



METALWORKING

Weld-on hinges and accessories



Item	Page	Item	Page
Technical information	4 - 5	Hinges and accessories for fire doors	
Multi-3D hinge for aluminium and steel doors		KO 5-F/11	15
VN 3041	6	KO 5-F/12	15
VN 3032	6	KO 5-F/13	16
Multi-3D hinge for steel and concrete frames		KO 5-F/21	16
VN 3130	7	KO 5-F/21 N	17
VN 3330	7	KO 5-F/22	17
Multi-2D hinge for aluminium and steel doors		KO 5-F/31	18
VN 5045	8	KO 5-F/31 N	19
VN 5046	8	No. 440 Wall anchor	20
Multi-2D hinge for fire and smoke resistant doors		No. 443 Protective cap	20
VN 5133	9	No. 441 Securing pin	21
VN 5134	9	No. 444 Securing pin	21
Hinge for steel windows		2-part weld-on hinges	
KF 1	10	KO 40, KO 41, KO 42, KO 43 with round head	22
2-part weld-on hinges		KO 50, KO 51 with flat head	22
KO 1	11	KO 50 stainless steel with round head	22
KO 2	11	3-part weld-on hinges	
KO 4	12	KO 15	23
KO 4 stainless steel	12	KO 16	23
2-part weld-on hinges with welding edge		Steel and brass washers and ball bearing rings	24 - 25
KO 6	13	Wall protection case for steel frames	
KO 7	13	No. 404	26
3-part weld-on hinges		No. 405	26
KO 8	14	No. 406	27
KO 8 stainless steel	14	Frame anchor, corner connector and brackets	
		Frame anchor no. 452	28
		Corner connector for steel frames	28
		No. 460 Type 1 - 4	29

Weld-on hinges and accessories for metalworking

Weights and measures

The hinge size of rolled hinges is always specified without the head and interstice. All flap lengths are measured from the knuckle. Due to the tolerances of the raw material, no guarantee can be granted for the exact compliance with the specified weights and measures. Only approximate values can therefore be specified for all weights.



Loads on hinges

When a hinge is chosen or specified, the load is often equated to the weight of the door. The load on the hinge can often exceed the weight of the door by several times owing to various influencing factors. It is essential to take account of the following criteria to prevent damage at a later time:

- Location (e.g. residential buildings, public buildings, administration, barracks, schools, nurseries etc.)
- Material type of the element
- Opening frequency
- Door dimensions (overlapping width)
- Arrangement of the hinges
- Installation of the hinges
- Outward opening doors (wind trap)
- Door stops
- Door closers
- Wall soffits
- etc.

Even if these different criteria are taken into account, an additional reserve should always be calculated when a hinge is selected.

Particularly in public buildings, where unusual loads occur due to the incalculably high opening frequency and wear occurs (nurseries, barracks etc.), sufficiently proportioned hinges should be used even if this is unnecessary owing to the simple weight of the door.

Finally, the hinge is only as good as its installation. Professional fitting and appropriate mounting are therefore essential. Only correctly fitted hinges can fulfil their intended purpose.

The material strength of the structural element to be fitted and the tensional connection with the brickwork or framework is the basis of the respective function of the hinge. If questions arise regarding the correct choice of a hinge in special cases, we will be delighted to help.

Please contact us.

Third hinge

When a third hinge is used (250 or 370 mm below the upper hinge, in relation to the hinge reference line), the specified load capacity is increased by approx. 30%.

Extra-wide doors

Weld-on hinges are generally designed for the specified load values.

Please observe that the load values for door widths over 100 cm decrease by the percentage by which the door width of 100 cm is exceeded (e.g. door width 125 cm = load value ./ 25%).

A condition for this is always precise fitting according to SIMONSWERK installation instructions.

Special designs

If no hinge listed in this catalogue can be used for special designs, please send a scale cross-section drawing of the component design, if possible in 1:1 scale, to SIMONSWERK. We will quickly determine whether a correspondingly modified hinge can fulfil the requirements.

Finishes

Heavy duty hinges for metalworking are available depending on the type in bright steel, galvanised and also stainless steel.

Anticorrosive measures

Anticorrosive properties are provided by galvanised or colour powder coated hinges.

In damp rooms and for components exposed to the weather, only hinges made of stainless steel should be used because only this material guarantees resistance to corrosion. This material must also be maintained occasionally under extreme conditions (such as in coastal regions, swimming baths, rooms with corrosive atmosphere etc.) to remove rust film or deposits.

All other finishes are for appearance only.

Maintenance-free weld-on hinges

Only the **maintenance-free** SIMONSWERK heavy duty hinges require no initial greasing and no subsequent maintenance. The concealed, maintenance-free and abrasion resistant special slide bearings guarantee excellent operating properties and a long service life.

To achieve minimum abrasion and easy, silent operation of hinges which are **not** maintenance-free, it is essential to grease the hinges after installation. Depending on the frequency of use, the hinges must be greased occasionally. Black traces of dust at the hinges are a clear sign of material abrasion due to inadequate maintenance.

Delivery

Stock types are delivered in original packing units only. For special designs, surpluses or deficits of up to 10% of the ordered quantity are possible for technical reasons.

Drilling jigs and accessories

Rational and accurate drilling jigs (fitting aids) are available for hinges from SIMONSWERK. Numerous applications are described in Chapter "A" (installation aids).

Recommendation

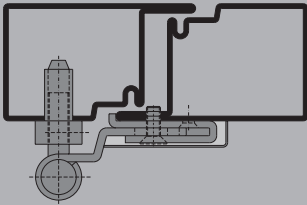
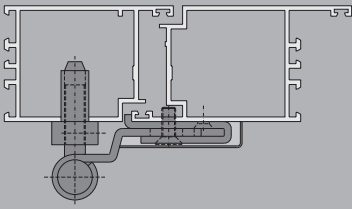
Install washers or ball bearings in hinges with loose pins.

Ordering

Specify the abbreviation and the dimensions of the hinge when ordering in the following order:

Example	a	b	c	d	e
800 pes. KO 2	60 x 23	x 23	x 6	x 2	mm DIN right
1200 pes. KO 4	180 x 50	x 50	x 16	x 5	mm

Multi-3D hinge for aluminium and steel doors

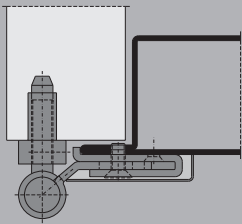


For fitting with:

- Multi-3D drilling jig VN 3041 simultaneous fitting



maintenance-free slide bearing technology



For fitting with:

- Special drilling jig



maintenance-free slide bearing technology

Note:

Multi-3D hinges for wooden and PVCu doors – see K catalogue page 10



Multi-3D hinge VN 3041

Three-dimensionally adjustable door hinge with maintenance-free slide bearings for aluminium and steel doors

- for unrebated, flush closing doors
- simple replacement by screw fastening
- short fitting time by accurate drilling jigs
- three-dimensional, infinite adjustability:
 - Side adjustment +/- 3 mm
 - Height adjustment +/- 4 mm
 - Depth adjustment up to +/- 3 mm
- simple adjustment even when installed
- maintenance-free by means of the self lubricating property of the special bearing material with excellent operating properties
- high load capacity up to 100 kg with 2 hinges
- also available with security pin

Finishes available:

satin nickel plated, satin chrome plated, white, brown and powder coated acc. to RAL colours, stainless steel

Packing unit:

2 pieces



Multi-3D hinge VN 3032

Version as VN 3041, but for rebated doors with an overlap of 5 - 8 mm

Finishes available:

white and brown powder coated

Packing unit:

2 pieces

Technical Details:

VN 3041 / VN 3032

Diameter of knuckle	20.0 mm
Hinge size	100.0 mm
Cover plate (W x H x D)	54 x 100 x 12.0 mm
Diameter of screw	3.9 mm
Drill bit diameter of frame receiver	12.0 mm
Drill bit diameter of screw holes	3.0 mm
Drill bit diameter of clamping screws	5.2 mm

Multi-3D hinge VN 3130

Three-dimensionally adjustable door hinge with maintenance-free slide bearings for rebated doors on steel and concrete frames. Frame mounting: for threaded drilling or heavy duty plug.

- in rebated design for overlap thicknesses of 13 - 18 mm
- this door hinge can be mounted on all common constructions due to the screw-on sash and frame receivers
- three-dimensional, infinite adjustability:
 - Side adjustment +/- 3 mm
 - Height adjustment +/- 4 mm
 - Depth adjustment up to +/- 3 mm
- simple adjustment even when installed
- maintenance-free by means of the self lubricating property of the special bearing material with excellent operating properties
- short fitting time by accurate drilling jigs
- high load capacity up to 100 kg
- pull-out strength due to angular fixing
- also available with security pin

Finishes available:

satin nickel plated, white, brown and powder coated acc. to RAL colours

Packing unit:

2 pieces



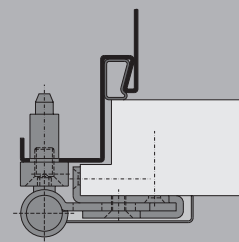
Multi-3D hinge VN 3330

Version as VN 3130, but for rebated doors on **concrete frames**. Frame mounting: heavy duty plugs or grouted TGL receivers.

Frame receiver with M 10 threaded pin.

Technical Details:

	VN 3130	VN 3330
Diameter of knuckle	20.0 mm	20.0 mm
Hinge size	100.0 mm	100.0 mm
Cover plate (W x H x D)	54 x 100 x 12.0 mm	54 x 100 x 12.0 mm
Diameter of screw (sash)	4.0 mm	4.0 mm
Drill bit diameter of screw holes	3.0 mm	3.0 mm
Drill bit diameter of frame receiver	12.0 mm	
Screws for frame receiver DIN 7991	M 8 x 16 mm	
Drill bit diameter of screws M 8	6.5 mm	

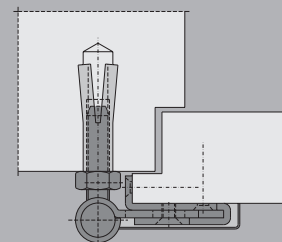


For fitting with:

- Special drilling jig



maintenance-free slide bearing technology



For fitting with:

- Special drilling jig

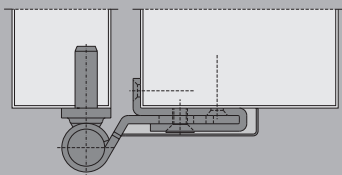


maintenance-free slide bearing technology

Note:

Multi-3D hinges for wooden and PVCu doors – see K catalogue page 10

Multi-2D hinge for aluminium and steel doors

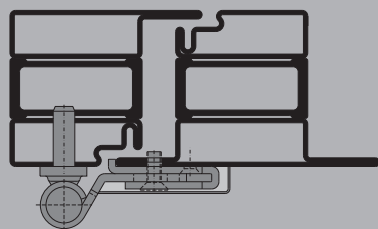
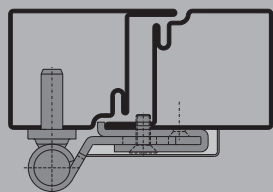


For fitting with:

- Special drilling jig



maintenance-free slide bearing technology



For fitting with:

- Multi-2D drilling jig VN 5046, simultaneous fitting.
- Special drilling jig required for stainless steel profiles.



maintenance-free slide bearing technology

Note:

Multi-3D hinges for wooden and PVCu doors – see K catalogue page 10



Multi-2D hinge VN 5045

Two-dimensionally adjustable door hinge with maintenance-free slide bearings for unrebated doors

- successfully tested on numerous fire and smoke resistant door sets
- for unrebated, flush closing doors
- simple replacement by screw fitting
- short fitting time due to accurate drilling jigs
- two-dimensional, infinite adjustability:
 - Side adjustment +/- 3 mm
 - Height adjustment +/- 4 mm
- packing plate for depth adjustment for frame part (thickness 1 mm)
- simple adjustment even when installed
- maintenance-free by means of the self lubricating property of the special bearing material with excellent operating properties
- high load capacity up to 100 kg with 2 hinges
- also available with security pin

Finishes available:

galvanised, satin nickel plated, satin chrome plated, white and brown powder coated

Packing unit:

20 pieces



Multi-2D hinge VN 5046

Version as VN 5045, but for **aluminium and steel doors**

Finishes available:

galvanised, white, brown and powder coated acc. to RAL colours, stainless steel

Packing unit:

20 pieces

Technical Details:

VN 5045 / VN 5046

Diameter of knuckle	20.0 mm
Hinge size	100.0 mm
Cover plate (W x H x D)	54 x 100 x 12.0 mm
Diameter of screw	3.9 mm
Drill bit diameter of frame receiver	9.2 mm
Drill bit diameter of screw holes	3.0 mm
Drill bit diameter of clamping screws	5.2 mm

Multi-2D hinge for fire and smoke resistant doors, system "Schröders"

METAL
WORKING

Multi-2D hinge VN 5133

Two-dimensionally adjustable door hinge with maintenance-free slide bearings for steel doors

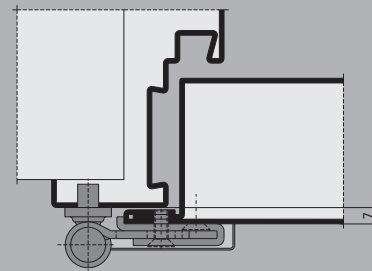
- tested on fire and smoke resistant door set for system "Schröders", overlap thickness 7 mm
- for heavy tubular profile constructions
- quick installation by simple screw fitting – without welding
- two-dimensional, infinite adjustability:
Side adjustment +/- 3 mm
Height adjustment +/- 3 mm
- packing plate for depth adjustment for frame part (thickness 1 mm)
- simple adjustment even when installed
- maintenance-free by means of the self lubricating property of the special bearing material with excellent operating properties
- also available with security pin

Finishes available:

galvanised and stainless steel

Packing unit:

20 pieces



For fitting with:

- Drilling jig VN 5133/5134 for simultaneous fitting



maintenance-free slide bearing technology

Multi-2D hinge VN 5134

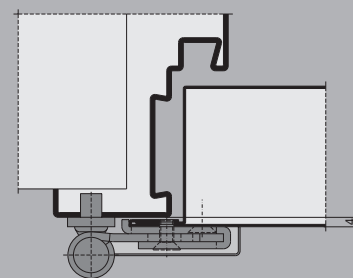
Version as VN 5133, but with overlap thickness 4 mm

Finishes available:

galvanised

Packing unit:

20 pieces



For fitting with:

- Drilling jig VN 5133/5134 for simultaneous fitting



maintenance-free slide bearing technology

Technical Details:

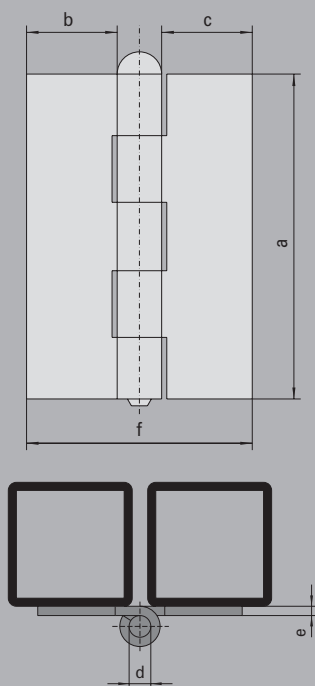
	VN 5133	VN 5134
Diameter of knuckle	20.0 mm	20.0 mm
Hinge size	100.0 mm	100.0 mm
Cover plate (W x H x D)	54 x 100 x 12.0 mm	54 x 100 x 12.0 mm
Screws M6		
Drill bit diameter of frame receiver	9.2 mm	9.2 mm
Drill bit diameter of screw holes	5.2 mm	5.2 mm
Drill bit diameter of clamping screws	5.2 mm	5.2 mm
Height	7.0 mm	4.0 mm

Note:

Multi-3D hinges for wooden and PVCu doors – see K catalogue page 10

KO hinges for windows and doors

METAL WORKING



Hinge KF 1

for steel windows, 5-part rolled knuckle,
straight flaps for welding,
with loose brass pin

Finishes available:
bright steel and galvanised

Packing unit:
20 pieces

Applicable for right- and left-hand acc. to DIN!

Technical Details:

a	b/c	d	e	f
60	21.5	6	2.5	55
95	26	7	3	65

Weld-on hinge KO 1

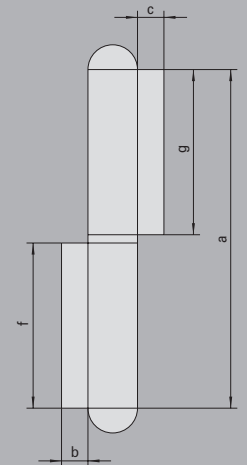
for steel frames and steel sashes, flaps for welding,
with galvanised ring pin (ring height 2.5 mm),
tips knurled and galvanised, for installation in
pressed fitting

Finishes available:

bright steel

Packing unit:

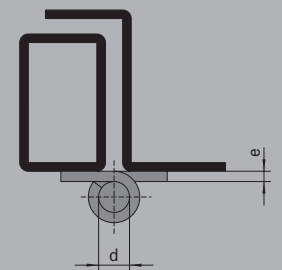
20 pieces unmounted



Applicable for right- and left-hand acc. to DIN!

Technical Details:

a	b/c	d	e	f/g
80	8	9	3	40
100	8	9	3	50
120	8	9	3	60



Weld-on hinge KO 2

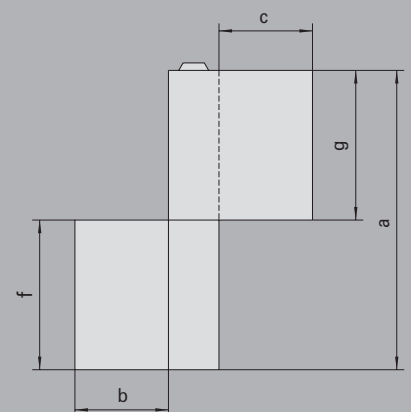
for steel frames and steel sashes, parallel flaps
for welding,
pin pressed into frame flap

Finishes available:

bright steel

Packing unit:

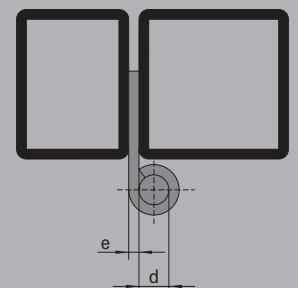
10 pieces



Please specify right- or left-hand acc. to DIN!

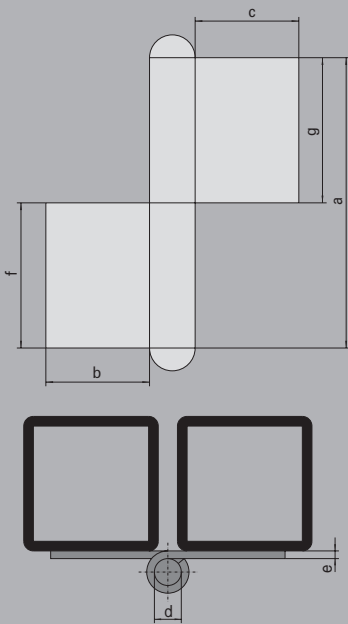
Technical Details:

a	b/c	d	e	f/g
60	23	6	2	30
80	25	8	2.75	40
100	35	9	3	50



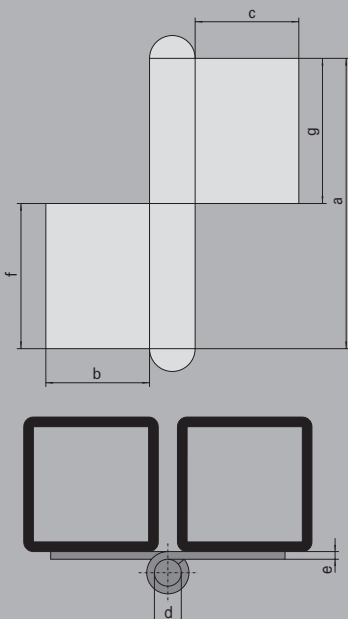
KO hinges for windows and doors

METAL WORKING



Note:

Install races for hinges with loose pin – see page 24.



Note:

Install washers or ball bearings for hinges with loose pin – see page 24.



Weld-on hinge KO 4

for steel frames and steel sashes, laps for welding,
with loose, galvanised pin, tips knurled and galvanised, for installation in pressed fitting

Finishes available:

bright steel and galvanised

Packing unit:

see table below

Technical Details:

a	b/c	d	e	f/g	units/pieces
80	30	9	3	40	10
100	30	8	2	50	10
100	30	9	3	50	10
120	30	9	3	60	10
140	8	14	4	70	10
140	50	14	4	70	10
160	13	14	4	80	10
160	50	14	4	80	10
160	50	16	5	80	6
180	8	14	4	90	10
180	50	14	4	90	10
180	50	16	5	90	6
200	50	14	4	100	10
200	50	16	5	100	6



Weld-on hinge KO 4 ER

Version as KO 4, but in stainless steel

Packing unit:

10 pieces

Technical Details:

a	b/c	d	e	f/g
140	50	12	3	70
160	50	12	3	80
180	50	12	3	90
200	50	14	4	100

Door hinges applicable for right- and left-hand acc. to DIN!

2-part weld-on hinges

Weld-on hinge KO 6

with fixed, galvanised ring pin and galvanised head for steel frames and steel sashes, welding edge approx. 5 mm long (b), placed to centre

Finishes available:

bright steel

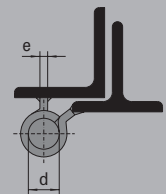
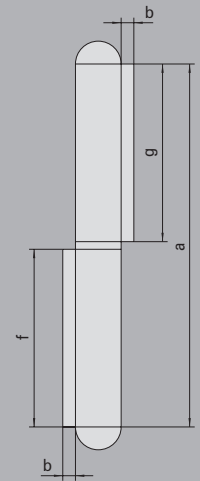
Packing unit:

see table below



Technical Details:

a	d	e	units/pieces
80	9	3	20
100	9	3	20
120	9	3	20
140	12	3	10
140	14	4	10
160	14	4	10



Weld-on hinge KO 7

with loose, galvanised steel pin and galvanised head for steel frames and steel sashes, welding edge approx. 5 mm long (b), placed to centre

Finishes available:

bright steel

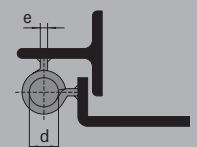
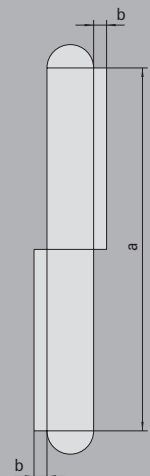
Packing unit:

see table below



Technical Details:

a	d	e	units/pieces
80	9	3	20
100	9	3	20
120	9	3	20
140	12	3	10
140	14	4	10
160	14	4	10

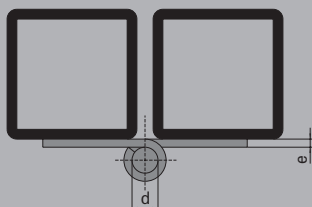
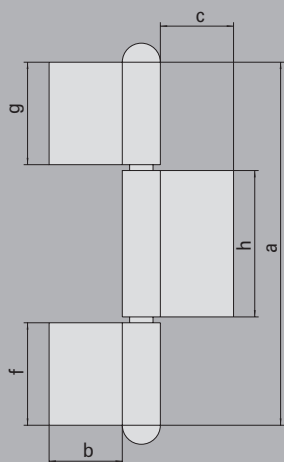


Note:

Install washers or ball bearings for hinges with loose pin – see page 24.

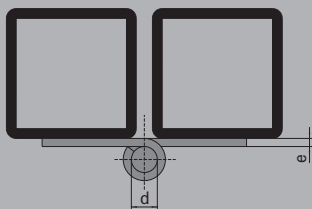
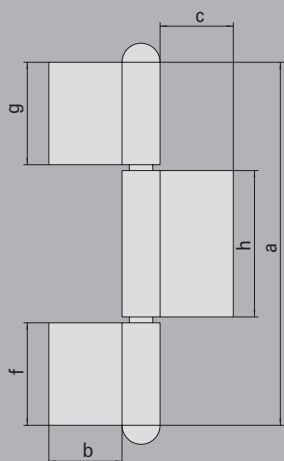
Door hinges applicable for right- and left-hand acc. to DIN!

KO hinges for doors



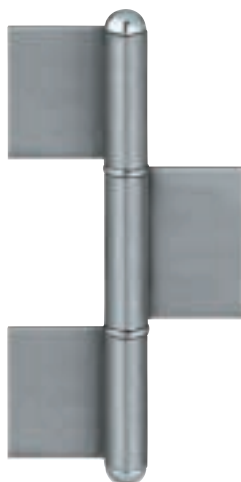
Note:

Washers or ball bearings must be ordered separately – see page 24.



Note:

Washers or ball bearings must be ordered separately – see page 24.



Weld-on hinge KO 8

for steel frames and steel doors, laps for welding, **with loose, galvanised pin**, tips knurled and galvanised, for installation in pressed fitting

Finishes available:

bright steel and galvanised

Packing unit:

6 pieces

Applicable for right- and left-hand acc. to DIN!

Technical Details:

a	b/c	d	e	f/g	h
180	50	14	4	60	60
220	50	14	4	70	80
240	50	16	5	70	100
260	50	16	5	80	100
260	50	20	6	80	100
300	50	20	6	100	100



Weld-on hinge KO 8 ER

Version as KO 8, but in stainless steel

Packing unit:

6 pieces

Applicable for right- and left-hand acc. to DIN!

Technical Details:

a	b/c	d	e	f/g	h
180	50	12	4	60	60
220	50	12	3	70	80
240	50	16	5	70	100
260	50	16	5	80	100

Weld-on hinge KO 5-F/11

Frame flap without jog,
for fire doors system "Hagen type B"
**with loose, hardened pin, oil groove, security pin
and hardened ball bearing, pin and tip galvanised**

Finishes available:
bright steel, galvanised and stainless steel

Packing unit:

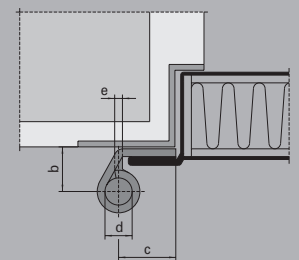
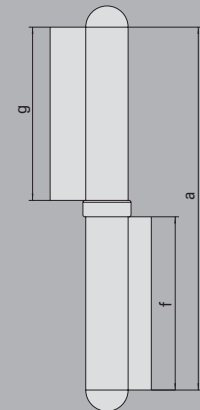
10 pieces



Applicable for right- and left-hand acc. to DIN!

Technical Details:

a	b	c	d	e	f/g
180	23	29.5	14	4	90



Weld-on hinge KO 5-F/12

Frame flap with jog,
for fire doors system "Hagen type B"
**with loose, hardened pin, oil groove, security pin
and hardened ball bearing, pin and tip galvanised**

Finishes available:
galvanised

Packing unit:

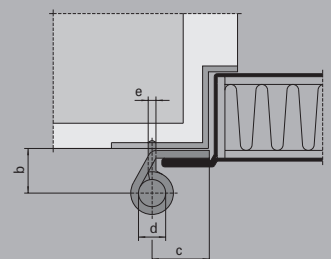
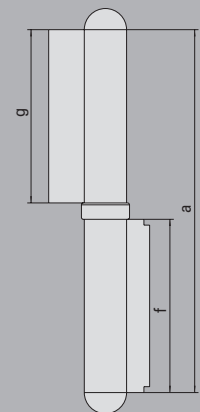
10 pieces



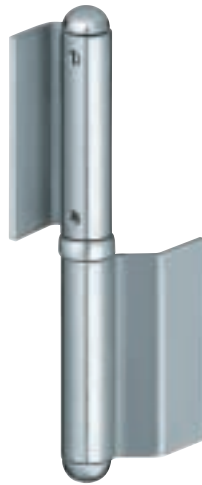
Applicable for right- and left-hand acc. to DIN!

Technical Details:

a	b	c	d	e	f/g
180	23	29.5	14	4	90



KO hinges for fire doors



Weld-on hinge KO 5-F/13

for fire doors T 30-1 according to DIN 18082,
**with loose, hardened pin, oil groove, security pin
and hardened ball bearing, pin and tip galvanised**

Finishes available:
bright steel and galvanised
Packing unit:
10 pieces

Applicable for right- and left-hand acc. to DIN!

Technical Details:

a	b	c	d	e	f/g
180	30	29.5	14	4	90



Weld-on hinge KO 5-F/21

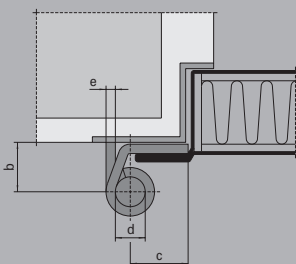
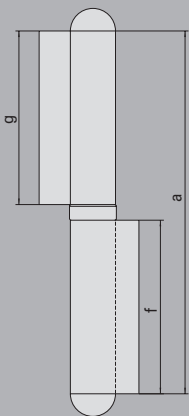
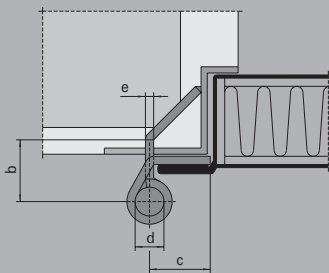
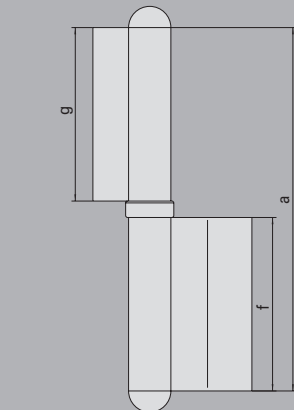
Frame flap without jog,
for fire doors
T 30-2 system Essen type
T 90-1 system NRW
T 30-1, T 30-2, T 90-1, T 90-2 system Schröder type
**with loose, hardened pin, oil groove, security pin
and hardened ball bearing, pin and tip galvanised**

Finishes available:
bright steel, galvanised and stainless steel
Packing unit:
6 pieces

Applicable for right- and left-hand acc. to DIN!

Technical Details:

a	b	c	d	e	f/g
200	26.5	31	16	5	100



Weld-on hinge KO 5-F/21 N

Frame flap without jog with shorter sash wing,
for fire doors

T 30-2 system Essen type

T 90-1 system NRW

T 30-1, T 30-2, T 90-1, T 90-2 system Schröder type

**with loose, hardened pin, oil groove, security pin
and hardened ball bearing, pin and tip galvanised**

Finishes available:

bright steel, galvanised and stainless steel

Packing unit:

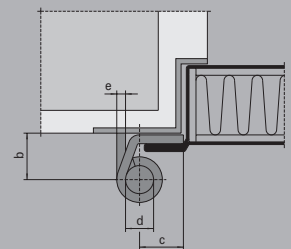
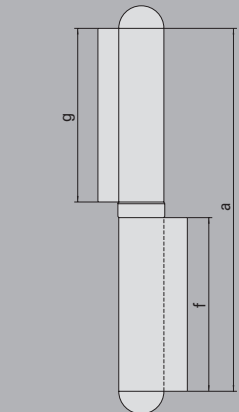
6 pieces



Applicable for right- and left-hand acc. to DIN!

Technical Details:

a	b	c	d	e	f/g
200	26.5	25	16	5	100



Weld-on hinge KO 5-F/22

Frame flap with jog,

for fire doors

T 30-2 system Essen type

**with loose, hardened pin, oil groove, security pin
and hardened ball bearing, pin and tip galvanised**

Finishes available:

bright steel and galvanised

Packing unit:

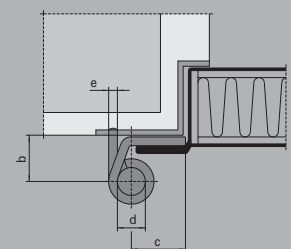
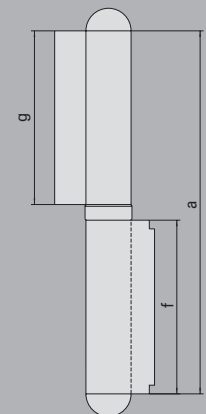
6 pieces



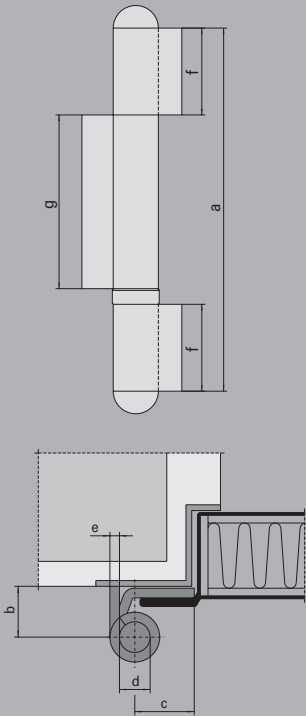
Applicable for right- and left-hand acc. to DIN!

Technical Details:

a	b	c	d	e	f/g
200	26.5	31	16	5	100



KO hinge for fire doors



Weld-on hinge KO 5-F/31

Frame flap without jog,

for fire doors

T 30-2 system Essen type

T 90-1 system NRW

T 30-1, T 30-2, T 90-1, T 90-2 system Schröder type

**with loose, hardened pin, oil groove, security pin
and hardened ball bearing, pin and tip galvanised**

Finishes available:

bright steel and galvanised

Packing unit:

6 pieces

Applicable for right- and left-hand acc. to DIN!

Technical Details:

a	b	c	d	e	f/g
200	26.5	31	16	5	50/100

Weld-on hinge KO 5-F/31 N

Frame flap without jog with shorter sash wing,
for fire doors

T 30-2 system Essen type

T 90-1 system NRW

T 30-1, T 30-2, T 90-1, T 90-2 system Schröder type

**with loose, hardened pin, oil groove, security pin
and hardened ball bearing, pin and tip galvanised**

Finishes available:

bright steel and galvanised

Packing unit:

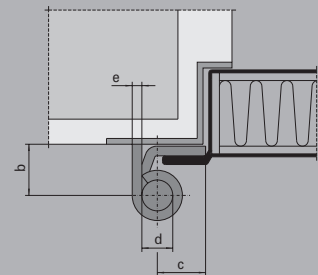
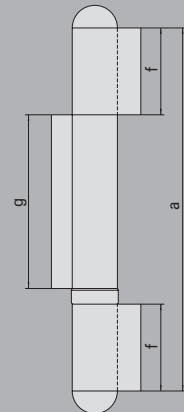
6 pieces

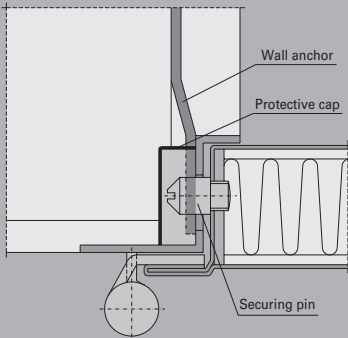


Applicable for right- and left-hand acc. to DIN!

Technical Details:

a	b	c	d	e	f/g
200	26.5	25	16	5	50/100





Wall anchor no. 440

for fire doors T 30-2 system Essen type,
for bolting

Finishes available:

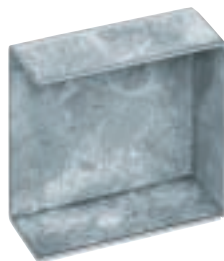
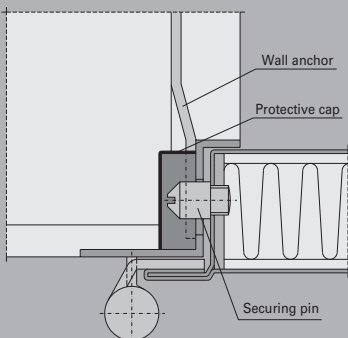
bright steel

Packing unit:

50 pieces

Technical Details:

Total length	190 mm
Total width	40 mm
Thickness of material	4 mm



Protective cap no. 443

for fire doors, meant for the rebate hole
of the securing pin,
for welding

Finishes available:

galvanised

Packing unit:

500 pieces

Technical Details:

Total length	40 mm
Total width	40 mm
Total depth	15 mm
Thickness of material	1 mm

Securing pin no. 441

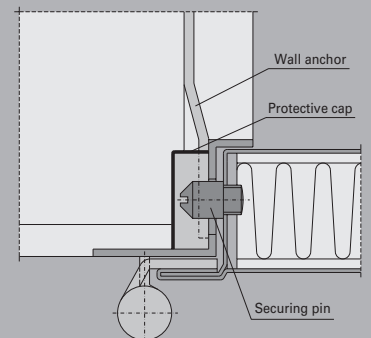
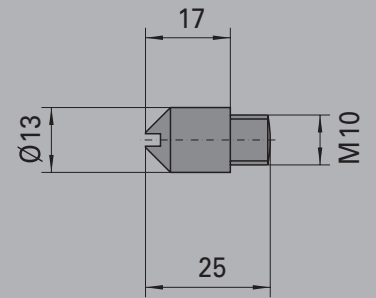
for fire doors
T 30-2 system Essen type and
T 90-1 system Hagen type,
for screwing in

Finishes available:

bright steel

Packing unit:

100 pieces



Securing pin no. 444

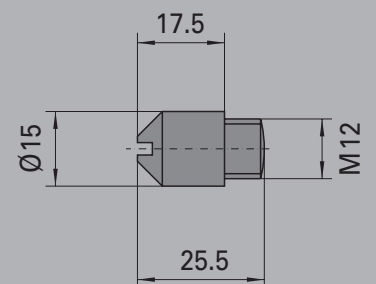
for fire doors
for screwing in

Finishes available:

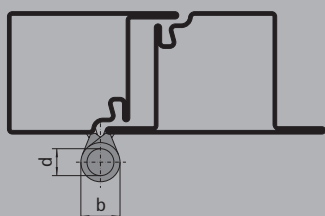
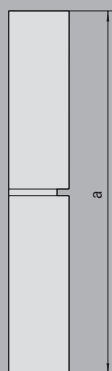
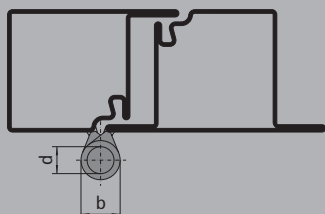
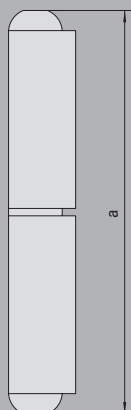
bright steel and galvanised

Packing unit:

100 pieces



2-part weld-on hinges



Applicable for right- and left-hand acc. to DIN!

Weld-on hinge with round head

2-part, made of drawn steel profile with lug for welding and brass washer

KO 40 with steel pin

KO 41 with brass pin

KO 42 with continuous, loose steel pin

KO 43 with continuous, loose brass pin

Finishes available:

bright steel

Packing unit:

25 pieces

Technical Details:

a	b	d
45	10	6
60	10	6
80	13	8
100	16	10
120	16	11
140	20	12
160	20	12
180	20	14



Applicable for right- and left-hand acc. to DIN!

Weld-on hinge with flat head

2-part, made of drawn steel profile with lug for welding

KO 50 with steel pin

KO 50 stainless steel (*)

KO 51 with brass pin

Finishes available:

bright steel and stainless steel

Packing unit:

25 pieces bright steel (with **brass washer**)

20 pieces stainless steel (with **stainless steel washer**)

Technical Details:

Steel			Stainless steel		
a	b	d	a	b	d
45	9	5	60	10	6
60	10	5.5	80	13	8
80	13	7	100	16	10
100	16	9	120	16	11
120	16	9	150	20	13
140	20	11			
160	20	12			
180	23	13			

Note:

(*) KO 50 in stainless steel with round head

3-part weld-on hinges

Weld-on hinge KO 15

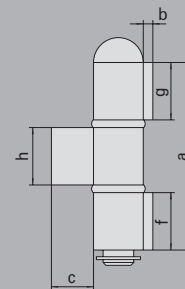
3-part, for steel doors, **with loose, galvanised pin** and brass washers, with flaps for welding

Finishes available:

bright steel

Packing unit:

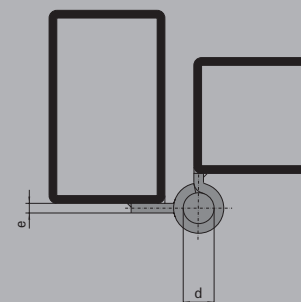
10 pieces



Applicable for right- and left-hand acc. to DIN!

Technical Details:

a	b	c	d	e	f/g/h
90	5	22	16	5	30
105	5	29	20	6	35



Note:

Pin secured by locking ring.

Weld-on hinge KO 16

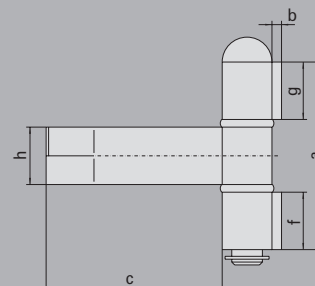
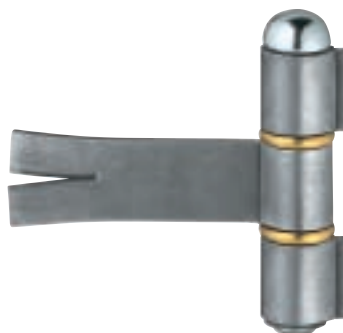
3-part, for steel doors, **with loose, galvanised pin** and brass washers, with flaps for welding

Finishes available:

bright steel

Packing unit:

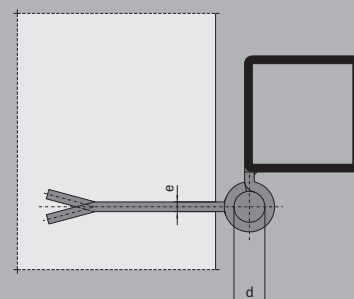
10 pieces



Applicable for right- and left-hand acc. to DIN!

Technical Details:

a	b	c	d	e	f/g/h
90	5	92	16	5	30
105	5	99	20	6	35



Note:

Pin secured by locking ring.

Steel and brass washers and ball bearing rings



Steel washers

for butt hinges, screw-on and
weld-on hinges

punched iron rings

Finishes available:

galvanised and brass plated

Packing unit:

100 pieces in PE bag

Technical Details:

Diameter of pin	Ring height	Outside diameter
mm	mm	mm
7	2	11.5
8	2	12.5
9	2	13.5
10	2	14.5
11	2	15.5
12	2	16.5
13	2	17.5
14	2	18.5
16	2	20.5



Steel washers

Steel washers with turned edge

Finishes available:

bright steel and galvanised

Technical Details:

Diameter of pin	Ring height	Outside diameter
mm	mm	mm
14	4	24
16	4	28

Note:

Please specify pin diameter
when ordering.

Brass washers

brass washers with turned edge



Technical Details:

Diameter of pin	Ring height	Outside diameter
mm	mm	mm
10	2	16
12	2.5	18
14	4	24
16	4	28

Steel ball bearing rings

Ball bearing rings (cylindrical/hardened)
with steel case



Finishes available:

galvanised and nickel plated

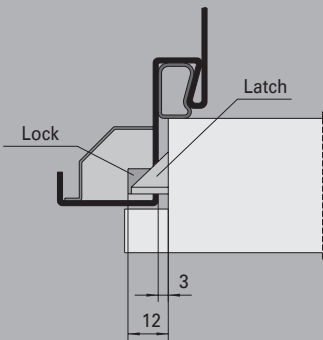
Technical Details:

Diameter of pin	Ring height	Outside diameter
mm	mm	mm
10	6	17.5
11	7	20
12	8	22
14	8.5	25
16	9	27
20	10	33

Note:

Please specify pin diameter
when ordering.

Wall protection cases for steel frames



Wall protection case no. 404

for rebated steel frames

Finishes available:

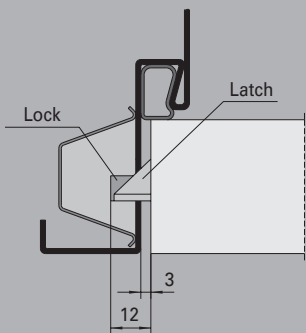
galvanised

Packing unit:

1000 pieces

Technical Details:

Total length	185.0 mm
Total width	35.0 mm
Total depth	21.3 mm
Thickness of material	0.7 mm



Wall protection case no. 405

for unrebated steel frames

Finishes available:

galvanised

Packing unit:

800 pieces

Technical Details:

Total length	183.0 mm
Total width	44.0 mm
Total depth	22.3 mm
Thickness of material	0.7 mm

Wall protection cases prevent mortar from entering into the lock and latch openings of the steel frames.

Wall protection case no. 406

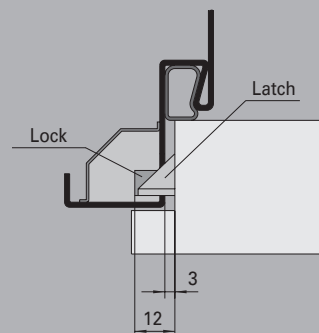
for rebated steel frames

Finishes available:

galvanised

Packing unit:

1000 pieces

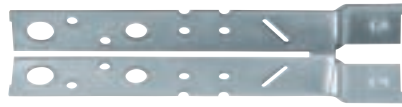
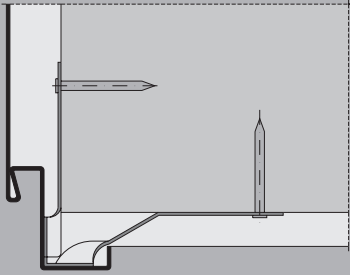


Technical Details:

Total length	210.0 mm
Total width	34.5 mm
Total depth	21.3 mm
Thickness of material	0.7 mm

Wall protection cases prevent mortar from entering into the lock and latch openings of the steel frames.

Frame anchor for steel frames in brickwork



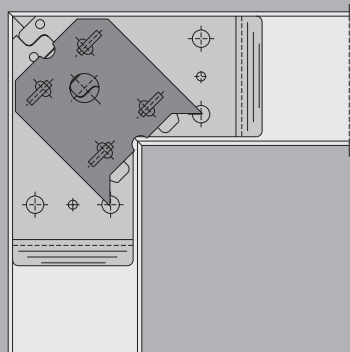
Frame anchor no. 452

for corner frames

Finishes available:
galvanised

Technical Details:

Total length	148.0 mm
Total width	26.5 mm
Thickness of material	1.25 mm



Corner connector

for steel clip-assembly frames for welding

Corner connectors for clip-assembly frames can be manufactured according to the respective frame designs.

Please contact us!

Brackets for steel frames in framework walls

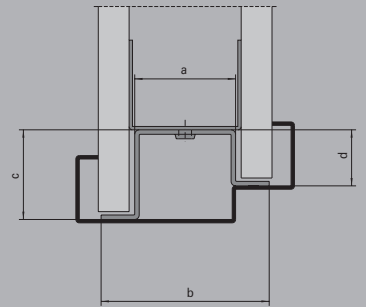
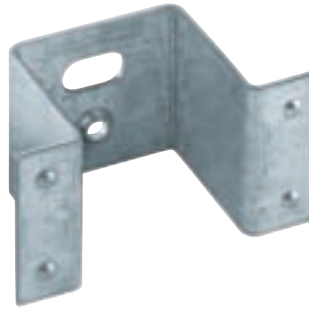
METAL WORKING

Bracket no. 460

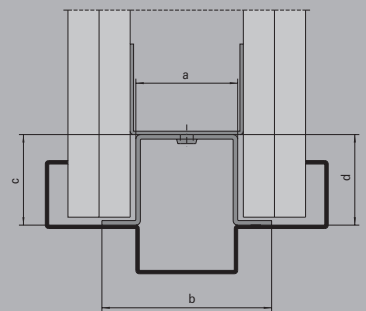
Type 1 - 4

for framework walls, for welding on steel frames

Finishes available:
galvanised



Type 1 - 3



Type 4

Technical Details:

Thickness of material 2 mm

Bracket height 40 mm

	a	b	c	d
Type 1	45	75	40	25
Type 2	70	100	40	25
Type 3	95	125	40	25
Type 4	45	75	40	40

Your SIMONSWERK-partner:



 **simonswerk**

Hinges & Things Ltd.

Burcot Works, Spring Street,
Tipton, West Midlands DY4 8TF
Phone 0121 522 2848
Fax 0121 557 7042
Internet: www.hinges-things.co.uk
eMail: sales@hinges-things.co.uk

SIMONSWERK GmbH

Bosfelder Weg 5
D-33378 Rheda-Wiedenbrück
Phone + 49 (0) 52 42 / 4 13-0
Fax + 49 (0) 52 42 / 4 13-2 60
Internet: www.simonswerk.de
eMail: mail@simonswerk.de