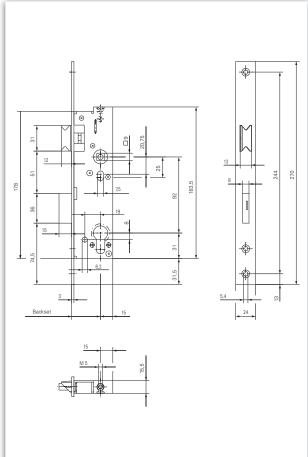
Face plate Finish	Backset	Face Plate Form	Face plate 24 x 235 mm
	25	round	2094fb000m30000
	30	round	2094fc000m30000
Stainless	35	round	2094fd000m30000
Steel	40	round	2094fe000m30000
	45	round	2094ff000m30000
	65	round	2094fj000m30000

Face plate Finish	Backset	Face Plate Form	Face plate 24 x 235 mm
	25	square	2094fb000k30000
	30	square	2094fc000k30000
Stainless	35	square	2094fd000k30000
Steel	40	square	2094fe000k30000
	45	square	2094ff000k30000
	65	square	2094fj000k30000









- Panic mortise lock
- Suitable for fire-protection doors
- Tested and certified acc. to EN 179 and EN 1125
- Made completely of fire-resistant materials
- Panic function E: same version DIN left / DIN right
- Addtional top-bolting on request



GBS 96 ■ Panic mortise lock for fire-proof doors

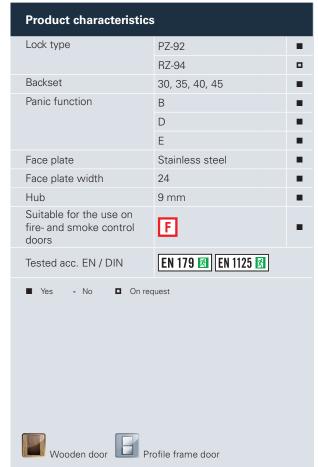
Face plate	Backset	Face Plate	Face plate 24 x 270 mm Function B / PZ-92	
Finish	in mm	Form	DIN left	DIN right
	30	square	2096acb02q33100	2096acb02q33200
Stainless	35	square	2096adb02q33100	2096adb02q33200
Steel	40	square	2096aeb02q33100	2096aeb02q33200
	45	square	2096afb02q33100	2096afb02q33200

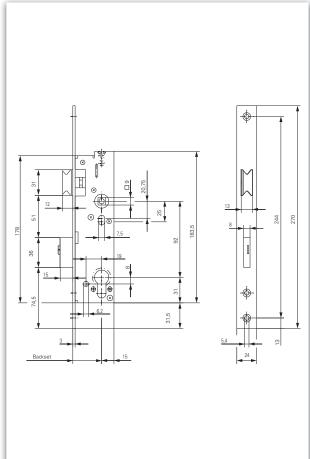
Face plate Finish	Backset	Face Plate	Face plate 24 x 270 mm Function D / PZ-92	
FINISN	in mm	Form	DIN left	DIN right
	30	square	2096acb02q35100	2096acb02q35200
Stainless	35	square	2096adb02q35100	2096adb02q35200
Steel	40	square	2096aeb02q35100	2096aeb02q35200
	45	square	2096afb02q35100	2096afb02q35200

Face plate Finish	Backset in mm	Backset Face		4 x 270 mm :/PZ-92 W nob execution)
		Form	DIN left	DIN right
	30	square	2096acb02q34000	2096acb02q34000
Stainless	35	square	2096adb02q3400	2096adb02q3400
Steel	40	square	2096aeb02q3400	2096aeb02q3400
	45	square	2096afb02q3400	2096afb02q3400









- Panic mortise lock
- Suitable for fire-protection doors
- Tested and certified acc. to EN 179 and EN 1125
- Made completely of fire-resistant materials
- Panic function E: same version DIN left / DIN right
- Addtional top-bolting on request

GBS 97 ■ Panic mortise lock for fire-proof doors

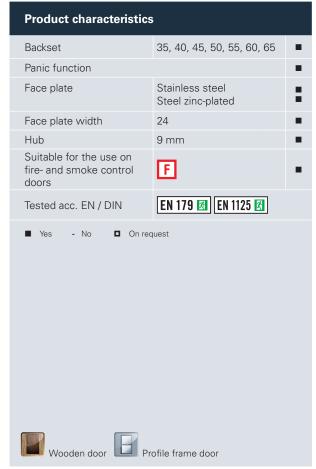
Face plate	Backset	Face Plate	F., matiam D / D7 02	
Finish	in mm	Form	DIN left	DIN right
	30	square	2097acb02q33100	2097acb02q33200
Stainless	35	square	2097adb02q33100	2097adb02q33200
Steel	40	square	2097aeb02q33100	2097aeb02q33200
	45	square	2097afb02q33100	2097afb02q33200

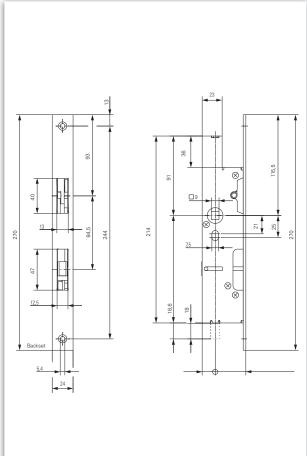
Face plate	Backset	Face Plate	Face plate 24 x 270 mm Function D / PZ-92	
Finish	in mm	Form	DIN left	DIN right
	30	square	2097acb02q35100	2097acb02q35200
Stainless	35	square	2097adb02q35100	2097adb02q35200
Steel	40	square	2097aeb02q35100	2097aeb02q35200
	45	square	2097afb02q35100	2097afb02q35200

Face plate Finish	Backset in mm	Face plate 24 x 270 Face Function E / PZ-92 Plate (W = handle / knob exe		E / PZ-92 W	
		Form	Form	DIN left	DIN right
	30	square	2097acb02q34000	2097acb02q34000	
Stainless	35	square	2097adb02q34000	2097adb02q34000	
Steel	40	square	2097aeb02q34000	2097aeb02q34000	
	45	square	2097afb02q34000	2097afb02q34000	









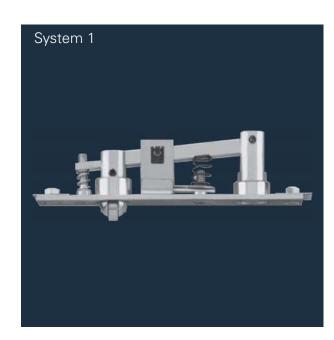
- Panic counter lock / passive leaf
- For double-leaf fire proof doors
- Safety requirements acc. to **EN 179** and **EN 1125**
- Made completely of fire-resistant materials



GBS 98 • Panic counter lock for fire-proof doors

Face plate Finish	Backset in mm	Face Plate Form	Face plate 24 x 270 mm
	35	square	2098ad002q31000
	40	square	2098ae002q31000
	45	square	2098af002q31000
Stainless Steel	50	square	2098ag002q31000
	55	square	2098ah002q31000
	60	square	2098ai002q31000
	65	square	2098aj002q31000





Dual locking device system 1

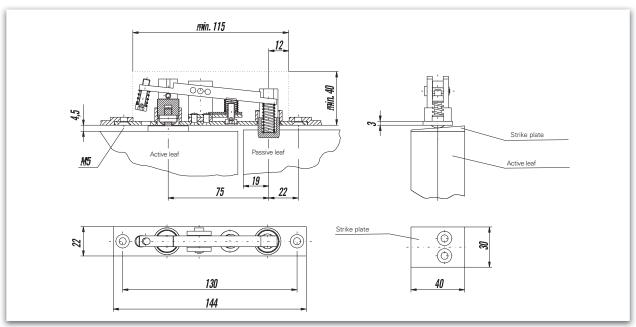
The passive door leaf is locked when the active door leaf is closed since the indexing bolt is pushed up, causing the locking bolt to engage in the passive door leaf.

The passive door leaf is likewise unlocked when the active door leaf is opened since the locking bolt is retracted by spring pressure. The pressure of the door closer ensures that the passive door leaf remains in closed position. Delivery includes striking plate.

Tested acc. DIN 4102, Part 18

DIN left / DIN right useable

	Article number
Dual locking device system 1	204585500000000



Dimensioning: Dual locking device system 1 with roller latch

The dual locking device system 1 with roller latch is also available with standard latch. Please contact us if you need this execution.









Dual locking device system 2

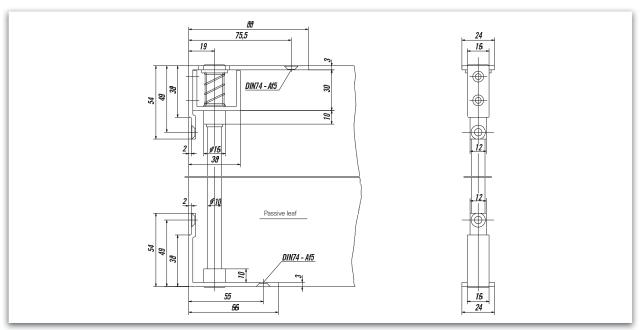
In addition to system I the top fastening, the passive door leaf can also be locked at the bottom. A continous locking bar is built into the passive door leaf in a resilient mounting.

The locking bolt presses against the locking bar which engages in the ground, securing the passive door leaf. When the active door leaf is opened, the locking bolt is pulled back and the locking bar is in its initial position. Scope of delivery included locking bar (2.500 mm).

DIN left / DIN right useable

Taking into consideration a certification with tested fire-protection doors, this system can also be used as panic locking device.

	Article number
Dual locking device system 2	204586500000000



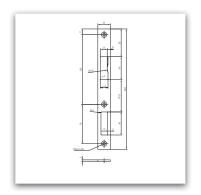
Dimensioning: Dual locking device system 2 with roller latch

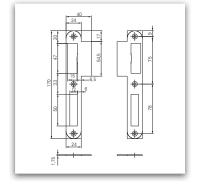
The dual locking device system 2 with roller latch is also available with standard latch. Please contact us if you need this execution.

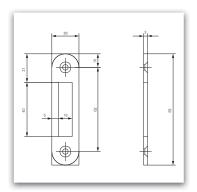




Accessories ■ GBS 72







Dimensioning: Type 20

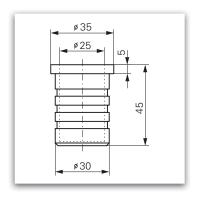
Dimensioning: Type 08

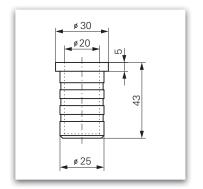
Dimensioning: Type 02

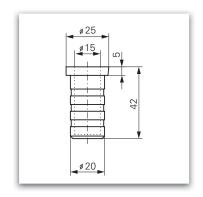
Strike plates

Туре	Execution	Article number
02	square	2Z01020000ED000
	round	2Z01080000RD000
08	square	2Z01080000ED000
20	square	2Z01200000ED000









Dimensioning: 16 mm

Dimensioning: 13 mm

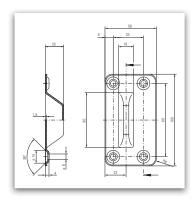
Dimensioning: 10 mm

Accessories GBS 73: Floor mould for round rods

Туре	Ø	Article number
10 mm	20 mm	2Z70070
13 mm	25 mm	2Z70071
16 mm	30 mm	2Z70072



Illustration: Mould square



Dimensioning: Mould square

Floor mould square

Face plate	Article number
100 x 56 mm	2098003146



Illustration: Shoot bolt guide

50 50 10 10 10 10 10 10 10 10 10 10 10 10 10

Dimensioning: Shoot bolt guide

Shoot bolt guide

•	
Face plate	Article number
20 x 60 mm	20980106







Illustration: Flush bolt

Dimensioning: Flush bolt

Flush bolt

Length in mm	Article number
1.000 mm	2Z70060
1.500 mm	2Z70061
2.000 mm	2Z70062







13 209 13 235

Dimensioning: Strike plate

Strike plates GBS 82 and GBS 83

Dimensions	Article number
24 x 235 x 3 mm	2082000143



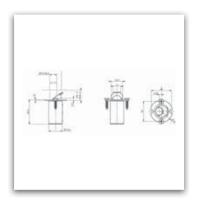




Abbildung: Schaltschloss

Schaltschloss GBS 84

Maße	Artikelnummer
Ø 29 x 36 mm	20840000



Bemaßung: Schaltschloss



Abbildung: Distanzring

Distanzring für Schaltschloss

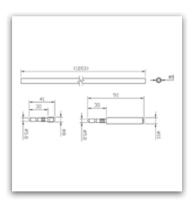
Maße (Höhe)	Artikelnummer
1 mm	20840001
2 mm	20840002



Abbildung: Treibriegelstange

Treibriegelstange für GBS 84

Länge in mm (A)	Artikelnummer
Ø 8 x 1.203 mm	20840007



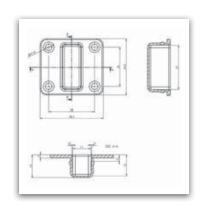
Bemaßung: Treibriegelstange



Abbildung: Bodenschließmulde

Bodenschließmulde eckig GBS 84

Maße	Artikelnummer
38 x 34 mm	20840003



Bemaßung: Bodenschließmulde





Illustration: Floor mould

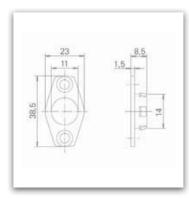
Dimensioning: Floor mould

Floor mould round for GBS 84

Face plate	Article number
20 x 60 mm	20840004



Illustration: Shoot bolt guide



Dimension drawing: Shoot bolt guide



Illustration: Steel plate for shoot bolt guide*

Shoot bolt guide round for GBS 84

Dimensions	Article number
29 x 16 mm	20840005
	20840006*





Illustration: Switch lock

for 2-7 mm door space 13,5 54 42 42 42 43 45 40 50 18 Drill hole in the door:

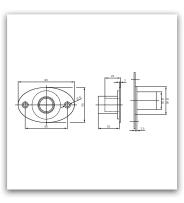
Dimensioning: Switch lock

Switch lock

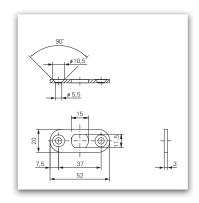
Face plate	Article number
20 x 54 mm	20610220
24 x 54 mm	20610221



Illustration: Floor mould



Dimensioning: Floor mould



Dimensioning: Upper striking plate

Floor mould

Face plate	Article number
50 x 80 mm	20980036

Upper striking plate

Face plate	Article number
52 x 20 mm	2094080443



Illustration: Bottom shoot bolt guide

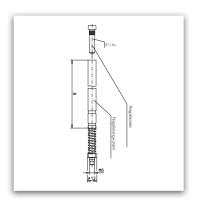
8 05.3

Dimensioning: Bottom shoot bolt guide

Bottom shoot bolt guide

Face plate	Article number
20 x 60 mm	20940803BVZ





Dimensioning: Upper shoot bolt

Upper shoot bolt

Length mm (B)	Article number
1.500 mm	20940810BVZ
2.000 mm	20940814BVZ

Proprietory channels and the state of the st

Dimensioning: Lower shoot bolt

Lower shoot bolt

Length mm (B)	Article number	
1.000 mm	20940812BVZ	

Accessories set GBS 94

Accessories face plate 24 mm, upper shoot bolt 1.500 mm

Content	Length mm	Face plate	Article number	Article number set
Lower shoot bolt	1.000		20940812BVZ	
Upper shoot bolt	1.500		20940810BVZ	
Switch lock		24 x 54 mm	20610221	209405010000000
Upper striking plate			2094080443	209405010000000
Bottom shoot bolt guide			20940803BVZ	
Floor mould		50 x 80 mm	20980036	

Accessories face plate 24 mm, upper shoot bolt 2.000 mm

Content	Length mm	Face plate	Article number	Article number set
Lower shoot bolt	1.000		20940812BVZ	
Upper shoot bolt	2.000		20940814BVZ	
Switch lock		24 x 54 mm	20610221	00040544000000
Upper striking plate			2094080443	209405110000000
Bottom shoot bolt guide			20940803BVZ	
Floor mould		50 x 80 mm	20980036	

Accessories set for face plate 20 mm for doors with up to 1.500 mm height

Content	Length mm	Face plate	Article number	Article number set
Lower shoot bolt	1.000		20940812BVZ	
Upper shoot bolt	1.500		20940810BVZ	
Switch lock		20 x 54 mm	20610220	209405000000000
Upper striking plate			2094080443	209405000000000
Bottom shoot bolt guide			20940803BVZ	
Floor mould		50 x 80 mm	20980036	

Accessories face plate 20 mm, upper shoot bolt 2.000 mm

•				
Content	Length mm	Face plate	Article number	Article number set
Lower shoot bolt	1.000		20940812BVZ	
Upper shoot bolt	2.000		20940814BVZ	
Switch lock		20 x 54 mm	20610220	209405100000000
Upper striking plate			2094080443	209405100000000
Bottom shoot bolt guide			20940803BVZ	
Floor mould		50 x 80 mm	20980036	

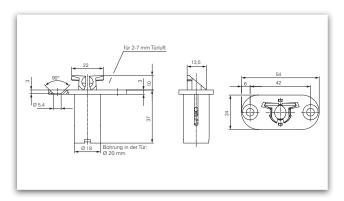




Illustration: Switch lock

Switch lock

Face plate	Article number
24 x 54 mm	20610221



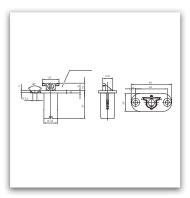
Dimensioning: Switch lock



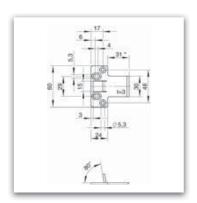
Illustration: Floor mould

Floor mould

Face plate	Article number
50 x 80 mm	20980036



Dimensioning: Floor mould



Dimensioning: Upper strike plate

Upper strike plate

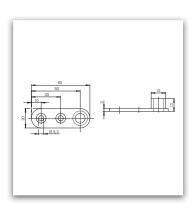
Face plate	Article number	
60 x 24 mm	20980105	



Illustration: Bottom shoot bolt guide

Bottom shoot bolt guide

Face plate	Article number
20 x 60 mm	20940803BVZ



Dimensioning: Bottom shoot bolt guide

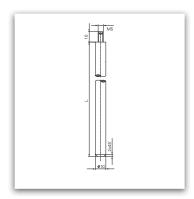




Dimensioning: Upper shoot bolt

Upper shoot bolt

Length mm	Article number
1.400 mm	20980101
1.900 mm	20980102
2.400 mm	20980111



Dimensioning: Lower shoot bolt

Lower shoot bolt

Length mm	Article number
1.000 mm	20940812BVZ

Accessory set GBS 98

Accessory set for doors with up to 2.500 mm height

Content	Length mm	Face plate	Article number	Article number set
Lower shoot bolt	950		20980100	
Upper shoot bolt	1.400		20980101	
Switch lock		24 x 54 mm	20610221	20000500000000
Upper striking plate			20980105	209805000000000
Bottom shoot bolt guide		20 x 60 mm	20980106	
Floor mould		50 x 80 mm	20980036	

Accessory set for doors with up to 3.000 mm height

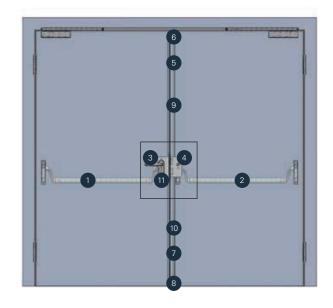
Content	Length mm	Face plate	Article number	Article number set
Lower shoot bolt	950		20980100	
Upper shoot bolt	1.900		20980102	
Switch lock		24 x 54 mm	20610221	209805100000000
Upper striking plate			20980105	209805100000000
Bottom shoot bolt guide		20 x 60 mm	20980106	
Floor mould		50 x 80 mm	20980036	

Accessory set for doors with up to 3.500 mm height

Content	Length mm	Face plate	Article number	Article number set
Lower shoot bolt	950		20980100	
Upper shoot bolt	2.400		20980111	
Switch lock		24 x 54 mm	20610221	20000520000000
Upper striking plate			20980105	209805200000000
Bottom shoot bolt guide		20 x 60 mm	20980106	
Floor mould		50 x 80 mm	20980036	



Combination for panic doors PE 2.2PB • For double-leaf wooden and metal doors



Recommen	ded use		
Doors / Tests	Panic set acc.	EN 1125 🔀	•
	Suitable for fire- and smoke control doors	F	•
	CE tested	C€	•
Application recommended	Doors in escape ways		
for:	Residential homes for	the elderly	
	Factory doors		
	Museums		
	Airports		
	Stadiums and arenas		-









Nr.	Components	Page*
1	EPN 900 III GF, max. door width 1.320	428
2	EPN 900 III SF, max. door width 1.320	428
3	GBS 93 GF, backset: 55, 65, 80, 100 mm	500
4	GBS 94 SF, backset: 65, 80, 100 mm	502
5	Switch lock	
6	Striking plate	
7	Shoot bolt guide	520
8	Floor mould	520
9	Upper shoot bolt	
10	Lower shoot bolt	
11	Counter hardware	222
	Spindles	363, 364, 556

The sole use of ECO panic systems presents only part of the safety. The complete
safety is the result of the co-operation between ECO panic systems as well as
ECO doors closers and project hinges (chapter 2 and 5 of this catalogue or our
price list).

 $[\]ensuremath{^{*}}$ Further information regarding the single components can be found on the mentioned pages.

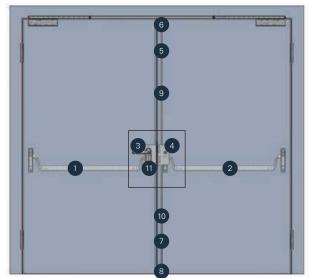
1. Position	2. Position	3. Position	4. Position	5. Position
PE	2.	2	Р	В
Panic Exit	Double- leaf	Panic	Pushbar	PAF-B

1. Position			
PE	Panic Exit	EN 1125 🐼	
PPE	Profile Panic Exit	EN 1125 🔯	
EE	Emergency Exit	EN 179 🖪	
PEE	Profile Emergency Exit	EN 179 🖪	
2. Position			
1	Single-leaf		
2	Double-leaf		
3. Position			
1	Active leaf panic		
2	Active- and passive leaf panic		
4. Position			
Р	Pushbar (EPN 900 III)		
Т	Touchbar (EPN 2000 II)		
Н	Handle set (lever / knob)		
5. Position			
В	Panic function B - Key operated spring bolt change (external)		
D	Panic function D - Transit	function (external)	
Е	Panic function E - (W=handle/knob execution	on)	

ECO.

Combination for panic doors PE 2.2PD • For double-leaf wooden and metal doors













Nr.	Components	Page*
1	EPN 900 III GF, max. door width 1.320	428
2	EPN 900 III SF, max. door width 1.320	428
3	GBS 93 GF, backset: 55, 65, 80, 100 mm	500
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5	Switch lock	
6	Striking plate	
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9	Upper shoot bolt	
10	Lower shoot bolt	
11	Counter hardware	222
	Spindles	363, 364, 556

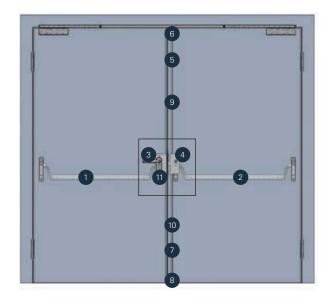
PE	2.	2	Р	D
Panic Exit	Double-leaf	Panic	Pushbar	PAF-D

The sole use of ECO panic systems presents only part of the safety. The complete safety is the result of the co-operation between ECO panic systems as well as ECO doors closers and project hinges (chapter 2 and 5 of this catalogue or our price list).

 $[\]ensuremath{^{*}}$ Further information regarding the single components can be found on the mentioned pages.







Recommended use			
Doors / Tests	Panic set acc.	EN 1125 🛐	•
	Suitable for fire- and smoke control doors	F	•
	CE tested	C€	-
Application recommended	Doors in escape ways	i	-
for:	Residential homes for	the elderly	-
	Factory doors		-
	Museums		-
	Airports		-
	Stadiums and arenas		-









Nr.	Components	Page*
1	EPN 900 III GF, max. door width 1.320	428
2	EPN 900 III SF, max. door width 1.320	
3	GBS 93 GF, backset: 55, 65, 80, 100 mm	500
4	GBS 94 SF, backset: 65, 80, 100 mm	502
5	Switch lock	
6	Striking plate	
7	Shoot bolt guide	520
8	Floor mould	520
9	Upper shoot bolt	
10	Lower shoot bolt	
11	Counter hardware	216
	Spindles	363, 364, 556

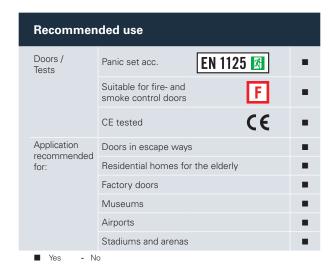
The sole use of ECO panic systems presents only part of the safety. The complete
safety is the result of the co-operation between ECO panic systems as well as
ECO doors closers and project hinges (chapter 2 and 5 of this catalogue or our
price list).

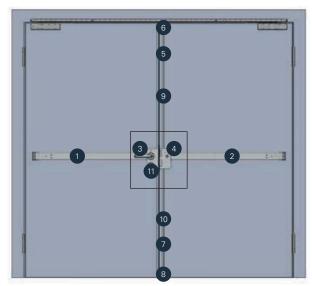
 $[\]ensuremath{^{*}}$ Further information regarding the single components can be found on the mentioned pages.

1. Position	2. Position	3. Position	4. Position	5. Position
PE	2.	2	Р	E
Panic Exit	Double- leaf	Panic	Pushbar	PAF-E

1. Position				
PE	Panic Exit EN 1125 🖟			
PPE	Profile Panic Exit EN 1125 🖪			
EE	Emergency Exit	EN 179 🖪		
PEE	Profile Emergency Exit	EN 179 🗷		
2. Position				
1	Single-leaf			
2	Double-leaf			
3. Position				
1	Active leaf panic			
2	Active- and passive leaf panic			
4. Position				
Р	Pushbar (EPN 900 III)			
Т	Touchbar (EPN 2000 II)			
Н	Handle set (lever / knob)			
5. Position	osition			
В	Panic function B - Key operated spring bolt change (external)			
D	Panic function D - Transit function (external)			
Е	Panic function E - (W=handle/knob execution)			















Nr.	Components	Page*
1	EPN 2000 II, DS GF, max. door width 1.320	422
2	EPN 2000 II, DS SF, max. door width 1.320	422
3	GBS 93 GF, backset: 55, 65, 80, 100 mm	500
4	GBS 94 SF, backset: 65, 80, 100 mm	502
5	Switch lock	
6	Striking plate	
7	Shoot bolt guide	520
8	Floor mould	520
9	Upper shoot bolt	
10	Lower shoot bolt	
11	Counter hardware	216
	Spindles	363, 364, 556

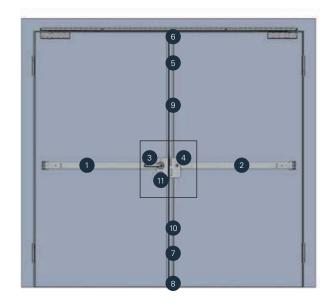
PE	2.	2	Т	В
Panic Exit	Double-leaf	Panic	Touchbar	PAF-B

The sole use of ECO panic systems presents only part of the safety. The complete safety is the result of the co-operation between ECO panic systems as well as ECO doors closers and project hinges (chapter 2 and 5 of this catalogue or our price list).

 $[\]ensuremath{^{*}}$ Further information regarding the single components can be found on the mentioned pages.



Combination for panic doors PE 2.2TD ■ For double-leaf wooden and metal doors



Recommen	ded use		
Doors / Tests	Panic set acc.	EN 1125 🖪	•
	Suitable for fire- and smoke control doors	F	
	CE tested	C€	•
Application recommended	Doors in escape ways	3	
for:	Residential homes for the elderly		
	Factory doors		
	Museums		
	Airports		
	Stadiums and arenas		









Nr.	Components	Page*
1	EPN 2000 II, DS GF, max. door width 1.320	422
2	EPN 2000 II, DS SF, max. door width 1.320	422
3	GBS 93 GF, backset: 55, 65, 80, 100 mm	500
4	GBS 94 SF, backset: 65, 80, 100 mm	502
5	Switch lock	
6	Striking plate	
7	Shoot bolt guide	520
8	Floor mould	
9	Upper shoot bolt	
10	Lower shoot bolt	
11	Counter hardware	216
	Spindles	363, 364, 556

The sole use of ECO panic systems presents only part of the safety. The complete safety is the result of the co-operation between ECO panic systems as well as ECO doors closers and project hinges (chapter 2 and 5 of this catalogue or our price list).

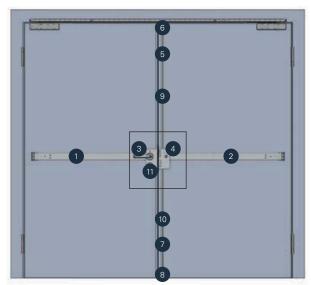
1. Position	2. Position	3. Position	4. Position	5. Position
PE	2.	2	Т	D
Panic Exit	Double- leaf	Panic	Touchbar	PAF-D

1. Position				
PE	Panic Exit EN 1125 🖟			
PPE	Profile Panic Exit EN 1125 🗹			
EE	Emergency Exit	EN 179 🖪		
PEE	Profile Emergency Exit	EN 179 🗷		
2. Position				
1	Single-leaf			
2	Double-leaf			
3. Position				
1	Active leaf panic			
2	Active- and passive leaf panic			
4. Position				
Р	Pushbar (EPN 900 III)			
Т	Touchbar (EPN 2000 II)			
Н	Handle set (lever / knob)			
5. Position	ion			
В	Panic function B - Key operated spring bolt change (external)			
D	Panic function D - Transit function (external)			
Е	Panic function E - (W=handle/knob execution)			

 $[\]ensuremath{^{*}}$ Further information regarding the single components can be found on the mentioned pages.

Combination for panic doors PE 2.2TE • For double-leaf wooden and metal doors













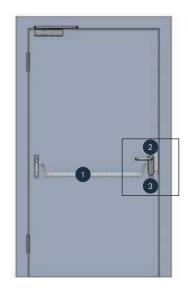
Nr.	Components	Page*
1	EPN 2000 II, DS GF, max. door width 1.320	422
2	EPN 2000 II, DS SF, max. door width 1.320	422
3	GBS 93 GF, backset: 55, 65, 80, 100 mm	500
4	GBS 94 SF, backset: 65, 80, 100 mm	502
5	Switch lock	
6	Striking plate	
7	Shoot bolt guide	520
8	Floor mould	520
9	Upper shoot bolt	
10	Lower shoot bolt	
11	Counter hardware	216
	Spindles	363, 364, 556

PE	2.	2	Т	E
Panic Exit	Double-leaf	Panic	Touchbar	PAF-E

 $[\]ensuremath{^{*}}$ Further information regarding the single components can be found on the mentioned pages.



Combination for panic doors PE 1.1PB • For single-leaf wooden and metal doors



Recommended use			
Doors / Tests	Panic set acc.	EN 1125 🗷	•
	Suitable for fire- and smoke control doors	F	٠
	CE tested	C€	•
Application recommended	Doors in escape ways	3	•
for:	Residential homes for	the elderly	•
	Factory doors		•
	Museums		•
	Airports		•
	Stadiums and arenas		







Nr.	Components	Page*
1	EPN 900 III, max. door width 1.320 mm	428
2	GBS 92, backset: 55, 65, 80, 100 mm	498
3	Counter hardware	222
	Spindle	363, 364

1. Position	2. Position	3. Position	4. Position	5. Position
PE	1.	1	Р	В
Panic Exit	Single-leaf	Panic	Pushbar	PAF-B

1. Position			
PE	Panic Exit	EN 1125 🗷	
PPE	Profile Panic Exit	EN 1125 🗷	
EE	Emergency Exit	EN 179 🖪	
PEE	Profile Emergency Exit	EN 179 🗷	
2. Position			
1	Single-leaf		
2	Double-leaf		
3. Position			
1	Active leaf panic		
2	Active- and passive leaf panic		
4. Position			
Р	Pushbar (EPN 900 III)		
Т	Touchbar (EPN 2000 II)		
Н	Handle set (lever / knob)		
5. Position			
В	Panic function B - Key operated spring bolt change (external)		
D	Panic function D - Transit function (external)		

Panic function E -

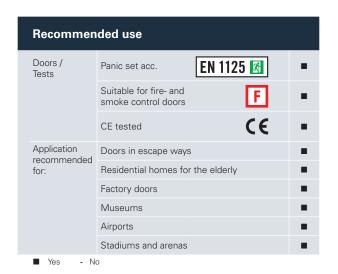
(W=handle/knob execution)

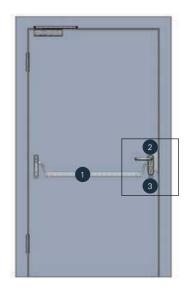
Е

 $[\]mbox{\ensuremath{\mbox{\sc *}}}$ Further information regarding the single components can be found on the mentioned pages.

Combination for panic doors PE 1.1PD • For single-leaf wooden and metal doors













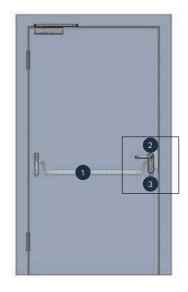
Nr.	Components	Page*
1	EPN 900 III, max. door width 1.320 mm	428
2	GBS 92, backset: 55, 65, 80, 100 mm	498
3	Counter hardware	222
	Spindle	363, 364

PE	1.	1	Р	D
Panic Exit	Single-leaf	Panic	Pushbar	PAF-D

The sole use of ECO panic systems presents only part of the safety. The complete safety is the result of the co-operation between ECO panic systems as well as ECO doors closers and project hinges (chapter 2 and 5 of this catalogue or our price list).



Combination for panic doors PE 1.1PE • For single-leaf wooden and metal doors











Nr.	Components	Page*
1	EPN 900 III, max. door width 1.320 mm	428
2	GBS 92, backset: 55, 65, 80, 100 mm	498
3	Counter hardware	216
	Spindle	363, 364

1. Position	2. Position	3. Position	4. Position	5. Position
PE	1.	1	Р	E
Panic Exit	Single-leaf	Panic	Pushbar	PAF-E

1. Position			
PE	Panic Exit	EN 1125 🖪	
PPE	Profile Panic Exit	EN 1125 🖪	
EE	Emergency Exit	EN 179 🗷	
PEE	Profile Emergency Exit	EN 179 🗷	
2. Position			
1	Single-leaf		
2	Double-leaf		
3. Position			
1	Active leaf panic		
2	Active- and passive leaf panic		
4. Position			
Р	Pushbar (EPN 900 III)		
Т	Touchbar (EPN 2000 II)		
Н	Handle set (lever / knob)		
5. Position			
В	Panic function B - Key operated spring bolt change (external)		
D	Panic function D - Transit function (external)		

Panic function E -

(W=handle/knob execution)

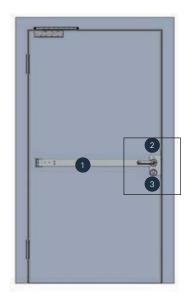
Е

 $[\]mbox{\ensuremath{\mbox{\sc *}}}$ Further information regarding the single components can be found on the mentioned pages.

Combination for panic doors PE 1.1TB • For single-leaf wooden and metal doors













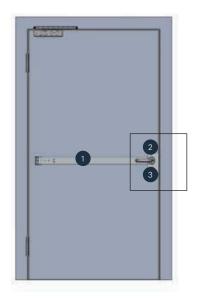
Nr.	Components	Page*
1	EPN 2000 II, DS, max. door width 1.300	428
2	GBS 92, backset: 55, 65, 80, 100 mm	498
3	Counter hardware	216
	Spindle	363, 364

PE	1.	1	Т	В
Panic Exit	Single-leaf	Panic	Touchbar	PAF-B

The sole use of ECO panic systems presents only part of the safety. The complete safety is the result of the co-operation between ECO panic systems as well as ECO doors closers and project hinges (chapter 2 and 5 of this catalogue or our price list).



Combination for panic doors PE 1.1TD • For single-leaf wooden and metal doors











Nr.	Components	Page*
1	EPN 2000 IIDS, max. door width 1.320 mm	422
2	GBS 92, backset: 55, 65, 80, 100 mm	498
3	Counter hardware	216
	Spindle	363, 364

1. Position	2. Position	3. Position	4. Position	5. Position
PE	1.	1	Т	D
Panic Exit	Single-leaf	Panic	Touchbar	PAF-D

1. Position				
PE	Panic Exit	EN 1125 🗷		
PPE	Profile Panic Exit	EN 1125 🗷		
EE	Emergency Exit	EN 179 🗷		
PEE	Profile Emergency Exit	EN 179 🗷		
2. Position				
1	Single-leaf			
2	Double-leaf			
3. Position				
1	Active leaf panic			
2	Active- and passive leaf pa	anic		
4. Position				
Р	Pushbar (EPN 900 III)			
Т	Touchbar (EPN 2000 II)			
Н	Handle set (lever / knob)			
5. Position				
B Panic function B - Key operated spring change (external)				
D	Panic function D - Transit function (external)			

Panic function E -

(W=handle/knob execution)

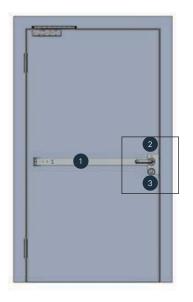
Е

The sole use of ECO panic systems presents only part of the safety. The complete safety is the result of the co-operation between ECO panic systems as well as ECO doors closers and project hinges (chapter 2 and 5 of this catalogue or our price list).

Combination for panic doors PE 1.1TE • For single-leaf wooden and metal doors













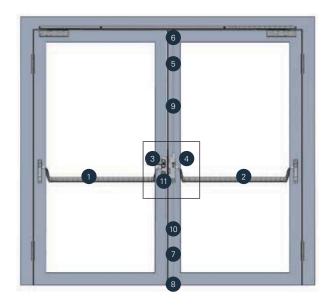
Nr.	Components	Page*
1	EPN 2000 IIDS, max. door width 1.320 mm	422
2	GBS 92, backset: 55, 65, 80, 100 mm	498
3	216	
	Spindle	363, 364

PE	1.	1	Т	E
Panic Exit	Single-leaf	Panic	Touchbar	PAF-E

^{*} Further information regarding the single components can be found on the mentioned pages.







Recommen	ded use		
Doors / Tests	Panic set acc.	EN 1125 🔀	
	Suitable for fire- and smoke control doors	F	•
	CE tested	C€	•
Application recommended	Doors in escape ways		-
for:	Residential homes for the elderly		
	Factory doors		
	Museums		
	Airports		
	Stadiums and arenas		









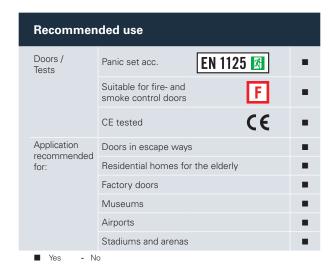
Nr.	Components	Page*
1	EPN 900 III GF, max. door width 1.320 mm	428
2	EPN 900 III SF, max. door width 1.320 mm	428
3	GBS 97 GF, backset: 30, 35, 40, 45 mm	508
4	GBS 98 SF, backset: 35, 40, 45, 50, 55, 60, 65 mm	510
5	Switch lock	
6	Striking plate	
7	Shoot bolt guide	522
8	Floor mould	
9	Upper shoot bolt	
10	Lower shoot bolt	
11	Counter hardware	286
	Spindle	363, 364, 556

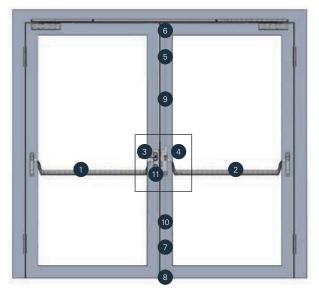
1. Position	2. Position	3. Position	4. Position	5. Position
PPE	2.	2	Р	В
Profile Panic Exit	Double- leaf	Panic	Pushbar	PAF-B

1. Position			
PE	Panic Exit	EN 1125 🚳	
PPE	Profile Panic Exit	EN 1125 🐼	
EE	Emergency Exit	EN 179 🗷	
PEE	Profile Emergency Exit	EN 179 🗷	
2. Position			
1	Single-leaf		
2	Double-leaf		
3. Position			
1	Active leaf panic		
2	Active- and passive leaf panic		
4. Position			
Р	Pushbar (EPN 900 III)		
Т	Touchbar (EPN 2000 II)		
Н	Handle set (lever / knob)		
5. Position			
В	Panic function B - Key operated spring bolt change (external)		
D	Panic function D - Transit	function (external)	
Е	Panic function E - (W=handle/knob execution)		

 $[\]mbox{\ensuremath{\mbox{\sc Further}}}$ Further information regarding the single components can be found on the mentioned pages.















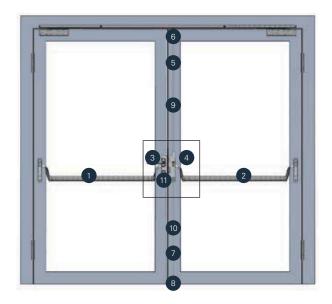
Nr.	Components	Page*
 1	EPN 900 III GF, max. door width 1.320 mm	428
2	EPN 900 III SF, max. door width 1.320 mm	428
3	GBS 97 GF, backset: 30, 35, 40, 45 mm	508
4	GBS 98 SF, backset: 35, 40, 45, 50, 55, 60, 65 mm	510
5	Switch lock	
6	Striking plate	- 522
 7	Shoot bolt guide	
8	Floor mould	
9	Upper shoot bolt	
 10	Lower shoot bolt	
1	Counter hardware	286
	Spindle	363, 364, 556

PPE	2.	2	P	D
Profile Panic Exit	Double-leaf	Panic	Pushbar	PAF-D

 $[\]ensuremath{^{*}}$ Further information regarding the single components can be found on the mentioned pages.







EN 1125 🚮
fire- and
trol doors
(€ •
scape ways
homes for the elderly
ors
nd arenas









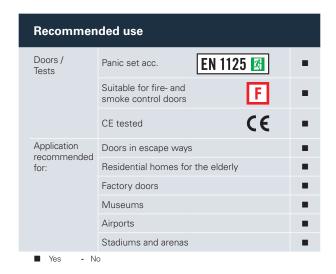
Nr.	Components	Page*
1	EPN 900 III GF, max. door width 1.320 mm	428
2	EPN 900 III SF, max. door width 1.320 mm	428
3	GBS 97 GF, backset: 30, 35, 40, 45 mm	508
4	GBS 98 SF, backset: 35, 40, 45, 50, 55, 60, 65 mm	508
5	Switch lock	
6	Striking plate	
7	Shoot bolt guide	522
8	Floor mould	522
9	Upper shoot bolt	
10	Lower shoot bolt	
11	Counter hardware	286
	Spindle	363, 364, 556

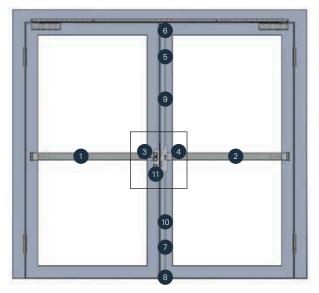
1. Position	2. Position	3. Position	4. Position	5. Position
PPE	2.	2	Р	E
Profile Panic Exit	Double- leaf	Panic	Pushbar	PAF-E

1. Position			
PE	Panic Exit	EN 1125 🖪	
PPE	Profile Panic Exit	EN 1125 🚳	
EE	Emergency Exit	EN 179 🖪	
PEE	Profile Emergency Exit	EN 179 🖪	
2. Position			
1	Single-leaf		
2	Double-leaf		
3. Position			
1	Active leaf panic		
2	Active- and passive leaf panic		
4. Position			
Р	Pushbar (EPN 900 III)		
Т	Touchbar (EPN 2000 II)		
Н	Handle set (lever / knob)		
5. Position			
В	Panic function B - Key operated spring bolt change (external)		
D	Panic function D - Transit	function (external)	
Е	Panic function E - (W=handle/knob execution)		

 $[\]mbox{\ensuremath{\mbox{\sc Further}}}$ Further information regarding the single components can be found on the mentioned pages.















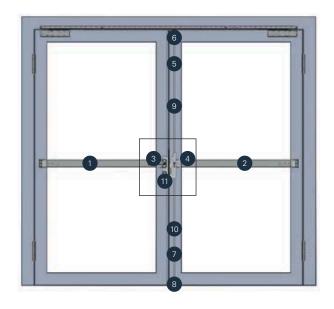
Nr.	Components	Page*
1	EPN 2000 II GF, max. door width 1.320 mm	422
2	EPN 2000 II SF, max. door width 1.320 mm	422
3	GBS 97 GF, backset: 30, 35, 40, 45 mm	508
4	GBS 98 SF, backset: 35, 40, 45, 50, 55, 60, 65 mm	508
5	Switch lock	
6	Striking plate	
7	Shoot bolt guide	522
8	Floor mould	522
9	Upper shoot bolt	
10	Lower shoot bolt	
11	Counter hardware	286
	Spindle	363, 364, 556

PPE	2.	2	Т	В
Profile Panic Exit	Double-leaf	Panic	Touchbar	PAF-B

^{*} Further information regarding the single components can be found on the mentioned pages.







Recommen	ded use		
Doors / Tests	Panic set acc.	EN 1125 🖪	•
	Suitable for fire- and smoke control doors	F	
	CE tested	C€	•
Application recommended	Doors in escape ways	3	
for:	Residential homes for	the elderly	
	Factory doors		
	Museums		
	Airports		
	Stadiums and arenas		



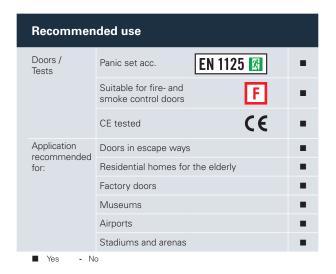
Nr.	Components	Page*
1	EPN 2000 II GF, max. door width 1.320 mm	422
2	EPN 2000 II SF, max. door width 1.320 mm	422
3	GBS 97 GF, backset: 30, 35, 40, 45 mm	508
4	GBS 98 SF, backset: 35, 40, 45, 50, 55, 60, 65 mm	510
5	Switch lock	
6	Striking plate	
7	Shoot bolt guide	522
8	Floor mould	522
9	Upper shoot bolt	
10	Lower shoot bolt	
11	Counter hardware	286
	Spindle	363, 364, 556

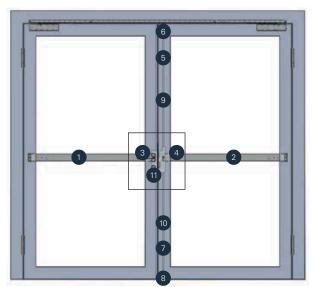
1. Position	2. Position	3. Position	4. Position	5. Position
PPE	2.	2	Т	D
	Double- leaf	Panic	Touchbar	PAF-D

1. Position		
PE	Panic Exit	EN 1125 🚳
PPE	Profile Panic Exit	EN 1125 🚮
EE	Emergency Exit	EN 179 🖪
PEE	Profile Emergency Exit	EN 179 🗷
2. Position		
1	Single-leaf	
2	Double-leaf	
3. Position		
1	Active leaf panic	
2	Active- and passive leaf p	panic
4. Position		
Р	Pushbar (EPN 900 III)	
Т	Touchbar (EPN 2000 II)	
Н	Handle set (lever / knob)	
5. Position		
В	Panic function B - Key operated spring bolt change (external)	
D	Panic function D - Transit	function (external)
Е	Panic function E - (W=handle/knob execution	on)

 $[\]ensuremath{^{*}}$ Further information regarding the single components can be found on the mentioned pages.















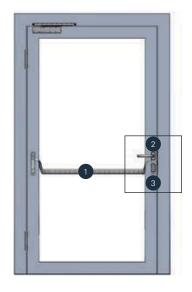
Nr.	Components	Page*
1	EPN 2000 II GF, max. door width 1.320 mm	422
2	EPN 2000 II SF, max. door width 1.320 mm	422
3	GBS 97 GF, backset: 30, 35, 40, 45 mm	508
4	GBS 98 SF, backset: 35, 40, 45, 50, 55, 60, 65 mm	510
5	Switch lock	
6	Striking plate	
7	Shoot bolt guide	522
8	Floor mould	522
9	Upper shoot bolt	
10	Lower shoot bolt	
11	Counter hardware	286
	Spindle	363, 364, 556

PPE	2.	2	Т	E
Profile Panic	Double-leaf	Panic	Touchbar	PAF-E
Exit				

 $[\]ensuremath{^{*}}$ Further information regarding the single components can be found on the mentioned pages.



Combination for panic doors PPE 1.1PB • For single-leaf profile frame doors











Nr.	Components	Page*
1	EPN 900 III, max. door width 1.320 mm	428
2	GBS 96, backset: 30, 35, 40, 45 mm	506
3	Counter hardware	286
	Spindle	363, 364

1. Position	2. Position	3. Position	4. Position	5. Position
PPE	1.	1	Р	В
Profile Panic Exit	Single-leaf	Panic	Pushbar	PAF-B

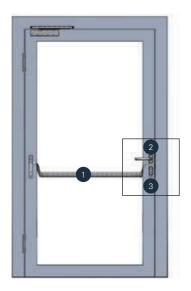
1. Position			
PE	Panic Exit	EN 1125 🔯	
PPE	Profile Panic Exit	EN 1125 🐼	
EE	Emergency Exit	EN 179 🖪	
PEE	Profile Emergency Exit	EN 179 🖪	
2. Position			
1	Single-leaf		
2	Double-leaf		
3. Position			
1	Active leaf panic		
2	Active- and passive leaf panic		
4. Position			
Р	Pushbar (EPN 900 III)		
Т	Touchbar (EPN 2000 II)		
Н	Handle set (lever / knob)		
5. Position			
В	Panic function B - Key operated spring bolt change (external)		
D	Panic function D - Transit function (external)		
E	Panic function E - (W=handle/knob execution)		

The sole use of ECO panic systems presents only part of the safety. The complete safety is the result of the co-operation between ECO panic systems as well as ECO doors closers and project hinges (chapter 2 and 5 of this catalogue or our price list).

 $\mbox{\ensuremath{\mbox{\sc Further}}}$ Further information regarding the single components can be found on the mentioned pages.

Combination for panic doors PPE 1.1PD • For single-leaf profile frame doors











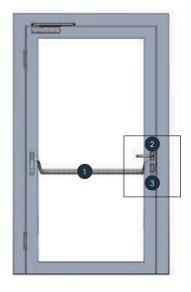
Nr.	Components	Page*
1	EPN 900 III, max. door width 1.320 mm	428
2	GBS 96, backset: 30, 35, 40, 45 mm	506
3	Counter hardware	286
	Spindle	363, 364

PPE	1.	1	P	D
Profile Panic Exit	Single-leaf	Panic	Pushbar	PAF-D

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Combination for panic doors PPE 1.1PE • For single-leaf profile frame doors



Recommended use			
Doors / Tests	Panic set acc.	EN 1125 🖪	•
	Suitable for fire- and smoke control doors	F	•
	CE tested	C€	•
Application recommended	Doors in escape ways	3	
for:	Residential homes for	r the elderly	-
	Factory doors		-
	Museums		-
	Airports		
	Stadiums and arenas		•
■ Yes - No			







Nr.	Components	Page*
1	EPN 900 III, max. door width 1.320 mm	428
2	GBS 96, backset: 30, 35, 40, 45 mm	506
3	Counter hardware	286
	Spindle	363, 364

1. Position	2. Position	3. Position	4. Position	5. Position
PPE	1.	1	Р	E
Profile Panic Exit	Single-leaf	Panic	Pushbar	PAF-E

1. Position			
PE	Panic Exit	EN 1125 🖪	
PPE	Profile Panic Exit	EN 1125 🖪	
EE	Emergency Exit	EN 179 🖪	
PEE	Profile Emergency Exit	EN 179 🗷	
2. Position			
1	Single-leaf		
2	Double-leaf		
3. Position			
1	Active leaf panic		
2	Active- and passive leaf panic		
4. Position			
Р	Pushbar (EPN 900 III)		
Т	Touchbar (EPN 2000 II)		
Н	Handle set (lever / knob)		
5. Position			
В	Panic function B - Key operated spring bolt change (external)		
D	Panic function D - Transit function (external)		
Е	Panic function E - (W=handle/knob execution)		

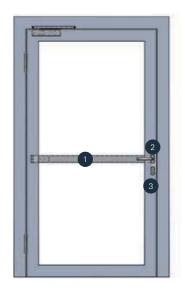
The sole use of ECO panic systems presents only part of the safety. The complete safety is the result of the co-operation between ECO panic systems as well as ECO doors closers and project hinges (chapter 2 and 5 of this catalogue or our price list).

 $\mbox{\ensuremath{\mbox{\sc Further}}}$ Further information regarding the single components can be found on the mentioned pages.

Combination for panic doors PPE 1.1TB • For single-leaf profile frame doors













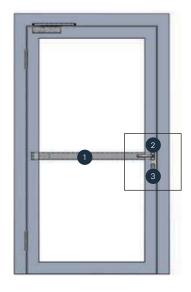
Nr.	Components	Page*
1	EPN 2000 II, max. door width 1.320 mm	422
2	GBS 96, backset: 30, 35, 40, 45 mm	506
3	Counter hardware	286
	Spindle	363, 364

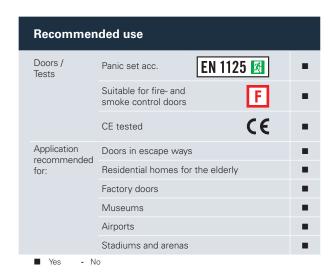
PPE	1.	1	Т	В
Profile Panic Exit	Single-leaf	Panic	Touchbar	PAF-B

 $[\]ensuremath{^{*}}$ Further information regarding the single components can be found on the mentioned pages.



Combination for panic doors PPE 1.1TD • For single-leaf profile frame doors











Nr.	Components	Page*
1	EPN 2000 II, max. door width 1.320 mm	422
2	GBS 96, backset: 30, 35, 40, 45 mm	506
3	Counter hardware	286
	Spindle	363, 364

1. Position	2. Position	3. Position	4. Position	5. Position
PPE	1.	1	Т	D
Profile Panic Exit	Single-leaf	Panic	Touchbar	PAF-D

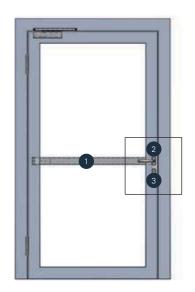
1. Position			
PE	Panic Exit EN 1125 M		
PPE	Profile Panic Exit	EN 1125 🗷	
EE	Emergency Exit	EN 179 🗷	
PEE	Profile Emergency Exit	EN 179 🗷	
2. Position			
1	Single-leaf		
2	Double-leaf		
3. Position			
1	Active leaf panic		
2	Active- and passive leaf panic		
4. Position	'		
Р	Pushbar (EPN 900 III)		
Т	Touchbar (EPN 2000 II)		
Н	Handle set (lever / knob)		
5. Position			
В	Panic function B - Key operated spring bolt change (external)		
D	Panic function D -Transit function (external)		
Е	Panic function E - (W=handle/knob execution)		

The sole use of ECO panic systems presents only part of the safety. The complete safety is the result of the co-operation between ECO panic systems as well as ECO doors closers and project hinges (chapter 2 and 5 of this catalogue or our price list).

Combination for panic doors PPE 1.1TE • For single-leaf profile frame doors













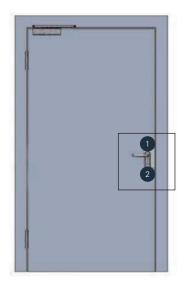
Nr.	Components	Page*
1	EPN 2000 II, max. door width 1.320 mm	422
2	GBS 96, backset: 30, 35, 40, 45 mm	506
3	Counter hardware	286
	Spindle	363, 364

PPE	1.	1	Т	E
Profile Panic Exit	Single-leaf	Panic	Touchbar	PAF-E

^{*} Further information regarding the single components can be found on the mentioned pages.



Combination for emergeny exists EE 1.1HB • For single-leaf wooden and metal doors







Nr.	Components	Page*
1	GBS 81, backset: 55 mm, 65 mm	488
2	Lever set on plate VDS OGL D-110, PZ-72	222

1. Position	2. Position	3. Position	4. Position	5. Position
EE	1.	1	н	В
Emergen- cy Exit	Single-leaf	Panic	Handle Set	PAF-B

1. Position	,			
PE	Panic Exit	EN 1125 🖾		
PPE	Profile Panic Exit	EN 1125 🖪		
EE	Emergency Exit	EN 179 🖪		
PEE	Profile Emergency Exit	EN 179 🖪		
2. Position				
1	Single-leaf			
2	Double-leaf	Double-leaf Double-leaf		
3. Position				
1	Active leaf panic			
2	Active- and passive leaf panic			
4. Position				
Р	Pushbar (EPN 900 III)			
Т	Touchbar (EPN 2000 II)			
Н	Handle set (lever / knob)			
5. Position	•			
В	Panic function B - Key operated spring bolt change (external)			
D	Panic function D - Transit function (external)			
F	Panic function E -			

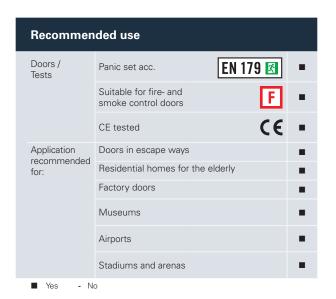
(W=handle/knob execution)

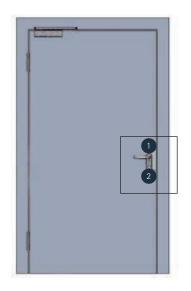
Ε

The sole use of ECO panic systems presents only part of the safety. The complete safety is the result of the co-operation between ECO panic systems as well as ECO doors closers and project hinges (chapter 2 and 5 of this catalogue or our price list).

Combination for emergeny exists EE 1.1HD • For single-leaf wooden and metal doors











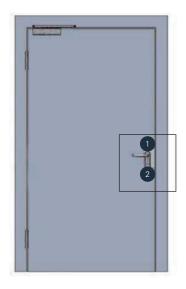
Nr.	Components	Page*
1	GBS 81, backset: 55 mm, 65 mm	488
2	Lever set on plate VDS OGL D-110, PZ-72	222

EE	1.	1	Н	D
Emergency Exit	Single-leaf	Panic	Handle Set	PAF-D

^{*} Further information regarding the single components can be found on the mentioned pages.



Combination for emergeny exists EE 1.1HE • For single-leaf wooden and metal doors









Nr.	Components	Page*
1	GBS 81, backset: 55 mm, 65 mm	488
2	Lever set on plate VDS K-130, PZ-72	216

1. Position	2. Position	3. Position	4. Position	5. Position
EE	1.	1	Н	E
Emergen- cy Exit	Single-leaf		Handle Set	PAF-E

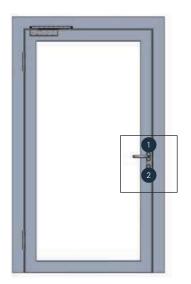
1. Position			
PE	Panic Exit	EN 1125 🖪	
PPE	Profile Panic Exit	EN 1125 🖪	
EE	Emergency Exit	EN 179 🗷	
PEE	Profile Emergency Exit	EN 179 🖪	
2. Position			
1	Single-leaf		
2	Double-leaf		
3. Position			
1	Active leaf panic		
2	Active- and passive leaf panic		
4. Position			
Р	Pushbar (EPN 900 III)		
Т	Touchbar (EPN 2000 II)		
Н	Handle set (lever / knob)		
5. Position	tion		
В	Panic function B - Key operated spring bolt change (external)		
D	Panic function D -Transit function (external)		
E	Panic function E - (W=handle/knob execution)		

The sole use of ECO panic systems presents only part of the safety. The complete safety is the result of the co-operation between ECO panic systems as well as ECO doors closers and project hinges (chapter 2 and 5 of this catalogue or our price list).

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Combination for emergeny exists PEE 1.1HB • For single-leaf profile frame doors









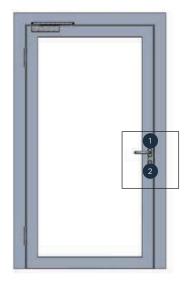
Nr.	Components	Page*
1	GBS 96, backset: 30, 35, 40, 45 mm	488
2	Oval lever set (OVR) D-116	286
	Spindle	364

EE	1.	1	Н	В
Profile Emergency Exit	Single-leaf	Panic	Handle Set	PAF-B

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Combination for emergeny exists PEE 1.1HD • For single-leaf profile frame doors









Nr.	Components	Page*
1	GBS 96, backset: 30, 35, 40, 45 mm	506
2	Oval lever set (OVR) D-116	286
	Spindle	364

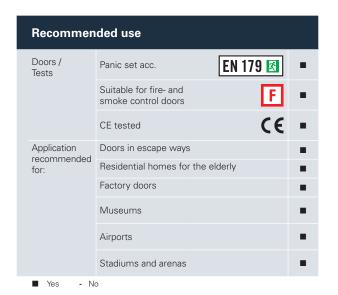
1. Position	2. Position	3. Position	4. Position	5. Position
EE	1.	1	Н	D
Profile Emergen- cy Exit	Single-leaf	Panic	Handle Set	PAF-D

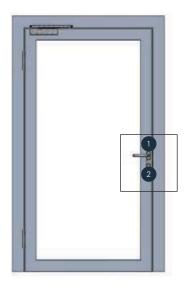
1. Position				
PE	Panic Exit	EN 1125 M		
PPE	Profile Panic Exit	EN 1125 🖪		
EE	Emergency Exit	EN 179 🖪		
PEE	Profile Emergency Exit	EN 179 🖪		
2. Position				
1	Single-leaf			
2	Double-leaf			
3. Position	3. Position			
1	Active leaf panic			
2	Active- and passive leaf panic			
4. Position	Position			
Р	Pushbar (EPN 900 III)			
Т	Touchbar (EPN 2000 II)			
Н	Handle set (lever / knob)			
5. Position				
В	Panic function B - Key operated spring bolt change (external)			
D	Panic function D - Transit function (external)			
Е	Panic function E - (W=handle/knob execution)			

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Combination for emergeny exists PEE 1.1HE • For single-leaf profile frame doors









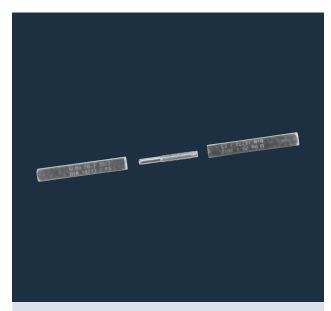


Nr.	Components	Page*
1	GBS 96, backset: 30, 35, 40, 45 mm	506
2	Oval lever / knob set (OVR) K-160	286
	Spindle	364

EE	1.	1	Н	E
Profile	Single-leaf	Panic	Handle	PAF-E
Emergency			Set	
Exit				

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Panic pin set (9 mm)

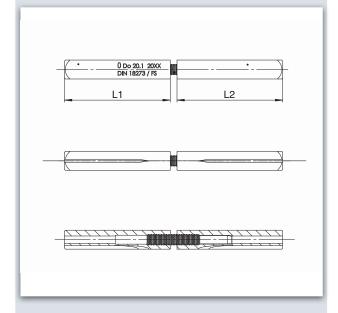
E

For panic door hardware using locks with divided hub.

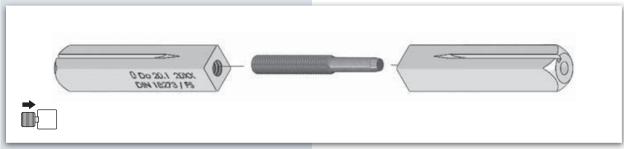
Further lengths on request.

Set contains:

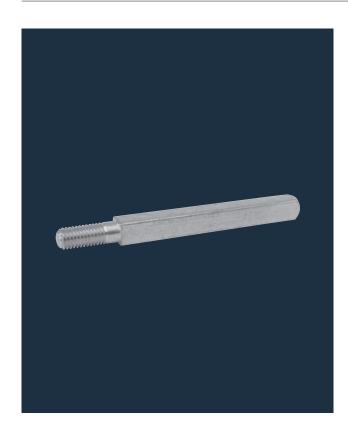
- Panic pin L1Panic pin L2
- Connecting screwTwo threaded pins



Article number	Spindle	Length (L1)	Length (L2)
901800.43	Ø 9 mm	40 mm	50 mm
901801.43	Ø 9 mm	40 mm	55 mm
901802.43	Ø 9 mm	40 mm	60 mm
901803.43	Ø 9 mm	40 mm	65 mm
901804.43	Ø 9 mm	40 mm	70 mm
901805.43	Ø 9 mm	40 mm	75 mm
901806.43	Ø 9 mm	40 mm	80 mm
901807.43	Ø 9 mm	40 mm	85 mm
901808.43	Ø 9 mm	45 mm	50 mm
901809.43	Ø 9 mm	45 mm	55 mm
901810.43	Ø 9 mm	45 mm	60 mm
901811.43	Ø 9 mm	45 mm	65 mm
901812.43	Ø 9 mm	45 mm	70 mm
901813.43	Ø 9 mm	45 mm	75 mm
901814.43	Ø 9 mm	45 mm	80 mm
901815.43	Ø 9 mm	45 mm	85 mm
901816.43	Ø 9 mm	50 mm	50 mm
901817.43	Ø 9 mm	50 mm	55 mm
901818.43	Ø 9 mm	50 mm	60 mm
901819.43	Ø 9 mm	50 mm	65 mm
901820.43	Ø 9 mm	50 mm	70 mm
901821.43	Ø 9 mm	50 mm	75 mm
901822.43	Ø 9 mm	50 mm	80 mm
901823.43	Ø 9 mm	50 mm	85 mm
901824.43	Ø 9 mm	55 mm	55 mm
901825.43	Ø 9 mm	55 mm	60 mm
901826.43	Ø 9 mm	55 mm	65 mm
901827.43	Ø 9 mm	55 mm	70 mm
901828.43	Ø 9 mm	55 mm	75 mm
901829.43	Ø 9 mm	55 mm	80 mm
901830.43	Ø 9 mm	55 mm	85 mm
901831.43	Ø 9 mm	60 mm	60 mm
901832.43	Ø 9 mm	60 mm	65 mm
901833.43	Ø 9 mm	60 mm	70 mm
901834.43	Ø 9 mm	60 mm	75 mm
901835.43	Ø 9 mm	60 mm	80 mm
901836.43	Ø 9 mm	60 mm	85 mm
901837.43	Ø 9 mm	65 mm	65 mm
901838.43	Ø 9 mm	65 mm	70 mm
901839.43	Ø 9 mm	65 mm	75 mm
901840.43	Ø 9 mm	65 mm	80 mm
901841.43	Ø 9 mm	65 mm	85 mm





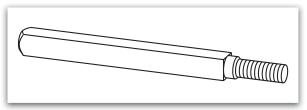


Spindle for knob/lever set (9 mm)

F

The spindle is screwed into the grip plate / knob (minimum 8 mm). Do not tighten too strong since the function of the handle has to be given.

Further lengths on request.



Article number	Spindle	Length
900686.43	□ 9 mm	80 mm
900688.43	□ 9 mm	90 mm
900689.43	□ 9 mm	101 mm
900691.43	□ 9 mm	110 mm
900693.43	□ 9 mm	125 mm

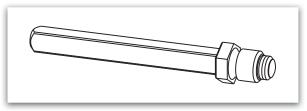


Spindle for knob/lever set with excentric drilling (9 mm)



The spindle is screwed into the grip plate / knob (minimum 8 mm). Do not tighten too strong since the function of the handle has to be given.

Further lengths on request.



Article number	Spindle	Length
908068.43	□ 9 mm	60 mm
908069.43	□ 9 mm	70 mm
908067.43	□ 9 mm	80 mm
908090.43	□ 9 mm	100 mm
908091.43	□ 9 mm	120 mm

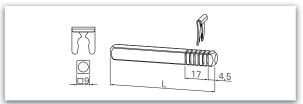




Spindle (9 mm) for EPN 900 III

F

For fastening (EPN 900 III and counter hardware), seamlessly, spindle 9 x 9 mm, zinc-plated, with slots and plug clip.



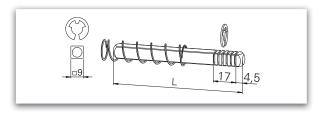
Article number	Spindle	Length
119007914300030	□ 9 mm	55 mm
119007924300030	□ 9 mm	75 mm
119007934300030	□ 9 mm	95 mm



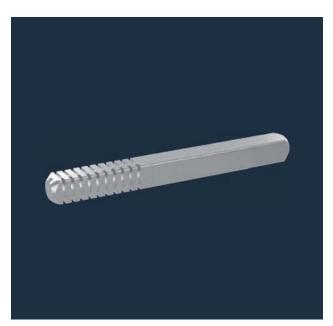
Spindle (9 mm) for EPN 900 IV / EPN 950



For mounting on single side. Spindle 9×9 mm, with slots and plug clip. **DIN 6799.**



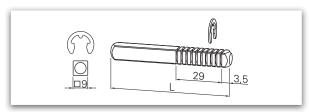
Article number	Spindle	Length
119007914301030	□ 9 mm	55 mm
119007924301030	□ 9 mm	75 mm
119007934301030	□ 9 mm	95 mm



Spindle (9 mm) for EPN 2000 II



For fastening (EPN 2000 II and counter hardware), seamlessly, spindle 9×9 mm, zinc-plated, with slots and two retaining rings **DIN 6799**



Article number	Spindle	Length
119007944300030	□ 9 mm	55 mm
119007954300030	□ 9 mm	75 mm
119007964300030	□ 9 mm	95 mm

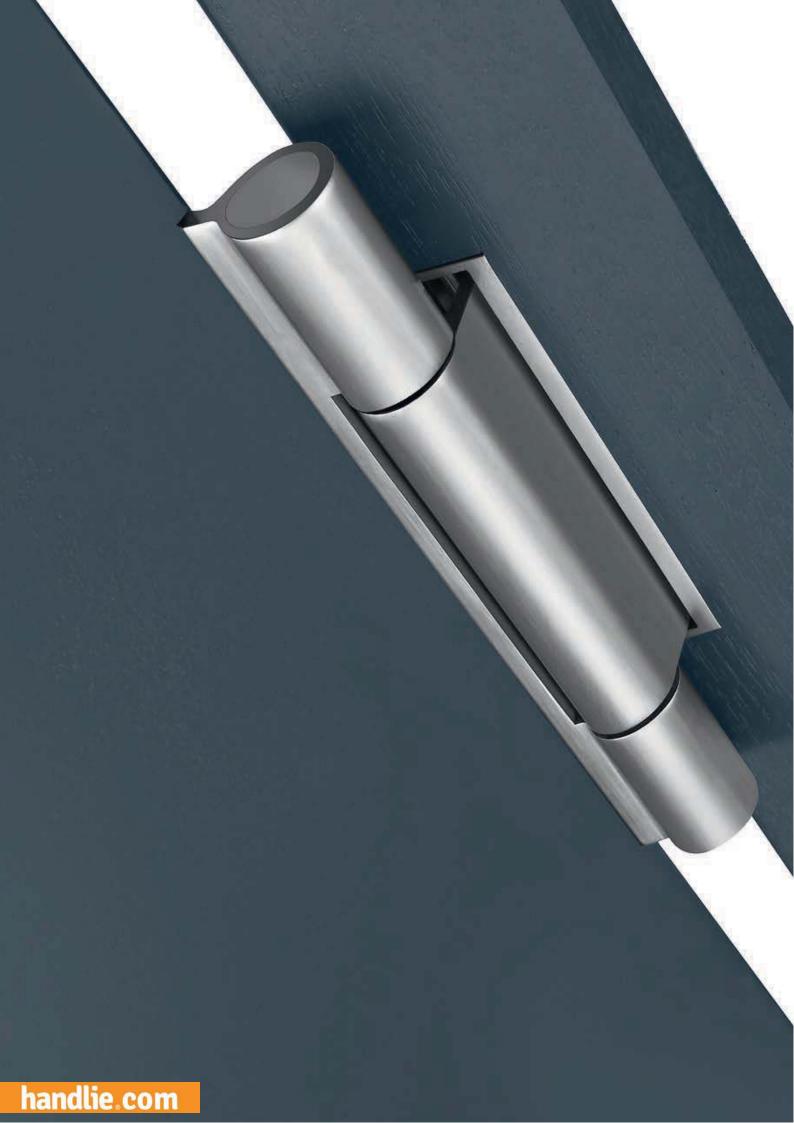


ECO Panic and locking technology Differentiation by building utilization

The type of room and utilization of the building are decisive when choosing the right panic door combination. European standards **DIN EN 1125** and **DIN EN 179** define the fittings of panic doors and emergency exits.

Emergency exit locks in compliance with **DIN EN 179** are not normally subjected to use by the general public. It is assumed here that the users of the building are acquainted with the escape routes, so conventional panic lock technology with a handle or impact plate are sufficient here.

Panic locks with a horizontal activation bar in accordance with **DIN EN 1125**, on the other hand, are intended for use in buildings frequented by the general public. Our panic systems in conformance with **DIN EN 1125** ensure that persons who have panicked and are not acquainted with the functions of the door can always get out of the building safely.



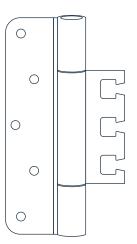




Hinge technology

Supporting rollers



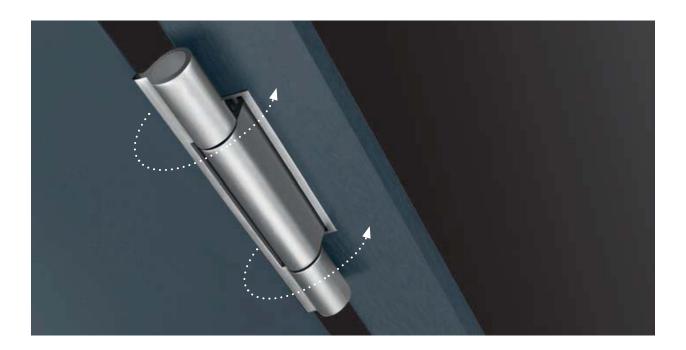




Defying the laws of leverage

The hinges connect the door leaf to the frame and enable its opening and closing. The German term Band originates from the time when doors had iron bands fitted to them, the ends of which were bent to form an eye. This eye was then hung onto a tang protruding from the door frame, thus giving rise to the English word hinge.

Many aphorisms have been dedicated to doors. One of the most powerful comes from a quote by Archimedes: "Give me a firm location outside our earth, and I will lift the world off its hinges". This adage is always used when something fundamental is changed, when a philosophy alters or a paradigm is to be reappraised. Archimedes was referring to the laws of leverage.



This remains true to this day: good hinges ensure that doors open the way we expect them to. They define the fulcrum - and thereby the mobility of the door - and give the door leaf a solid support.

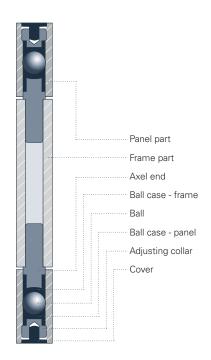
Door hinges must be precisely coordinated to the dimensions of a door - to its measurements, weight, type of mounting and location. They are not just hard-wearing components of a door. ECO Schulte can look back on decades of experience in the manufacture of hinges. ECO hinges are premium products that comply with the standard **EN 1935.** They bear the CE mark and are tested in the highest standard class (14).





Premium ball-bearings

The quality of a hinge is determined to a great extent by the quality of the bearing. That is why ECO Schulte developed its own bearings technology especially for its hinge plates (Patent: DE 103 61 548.2). The bearing is characteristic: the roller is guided top and bottom on a steel ball, each mounted in two high-strength plastic trays. This specific bearing is wear, maintenance and play-free and guarantees the light and smooth running of the door. The double bearing controls axial and radial forces effectively and permanently. In a series of practical tests, this bearings technology was successfully tested by an independent institute for more than one million closing actions. That more than guarantees lifelong, secure functioning.



Hinge plates - Versions

The high-quality hinge plates from ECO Schulte are available for all standard door types. Individual solutions to match each door are also available, depending on requirements.

OBX hinge plates - Perfectly adjustable

Because hinge plates of this type are three dimensionally adjustable within the element that holds them when the door is mounted, installation is made considerably easier. The number behind the OBX mark indicates the diameter of the roller used. Hinge plate OBX 20 is cast in stainless steel for the highest possible surface quality and fitting precision of the roller and eye.



OBN hinge plates - Firmly bolted for fixed doors

Hinge plates of this type are installed by the door manufacturer or processor and cannot be adjusted. The number behind the OBN mark indicates the diameter of the roller used. Hinge plate OBN 20 is cast in stainless steel for the highest possible surface quality and fitting precision of the roller and eye.





The highlights of the system

The quality of a hinge can be seen from the details. ECO is the specialist for hinges and can score points here - not only through the fact that ECO hinges can be used DIN-left / DIN-right without conversion.

Premium ball-bearings

With its patented ball-bearing technology, ECO Schulte has a unique selling point in the market and sets a new standard in the premium segment. The right product for those who place the highest demands on a door hinge. ECO Schulte OBX and OBN hinges are absolutely maintenance-free and work without any lubrication. Unsightly deposits of grease and oil on the visible parts of the hinge are a thing of the past. The absolutely play-free door bearings guarantee optimum load transfer via both hinges.



Cast roller holders

The processing of stainless steel is a demanding affair, as can be seen from the example of the hinge roller: ECO investment casting technology produces a perfect, closed roller holder. Thanks to the homogeneity of the material all the way through to the hinge flaps, the load transfer of our hinges is guaranteed to a well above average extent.

That precison and quality of this kind are not a matter of course can be seen from the rival product depicted here. The holder of this roller has some play and can be levered up - a mortgage on the service life of the product and an invitation to burglars.





Defined edges

ECO Schulte hinge plates are in a class of their own where aesthetics and precision are concerned. The defined edge of the holder surface ensures the best possible fitting precision and force distribution. It also proves that the system constructors from the Westphalian town of Menden are masters where the handling of materials and hinges is concerned.



System-identical finish pattern

ECO Schulte perceives the door as a system consisting of all of the functional elements that make a door open and close. Where the hinge plates are concerned, ECO demonstrates a love of detail by polishing the stainless steel surface of the hinges in the longitudinal direction so that the fine finish pattern thus produced is exactly the same as the one on the handle fittings from the same company.





Weights and loads

Door hinges are high load-bearing construction elements. They not only have to carry the weight of the door itself, they are subjected to much higher loads, depending on where they are used. Frequent opening, slamming and exceptional handling of doors, as occurs in barracks and schools, can take conventional hinges to their limits if they are only designed to carry the weight of the door.

ECO Schulte hinges have a closed hinge roller which is manufactured using elaborate cold forging technology which prevents the roller from bending up. There are no compromises with the material thickness of the hinges either: ECO Schulte hinge flaps can carry loads of up to 300 kg each.

Maximum door weight of hinge plates

Notch	max. door load: 300 kg	max. door load: 200 kg	max. door load: 160 kg	max. door load: 120 kg
Rebated	OBX-20-1531/160	OBX-20-1531/120	OBX-20-1951/120	
notch	OBX-20-1532/160	OBX-20-1532/120	OBX-18-1532/160	
		OBX-20-1951/160		OBX-18-1531/120
			OBX-18-1531/160	
Unrebated	OBX-20-2541/160	OBX-20-2541/120		OBX-18-2541/120
notch	OBX-20-2542/160	OBX-20-2542/120	OBX-18-2541/160	
	OBN-20-4141/160			OBN-18-4141/120
			OBN-18-4141/160	

The listed values were measured under 100% test lab conditions. Please observe them when selecting hinge plates.

Assuming the proper mounting of the door, the material stability of the construction element to which they are to be attached and an effective bonding with the masonry, ECO Schulte hinges should be selected and utilized in accordance with the above table with sufficient load and safety reserves, particularly where special locations are concerned. The use of a third hinge with the ECO Schulte system is only necessary under particularly difficult conditions. A third hinge attached in the upper third of the door frame can increase the load-bearing capacity of the hinges by around one third.

The following data relates to a door leaf size of 2x1 m, the application of two hinges and a professional installation. The EN 1935 is the basis of the development of our object hinges. The norm requirements regarding the use of hinges are in accordance with the guidelines required in Europe. ECO hinges are way beyond these requiremends. ECO hinges therefore fulfill the highest demand for which the object industry is known. The multitude of the individual criteria of choice, for example installation site, use of the doors and so on, cannot be considered for the determination of the values. Therefore we recommend to take reserves into account for the protection of the individual's safety. The correct choice of the hinges should be made accordingly.

For any further information / questions please feel free to contact us.



For all notches

Technical, construction and aesthetic requirements determine the form of the edge of the door leaf - and consequently the required hinge. Typical edge types are blunt notch and rebated doors - and variations thereof. ECO Schulte has hinges in its range for the following door notch versions:

Rebated door versions:

1a. Rebated door

The rebated door leaf has a single groove on the lateral and upper edge. The closed door locks into the frame so that no gap is visible.

1b. Rebated door with leaf seal

This rebated door has an additional seal in the locking groove.

Variations of the flush door:

2a. Flush door

The door leaf of a flush door is flush with the frame when closed. A circumferential gap (joint clearance) remains visible from the abutment side.

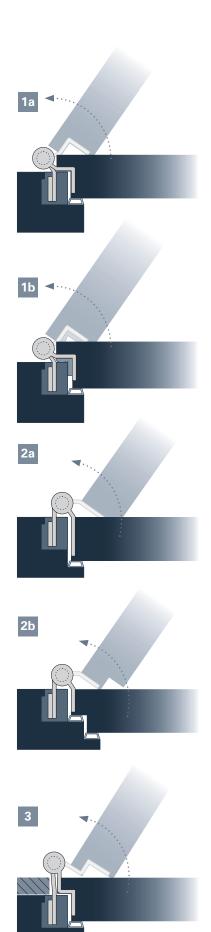
2b. Flush door with double groove

This door combines the optical effect of the flush door (frame and door leaf flush) with the improved sealing properties of the grooved door. A double rubber seal in the door frame ensures outstanding sound and heat insulation. This makes the double groove door a typical front door in many homes.

Variants of the grooved, flush-surface door:

3. Diminishing door

A special door design with which continuous wall panelling extends over the door leaf. The door leaf is grooved but closes flush with the panelling. A circumferential gap (joint clearance) remains visible from the abutment side.





Steel doors: OEM hinges made to measure

ECO Schulte offers processors and door manufacturers a wide range of individually developed hinges for sheet steel doors (German Patent 102008049740.1, European Patent 09008617.4). These hinges are constructed and manufactured for series production in accordance with customers' requirements. The most innovative OEM solution from ECO Schulte is called the ECO GENIUS LHA and is a laser-welded industrial hinge.

LHA stands for "laser hinge adjustable" and it is not only laser-welded but also height adjustable. "

Laser welding technology produces minimum contact, precise and highly stable welding seams. The technology combines top manufacturing precision with a high load-carrying capacity. The height adjustment of the hinge during assembly is very simple and is carried out using a standard commercial Allen key.





The new manufacturing concept satisfies the needs of the door industry in a flexible manner:

- Frame and leaf parts are available separately
- A set consists of a spring hinge that support the closing force and a standard hinge (KO hinge)
- Various materials available (galvanized or stainless steel)
- Various material thicknesses (3, 4 or 5 mm)
- Flexible tools for a flexible manufacturing concept



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Project hinges OBX 20 mm for mortise rebated door 3D hinge





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OBX-20-1531/120 for mortise rebated door 3D hinge

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OBX-20-1532/160 FD for mortise rebated door 3D hinge

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OBX-20-1532/120 FD for mortise rebated door 3D hinge

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OBX-20-1951/160 for mortise rebated door 3D hinge

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OBX-20-1951/120 for mortise rebated door 3D hinge

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Project hinges OBX 20 mm for mortise flush door 3d hinge





OBX-20-2541/160 for mortise flush door 3D hinge

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OBX-20-2541/120 for mortise flush door 3D hinge

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OBX-20-2542/160 for mortise flush door 3D hinge

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OBX-20-2542/120 for mortise flush door 3D hinge

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Project hinges OBX 18 mm rebated / mortise flush door 3D hinge



OBX-18-1531/160 for mortise rebated door 3D hinge

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OBX-18-1531/120 for mortise rebated door 3D hinge

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OBX-18-1532/160 FD for mortise rebated door 3D hinge

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OBX-18-2541/160 for mortise flush door 3D hinge

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OBX-18-2541/120 for mortise flush door 3D hinge Page 602

Project hinges OBN 20 und 18 mm for mortise flush door hinge



OBN-20-4141/160 for mortise flush door hinge

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OBN-18-4141/160 for mortise flush door hinge

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OBN-18-4141/120 round for mortise flush door hinge

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OBN-18-4141/120 square for mortise flush door hinge

Page 612

Adjustable frame boxes - Cover plates - Lifting lug



OBX adjustable frame boxes for OBX-hinges

Page 616



OBX-Cover plates for adjustable frame boxes

Page 620



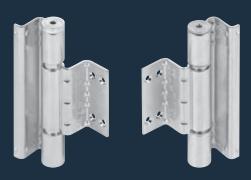
OBX-Lifting lug for OBX-hinges

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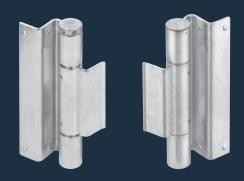
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Laser-welded steel hinges - GENIUS LHA



GENIUS LHA Hinge with spring / KO hinge set Page 624

Laser-welded steel hinges - Standard 3 mm

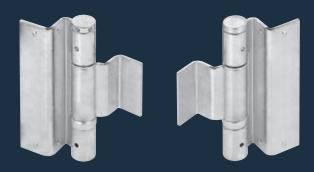


Standard 3 mm Hinge with spring / KO hinge set Page 626

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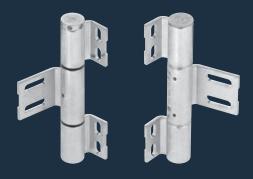


Laser-welded steel hinges - Standard 4 mm



Standard 4 mm Hinge with spring / KO hinge set Page 628

Laser-welded steel hinges • 3 mm adjustable in height and side



Adjustment in height 3 mm Hinge with spring / KO hinge set Page 630

Laser-welded steel hinges - Accessories





Locking pin 3 mm / 4 mm Page 632 Spring pin 3 mm / 4 mm Page 632





Project hinges OBX-20

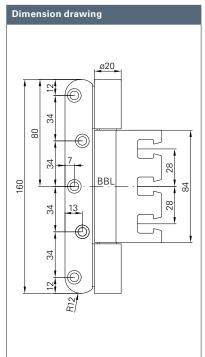


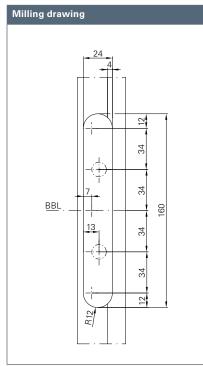




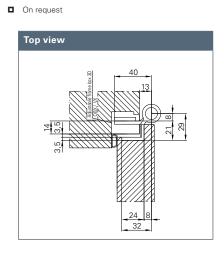


Product characte	winding.	
Size	nsucs	160 mm
Ø Barrel diameter		20 mm
Material thickness		3.5 mm
Screws		5 x 50 mm
00.01.0		
DIN left / DIN right		• ·
Milling diameter		24 mm
Milling length		160 mm
Milling depth		3,5 mm
Door types	Rebated	•
	Flush with the adjacent areas	-
Frame types	Wood	-
	Steel	-
	Aluminium	-
Suitable for fire doors	F	
Loading capacity	EN 1935 C €	-
(maximum door	Norm	160 kg
load)	ECO loading capacity	300 kg
Finishes	Stainless steel (ER)	-
	ER polished	0
	PVD coating (brass)	0
	PVD coating in RAL colours	0
Reception elements	For upright standing pillars	OBX-3001-3D
page 616	For timber frames	OBX-3002-3D
	For steel frames	OBX-3011-3D
		OBX-3012-3D
	For aluminium frames	OBX-3021-3D





■ Yes









OBX-20-1532/160.ER OBX-20-1532/120.ER



OBX-20-1951/160.ER OBX-20-1951/120.ER



Description

ECO project hinge OBX-20-1531/160

- For rebated doors on wooden, steel or aluminium frames
- With OBX adjustable frame box adjustable in three dimensions
- Inner, firmly rotating axis
- Wear and maintenance-free ball bearing technology
- Suitable for fire doors
- Can be used DIN left and DIN right without modification











OBX-20-1531 Mortise rebated door 3D hinge	Dimensions	Article number
OBX-20-1531/160.ER	Ø 20 x 160 mm	459231.46

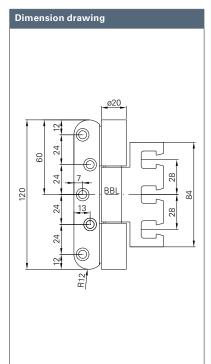
Door part Frame part Axle end Ball case - frame Ball Ball case - panel Set collar Cover guarantees a lifelong function.

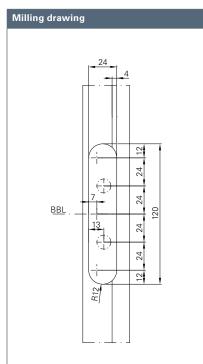
ECO Schulte is using a patented bearing technology for the production of OBX and OBN hinges. This technology



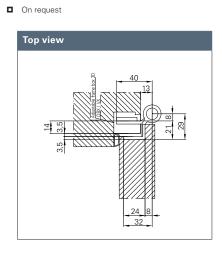


Product characte	riction	
Size	Histics	120 mm
Ø Barrel diameter		20 mm
Material thickness		3.5 mm
Screws		5 x 50 mm
DIN left / DIN right		•
Milling diameter		24 mm
Milling length		120 mm
Milling depth		3,5 mm
Door types	Rebated	•
Door types	Flush with the adjacent areas	-
Frame types	Wood	-
	Steel	-
	Aluminium	-
Suitable for fire doors	F	•
Loading capacity	EN 1935 C €	-
(maximum door	Norm	160 kg
load)	ECO loading capacity	200 kg
Finishes	Stainless steel (ER)	-
	ER polished	0
	PVD coating (brass)	0
	PVD coating in RAL colours	0
Reception elements	For upright standing pillars	OBX-3001-3D
page 616	For timber frames	OBX-3002-3D
	For steel frames	OBX-3011-3D
		OBX-3012-3D
	For aluminium frames	OBX-3021-3D





■ Yes









OBX-20-1532/160.ER OBX-20-1532/120.ER



OBX-20-1951/160.ER OBX-20-1951/120.ER



Description

ECO project hinge OBX-20-1531/120

- For rebated doors on wooden, steel or aluminium frames
- With OBX adjustable frame box adjustable in three dimensions
- Inner, firmly rotating axis
- Wear and maintenance-free ball bearing technology
- Suitable for fire doors
- Can be used DIN left and DIN right without modification











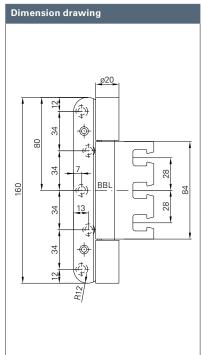
F EN 1935 C E Wooden door

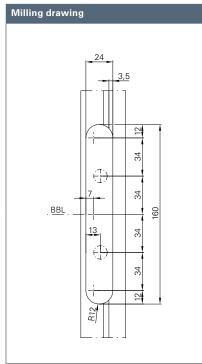
OBX-20-1531 Mortise rebated door 3D hinge	Dimensions	Article number
OBX-20-1531/120.ER	Ø 20 x 120 mm	459131.46



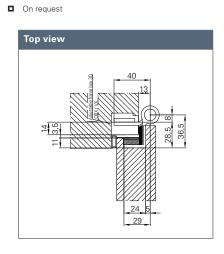


Product characte	eristics	
Size		160 mm
Ø Barrel diameter		20 mm
Material thickness		3,5 mm
Screws		5 x 50 mm
DIN left / DIN right		
Milling diameter		24 mm
Milling length		160 mm
Milling depth		11 mm
Door types	Rebated	
	Flush with the adjacent areas	-
Frame types	Wood	
	Steel	
	Aluminium	•
Suitable for fire doors	E	-
Loading capacity	EN 1935 C €	-
(maximum door	Norm	160 kg
load)	ECO loading capacity	300 kg
Finishes	Stainless steel (ER)	
	ER polished	0
	PVD coating (brass)	0
	PVD coating in RAL colours	0
Reception elements page 616	For upright standing pillars	OBX-3001-3D
	For timber frames	OBX-3002-3D
	For steel frames	OBX-3011-3D
		OBX-3012-3D
	For aluminium frames	OBX-3021-3D





■ Yes







OBX-20-1531/160.ER OBX-20-1531/120.ER



OBX-20-1532/120.ER



OBX-20-1951/160.ER OBX-20-1951/120.ER



Description

ECO project hinge OBX-20-1532/160 leaf gasket (FD)

- For rebated doors on wooden, steel or aluminium frames
- With OBX adjustable frame box adjustable in three dimensions
- Inner, firmly rotating axis
- Wear and maintenance-free ball bearing technology
- Suitable for fire doors
- Can be used DIN left and DIN right without modification











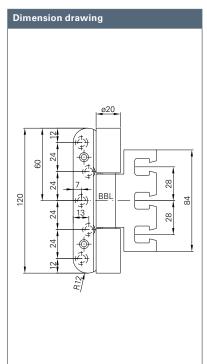
OBX-20-1532 Mortise rebated door 3D hinge leaf gasket	Dimensions	Article number
OBX-20-1532.FD/160.ER	Ø 20 x 160 mm	459232.46

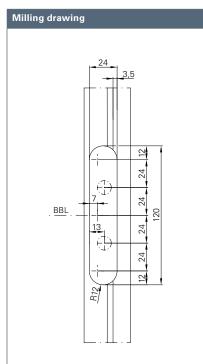




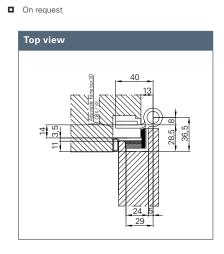


Product characte	eristics	
Size		120 mm
Ø Barrel diameter		20 mm
Material thickness		3,5 mm
Screws		5 x 50 mm
DIN left / DIN right		•
Milling diameter		24 mm
Milling length		120 mm
Milling depth		11 mm
Door types	Rebated	•
	Flush with the adjacent areas	-
Frame types	Wood	
	Steel	
	Aluminium	
Suitable for fire doors	E	-
Loading capacity	EN 1935 C €	-
(maximum door	Norm	160 kg
load)	ECO loading capacity	200 kg
Finishes	Stainless steel (ER)	
	ER polished	
	PVD coating (brass)	0
	PVD coating in RAL colours	0
Reception elements page 616	For upright standing pillars	OBX-3001-3D
	For timber frames	OBX-3002-3D
	For steel frames	OBX-3011-3D
		OBX-3012-3D





■ Yes







OBX-20-1531/160.ER OBX-20-1531/120.ER







Description

ECO project hinge OBX-20-1532/120 leaf gasket (FD)

- For rebated doors on wooden, steel or aluminium frames
- With OBX adjustable frame box adjustable in three dimensions
- Inner, firmly rotating axis
- Wear and maintenance-free ball bearing technology
- Suitable for fire doors
- Can be used DIN left and DIN right without modification











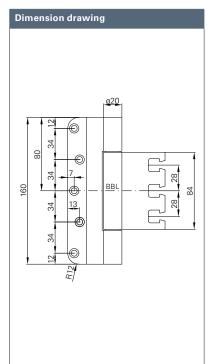
F EN 1935 C E Wooden door

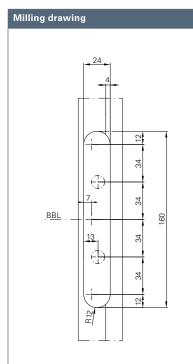
OBX-20-1532 Mortise rebated door 3D hinge leaf gasket	Dimensions	Article number
OBX-20-1532.FD/120.ER	Ø 20 x 120 mm	459132.46



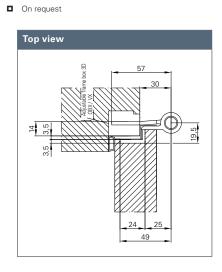


Product characte	ristics	
Size		160 mm
Ø Barrel diameter		20 mm
Material thickness		3,5 mm
Screws		5 x 50 mm
DIN left / DIN right		-
Milling diameter		24 mm
Milling length		160 mm
Milling depth		3,5 mm
Door types	Rebated	-
	Flush with the adjacent areas	•
Frame types	Wood	-
	Steel	-
	Aluminium	-
Suitable for fire doors	F	•
Loading capacity	EN 1935 C €	-
(maximum door	Norm	160 kg
load)	ECO loading capacity	200 kg
Finishes	Stainless steel (ER)	-
	ER polished	•
	PVD coating (brass)	0
	PVD coating in RAL colours	
Reception elements	For upright standing pillars	OBX-3001-3D
page 616	For timber frames	OBX-3002-3D
	For steel frames	OBX-3011-3D
		OBX-3012-3D
	For aluminium frames	OBX-3021-3D





Yes







OBX-20-1531/160.ER OBX-20-1531/120.ER



OBX-20-1532/160.ER OBX-20-1532/120.ER



OBX-20-1951/120.ER



Description

ECO project hinge OBX-20-1951/160

- For rebated doors, flush with the adjacent areas, on wooden, steel or aluminium frames
- With OBX adjustable frame box adjustable in three dimensions
- Inner, firmly rotating axis
- Wear and maintenance-free ball bearing technology
- Suitable for fire doors
- Can be used DIN left and DIN right without modification











F EN 1935 C ER Wooden door

OBX-20-1532 Mortise rebated door 3D hinge flush with the adjacent areas	Dimensions	Article number
OBX-20-1951/160.ER	Ø 20 x 160 mm	459251.46

The perfect casting technology of ECO provides a perfect, closed reception of the roll - and a best possible and free-of-play force distribution.

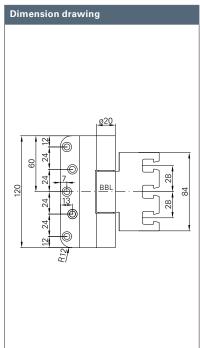


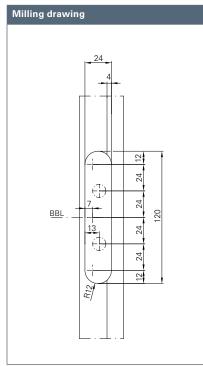




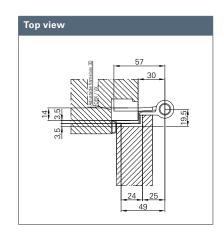
Dua de et abancata		
Product characte	ristics	100
Size		120 mm
Ø Barrel diameter		20 mm
Material thickness		3,5 mm
Screws		5 x 50 mm
DIN left / DIN right		-
Milling diameter		24 mm
Milling length		120 mm
Milling depth		3,5 mm
Door types	Rebated	-
	Flush with the adjacent areas	•
Frame types	Wood	-
	Steel	-
	Aluminium	-
Suitable for fire doors	F	•
Loading capacity	EN 1935 C €	•
(maximum door	Norm	160 kg
load)	ECO loading capacity	160 kg
Finishes	Stainless steel (ER)	-
	ER polished	0
	PVD coating (brass)	0
	PVD coating in RAL colours	0
Reception elements	For upright standing pillars	OBX-3001-3D
page 616	For timber frames	OBX-3002-3D
	For steel frames	OBX-3011-3D
		OBX-3012-3D
	For aluminium frames	OBX-3021-3D

■ On request





Yes







OBX-20-1531/160.ER OBX-20-1531/120.ER



OBX-20-1532/160.ER OBX-20-1532/120.ER



OBX-20-1951/160.ER



Description

ECO project hinge OBX-20-1951/120

- For rebated doors, flush with the adjacent areas, on wooden, steel or aluminium frames
- With OBX adjustable frame box adjustable in three dimensions
- Inner, firmly rotating axis
- Wear and maintenance-free ball bearing technology
- Suitable for fire doors
- Can be used DIN left and DIN right without modification











F EN 1935 C E R Wooden door

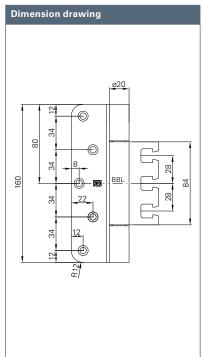
3	DBX-20-1951 Mortise rebated door D hinge flush with he adjacent areas	Dimensions	Article number
C	BX-20-1951/120.ER	Ø 20 x 120 mm	459151.46

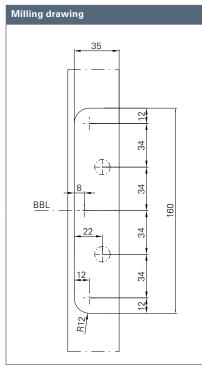


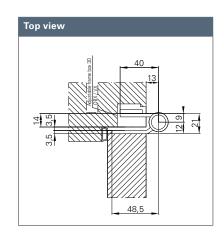


Product characte	ristics	
Size		160 mm
Ø Barrel diameter		20 mm
Material thickness		3,5 mm
Screws		5 x 50 mm
DIN left / DIN right		•
Milling diameter		24 mm
Milling length		160 mm
Milling depth		3,5 mm
Door types	Unrebated	•
	Double rebated	-
Frame types	Wood	
	Steel	
	Aluminium	-
Suitable for fire doors	F	•
Loading capacity Class 14	EN 1935 C €	•
(maximum door	Norm	160 kg
load)	ECO loading capacity	300 kg
Finishes	Stainless steel (ER)	•
	ER polished	0
	PVD coating (brass)	
	PVD coating in RAL colours	0
Reception elements	For upright standing pillars	OBX-3001-3D
page 616	For timber frames	OBX-3002-3D
	For steel frames	OBX-3011-3D
		OBX-3012-3D
	For aluminium frames	OBX-3021-3D

■ On request









PRODUCT FAMILY ■ MORTISE FLUSH DOOR 3D HINGE







Description

ECO project hinge OBX-20-2541/160

■ For unrebated doors on wooden, steel or aluminium frames

OBX-20-2542/120.ER

- With OBX adjustable frame box adjustable in three dimensions
- Inner, firmly rotating axis
- Wear and maintenance-free ball bearing technology
- Suitable for fire doors
- Can be used DIN left and DIN right without modification











OBX-20-2541 mortise flush door 3D hinge	Dimensions	Article number
OBX-20-2541/160.ER	Ø 20 x 160 mm	459241.46

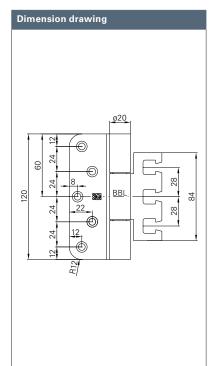


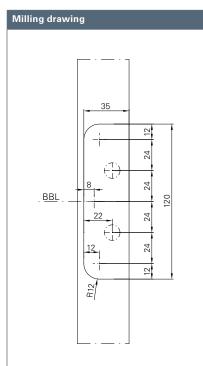


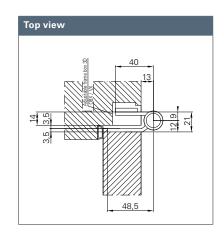


Product characte	eristics	
Size		120 mm
Ø Barrel diameter		20 mm
Material thickness		3,5 mm
Screws		5 x 50 mm
DIN left / DIN right	t	-
Milling diameter		24 mm
Milling length		120 mm
Milling depth		3,5 mm
Door types	Unrebated	
	Double rebated	-
Frame types	Wood	•
	Steel	•
	Aluminium	-
Suitable for fire doors	E	•
Loading capacity	EN 1935 C €	
(maximum door	Norm	160 kg
load)	ECO loading capacity	200 kg
Finishes	Stainless steel (ER)	-
	ER polished	
	PVD coating (brass)	0
	PVD coating in RAL colours	0
Reception elements	For upright standing pillars	OBX-3001-3D
page 616	For timber frames	OBX-3002-3D
	For steel frames	OBX-3011-3D
		OBX-3012-3D
	For aluminium frames	OBX-3021-3D

■ On request









PRODUCT FAMILY ■ MORTISE FLUSH DOOR 3D HINGE









Description

ECO project hinge OBX-20-2541/120

■ For unrebated doors on wooden, steel or aluminium frames

OBX-20-2542/120.ER

- With OBX adjustable frame box adjustable in three dimensions
- Inner, firmly rotating axis
- Wear and maintenance-free ball bearing technology
- Suitable for fire doors
- Can be used DIN left and DIN right without modification











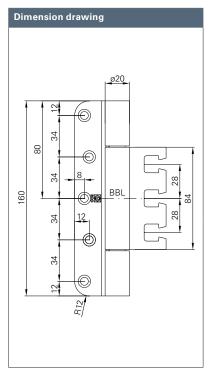


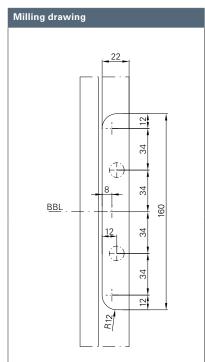
OBX-20-2541 mortise flush door 3D hinge	Dimensions	Article number
OBX-20-2541/120.ER	Ø 20 x 120 mm	459141.46

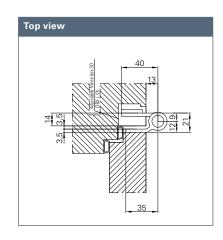




D.,	utuatus	
Product characte	ristics	100
Size		160 mm
Ø Barrel diameter		20 mm
Material thickness		3,5 mm
Screws		5 x 50 mm
DIN left / DIN right		
Milling diameter		24 mm
Milling length		160 mm
Milling depth		3,5 mm
Door types	Unrebated	•
	Double rebated	-
Frame types	Wood	•
	Steel	•
	Aluminium	•
Suitable for fire doors	E	-
Loading capacity	EN 1935 C €	•
(maximum door	Norm	160 kg
load)	ECO loading capacity	300 kg
Finishes	Stainless steel (ER)	-
	ED 11 1	
	ER polished	
	PVD coating (brass)	0
		_
elements	PVD coating (brass) PVD coating in RAL	0
elements	PVD coating (brass) PVD coating in RAL colours For upright standing	0
Reception elements page 616	PVD coating (brass) PVD coating in RAL colours For upright standing pillars	OBX-3001-3D
elements	PVD coating (brass) PVD coating in RAL colours For upright standing pillars For timber frames	OBX-3001-3D OBX-3002-3D









PRODUCT FAMILY • MORTISE FLUSH DOOR 3D HINGE







Description

ECO project hinge OBX-20-2542/160

- For mortise flush door 3D hinge, double rebated, on wooden, steel or aluminium frames
- With OBX adjustable frame box adjustable in three dimensions
- Inner, firmly rotating axis
- Wear and maintenance-free ball bearing technology
- Suitable for fire doors
- Can be used DIN left and DIN right without modification









OBX-20-2542 mortise flush door 3D hinge double rebated	Dimensions	Article number
OBX-20-2542/160.ER	Ø 20 x 160 mm	459242.46

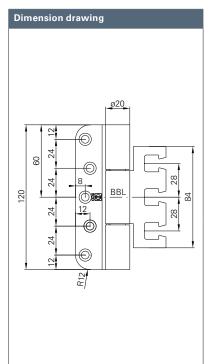
ECO Schulte shows attention to detail by brushing the surface of the stainless steel hinges lengthwise. Thus, the brushing pattern perfectly matches the handle sets delivered by ECO.

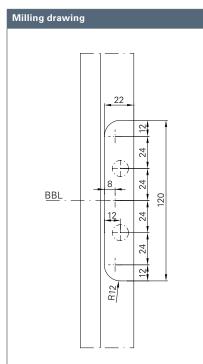


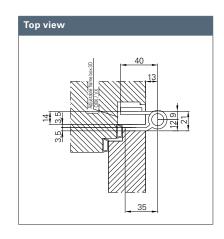




Product characte	ristics	
Size	Histics	120 mm
Ø Barrel diameter		20 mm
Material thickness		3.5 mm
Screws		5 x 50 mm
DIN left / DIN right		0.4
Milling diameter		24 mm
Milling length		120 mm
Milling depth		3,5 mm
Door types	Unrebated	•
	Double rebated	•
Frame types	Wood	
	Steel	•
	Aluminium	-
Suitable for fire doors	E	•
Loading capacity	EN 1935 C €	
(maximum door	Norm	160 kg
load)	ECO loading capacity	200 kg
Finishes	Stainless steel (ER)	•
	ER polished	0
	PVD coating (brass)	0
	PVD coating in RAL colours	
Reception elements	For upright standing pillars	OBX-3001-3D
page 616	For timber frames	OBX-3002-3D
	For steel frames	OBX-3011-3D
		OBX-3012-3D
	For aluminium frames	OBX-3021-3D
■ Yes - No	On request	









PRODUCT FAMILY ■ MORTISE FLUSH DOOR 3D HINGE





OBX-20-2542/160.ER OBX-20-2542/120.ER



Description

ECO project hinge OBX-20-2542/120

- For mortise flush door 3D hinge, double rebated, on wooden, steel or aluminium frames
- With OBX adjustable frame box adjustable in three dimensions
- Inner, firmly rotating axis
- Wear and maintenance-free ball bearing technology
- Suitable for fire doors
- Can be used DIN left and DIN right without modification











OBX-20-2542 mortise flush door 3D hinge double rebated	Dimensions	Article number
OBX-20-2542/120.ER	Ø 18 x 120 mm	459142.46





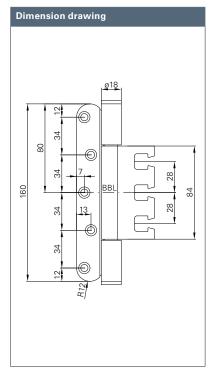
Project hinges OBX-18

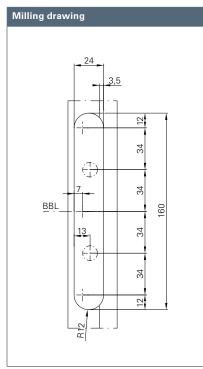


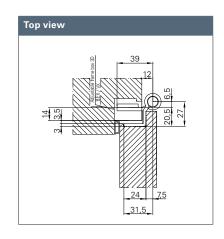




Size		160 mm
Ø Barrel diameter		18 mm
Material thickness		3 mm / 3,5 mr
Screws		5 x 50 mm
DIN left / DIN right	t	-
Milling diameter		24 mm
Milling length		160 mm
Milling depth		3 mm
Door types	Rebated	•
	Unrebated	-
Frame types	Wood	-
	Steel	-
	Aluminium	•
Suitable for fire doors	E	-
Loading capacity Class 11	EN 1935 C €	•
(maximum door	Norm	80 kg
load)	ECO loading capacity	160 kg
Finishes	Stainless steel (ER)	•
	Steel satin nickel plated	•
	Steel zinc plated	0
Reception elements	For upright standing pillars	OBX-3001-3D
page 616	For timber frames	OBX-3002-3D
	For steel frames	OBX-3011-3D
		OBX-3012-3D
	For aluminium frames	OBX-3021-3D









5



PRODUCT FAMILY • MORTISE REBATED DOOR 3D HINGE







Description

ECO project hinge OBX-18-1531/160

- For rebated doors on wooden, steel or aluminium frames
- With OBX adjustable frame box adjustable in three dimensions
- Inner, firmly rotating axis
- Wear and maintenance-free ball bearing technology
- Suitable for fire doors
- Can be used DIN left and DIN right without modification











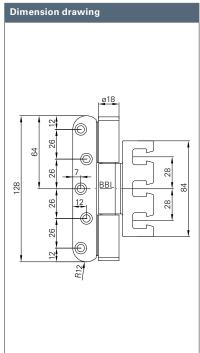
OBX-18-1531 Mortise rebated door 3D hinge	Dimensions	Article number
OBX-18-1531/160.ER	Ø 18 x 160 mm	460431.46
OBX-18-1531/160.St.Ni	Ø 18 x 160 mm	On request
OBX-18-1531/160.St.Zc	Ø 18 x 160 mm	460431.43

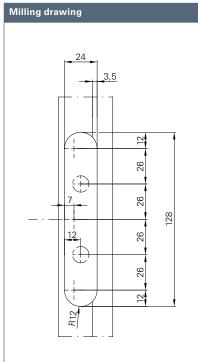


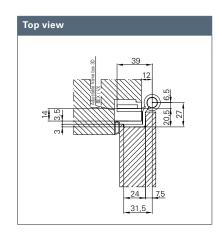




Size		120 mm
Ø Barrel diameter		18 mm
Material thickness		3 mm / 3,5 mr
Screws		5 x 50 mm
DIN left / DIN right		•
Milling diameter		24 mm
Milling length		128 mm
Milling depth		3 mm
Door types	Rebated	
	Unrebated	-
Frame types	Wood	•
	Steel	•
	Aluminium	
Suitable for fire doors	E	-
Loading capacity Class 11	EN 1935 C €	•
(maximum door	Norm	80 kg
load)	ECO loading capacity	120 kg
Finishes	Stainless steel (ER)	-
	Steel satin nickel plated	0
	Steel zinc plated	0
Reception elements	For upright standing pillars	OBX-3001-3D
page 616	For timber frames	OBX-3002-3D
	For steel frames	OBX-3011-3D
		OBX-3012-3D
	For aluminium frames	OBX-3021-3D















Description

ECO project hinge OBX-18-1531/120

- For rebated doors on wooden, steel or aluminium frames
- With OBX adjustable frame box adjustable in three dimensions
- Inner, firmly rotating axis
- Wear and maintenance-free ball bearing technology
- Suitable for fire doors
- Can be used DIN left and DIN right without modification









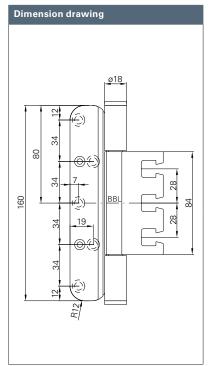


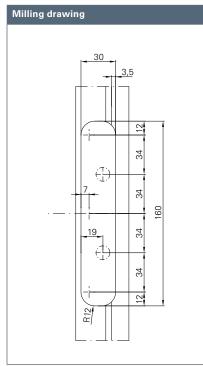
OBX-18-1531 Mortise rebated door 3D hinge	Dimensions	Article number
OBX-18-1531/120.ER	Ø 18 x 120 mm	460331.46
OBX-18-1531/120.St.Ni	Ø 18 x 120 mm	On request
OBX-18-1531/120.St.Zc	Ø 18 x 120 mm	460331.43

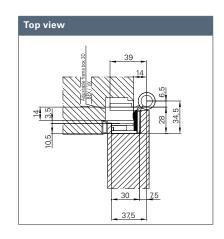




Size		160 mm
Ø Barrel diameter		18 mm
Material thickness		3 mm / 3,5 mr
Screws		5 x 50 mm
DIN left / DIN right		-
Milling diameter		24 mm
Milling length		160 mm
Milling depth		3 mm
Door types	Rebated	-
	Unrebated	-
Frame types	Wood	-
	Steel	-
	Aluminium	•
Suitable for fire doors	E	•
Loading capacity	EN 1935 C €	•
(maximum door	Norm	80 kg
load)	ECO loading capacity	160 kg
Finishes	Stainless steel (ER)	-
	Steel satin nickel plated	0
	Steel zinc plated	0
Reception elements page 616	For upright standing pillars	OBX-3001-3D
	For timber frames	OBX-3002-3D
	For steel frames	OBX-3011-3D
		OBX-3012-3D
	For aluminium frames	OBX-3021-3D











OBX-18-1531/160.ER OBX-18-1531/120.ER



Description

ECO project hinge OBX-18-1532/160 FD

- For rebated doors on wooden, steel or aluminium frames
- With OBX adjustable frame box adjustable in three dimensions
- Inner, firmly rotating axis
- Wear and maintenance-free ball bearing technology
- Suitable for fire doors
- Can be used DIN left and DIN right without modification











OBX-18-1532 Mortise rebated door 3D hinge leaf gasket	Dimensions	Article number
OBX-18-1532/160.ER	Ø 18 x 160 mm	460432.46

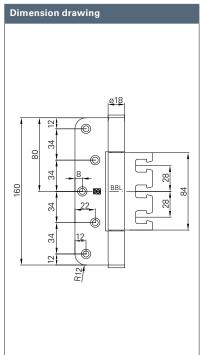
ECO Schulte project hinges are playing in their own league in regards to precision and aesthetics. The defined edge of the reception area provides best-possible force distribution and fitting accuracy.

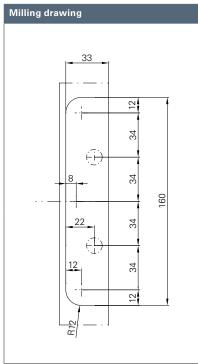


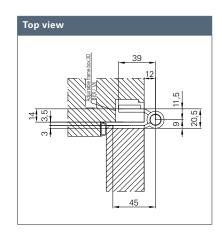




Size		160 mm
Ø Barrel diameter		18 mm
Material thickness		3 mm / 3,5 mm
Screws		5 x 50 mm
DIN left / DIN right		
Milling diameter		24 mm
Milling length		160 mm
Milling depth		3 mm
Door types	Rebated	-
	Unrebated	•
Frame types	Wood	•
	Steel	-
	Aluminium	•
Suitable for fire doors	E	-
Loading capacity	EN 1935 C €	•
(maximum door	Norm	80 kg
load)	ECO loading capacity	160 kg
Finishes	Stainless steel (ER)	-
	Steel satin nickel plated	0
	Steel zinc plated	0
Reception elements page 616	For upright standing pillars	OBX-3001-3D
	For timber frames	OBX-3002-3D
	For steel frames	OBX-3011-3D
		OBX-3012-3D
	For aluminium frames	OBX-3021-3D















Description

ECO project hinge OBX-18-2541/160

- For unrebated doors on wooden, steel or aluminium frames
- With OBX adjustable frame box adjustable in three dimensions
- Inner, firmly rotating axis
- Wear and maintenance-free ball bearing technology
- Suitable for fire doors
- Can be used DIN left and DIN right without modification









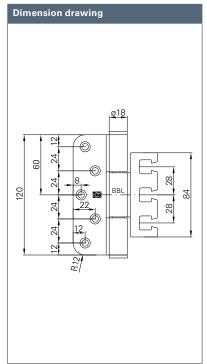


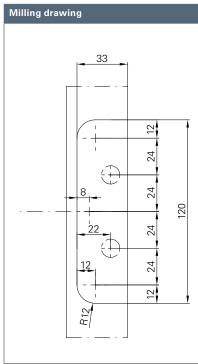
OBX-18-2541 mortise flush door 3D hinge	Dimensions	Article number
OBX-18-2541/160.ER	Ø 18 x 160 mm	460441.46
OBX-18-2541/160.St.Ni	Ø 18 x 160 mm	On request
OBX-18-2541/160.St.Zc	Ø 18 x 160 mm	460441.43

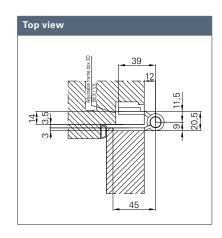




Size		120 mm
Ø Barrel diameter		18 mm
Material thickness		3 mm / 3,5 mr
Screws		5 x 50 mm
DIN left / DIN right		•
Milling diameter		24 mm
Milling length		120 mm
Milling depth		3 mm
Door types	Rebated	-
	Unrebated	
Frame types	Wood	•
	Steel	-
	Aluminium	•
Suitable for fire doors	E	-
Loading capacity Class 11	EN 1935 C €	•
(maximum door	Norm	80 kg
load)	ECO loading capacity	120 kg
Finishes	Stainless steel (ER)	-
	Steel satin nickel plated	0
	Steel zinc plated	
Reception elements page 616	For upright standing pillars	OBX-3001-3D
	For timber frames	OBX-3002-3D
	For steel frames	OBX-3011-3D
		OBX-3012-3D
	For aluminium frames	OBX-3021-3D

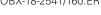














Description

ECO project hinge OBX-18-2541/120

- For unrebated doors on wooden, steel or aluminium frames
- With OBX adjustable frame box adjustable in three dimensions
- Inner, firmly rotating axis
- Wear and maintenance-free ball bearing technology
- Suitable for fire doors
- Can be used DIN left and DIN right without modification











OBX-18-2541 mortise flush door 3D hinge	Dimensions	Article number
OBX-18-2541/120.ER	Ø 18 x 120 mm	460341.46
OBX-18-2541/120.St.Ni	Ø 18 x 120 mm	On request
OBX-18-2541/120.St.Zc	Ø 18 x 120 mm	460341.43







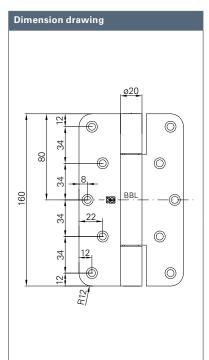
Project hinges OBN

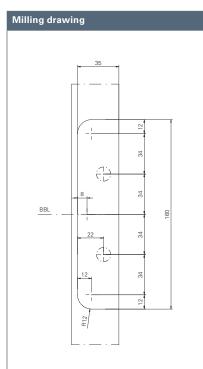


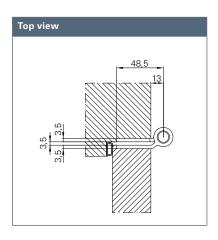




Size		120 mm
Ø Barrel diameter		20 mm
Material thickness		3,5 mm
Screws		5 x 50 mm
DIN left / DIN right		
Milling diameter		24 mm
Milling length		160 mm
Milling depth		3,5 mm
Door types	Rebated	-
	Unrebated	
Frame types	Wood	
Suitable for fire doors	F	•
Loading capacity	EN 1935 C €	
(maximum door	Norm	160 kg
load)	ECO loading capacity	300 kg
Finishes	Stainless steel (ER)	-
	ER polished	
	PVD coating (brass)	0
	PVD coating in RAL colours	











ECO project hinge OBN-20-4141/160

- For unrebated doors on upright standing pillars
- Inner, firmly rotating axis
- Wear and maintenance-free ball bearing technology
- Suitable for fire doors
- Can be used DIN left and DIN right without modification













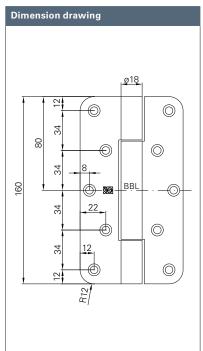
OBN-20-4141 mortise flush door 3D hinge for upright standing pillars	Dimensions	Article number
OBN-20-4141/160.ER	Ø 20 x 160 mm	460641.46

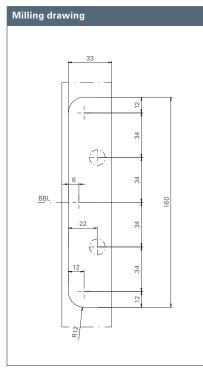


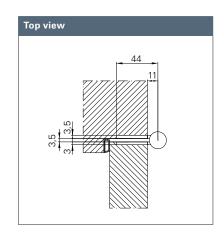




Size		160 mm
Ø Barrel diameter		18 mm
Material thickness		3 mm / 3,5 mm
Screws		5 x 50 mm
DIN left / DIN right		
Milling diameter		24 mm
Milling length		160 mm
Milling depth		3 mm / 3,5 mm
Door types	Rebated	-
	Unrebated	
Frame types	Wood	
Suitable for fire doors	F	•
Loading capacity	EN 1935 C €	•
(maximum door	Norm	80 kg
load)	ECO loading capacity	160 kg
Finishes	Stainless steel (ER)	
	ER polished	
	PVD coating (brass)	0
	PVD coating in RAL colours	















OBN-18-4141/120.ER square



Description

ECO project hinge OBN-18-4141/160

- For unrebated doors on upright standing pillars
- Inner, firmly rotating axis
- Wear and maintenance-free ball bearing technology
- Suitable for fire doors
- Can be used DIN left and DIN right without modification









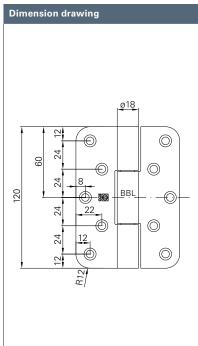
OBN-18-4141 mortise flush door 3D hinge	Dimensions	Article number
OBN-18-4141/160.ER	Ø 18 x 160 mm	460741.46
OBN-18-4141/160.St.Ni	Ø 18 x 160 mm	460741.42
OBN-18-4141/160.St.Zc	Ø 18 x 160 mm	460741.43

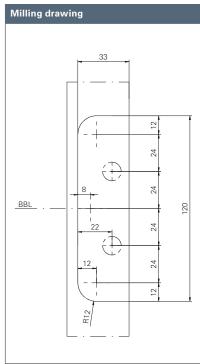


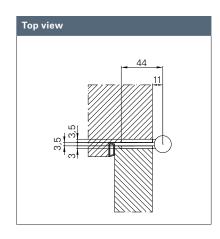




Size		120 mm
Ø Barrel diameter		18 mm
Material thickness		3 mm / 3,5 mm
Screws		5 x 50 mm
DIN left / DIN right		
Milling diameter		24 mm
Milling length		120 mm
Milling depth		3 mm / 3,5 mm
Door types	Rebated	-
	Unrebated	
Frame types	Wood	
Suitable for fire doors	F	•
Loading capacity	EN 1935 C €	•
(maximum door	Norm	80 kg
load)	ECO loading capacity	120 kg
Finishes	Stainless steel (ER)	
	ER polished	
	PVD coating (brass)	0
	PVD coating in RAL colours	





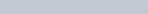














Description

ECO project hinge OBN-18-4141/120 round

- For unrebated doors on upright standing pillars
- Inner, firmly rotating axis
- Wear and maintenance-free ball bearing technology
- Suitable for fire doors
- Can be used DIN left and DIN right without modification











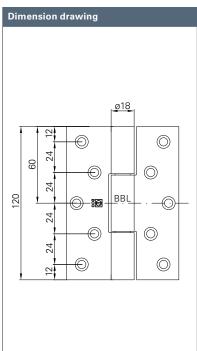
OBN-18-4141 mortise flush door 3D hinge round	Dimensions	Article number
OBN-18-4141/120.ER	Ø 18 x 120 mm	460841.46
OBN-18-4141/120.St.Ni	Ø 18 x 120 mm	460841.42
OBN-18-4141/120.St.Zk	Ø 18 x 120 mm	460841.43

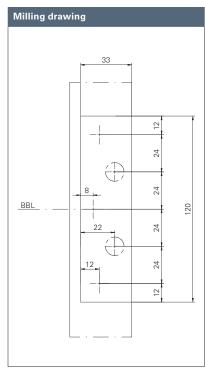


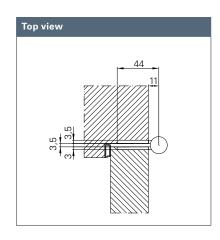




Product characte	1131103	
Size		120 mm
Ø Barrel diameter		18 mm
Material thickness		3 mm / 3,5 mm
Screws		5 x 50 mm
DIN left / DIN right		
Milling diameter		24 mm
Milling length		120 mm
Milling depth		3 mm / 3,5 mn
Door types	Rebated	-
	Unrebated	
Frame types	Wood	-
	Steel	-
	Aluminium	•
Suitable for fire doors	F	
Loading capacity	EN 1935 C €	•
(maximum door	Norm	80 kg
load)	ECO loading capacity	120 kg
Finishes	Stainless steel (ER)	
	ER polished	0
	PVD coating (brass)	0
	PVD coating in RAL colours	















Description

ECO project hinge OBN-18-4141/120 square

- For unrebated doors on upright standing pillars
- Inner, firmly rotating axis
- Wear and maintenance-free ball bearing technology
- Suitable for fire doors
- Can be used DIN left and DIN right without modification



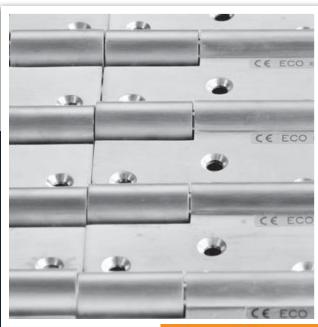








OBN-18-4141 mortise flush door 3D hinge for upright stan- ding pillars square	Dimensions	Article number
OBN-18-4141/120.ER	Ø 18 x 120 mm	460843.46
OBN-18-4141/120.St.Ni	Ø 18 x 120 mm	460843.42
OBN-18-4141/120.St.Zc	Ø 18 x 120 mm	460843.43







Adjustable frame boxes Cover plates Lifting lug







ECO-Adjustable frame box OBX-3001-3D

- Adjustable frame box for project hinges OBX in sizes 120 mm and 160 mm
- On upright standing pillar frames with rebated and unrebated doors
- Adjustable in three dimensions
 - + / 3 mm Side

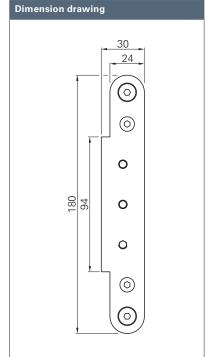
 - +/- 3 mm Height +/- 3 mm Pressure
- Surface: Steel zinc plated

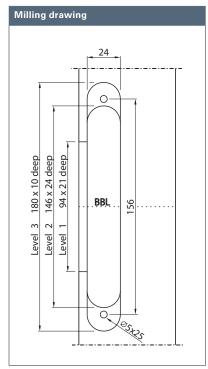
Adjustable frame box for upright standing pillars OBX-3001-3D	Material	Article number
OBX-3001-3D	Steel zinc plated	459301.43



Please directly order the necessary cover plates! Page 620

- Nylon-guided adjusting spindle supplies additional stability
- Nylon-guided push plate enables easy mounting. The insertion of the OBX hinge is simplified enormously.
- Adjustable in three dimensions The exact adjustment of the door is simplified.







ECO-Adjustable frame box OBX-3002-3D

- Adjustable frame box for project hinges OBX in sizes 120 mm and 160 mm
- For timber frames with rebated and unrebated doors
- Adjustable in three dimensions
 - + / 3 mm Side

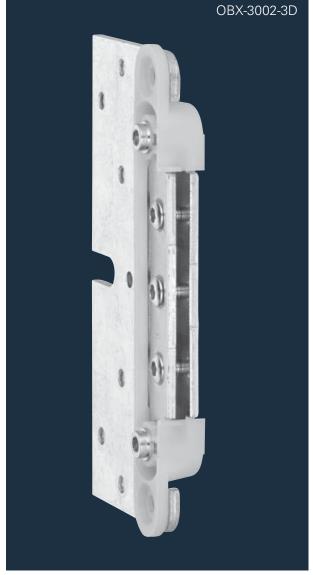
 - +/- 3 mm Height +/- 3 mm Pressure
- Surface: Steel zinc plated

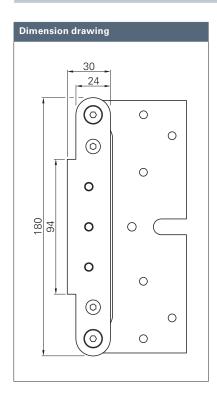
Adjustable frame box for timber frames OBX-3002-3D	Material	Article number
OBX-3002-3D	Steel zinc plated	459302.43

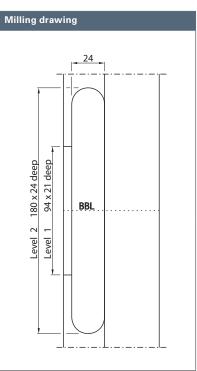


Please directly order the necessary cover plates! Page 620

- Nylon-guided adjusting spindle supplies additional stability
- Nylon-guided push plate enables easy mounting. The insertion of the OBX hinge is simplified enormously.
- Adjustable in three dimensions The exact adjustment of the door is simplified.











ECO-Adjustable frame box OBX-3011-3D

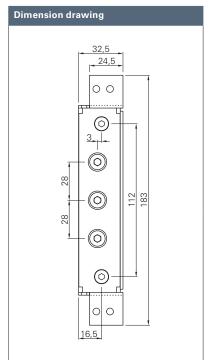
- Adjustable frame box for project hinges OBX in sizes 120 mm and 160 mm
- On steel frames with rebated and unrebated doors
- Adjustable in three dimensions
 - + / 3 mm Side

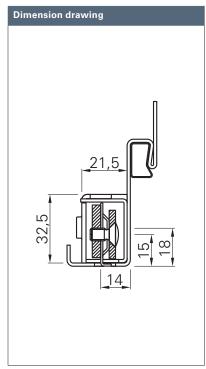
 - +/- 3 mm Height +/- 3 mm Pressure
- Surface: Steel zinc plated

Adjustable frame box For steel frames OBX-3011-3D	Material	Article number
OBX-3011-3D ¹	Steel zinc plated	459311.43
OBX-3012-3D ²	Steel zinc plated	459312.43

¹ With welding points

- Nylon-guided adjusting spindle supplies additional stability
- Nylon-guided push plate enables easy mounting. The insertion of the OBX hinge is simplified enormously.
- Adjustable in three dimensions The exact adjustment of the door is simplified.





² Without welding points

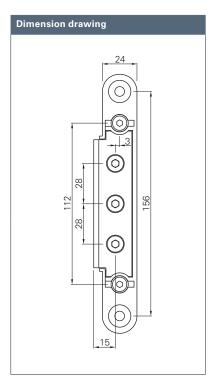


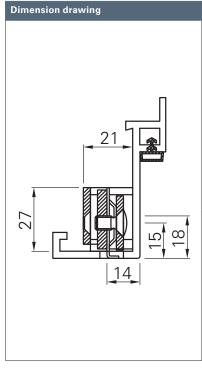
ECO-Adjustable frame box OBX-3021-3D

- Adjustable frame box for project hinges OBX in sizes 120 mm and 160 mm
- On aluminium frames with rebated and unrebated doors
- Adjustable in three dimensions
 - + / 3 mm Side
 - + /- 3 mm Height
 - + / 3 mm Pressure
- Surface: Steel zinc plated

Adjustable frame box Aluzarge OBX-3021-3D	Material	Article number
OBX-3021-3D	Steel zinc plated	459321.43

- Nylon-guided adjusting spindle supplies additional stability
- Nylon-guided push plate enables easy mounting.
 The insertion of the OBX hinge is simplified enormously.
- Adjustable in three dimensions
 The exact adjustment of the door is simplified.

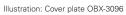


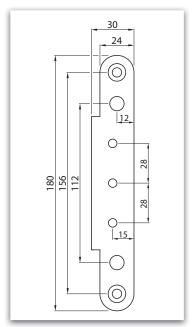




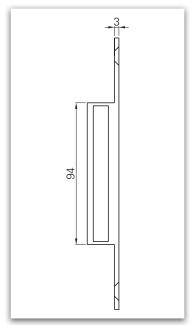








Dimension: Cover plate OBX-3096

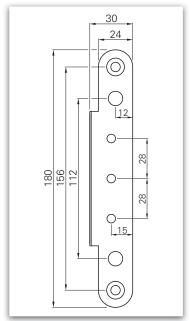


Dimension: Cover plate OBX-3096

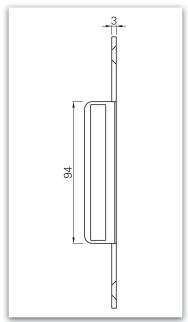
Cover plate OBX-3096	Material	Angle · Ending	Article number
OBX-3096.ER	Stainless steel satin	square - square	459396.46
OBX-3096.St.Ni	Steel satin zinc plated	square - square	459396.42
OBX-3096.St.Zk	Steel zinc plated	square - square	459396.43



Illustration: Cover plate OBX-3097



Dimension: Cover plate OBX-3097



Dimension: Cover plate OBX-3097

Cover plate OBX-3097	Material	Angle · Ending	Article number
OBX-3097.ER	Stainless steel satin	square - round	459397.46
OBX-3097.St.Ni	Steel satin zinc plated	square - round	459397.42
OBX-3097.St.Zk	Steel zinc plated	square - round	459397.43

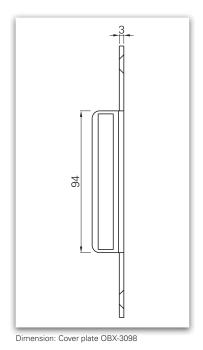
¹ square angle

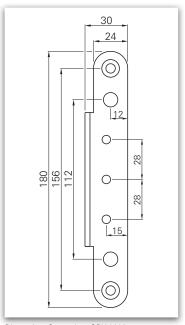
2 round angle

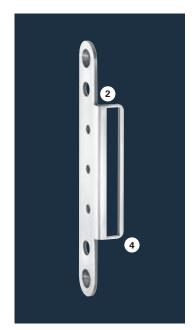
3 square ending

4 round ending





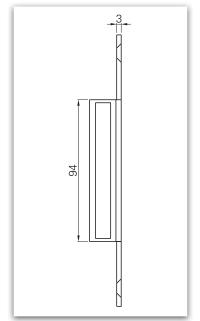




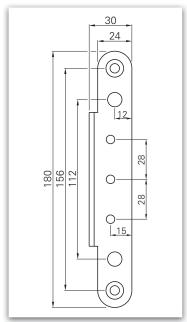
Dimension: Cover plate OBX-3098

Illustration: Cover plate OBX-3098

Cover plate OBX-3098	Material	Angle · Ending	Article number
OBX-3098.ER	Stainless steel satin	round - round	459398.46
OBX-3098.St.Ni	Steel satin zinc plated	round - round	459398.42
OBX-3098.St.Zk	Steel zinc plated	round - round	459398.43



Dimension: Cover plate OBX-3099



Dimension: Cover plate OBX-3099



Illustration: Cover plate OBX-3099

Cover plate OBX-3099	Material	Angle · Ending	Article number
OBX-3099.ER	Stainless steel satin	round - square	459399.46
OBX-3099.St.Ni	Steel satin zinc plated	round - square	459399.42
OBX-3099.St.Zk	Steel zinc plated	round - square	459399.43

- 1 square angle
- (2) round angle

- 3 square ending
- (4) round ending





Illustration: Lifting lug OBX-6012 steel zinc plated

Lifting lug

The use of lifting lugs is recommended for additional stabilization of the hinge - depending on use, construction and load of the door. Lifting lugs relieve the fixing screws and stabilize the hinge parts in the door frame. The lifting lugs transfer the forces into the stabilized door frame so the forces can be better absorbed. The lifting lug is only stabilizing, not increasing the loading capacity.

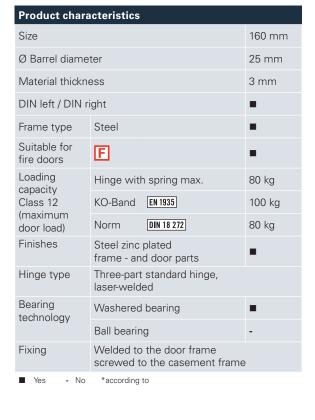
Lifting lug in order to stabilize the hinge	Material	Master gauge	Article number
OBX-6012.St.Zk	Steel zinc plated	for 7 point master gauge for holes	459905.43

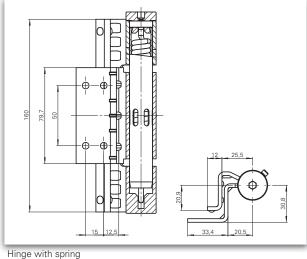


Laser-welded steel hinges









ECO-Genius LHA

three-part standard hinge to be welded on, adjustable in height (±3 mm)

Description:

ECO spring hinge / KO hinge set adjustable in height. Spring hinge: based on **DIN 18272** KO-hinge: acc. **EN 1935**

Mounting

Easy mounting of the hinge parts with the help of the hinge bolt

Special feature:

Height adjustment through comfortable handling.

Usage:

For the use in doors with requirements in regards to smokeand fire protection as well as in emergency and escape exits.

As construction hinge set (KO) also suitable for heavy doors.



KO hinge



5







GENIUS LHA SET	Material		Dimensions	Article number
GENIUS LHA Set	Steel zinc plated	Set	Ø 25 x 160	Customize



F DIN 18 272 Steel door

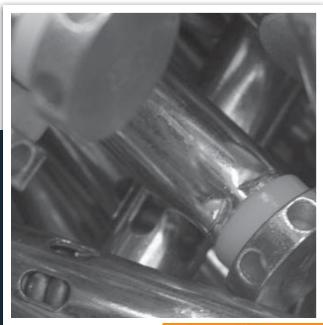
GENIUS LHA Hinge with spring	Material		Dimensions	Article number
GENIUS LHA hinge with spring	Steel zinc plated	Hinge with spring	Ø 25 x 160	Customize



F DIN 18 272 EN 1935 Steel door

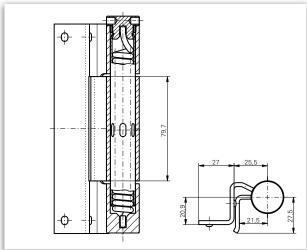
GENIUS LHA (KO hinge) Material Dimensions Article number

GENIUS LHA KO hinge Steel zinc plated KO hinge Ø 25 x 160 Customize

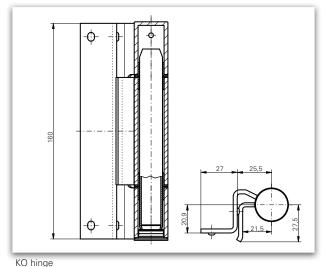








Hinge with spring



Product characteristics Size 160 mm Ø Barrel diameter 25 mm Material thickness 3 mm DIN left / DIN right Frame type Steel Suitable for F fire doors Loading Hinge with spring max. 80 kg capacity KO-Band EN 1935 Class 12 100 kg (maximum DIN 18 272 * Norm 80 kg door load) Steel zinc plated Finishes frame - and door parts Hinge type Three-part standard hinge, laser-welded Bearing Washered bearing technology Ball bearing Fixing Welded to the door frame screwed to the casement frame

ECO-standard hinge to be welded three-part standard hinge to be welded on (3 mm)

Description:

ECO spring hinge / KO hinge set.

Spring hinge: based on DIN 18272 KO-hinge: acc. EN 1935

Easy mounting of the hinge parts with the help of the hinge bolt.

Usage: For the use in doors with requirements in regards to smoke- and fire protection as well as in emergency and escape exits.







Standard Hinge with spring / KO - Set 3 mm	Material		Dimensions	Article number
Standard-Set	Steel zinc plated	Set	Ø 25 x 160	Customize



F DIN 18 272 Steel door

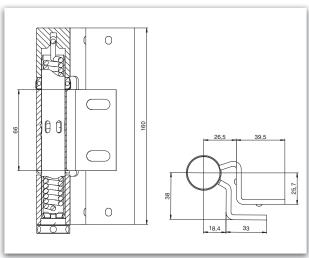
Standard Hinge with spring 3 mm	Material		Dimensions	Article number	
Hinge with spring	Steel zinc plated	Hinge with spring	Ø 25 x 160	Customize	

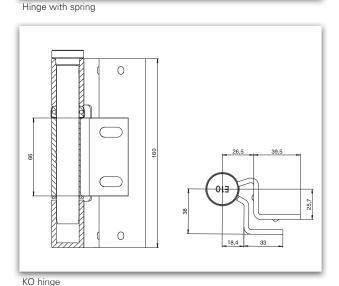


F DIN 18 272 EN 1935	Steel door			
Standard KO hinge 3 mm	Material		Dimensions	Article number
KO hinge	Steel zinc plated	KO hinge	Ø 25 x 160	Customize









Product characteristics Size 160 mm Ø Barrel diameter 27 mm Material thickness 4 mm DIN left / DIN right Frame type Steel Suitable for F fire doors Loading Hinge with spring max. 80 kg capacity KO-Hinge EN 1935 Class 13 120 kg (maximum DIN 18 272 * Norm 80 kg door load) Finishes Steel zinc plated frame - and door parts Hinge type Three-part standard hinge, laser-welded Bearing Washered bearing technology Ball bearing Fixing Welded to the door frame screwed to the casement frame

■ Yes - No *according to

ECO-standard hinge to be welded three-part standard hinge to be welded on (4 mm)

Description:

ECO spring hinge / KO hinge set.

Spring hinge: based on DIN 18272 KO-hinge: acc. EN 1935

Mounting

Easy mounting of the hinge parts with the help of the hinge bolt.

Usage:

For the use in doors with requirements in regards to smokeand fire protection as well as in emergency and escape exits.

As construction hinge set (KO) also suitable for heavy doors.







Standard Hinge with spring / KO - Set 4 mm	Material		Dimensions	Article number
Standard-Set	Steel zinc plated	Set	Ø 27 x 160	Customize



F DIN 18 272 Steel door

Standard Hinge with spring 4 mm	Material		Dimensions	Article number
Hinge with spring	Steel zinc plated	Hinge with spring	Ø 27 x 160	Customize



F EN 1935 Steel door

Standard KO hinge 4 mm	Material		Dimensions	Article number	
KO hinge	Steel zinc plated	KO-Band	Ø 27 x 160	Customize	

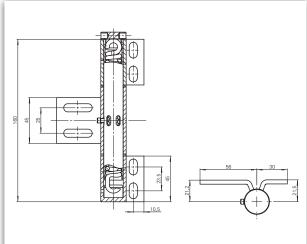






Product chara	acteristics	
Size		160 mm
Ø Barrel diame	ter	25 mm
Material thickne	ess	3 mm
DIN left / DIN r	ight	-
Frame type	Steel	-
Suitable for fire doors	E	-
Finishes	Steel zinc plated frame - and door parts	•
Hinge type	Three - part hinge to be screwed laser welded	d on
Bearing technology	Washered bearing	-
toormology	Ball bearing	-
Fixing	Screwed to the door frame Screwed to the casement frame)

■ Yes - No



Hinge with spring

ECO-Standard hinge

three-part hinge to be screwed on, adjustable in height and side (3 mm)

Description:

ECO spring hinge / KO hinge set adjustable in height and side.

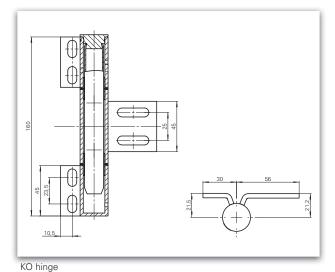
Special feature:

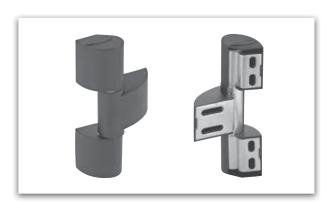
Nylon covers (black)

Usage:

For the use in doors with requirements in regards to smokeand fire protection as well as in emergency and escape exits

As construction hinge set (KO) also suitable for heavy doors.











Hinge with spring / KO - Set 3 mm adjustable in height and side	Material		Dimensions	Article number
Standard-Set	Steel zinc plated	Set	Ø 25 x 160	Customize



F Steel door

Hinge with spring 3 mm adjustable in height and side	Material		Dimensions	Article number	
Hinge with spring	Steel zinc plated	Hinge with spring	Ø 25 x 160	Customize	



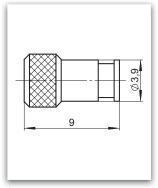
F Steel door

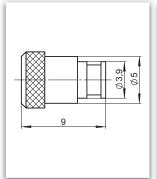
KO hinge 3 mm adjustable in height and side	Material		Dimensions	Article number
KO hinge	Steel zinc plated	KO-Band	Ø 25 x 160	Customize

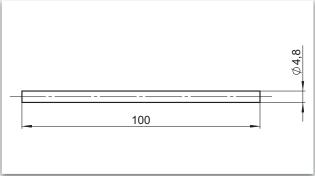












3	r	Υ	۱r	Υ	١	
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4 mm

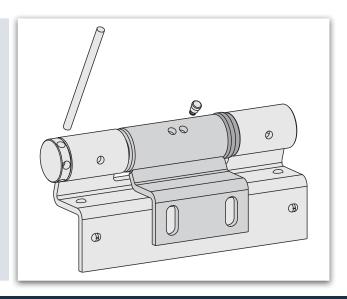
Locking pin	Article number	Material
Locking pin 5 x 9 mm for 3 mm material thickness	90031443	Steel zinc plated
Locking pin 6 x 9 mm for 4 mm material thickness	90031343	Steel zinc plated

Spring pin	Article number	Material
Spring pin 4,8 x 100 mm	93031643	Steel zinc plated

Tensioning and fixing of spring hinges

Fire-protection doors are equipped with one spring hinge and one KO hinge. In order to dismantle the door leaf, the hinge bolts have to be expelled to the door centre. When spring hinge is on tension, the **locking pin** has to be removed first.

If you want to put tension on the spring hinge, you have to enter the **spring pin** in one of the drill holes of the spring hinge head (when door is closed). Turning the split pin away from the door leaf puts tension on the spring. Putting the **locking pin** into one of the drill holes of the middle hinge roll, holds the position. The pre-tension has to be adjusted in that way that the door leaf is closing independently from an opening angle of approx. 30°.





ECO **Hinge Technology**Defying the laws of leverage

Good hinges ensure that doors open the way we expect them to. They define the fulcrum - and thereby the mobility of the door - and give the door leaf a solid support.

Door hinges must be precisely coordinated to the dimensions of a door - to its measurements, weight, type of mounting and location. They are not just hard-wearing components of a door. ECO Schulte can look back on decades of experience in the manufacture of hinges. ECO hinges are premium products that comply with the standard **EN 1935**. They bear the CE mark and are tested in the highest standard class (14).





Hardware for glass door handles

Holistic solutions



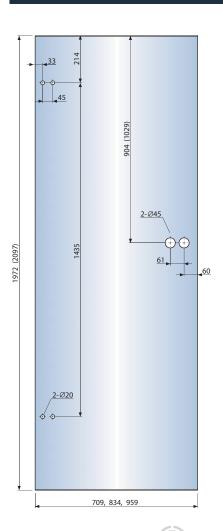
■ SYSTEM TECHNOLOGY FOR THE DOOR



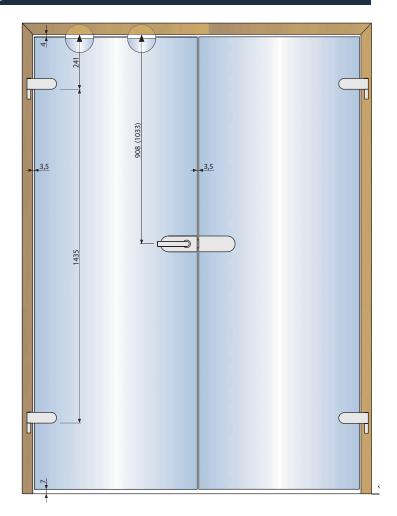


Locks, hinges and levers made of aluminium, zinc diecasting or stainless steel for the use in glass doors. Based on **DIN 18251** and **EN 1906**. They fulfill the requirements of holistic solutions with their form, construction and surface.

Glass working for two-part hinges and glass door locks



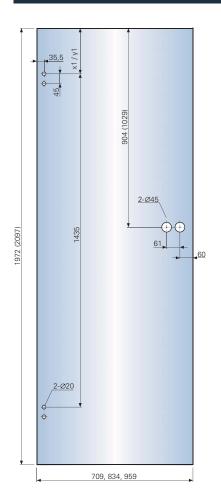
The illustration shows the glass working of a standard door leaf.

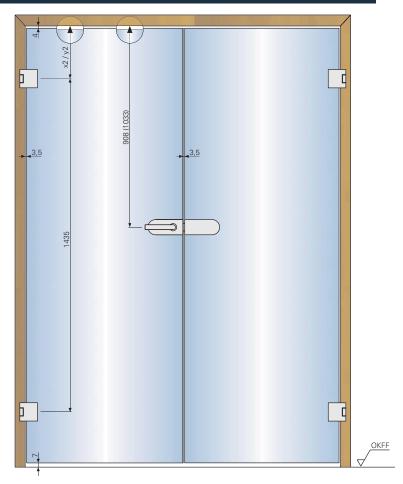


The illustration shows a glass door leaf using standard frames acc. to **DIN 18101**.



Glass working for three-part hinges and glass door locks





Note!

The illustration shows the glass working of a standard door leaf

The illustration shows a glass door leaf using standard frames acc. to DIN

Note!:

x1 = 232 mm / x 2= 258,5 mm

For screw-on – frame part for upright standing pillar frame For mortise – frame part and adjustable hinge box for timber frame

For mortise – frame part and adjustable hinge box for steel frame y1 = 214.5 / y2 = 241

For OBX – frame part and adjustable hinge box for upright standing pillar frame
For OBX – frame part and adjustable hinge box for timber frame
For OBX – frame part and adjustable hinge box for steel frame

For OBX - frame part and adjustable hinge box for aluminium frame

For glass doors with more than 900mm width we recommend to use door hinges with frame parts in combination with reception elements "series OBX"

References

For years, ECO products have been used everywhere in the world where modern design, quality, reliability and security are important. The relation between design and architecture are especially applied to the glass sector. Only ECO system components in connection with a glass door create an architectural element that is used by our customers worldwide.



Millenium Tower Vienna

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Glass door handles ■ Sets



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Glass door handles ■ Locks



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BB lock Page 646



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Glass door handles ■ Hinges



Studio Basic hinge AL / ER Page 648



Studio Design hinge AL / ER Page 648



Studio Office hinge AL / ER Page 648



Glass door handles • Lever sets



D-110 U-Form Page 654 D-310 CL-Form Page 654 D-410 U-Form Design Page 654

Glass door handles ■ Glass door patch handles



GF-0100 - GF-0500 Page 656

Glass door handles ■ Accessories







Frame parts, three-part Page 659





Product characteris	tics	
Glass (toughened safety glass)		8 (10) mm
Notch depth		24 (26) mm
Same version DIN lef	t and DIN right	-
Single-turn / 18 mm b	olt projection	-
Tested on the basis o	f DIN 18251 , class 3	DIN 18 251
Available lever sets	ECO	-
	Other	-
Follower	8 mm	-
Lever neck	16 mm	-
	18 mm	-
For door weights up	45 kg	-
to max.	55 kg	-
For door widths up to max.	1.000 mm	•
Finishes	Aluminium stainless steel look satin	•
	Aluminium F1 silver anodized	•
Locking mode	UV	-
	ВВ	•
	PZ	



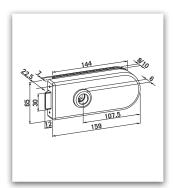
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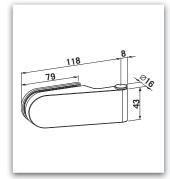
- No

■ On request



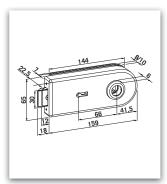


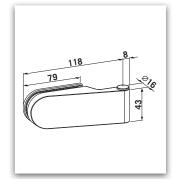




Door hardware set UV lock lever position in front	Article number	Description	Material
Studio Basic.Set. UV.ER	900.46	1 UV lock + 2 straight hinges (2-part)	Stainless steel look, satin
Studio Basic.Set. UV.AI	900.30	1 UV lock + 2 straight hinges (2-part)	Aluminim F1

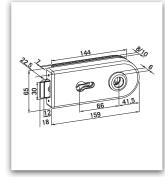


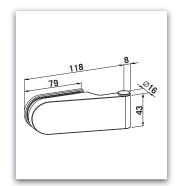




Door hardware set BB lock lever position in back	Article number	Description	Material
Studio Basic.Set. BB.ER	901.46	1 BB lock + 2 straight hinges (2-part)	Stainless steel look, satin
Studio Basic.Set. BB.Al	901.30	1 BB lock + 2 straight hinges (2-part)	Aluminim F1







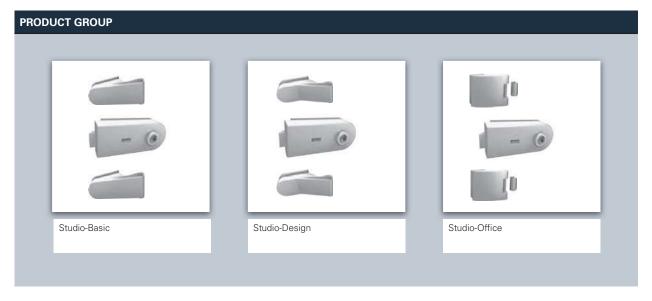
Door hardware set PZ lock lever position in back	Article number	Description	Material
Studio Basic.Set. PZ.ER	902.46	1 PZ lock + 2 straight hinges (2-part)	Stainless steel look, satin
Studio Basic.Set. PZ.AI	902.30	1 PZ lock + 2 straight hinges (2-part)	Aluminim F1





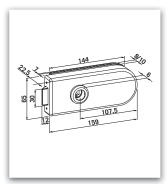
Product characteristics					
Glass (toughened safe	8 (10) mm				
Notch depth		24 (26) mm			
Same version DIN lef	t and DIN right	-			
Single-turn / 18 mm b	olt projection	-			
Tested on the basis o	f DIN 18251 , class 3	DIN 18 251			
Lever sets	ECO	-			
	Other	-			
Follower	8 mm	-			
Lever neck	16 mm	-			
	18 mm	-			
For door weights up	45 kg	-			
to max.	55 kg	-			
For door widths up to max.	1.000 mm	•			
Finishes	Aluminium stainless steel look satin	-			
	Aluminium F1 silver anodized	•			
Locking mode	UV	-			
	BB	-			
	PZ	-			

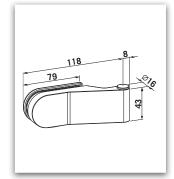
■ Yes - No ■ On request





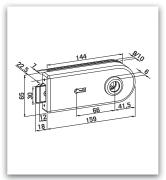


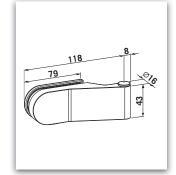




Door hardware set UV lock lever position in front	Article number	Description	Material
Studio Design.Set. UV.ER	910.46	1 UV lock + 2 cranked hinges (2-part)	Stainless steel look, satin
Studio Design.Set. UV.AI	910.30	1 UV lock + 2 cranked hinges (2-part)	Aluminim F1

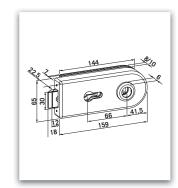


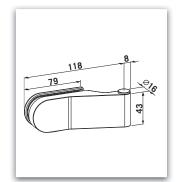




Door hardware set BB lock lever position in back	Article number	Description	Material
Studio Design.Set. BB.ER	911.46	1 BB lock + 2 cranked hinges (2-part)	Stainless steel look, satin
Studio Design.Set. BB.AI	911.30	1 BB lock + 2 cranked hinges (2-part)	Aluminim F1







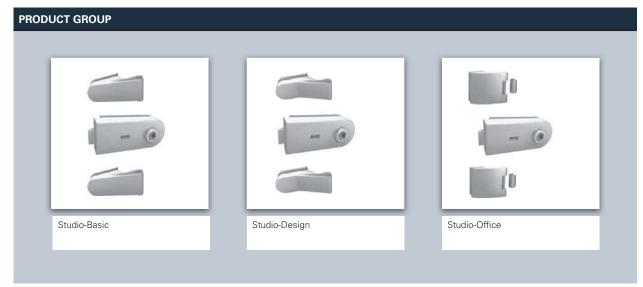
Door hardware set PZ lock lever position in back	Article number	Description	Material
Studio Design.Set. PZ.ER	912.46	1 PZ lock + 2 cranked hinges (2-part)	Stainless steel look, satin
Studio Design.Set. PZ.AI	912.30	1 PZ lock + 2 cranked hinges (2-part)	Aluminim F1





Product characteristics					
Glass (toughened safe	8 (10) mm				
Notch depth		24 (26) mm			
Same version DIN lef	t and DIN right	-			
Single-turn / 18 mm b	olt projection	-			
Tested on the basis o	f DIN 18251, class 3	DIN 18 251			
Lever sets	ECO	-			
	Other	-			
Follower	8 mm	-			
Lever neck	16 mm	-			
	18 mm	-			
For door weights up	45 kg	-			
to max.	55 kg	-			
For door widths up to max.	1.000 mm	-			
Finishes	Aluminium stainless steel look satin	•			
	Aluminium F1 silver anodized	•			
Locking mode	UV	-			
	BB	-			
	PZ	-			

■ Yes - No □ On request

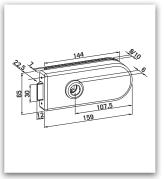


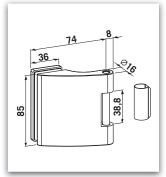
Note!:

For glass doors with more than 900 mm width we recommend to use door hinges with frame parts in combination with reception elements "series OBX"



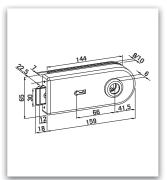


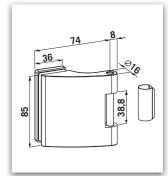




Door hardware set UV lock lever position in front	Article number	Description	Material
Studio Office.Set. UV.ER	904.46	1 UV lock + 2 hinges (3-part)	Stainless steel look, satin
Studio Office.Set. UV.AI	904.30	1 UV lock + 2 hinges (3-part)	Aluminim F1

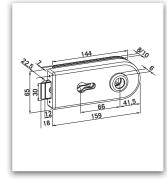


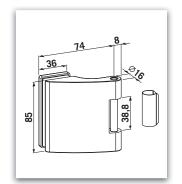




Door hardware set BB lock lever position in back	Article number	Description	Material
Studio Office.Set. BB.ER	905.46	1 BB lock + 2 hinges (3-part)	Stainless steel look, satin
Studio Office.Set. BB.AI	905.30	1 BB lock + 2 hinges (3-part)	Aluminium F1







Door hardware set PZ lock lever position in back	Article number	Description	Material
Studio Office.Set. PZ.ER	906.46	1 PZ lock + 2 hinges (3-part)	Stainless steel look, satin
Studio Office.Set. PZ.Al	906.30	1 PZ lock + 2 hinges (3-part)	Aluminim F1





Locks made of stainless steel or aluminium with fixing material \cdot without lever

- Suitable for 8 10 mm glass (toughened safety glass)
- Same version DIN left and DIN right
- Single-turn / 18 mm bolt projection
- Tested on the basis of **DIN 18251,** class 3
- Can be combined with all ECO as well as standard levers without escutcheon, with 8 mm follower and Ø 16 mm and Ø 18 mm lever neck

Finishes

- Stainless steel
- Aluminium F1 silver anodized





UV-lock lever position in front	Article Number	Description	Material
Studio lock.UV.ER	920.46	Glass door lock UV · without lever	Stainless steel
Studio lock.UV.Al	920.30	Glass door lock UV · without lever	Aluminium F1 silver anodized





BB lock lever position back	Article number	Description	Material
Studio lock.BB.ER	921.46	Glass door lock BB · without lever	Stainless steel
Studio lock.BB.AI	921.30	Glass door lock BB · without lever	Aluminium F1 silver anodized





PZ lock lever position back	Article number	Description	Material
Studio lock.PZ.ER	922.46	Glass door lock PZ · without lever	Stainless steel
Studio lock.PZ.AI	922.30	Glass door lock PZ · without lever	Aluminium F1 silver anodized



Counter locks for passive leaf made of stainless steel or aluminium for glass doors with fixing material

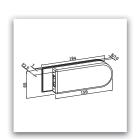
- Suitable for 8 10 mm glass (toughened safety glass)
- Same version DIN left and DIN right

Finishes

- Stainless steel
- Aluminium F1 silver anodized

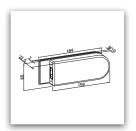






Counter lock	Article number	Description	Material
Counter lock.ER	970.46	Counter lock	Stainless steel





Counter lock	Article number	Description	Material
Counter lock.Al	970.30	Counter lock	Aluminium F1





Door hinges made of aluminium, or zinc diecasting for glass doors with fixing material

- Same version DIN left and DIN right
- Suitable for 8 mm 10 mm (toughened safety glass)
- Notch depth for two-part hinge = 24 mm at 8 mm,
 26 mm at 10 mm glass
- Notch depth for three-part hinge = 24 mm at 8 mm, 26 mm at 10 mm glass
- Stainless steel screws M6
- Can be combined with standard frame parts
- Installation in frames acc. DIN 18101 / 18111
- For door weights up to max. 45 kg with Studio Basic For door weights up to max. 55 kg with Studio Office
- For door widths up to max. 1.000 mm

Finishes:

- Stainless steel look, satin
- Aluminium F1 silver anodized





Studio-Basic	Article Number	Description	Material
Studio Basic.Hinge.ER	990.46	2 Studio-hinges, straight (2-part)	Stainless steel look, satin
Studio Basic.Hinge.Al	990.30	2 Studio-hinges, straight (2-part)	Aluminium F1 silver anodized





Studio-Design	Article Number	Description	Material
Studio Design.Hinge.ER	020.46	2 Studio-hinges, cranked (2-part)	Stainless steel look, satin
Studio Design.Hinge.Al	020.30	2 Studio-hinges, cranked (2-part)	Aluminium F1 silver anodized





Studio-Office	Article Number	Description	Material
Studio Office.Hinge.ER	980.46	1 hinge (3-part)	Stainless steel look, satin
Studio Office.Hinge.Al	980.30	1 hinge (3-part)	Aluminium F1 silver anodized



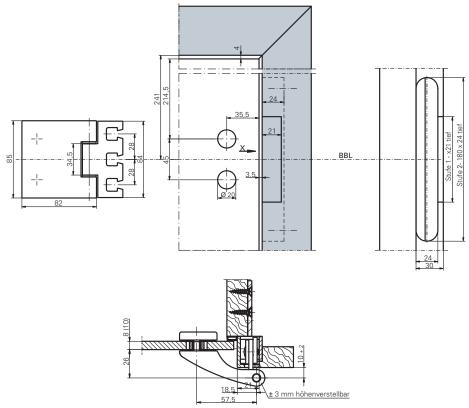
ECO **Glass door systems** Holistic solutions.

The single components in different executions and finishes offer you system technology for the glass door also in high-end quality: locks, hinges and levers made of aluminium, zinc-diecasting or stainless steel for the use on glass doors based on **DIN 18251** and **EN 1906**. With their form, construction and surface they comply with the holistic solutions of ECO's door hardware.

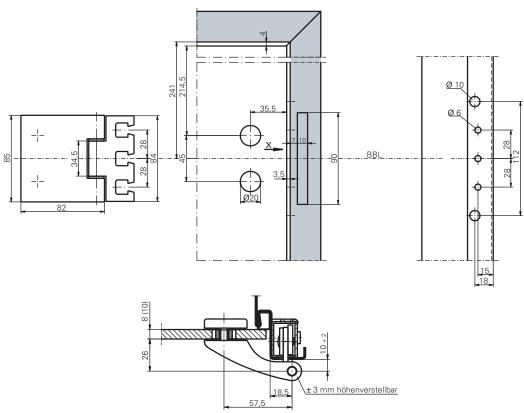
The complete programme of glass door handles has been well thought through. It is completed by hinges, handle sets & lock combinations as well as door closers and floor springs.



with OBX frame part and adjustable hinge box



For timber frames

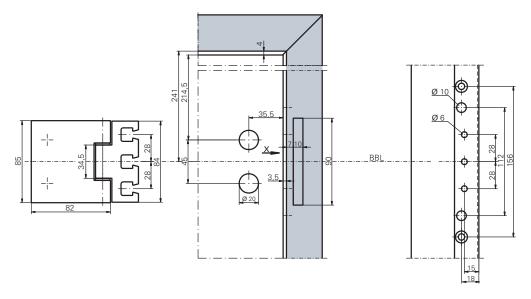


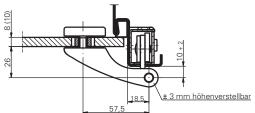
For steel frames





with OBX frame part and adjustable hinge box

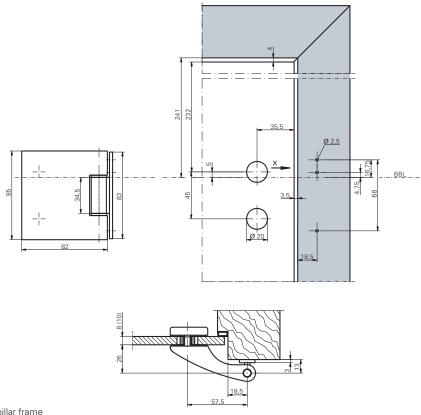




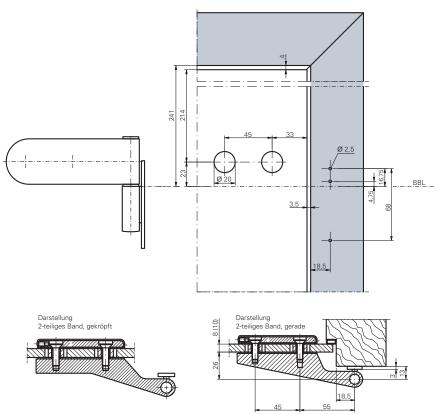
For aluminium frames



Frame part to be screwed on



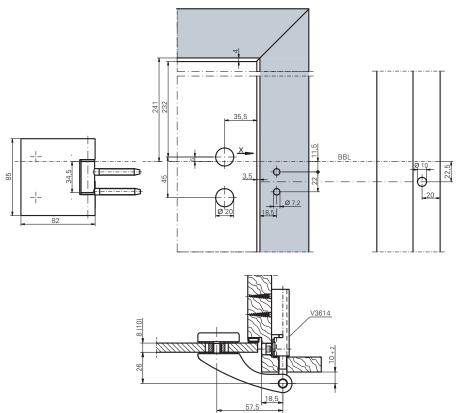
For upright standing pillar frame



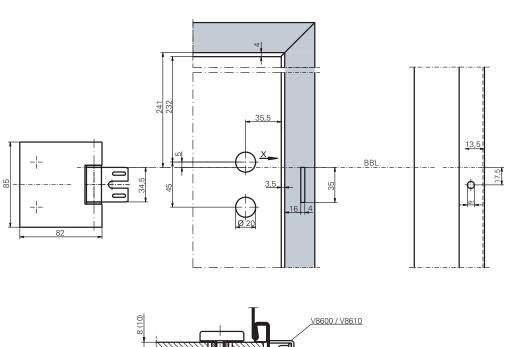
For upright standing pillar frame (2-part hinge)

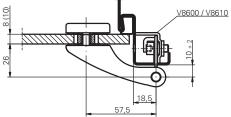


Frame part to be mounted in



For timber frames





For steel frames



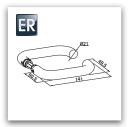


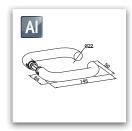
Levers made of aluminium or stainless steel for glass doors with fixing material \cdot without lever

- Suitable for 8 10 mm glass (toughened safety glass)
- Same version DIN left and DIN right
- Tested on the basis of **DIN 18251, class 3**
- Can be combined with all ECO as well as standard levers without escutcheon, with 8 mm follower and Ø 16 mm and Ø 18 mm lever neck

Finishes

- Stainless steel
- Aluminium F1 silver anodized

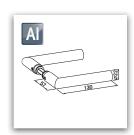






D-110 U-Form Article Number		Description	Material
Studio D-110.ER	006.46	Lever set D-110.ER without escutcheon	Stainless steel
Studio D-110.Al	006.30	Lever set D-110.AL without escutcheon	Aluminium F1 silver anodized

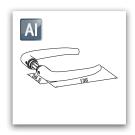






D-310 CL-Form	Article Number	Description	Material
Studio D-310.ER	010.46	Lever set D-310.ER without escutcheon	Stainless steel
Studio D-310.Al	010.30	Lever set D-310.AL without escutcheon	Aluminium F1 silver anodized

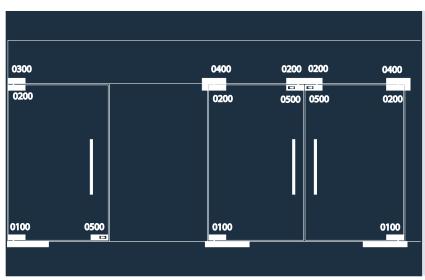




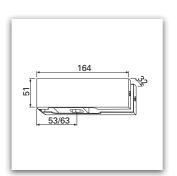


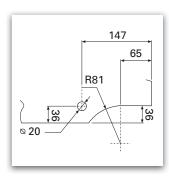
D-410 U-Form, Design		Description	Material
Studio D-410.ER	008.46	Lever set D-410.ER without escutcheon	Stainless steel
Studio D-410.Al	008.30	Lever set D-410.AL without escutcheon	Aluminium F1 silver anodized





- Suitable for 8 · 10 · 12 mm glass (toughened safety glass)
- Material: Stainless steel
- Finishes: Stainless steel satin or polished
- Maximum door weight 80 kg
- Maximum door width 1.100 mm

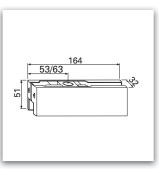


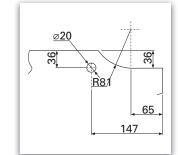




GF-0100 Bottom patch	Article Number	Description	Surface
GF-0100 S	801.46	Bottom corner fitting with reception for floor spring axis	Stainless steel satin
GF-0100 P	801.47	Bottom corner fitting with reception for floor spring axis	Stainless steel polished



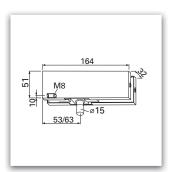


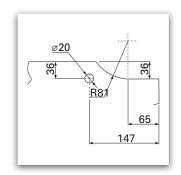


GF-0200 Top patch	Article Number	Description	Surface	
GF-0200 S	802.46	Top corner fitting with plastic bushing for pin	Stainless steel satin	
GF-0200 P	802.47	Top corner fitting with plastic bushing for pin	Stainless steel polished	



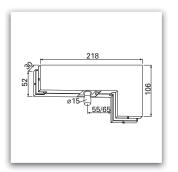


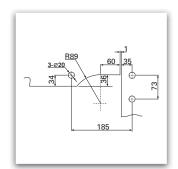






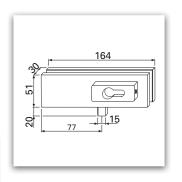
GF-0300 Overpanel patch	Article Number	Description	Surface
GF-0300 S	803.46 Overpanel patch with pin Stainless s		Stainless steel satin
GF-0300 P	803.47	Overpanel patch with pin	Stainless steel polished

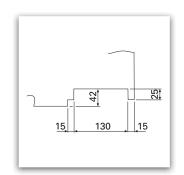






GF-0400 Overpanel patch	Article Number	Description	Surface
GF-0400 S	804.46	Overpanel & side patch with pin	Stainless steel satin
GF-0400 P	804.47	Overpanel & side patch with pin	Stainless steel polished







GF-0500 Patch lock	Article Number	Description	Surface
GF-0500 S	805.46	Corner lock with lock	Stainless steel satin
GF-0500 P	805.47	Corner lock with lock	Stainless steel polished



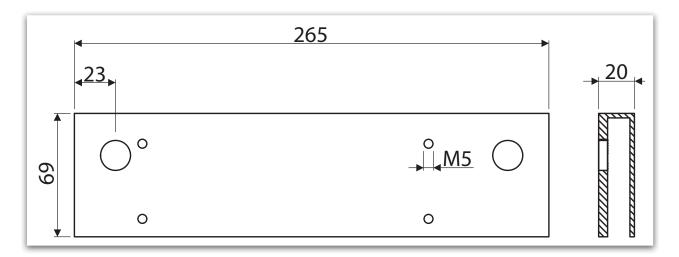


Glass clamping device for ECO door closer Newton TS-51

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

- Suitable for 8 10 mm glass (toughened safety glass)
 Same version DIN left and DIN right
- Including threaded holes for the door closer
- Aluminium: colours see table below

Description of the door closer please refer to chapter 2





Glass clamping device Article Number		Description	Material / Color
Glass clamping device.Al	350310600A00000	for door closer Newton TS-51	Al F1 coated
Glass clamping device.Al	350310600E00000	for door closer Newton TS-51	Al white RAL 9016 coated
Glass clamping device.Al	350310600D00000	for door closer Newton TS-51	Al brown RAL 8014 coated
Glass clamping device.Al	350310600Q00000	for door closer Newton TS-51	Al stainless steel look

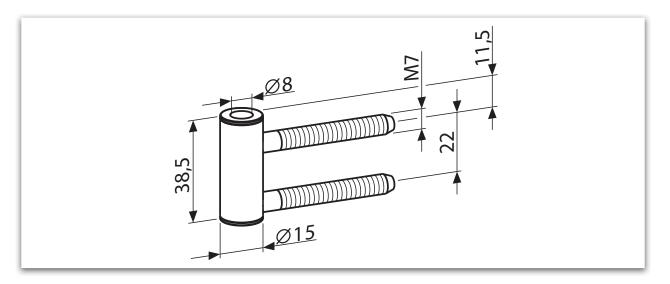


Frame part for three-part glass door hinges ${\tt ECO}$ Studio Office

- Frame part for reception in wooden frames
- With nylon guidance socket
- Same version DIN left and DIN right
- Material: Steel zinc-plated

Studio-Basic/Studio-Design	Article Number	Material	
1 frame part for wooden frame ECO Studio Office	10gla8104300112	Steel zinc-plated	







ECO Glass door systems Unique sense of space

Glass doors are the best possibility to create ideal lighting conditions. They create a bright and friendly atmosphere and an unique sense of space.

Glass door handles, hinges and locks with their slim form and their elegant design accentuate the special character and the transparency of glass doors.

They are a main stay of contemporary architecture.



"The total is more than the sum of its parts."

Aristotle



- Care notes
- Conditions of sale
- Product liability
- Index



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 lukewarm 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")





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.



Nylon



ECO fittings made of high-quality nylon are the latest trend, particularly with the young generation and in modern buildings. Available in numerous dECO rative 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 account rements 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.

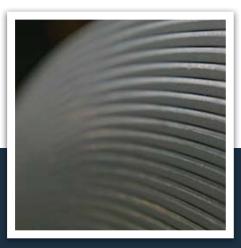
To protect or clean plastic, it is best to use warm water and a standard commercial cleaner such as "green soap". Only small amounts of this get the surface clean again and ready for treatment with a care product. There are a whole lot of these on the market, so you can't help but find the right one 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.





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.



Conditions of sale ECO Schulte GmbH & Co. KG

Item 1 Scope of the Conditions of Sale

- The following Conditions of Sale shall apply for all deliveries, performances and offers of ECO Schulte GmbH & Co. KG (hereinafter referred to as "Vendor"). For future business relationships, these Conditions of Sale shall also be considered as included, when they have not been expressly referred to
- General Terms and Conditions of the Customer are rejected. They shall only be considered agreed when the Vendor has expressly agreed to them in

Item 2 Offer and conclusion of contract

- The offers of the Vendor are subject to confirmation and non-binding.
- In order to become legally effective, declarations of acceptance and all orders require the written or telex confirmation of the Vendor. Order confirmation sent by data transmission and EDP print-out are also valid without a signature.
 - The same shall apply to deviations from these Conditions of Sale and other additions, amendments or supplementary agreements.
- Decisive for the content and scope of deliveries and services is the written order confirmation from the Vendor. This shall also apply for orders submitted to our sales representatives and / or sales force staff.

- The prices apply in euro plus VAT at the respectively valid rate.
- Provided no fixed price has been expressly agreed, the prices shall be binding up to the delivery date specified. Where no such delivery date has been agreed, the Vendor shall be bound by the agreed price for the duration of four months from confirmation of the order. Thereafter, the Vendor shall be entitled, in the event of a cost increase which ensues after issue of the order confirmation (e.g. due to an increase in material, wages or other costs to be borne by the Vendor), to effect appropriate price increases, provided he is not already in default in delivery. Where the Vendor incorporates changes required by the Customer, the Customer shall be invoiced for the ensuing additional costs.
- The forwarding charges including the costs of packaging shall be itemised separately and are to be borne by the Customer.

Item 4 Processing costs in the event of return of goods

When the Vendor accepts returned fault-free merchandise, which requires his express agreement, a processing fee with the respectively valid VAT is to be paid by the Customer.

Item 5 Times of delivery and performance, default

- The observance of deadlines for deliveries presupposes the timely receipt of all details to be provided by the Customer, all documentation, the necessary approvals (including any necessary import licences) and clearances, in particular plans, as well as the observance of the agreed payment conditions, including the timely payment of down payments agreed separately and other obligations by the Customer. If these preconditions are not met in time, the delivery periods shall be extended accordingly, provided a delay is not the responsibility of the Vendor.
- Business to be settled on a fixed date requires expressed written confirma-
- The delivery shall ensue subject to delivery possibility.
- Delays in delivery and performance due to force majeure, unforeseeable disruptions, industrial disputes (in particular strikes and lock-outs) or shortages of raw material or other events which are not within the responsibility of the Vendor (e.g. delivery delays of an upstream supplier) shall entitle him to extend the delivery date by the duration of the hindrance, even when this has been agreed in binding form. If the delivery is impossible or unreasonable for the Vendor due to circumstances of this kind, he may withdraw from the contract entirely or in part. Changes to the delivered merchandise on the instructions of the Customer shall lead to an appropriate extension of the delivery deadline.
- Should the hindrance last for longer than two months, the Customer shall be entitled, after notification of an appropriate grace period, to withdraw from the part of the contract not yet met.
- The delivery deadline shall be considered to have been met when the merchandise has been dispatch within the agreed delivery time or notification sent of the readiness for dispatch.
- If the delivery date or the delivery deadline is not observed by the Vendor, the Customer shall be obliged to specify an appropriate grace period in writing. If the Vendor culpably fails to deliver within the specified grace period, the Customer shall be entitled to withdraw from the contract.
- To the extent that the Vendor is responsible for the non-observance of bindingly-agreed deadlines, the Customer shall be entitled to compensation for losses caused by culpable delay, restricted to 5% of the net invoice value of the delivery or service affected by the delay following unsuccessful expiry of the period of grace specified by the Customer - provided he can plausibly show that he has suffered losses as a result of the delay. Farther-reaching claims are excluded, unless the delay is the result of at least gross negligence or the culpable infringement of a major contractual obligation. In this case, the compensation is limited to the foreseeable losses which typically
- At the request of the Vendor, the Customer shall be obliged to declare to the Vendor, within a reasonable period of notice, whether he intends withdrawing from the contract due to the delay in delivery, and / or demanding compensation instead of performance and / or insisting on performance.
- 10. If the supply, the dispatch or the delivery is postponed, at the request of the Customer, to a point beyond that foreseen in the contract, the Vendor may

- invoice the Customer, at the earliest ten working days following notification of readiness for dispatch, for warehousing charges amounting to 0.5% of the invoice sum for each month or part thereof. The contractual parties shall be free to provide proof of higher or lower warehouse costs.
- 11. The Vendor shall be entitled to make part-deliveries to a reasonable extent. Part-deliveries shall be considered transactions in their own right. They shall
- be invoiced as such and are to be settled separately.

 12. Over-delivery and under-delivery of up to 10% resulting from production processes, and common in the industry, are permissible, unless a deviation from the contractual quantity in individual cases is unreasonable for the

Item 6Transfer of risk

- The risk of accidental perishing and / or loss shall transfer to the Customer as soon as the freight as been handed over to the person executing the transport or has left the Vendor's warehouse for the purpose of dispatch. This shall also apply when the forwarding is executed totally or in part by the Vendor's own staff.
- Furthermore, the risk shall transfer to the Customer as soon as same defaults on acceptance following receipt of notification of readiness for dispatch.
- If merchandise is taken back in individual cases for reasons for which the Vendor is not responsible and on the basis of a separate written agreement, the Customer shall bear all risks up to the receipt of the merchandise at the Vendor's premises

Item 7 Warranty

- No right to claim damages for defects shall apply in the case of only minor deviations from the agreed properties or in the case of only minor negative impact on the usability
- Furthermore, the right to claim damages for defects shall not apply in the case of natural wear and tear or damage which occurs following transfer of risk as a result of faulty or negligent treatment, excessive use, unsuitable operating material, faulty assembly work, unsuitable working material, unsuitable operating material, failure to observe the operating instructions, faulty maintenance or as a result of special external influences (including chemical or electrolytic influences) not provided for in the contract.
- Similarly, if inappropriate alterations or maintenance work are/is carried out by the Customer or by third parties, no right to claim for damages resulting from defects shall exist for this or the resulting consequences.
- The Customer must inform the Vendor of obvious defects immediately in writing, at the latest, however, within one week of receipt of the item delivered. Faults which cannot be discovered within this period even with careful examination, are to be reported in writing by the Vendor as soon as they are
- Warranty claims are excluded if the Vendor is not granted the opportunity, within ten day of notification of the fault, to view the merchandise. In the event of justified notification of defects the Vendor shall have the
- choice of rectification (repair) or additional delivery.
- When the Vendor delivers a fault-free item for the purpose of supplementary performance, the Customer shall be obliged to return the faulty item This shall apply accordingly for faulty components when these are replaced by fault-free ones within the framework of the rectification.
- If the Vendor is not capable of rectification or additional delivery, or entitled in accordance with Section 439 Abs. (3) BGB to refuse rectification or additional delivery, or if the delay of the rectification or additional delivery extends beyond a reasonable deadline, for reasons for which the Vendor is responsible, or if the additional delivery or rectification is unsuccessful twice, the Customer can, as he sees fit, demand a reduction of the price or withdraw from the contract.
- Statutory rights of recourse of the Customer against the Vendor shall exist only provided that the statutory preconditions (including those of the sale of consumer goods) have been met. Therefore, no rights of recourse shall exist, in particular, when the Customer has reached an agreement with his purchaser extending beyond the statutory right to claim damages for defects in the context of a guarantee or for reasons of goodwill.
- 10. To the extent that the statutory stipulations regarding the sale of consumer goods (Sections 474 ff. BGB), in particular those relating to recourse liability (Sections 478 ff. BGB) does not apply due to the non-existence of the statutory preconditions, a one-year guarantee period shall apply. Section 438, Sub-section 1, No. 2 and Section 3 shall remain unaffected.
- 11. The legal consequences of a contravention of the commercial obligation to inspect for faults and provide notification of same shall remain unaffected.

 12. For the rest, Item 11 shall apply for compensation claims. Farther-reaching
- claims of the Customer against the Vendor and his vicarious agents relating to a material defect, or claims other than those regulated in this section and Item 11, are excluded.

Item 8 Product details

- The details and illustrations contained in brochures and catalogues are approximate values customary within the industry, unless they have been specifically described as binding. The Customer shall be obliged to convince himself of the suitability of the product for the intended through his own examination
- Specific reference is made to our information on product liability. This information must be observed by the Customer.
- Drawings and details of weight and dimensions in brochures and catalogues have been compiled with care; the right to make subsequent corrections in the case of obvious errors is reserved.



Item 9 Expanded and extended reservation of proprietary rights

- The Vendor reserves ownership of the merchandise he delivers until payment of the purchase price has been rendered in full and until settlement of all existing and future claims of the Vendor against the Customer arising from the business relationship.
- from the business relationship.

 The delivered merchandise must be properly stored, kept and marked by the Customer as originating from the delivery of the Vendor and separated from similar merchandise of other companies.
- 3. The Customer shall be entitled to sell, install or process the reserved goods in a due business transaction. Due business transaction does not include the processing, installation or sale to such purchasers as have signed a prohibition of assignment agreement with the Customer. Otherwise this authorisation can only be revoked when the Customer has failed to duly meet his payment obligations.
- 4. Even at this stage, by way of precaution, the Customer assigns receivables relating to the reserved goods arising from a selling on or other legal basis (processing, installation, unauthorised action, insurance, etc..) to the amount of the invoice sum of the delivered merchandise. If the Customer enters the receivables from a selling on or on other legal grounds into a current account already existing with his customer, the balance claim is to be assigned to the level of the invoice sum.
- 5. The Customer is authorised to process the merchandised delivered under reservation of proprietary rights, provided he is not in default. The processing ensues through the Customer for the Vendor. The Vendor acquires ownership of the new merchandise as a manufacturer within the meaning of Section 950 BGB, while the Customer holds the merchandise on account for the Vendor. When processed with other goods not delivered by the Vendor, the Vendor shall be entitled to co-ownership of the new merchandise at the ratio of the value of the reserved goods to the other processed goods at the time of processing. The same shall apply for the merchandise resulting from the processing as to the reserved goods.
- The Vendor authorises the Customer to collect receivables assigned to the Vendor for his own account and in his own name. The direct debit authorisation can only be revoked when the Customer has not duly met his payment obligations.
- 7. In the event of culpable conduct in contravention of the contract on the part of the Customer in particular payment default the Vendor shall be entitled to notify the debtor of the assignment of the above receivables. The Vendor shall also then be entitled to take back the reserved goods or, where applicable, to demand the assignment of the claim to handover of the goods vis-à-vis third parties.
- 8. The taking back of the reserved goods shall not be considered a withdrawal from the contract. Section 449, Sub-section 2 BGB is excluded.
- When demanded to so do by the Customer, the Vendor must release part
 of the securities providing their value exceeds the receivables over a longer
 period by over 20%.

Item 10 Payment

- 1. The Vendor's invoices are payable within 14 days of their issue (according to invoice date) with 2% cash discount or within 30 days of the invoice date without deduction. If the Customer fails to make settlement within 30 days of the invoice date, he shall be in default, even without a reminder. If the time of receipt of the invoice or payment plan, or the receipt itself, is unclear, the Customer who is not a consumer shall be in default at least 30 days after the due date and receipt of the return service.
- Payment shall only be considered to have been rendered when the sum is at the disposal of the Vendor. In the case of bank drafts or cheques, the payment shall only be considered to have been rendered when the cheque or bank draft has been cleared.
- 3. If the Customer who is a consumer should be in default, the Vender can demand interest at the rate of 5% p. a. above the respective basic interest rate in accordance with Section 247 BGB. If the Customer is not a consumer, the rate of default interest shall be 8% p. a. above the respective basic interest rate in accordance with Section 247 BGB. The Customer cannot contend that the Vendor has incurred only a lower interest loss, or none at all. However, the Vendor shall remain free to calculate the interest loss on the basis of proven incurred costs.
- 4. The Vendor shall not be obliged to discount bank drafts. If, in individual cases, bank drafts are discounted on the basis of special agreements, the bank discounting and handling charges shall be borne by the issuer of the draft in the case of the receivables becoming due and are payable in cash with immediate effect.
- 5. Regardless of the payment arrangements concluded separately in individual cases, the receivables owing to the Vendor shall become due immediately when circumstances arise in the person of the Customer which make adherence to agreed payment arrangements no longer reasonable. This is the case when there are well-founded indications of a major deterioration of the financial standing of the Customer, in particular with the discontinuation of payments, cheque or draft protests or payment default, when it becomes evident as a result that the Vendor's entitlement to return service is endangered through inability to pay on the part of the Customer. In this case, the Vendor shall also be entitled to set the Customer a deadline in which the Customer, at the discretion of the Vendor, must effect payment of the return service or arrange additional securities. Following effectless expiry of the deadline set by the Vendor, same shall be entitled to withdraw from the contract.
- 6. Within the framework of warranty for defects, the Customer may only withhold payment following submission justified of notice of defects to an extent which is in a reasonable ratio to the material fault which has arisen. For the rest, a right of retention of the Customer is excluded.

- The Customer shall only be entitled to set-off when the counterclaim is undisputed, recognised by declaratory judgement or ready to be adjudicated
- 8. The Vendor shall be entitled to assign the claims arising from the business relationship with the Customer.

Item 11 Compensation / Limitation of liability

- Compensation claims of the Customer, for whatever legal reason, in particular for infringement of contractual obligations and from unauthorised actions are excluded unless mandatory liability applies in accordance with the product liability law, in the case of liability for deliberate of grossly negligent conduct, for injury to life, limb or health, for the infringement of major contractual obligation or where the Vendor has issued a guarantee of particular properties.
- 2. The compensation claim for the infringement of major contractual obligations shall, however, be limited to the foreseeable losses typical for contracts of this kind, provided a limitation is not excluded for other reasons due to deliberate or grossly negligent conduct or injury to life, limb or health.
- 3. In the event that justifiable claims are asserted against the Customer under the statutory stipulations for supplementary performance by his customer or his customer's customer, he must give the Vendor the possibility, within a reasonable period of time, to undertake the supplementary performance himself, before otherwise supplying "substitute". The Customer shall impose this obligation accordingly on his purchasers. Should the Customer infringe on these obligations, the Vendor shall reserve the right to reduce the reimbursement of expenses to the sum which he would have incurred with a supplementary performance of his own. Section 444 BGB shall remain unaffected.
- 4. Reimbursement for expenses within the framework of the supplementary performance of the Customer vis-à-vis his customer are furthermore excluded when the Customer has not availed of his right to refuse this type of supplementary performance, or both types of supplementary performance, due to disproportionality of costs, in contravention of his duty to avert, minimise or mitigate losses and/or has not limited the reimbursement of expenses to a reasonable sum.
- 5. Claims of the Customer to expenses necessary for the purpose of supplementary performance, in particular transport costs, wage costs, labour costs and material costs are excluded to the extent that the expenses increase due to the delivery item being subsequently transferred to a place other than the contractually-agreed place of destination unless the transfer conforms with the use for which it was intended. This shall apply accordingly for the recourse liability.
- For compensation claims and claims to compensation for expenses in the context of the claims for liability for defects in the merchandise, the binding period of limitation applying to these claims shall apply (see Item 7).

Item 12 Data protection

- Personal data of the Customer which becomes known directly or through third parties within the framework of the business relationship shall be stored by the Vendor in an automatic file and processed in the course of business (Note in accordance with the German Data Protection Act).
- The Customer agrees to the processing of his personal details which emerge directly or through third parties by the Vendor.

Item 13 Place of performance, applicable law, court of jurisdiction, partial nullity

- The Vendor retains his proprietorial and copyright exploitation rights, without
 restriction, to cost estimates, drawings and other documents (hereinafter
 referred to as "documents" The documents may only be made accessible
 to third parties with the prior approval of the Vendor and, when the order is
 not placed with the Vendor, returned to same on demand, without delay.
- Place of performance for the mutual primary and secondary obligations arising from the contracts, as well as all rights and duties arising from the contract, shall be Menden.
- For these Conditions of Sale and the entire legal relationship between the Vendor and the Customer, the laws of the Federal Republic of Germany shall apply, under exclusion of the UN Convention on the International Sale of Goods.
- Court of jurisdiction for all disputes arising directly or indirectly from the contractual relationship is Menden, when the Customer is a merchant, legal entity under public law or special fund under public law.
- Should any provision in these Conditions of Sale or a provision within the framework of other agreements be or become invalid, the validity of all other provisions or agreements shall not be affected.

Date: 03/01/2014



Product information and use of ECO Handle technology

§ 1 Product information and designated use

- The mounting systems manufactured by ECO are operating aids with which opening and closing and / or blocking actions can be carried out on doors, glazed doors and window elements.
- It is essential that the fixing material supplied with these products is used and that mounting is carried out in accordance with the mounting instructions / specifications.

§ 2 Improper use of the products

In particular the following constitute improper use of the hardware systems for doors and windows, i.e. undesignated use of the products:

- The incorporation or attachment of external or non-designated objects in the hardware system
- The use of auxiliary tools for operating
- Using the hardware as replacement for missing wall stoppers
- Misuse of the hardware as suspension devices for heavy loads
- If, contrary to the rECOmmendation of the lock and hardware industry, hardware with panic locks are in constant operation and used for permanent operations instead of only in emergencies
- If the surface of the hardware system is damaged due to the use of sharp or hard objects
- The use of fixing material of other manufacturers

Sooner or later, this type of misuse will lead to a damage and the products will no longer possess the characteristic features defined by the manufacturer.

§ 3 Product services

- Product services are only partially regulated by standards. Many performance ratings have developed through long experience and are viewed as the joint property of the building hardware industry. The content of standards and these experimental values can also be used by analogy for any door hardware which there are no express regulations.
- 2. In particular following standards apply:
- EN 1906: General basic value for door hardware and accessory
- DIN 18273: Special rules for fire- and smoke control doors
- DIN 18257: Minimum safety requirements of security hardware
- The door hardware should be replaced whenever the proper function is no longer guaranteed in spite of maintenance and care, or if it presents any risk of injury.
- 4. Further development of the products is carried out on an ongoing basis and production is subject to quality assurance. We reserve the right to make technical changes.

§ 4 Product maintenance

- 1. The user must observe the correct position of the hardware and fixing devices.
- 2. The products are subject to natural wear which depends on the material and place of installation. All moving parts should therefore be subject to annual maintenance, i.e. the snug fit, tightness of screwed connections, etc. should be checked at regular intervals. Only water and gentle cleaning agents containing no corrosives as well as soft cleaning cloths should be used to care for the hardware systems.
- Aluminium, plastics, stainless steel and brass are the main materials used in production. Specific reference is made to the various care and maintenance requirements for these different materials.

§ 5 Liability to inform and instruct

- 1. The following literature is available for your information and instruction:
- Catalogues and brochures
- Tendering texts
- Purchasing information
- Quotation rECOrds
- Mounting and operating instructions
- DIN standards
- 2. To ensure the functional efficiency of hardware systems:
- Architects, planners and other persons involved are advised to request all required product information from us and to observe the same
- Specialist dealers are advised to observe the product information and references in the price lists and catalogues and in particular to request all necessary instructions from us and pass these on to the person handling the mounting systems
- Persons installing the hardware are advised to obtain and observe all information relating to the product and in particular to request instructions for operating and caring for the same from us and to pass these on to the customer / end user

All persons involved should take care that the hardware systems are properly mounted and installed and that the respective end user receives appropriate directions.



Product information and use of ECO Lock technology

§ 1 Product information and designated use

- 1. The locks manufactured by ECO are intended for locking and bolting of doors.
- 2. The correct configuration with approved door hardware, fastenings and accessories is essential to ensure the designated use of the locks. Installation must be carried out in accordance with mounting instructions, or with due regard to the DIN standards, including maintenance. Locks for doors with special functions must be selected according to regulations and should be duly identified, if necessary.

§ 2 Improper use of the products

In particular the following constitute improper use of the locks, i.e. undesignated use of the products:

- Misusing the locked bolt to keep the door open
- Adjusting the hinges or lowering the door if this results in an increase or reduction of the required door clearance
- Any assembly or later adjustment of the locking elements which would prevent normal functions
- The incorporation or attachement of external or non-designated objects in the lock or the striking plate
- The application to the lock assembly of loads exceeding normal manual force
- Opening a double-leaf door using the passive leaf, unless this is duly authorized
- The use of inappropriate fastening materials (deviating measurements or incorrect adjustments)
- Interering or tampering with the lock or striking plate which results in any change of the structure, operation or function
- Simultaneous operation of the door handle and lock system
- Closing the door while reaching between door leaf and door frame

Sooner or later, this type of misuse will lead to a damage and the products will no longer possess the characteristic features defined by the manufacturer.

§ 3 Product services

- 1. Product services are only partially regulated by standards. Many performance ratings have developed through long experience and are viewed as the joint property of the building hardware industry. The content of standards and these experimental values can also be used by analogy for any locks which there are no express regulations.
- 2. In particular standards DIN 18250, DIN 18251, DIN 18252, DIN 18254, DIN 18255, DIN 18257, DIN 18273 and the standards for door mountings are applicable in which both the basic and the supplementary requirements of locks are specified.
- 3. The locks should be replaced whenever the proper function is no longer guaranteed in spite of maintenance and care, or if it presents any risk of injury.
- 4. Further development of the products is carried out on an ongoing basis and production is subject to quality assurance. We reserve the right to make technical changes.

§ 4 Product maintenance

- 1. The user must observe the correct function of the locks.
- 2. The products are subject to natural wear which depends on the material and place of installation. Subject to the amount of use, maintenance of the locks should be carried out once a year, i.e. greased at regular intervals using suitable lubricants. Only noncorroding cleaning agents should be used to care for the locks.
- 3. A variety of different materials are used in the lock production. Specific reference is made to the various care and maintenance requirements for these different materials.

§ 5 Liability to inform and instruct

- 1. The following literature is available for your information and instruction:
- Catalogues and brochures
- Quotation rECOrds
- Tendering texts
- Mounting and operating instructions
- Purchasing information
- DIN standards
- 2. To ensure the functional efficiency of the locks:
- Architects, planners and other persons involved are advised to request all required product information from us and to observe the same
- Specialist dealers are advised to observe the product information and references in the price lists and catalogues and in particular to request all necessary instructions from us and pass these on to the person handling the mounting systems
- Persons installing the locks are advised to obtain and observe all information relating to the product and in particular to request instructions for operating and caring for the same from us and to pass these on to the customer / end use.

All persons involved should take care that the locks are properly mounted and installed and that the respective end user receives appropriate directions.



Product information and use of ECO Door closer technology

Attention should be paid to the following information about door closers for revolving doors, following the liability of the manufacturer for its own products defined in product liability law (§ 4 ProdHaftG). Failure to observe it will release the manufacturer from liability obligation.

Door closers serve to close revolving doors again after the manual opening procedure. The closing process takes place adjustably and hydraulically cushioned. The necessary closing force in relation to the leaf widths is established in EN 1154. The information of the manufacturer will be decisive in the case of different areas of use. Door closers are used in installed revolving doors made of metal, wood or plastic and their appropriate combinations of materials. The type of installation and the position is precisely stipulated in the case of fire protection doors, fire break and smoke protection doors or other standardized, self-closing doors. Differences from this will not correspond to use in accordance with regulations. The use of door closers in accordance with regulations presupposes vertical, easy-running doors with properly attached door closers. Installation and setting must be carried out expertly in accordance with the information of the manufacturer.

Door closers with large closing moments must be used in the case of unfavourable local conditions (e.g. the effect of wind). Door closers with back-check must be used, particularly in the case of revolving doors that open outwards and are subject to wind. The back-check contributes to the protection of people, door elements, adjoining walls and objects, without restricting the door opening angle. If it is not possible to rule out the possibility of the door leaf striking the frame near to the door rotation axis, because of the structural conditions of the door, a stopper that will restrict the maximum opening angle of the door must be set. A fixed open position of revolving doors can only be achieved with additional special metal fittings or integrated construction elements. The fittings must be perwithted in relation to building supervision by the Institut for Bautechnik in the case of fire protection doors, fire break and smoke protection doors (attention must be paid to evidence of the suitability of the door).

Door closers on revolving doors for damp rooms, unprotected external installation and use in environments with aggressive, corrosion-promoting air content or surroundings and those that are subject to high or extremely low temperatures will require special versions. Installation housing for floor springs must be sealed against dirt after installation

If floor springs are subject to penetrating water, e.g. in damp rooms, or without rain protection in the case of external doors, the space between the cement casing and the door closer housing must be filled with a suitable sealing compound.

If necessary, attention must be paid to binding legal regulations before installing door closers and bringing them into operation.

Incorrect use

Incorrect use of door closers for revolving doors - will say the use of the product not in accordance with regulations - will be present in particular if

- Obstructions in the doors sliding into the closing area, jamming seals wooden wedges etc constrain the closing process
- Incorrect or improper installation and / or setting is present
- There is an intervention in the area between the door frame and the door leaf (danger of injury!)
- Function in accordance with regulations is expected, beyond the promised characteristics, in the case of unusual low-pressure or overpressure effecting the door, e.g. storm
- Door closers are used for other reasons than closing the door
- The chosen door closer size does not match the rECOmmendation of the manufacturer

Product services

Special requirements must be discussed with the manufacturer and agreed by the manufacturer, provided that the product services are not described in catalogues, brochures, instructions etc in correct terms. The norm EN 1154 will be decisive. All basic and additional requirements are established to a great extent in this norm. The suitability of door closers for use is dependent of the frequency of operation, the mode of operation, the environmental influences and care, among other factors. Door closers must be replaced as soon as a perfect, safely functioning closing process is no longer guaranteed.

General notes



ECO recommends:

- For handle sets without spring we recommend to use locks according to **DIN 18251** class 3 or higher.
- In order to keep tolerances between handle and lock as small as possible we recommend to use locks accordings to **DIN 18251** with a special spring hub.
- The colour application of ECO fittings will withstand daily use if mounting and use are done properly. Excessive use with hard or edged items (keys, rings etc) might scratch the finishes. The function is, however, not affected. A warranty claim cannot be filed in this case





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