



HELM Hardware for Sliding Gates

 HELM

Sliding hardware

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HELM sliding hardware is very versatile.

High-quality materials and more than 90 years of experience in developing and manufacturing of sliding hardware guarantee the long service life of the HELM hardware. With a wide range and manifold possibilities to manufacture individual solutions HELM stands, above all, for a very versatile range of applications.

The most common applications of the HELM sliding hardware can be found in the field of straight sliding gates. With the track series HELM 100 up to HELM 700 we offer a comprehensive range up to 2000 kg door weight. Moreover, for higher door weights special rollers up to 8000 kg door weight are manufactured.

In addition to the classic, straight sliding hardware we present also many special applications for sliding doors and gates, as well as mobile partition solutions in this catalogue:

- round the corner sliding door hardware
- folding hardware
- concertina door hardware
- parallel sliding and stacking hardware
- hardware for flush sliding installations

For these special solutions you will find the respective schematic depictions of the installation types and further information regarding the distinctive features. Furthermore, we offer you the opportunity to use our consulting service easily and quickly with the help of the respective enquiry forms.



Straight Sliding Hardware

As a matter of course the HELM hardware for straight sliding gates complies with the requirements of DIN 1527:1998 and are also tested for fire doors (profile 400 to 700) according to DIN 18200 and 4102-18.

Particularly the 100.000 cycles test with the double-pair trolley hangers of the -91 series stands for the long service life of the HELM hardware up to 2000 kg door weight. High-quality ball bearings make the excellent running properties also in higher weight classes possible.

But also achieving the corrosion resistance according to class 3 (according to EN 1670: class 1-4) is crucial for outdoor use. For special requirements in this field the track series 100 to 500 with the relevant accessories are also manufactured in stainless steel.

On the following Pages you will find all the necessary information for choosing the right track series (page 6 and 7) and regarding the possible applications with the respective set combinations (pages 14 to 21).

Certification according to DIN EN 1527:1998

HELM tracks 100 to 700 have been tested in combination with double-pair trolley hangers according to DIN 1527: 1998. This standard makes a simple and quick comparison of different products possible according to the following criteria:

Criteria of DIN EN 1527:

Service life time:

Classes: 1 = 2,500 cycles, 2 = 5,000 cycles, 3 = 10,000, 4 = 25,000 cycles, 5 = 50,000 cycles, 6 (highest class) = 100,000 cycles

Door weight:

Classes: 1 = up to 50 kg, 2 = 50-100 kg, 3 = 100-330 kg, 4 = more than 330 kg

Corrosion resistance:

0 (no requirement) - 4 (highest class)

Type of door:

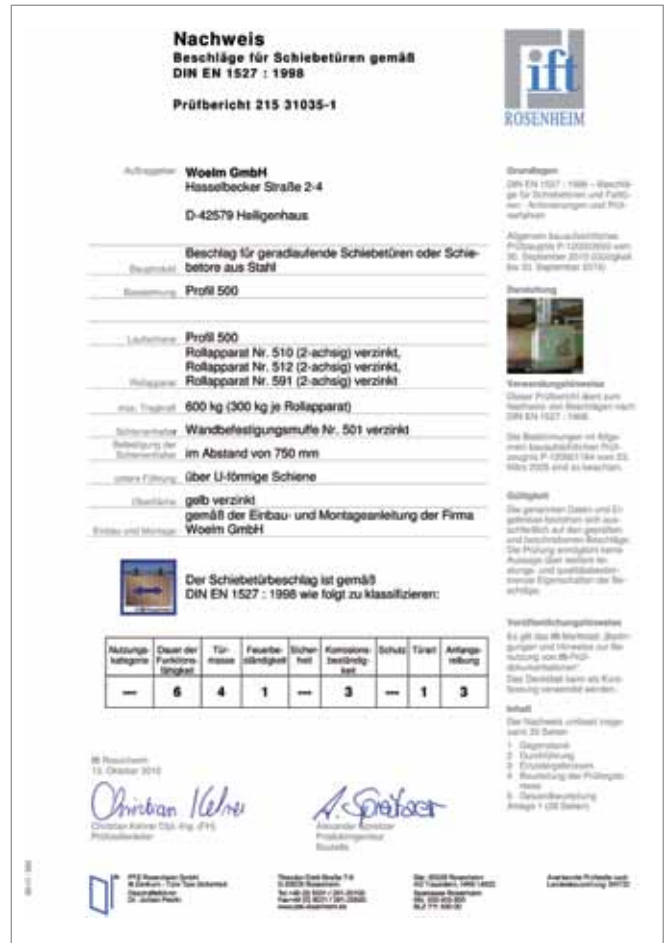
1 = sliding door, 2 = double folding door, 3 = multi-leaf folding door

Initial friction:

Door weight	up to 50 kg	up to 100 kg	up to 330 kg	more than 330 kg
Class 1	50 N	80 N	100 N	5 % of door weight
Class 2	40 N	60 N	5 % of door weight	4 % of door weight
Class 3	30 N	40 N	4 % of door weight	3 % of door weight

Test results:

HELM track	in combination with trolley hanger	Max. tested bearing load	Service life time	Door weight	Corrosion resistance	Type of door	Initial friction
100	191, 191S, 110, 112	90 kg	6	2	3	1	3
300	391, 391 S, 391EL, 392	170 kg	6	3	3	1	3
400	491, 491S, 491 EL, 412	300 kg	6	3	3	1	3
500	510, 512, 591, 591S, 591EL	600 kg	6	4	3	1	3
600	610, 691, 691S, 691EL	1200 kg	6	4	3	1	3
700	791, 791S, 791EL	2000 kg	6	4	3	1	3



Determining the Tracks




Track Dimensions

Based on load-bearing capacity of one or double-pair trolley hangers the correct track dimension can be determined with help of the following tables.

The decision on the construction of the trolley hangers depends on the door weight. Generally double-pair trolley hangers have better running properties.




Trolley hangers for the track dimensions 100 to 500 can also be supplied with plastic-coated rollers.

Max. permissible gate weight

Profile	100	300	400	500	600	700	
Manual gate operation 	steel rollers	60 kg	130 kg	200 kg	400 kg	800 kg	1400 kg
	plastic rollers*	45 kg	110 kg	150 kg	300 kg	-	-
Manual gate operation 	steel rollers	100 kg ¹⁾	200 kg ¹⁾	400 kg ¹⁾	600 kg	1200 kg	2000 kg
	plastic rollers*	70 kg	140 kg	240 kg	480 kg	-	-
Electrical gate operation 	steel rollers	-	140 kg	240 kg	480 kg	950 kg	1400 kg
	plastic rollers*	-	-	-	-	-	-

¹⁾ Note: certified according to DIN 1527, 100.000 cycle test, with the following values: profile 100 with 90 kg, profile 300 with 170 kg, profile 400 with 300 kg gate weight. The values according to above table can be guaranteed for normally used sliding gates.

Max. admissible load bearing capacity

Profile	100	300	400	500	600	700	
Manual gate operation 	steel rollers	30 kg	65 kg	100 kg	200 kg	400 kg	700 kg
	plastic rollers*	23 kg	55 kg	75 kg	150 kg	-	-
Manual gate operation 	steel rollers	50 kg	100 kg	200 kg	300 kg	600 kg	1000 kg
	plastic rollers*	35 kg	70 kg	120 kg	240 kg	-	-
Electrical gate operation 	steel rollers	-	70 kg	120 kg	240 kg	475 kg	700 kg
	plastic rollers*	-	-	-	-	-	-

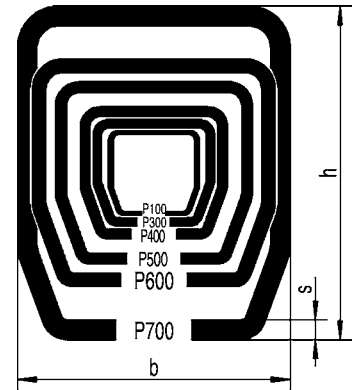
*plastic-sheathed rollers

Track Profiles

HELM Tracks

The HELM tracks are available in steel blank or zinc-plated, in stock lengths of max. approx. 6000 mm or in fixed lengths. The profiles HELM 100, 300, 400 and 500 are also made of stainless steel.

Fixing brackets are to be planned with a spacing of 750 mm. The track hanging can be adjusted to the structural conditions according to the specifications from Page 22.



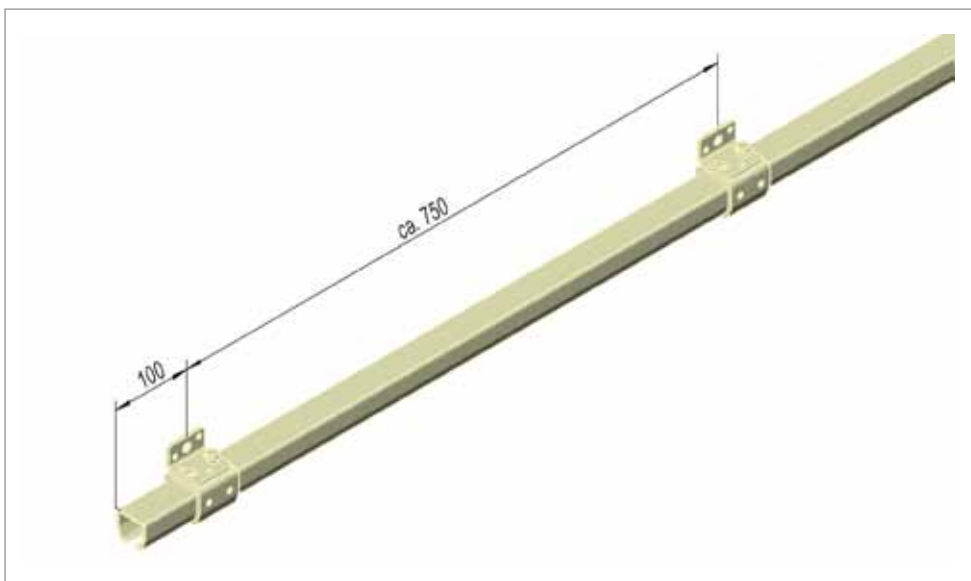
Track profile in steel

Profile size	100	300	400	500	600	700
h (mm)	28	35	43.5	60	75	110
b (mm)	30	40	48.5	65	80	90
s (mm)	1.75	2.75	3.2	3.6	4.5	6.5

Track profile in stainless steel

Profile size	100	300	400	500
h (mm)	28	35	43.5	59
b (mm)	30	40	48.5	64
s (mm)	1.6	3	3.1	3.5

Hanging spacings



Rail stops and Gate stops

Rail stops

Rail stops are supplied as travel path limiters which prevent the trolley hangers from running off and thus the gate leaves from falling down during mounting.

HELM rail stops are not suitable for intercepting the door or gate leaves.



HELM Rail stop for profile dimensions HELM 300 up to HELM 500



HELM Rail stop for profile HELM 300 up to HELM 700

Gate stops

For stopping the door or gate leaves a door stop is to be mounted half way up the gate leaf.

In case of door or gate installations of a height of more than 2.50 m two stops are to be mounted respectively in the middle of the top and bottom leaf half.

In case of heavy gate leaves the gate stops mounted with steel spring are recommended.

Extra heavy gate leaves and fire doors make the use of hydraulic stops (fig. 1) necessary (information on request).



Gate stop for light door or gate leaves up to 300 kg leaf weight



Gate stop with steel spring for heavy gate leaves up to 2000 kg door weight

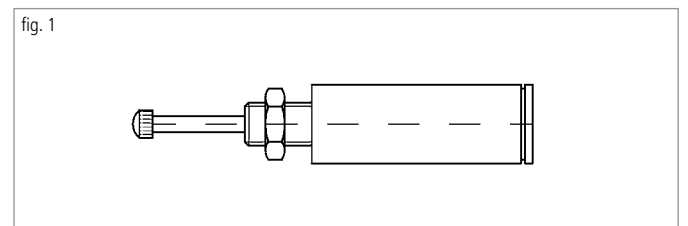


fig. 1

More accessories from page 38

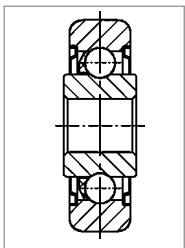
HELM Rollers and Trolley Hangers

The decision on the construction of the trolley hangers depends on the door weight (see Page 6). Due to the better guiding in the profile track double-pair trolley hangers with pendulum hinge (fig. 2), than the one-pair construction (fig. 1), ensure significantly better running properties.

Trolley hangers for the profile dimensions 100 to 500 are also available with rollers including plastic outer ring for low-noise operation. In this case the load bearing capacity is decreased by approx. 15% to 25% (see Page 6).

HELM Rollers

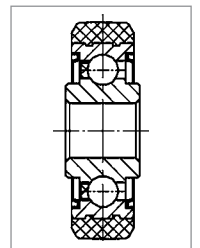
The rollers are designed for the temperature range of -20°C up to +115° C.



HELM hardened roller for trolley hangers in the profile sizes 100 - 700

HELM Special lubrications on request

- 1. "cowshed" grease T = -10°C up to +140°C
- 2. high-temperature grease T = -30°C up to +260°C
- 3. deep-freeze grease T = -40°C up to 140°C



HELM plastic-sheathed rollers. This type is available for trolley hangers in the profile sizes 100 - 500.

Technical information

HELM Trolley Hangers (two trolley hangers per leaf are used only)



fig. 1

Series -90 one-pair trolley hanger with pendulum hinge of plastic or steel, height-adjustable



fig. 2

Series -91 double-pair trolley hanger with pendulum hinge of plastic or steel, height-adjustable



Series -92 double-pair trolley hanger with pendulum hinge of plastic or steel and with counter-pressure roller for sliding leaves with top-hung leaves, height-adjustable



Series -91 EL double-pair trolley hanger with pendulum hinge of plastic or steel, with 2 transverse rollers for electrically operated gates, height-adjustable



Series -91/85 double-pair trolley hanger with pendulum hinge of steel for fire-protection sliding gates, height-adjustable



double-pair special trolley hanger - for load-bearing capacity up to 1500 and 4000 kg - for gate weights 3000 and 8000 kg

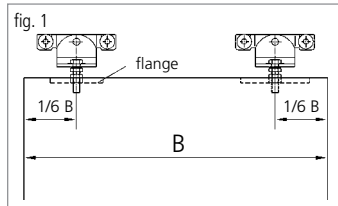
More accessories from page 32

Hanging Material for Leaves (Flanges and Angle Brackets)

Hanging material for leaves – flange -93 and -93 S

Flanges (fig. 2 and fig. 3) for hanging the sliding leaves that are wider (B) than high (H). Positioning at the outer edges with a spacing of $1/6$ of the total width of the leaf guarantees a suspension in the gravity centre and a smooth-running, trouble-free operation of the hardware and the gate.

Independent of the leaf width only two trolley hangers per leaf are used.



HELM Flange of the series -93 (fig. 2) for bolting down with timber leaves

HELM Flange of the series -93 S (fig. 3) for welding on steel leaves

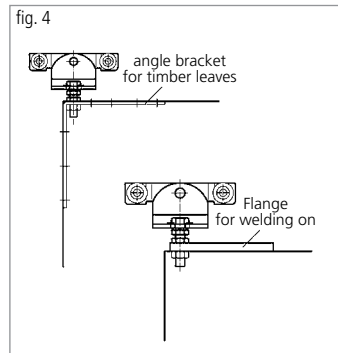


Hanging material for leaves – flange -94 and -96 S

Support bracket (fig. 6) or flange (fig. 5) for suspending the sliding gates that are higher than wide.

Running track gets longer (Fig.4) -

- a) due to projection of the rolls
- b) due to mounting of the track stops



HELM Angle bracket of the series -94 (fig. 6) for bolting down with timber leaves

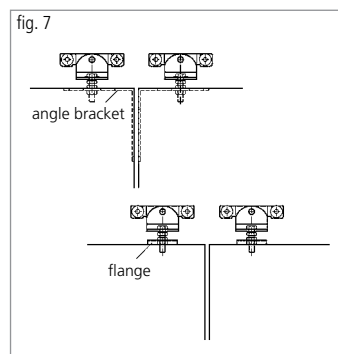


HELM Flange of the series -96 S (fig. 5) for welding on steel leaves

Hanging material for leaves – flange -95 and -93 S

Angle bracket or flange for hanging the leaves.

Use e. g. for double doors.



HELM Angle bracket of the series -95 (fig. 9) for bolting down with timber leaves



HELM Flange of the series -93 S (fig. 8) for welding on steel leaves

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HELM Bottom Guide - Pressure Rollers, Guide Rollers and Glides

In order to achieve a trouble-free and smooth-running operation of the sliding leaves a bottom guide should be incorporated, if possible. For this HELM hardware offers a choice of standard parts. The decision on the kind of bottom guide depends on the constructional conditions of the location and the following factors:

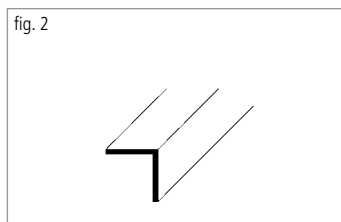
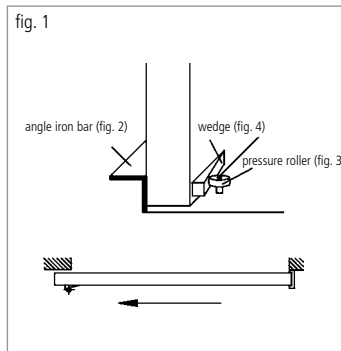
- the use as sliding door or gate door for closing off of a hall to the outside or for separating of inside rooms
- the dimension of the usable clearance (height and width)
- the number of the door or gate leaves
- the weight, the size and the material (timber/steel/aluminium) of the door or gate leaf
- the constructional conditions (e. g. structural analysis), as well as the regulations with regard to safety or fire protection.

HELM Pressure rollers and wedge

Pressure roller (fig. 3) and wedge (fig. 4) as well as angle iron bar (fig. 2) with claw for specially good waterproofing of exterior doors or gates.

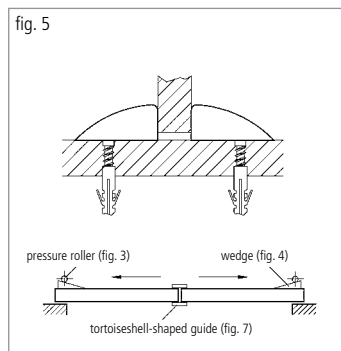
Benefit:

No water intrusion in case of upright angle iron bar.
No movement in case of wind.



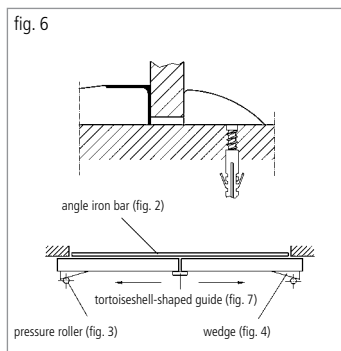
HELM Adjustable tortoiseshell-shaped guide

Adjustable tortoiseshell-shaped guides (fig. 7) with 2 wedges (fig. 4) and 2 pressure rollers (fig. 3). Guiding of 2 door leaves to the centre on continuous floor. No tyre damage when passing through.

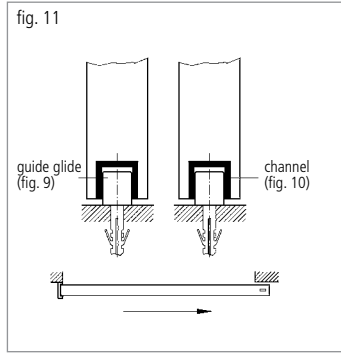


HELM Tortoiseshell-shaped guide with angle bar

Adjustable tortoiseshell-shaped guides (fig. 8) with wedges (fig. 4), pressure rollers (fig. 3) and angle bars (fig. 2 - to be supplied by the customer).

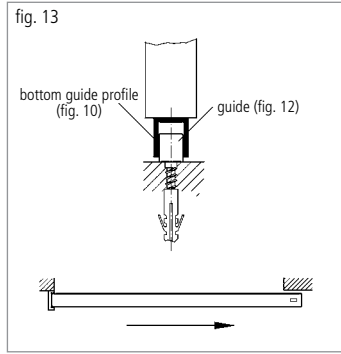


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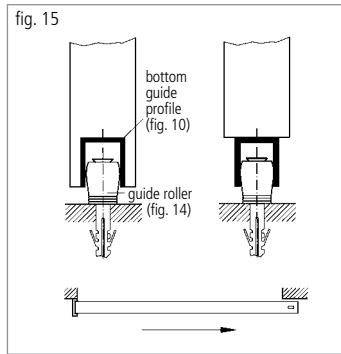
HELM Plastic guide glide

Plastic guide glide (fig. 9) including plug with bottom guide profile integrated in timber leaf (fig. 10).



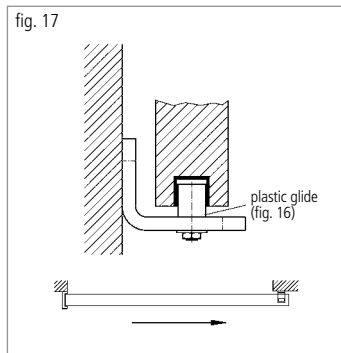
HELM Guide of malleable cast iron

Guide of malleable cast iron with plastic plugs (fig. 12) and hexagonal screws. Used in combination with bottom guide profile fixed below the door leaves (fig. 10) for steel leaves.



HELM Plastic guide roller

Plastic guide roller including plug (fig. 14), with bottom guide profile integrated in the timber leaf or mounted below the steel leaf (fig. 10).



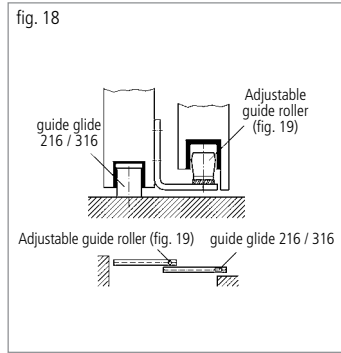
HELM Plastic glide

Adjustable plastic glide (fig. 16) on zinc-plated angle bracket for use in timber leaves.

▶ More accessories from page 39

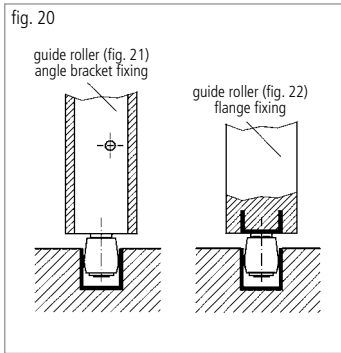
HELM Adjustable guide roller

Adjustable guide roller (plastic or brass) (fig. 19) on zinc-plated angle bracket and plastic guide peg. For guiding fixed on the side, staggered door leaves (fig. 18).



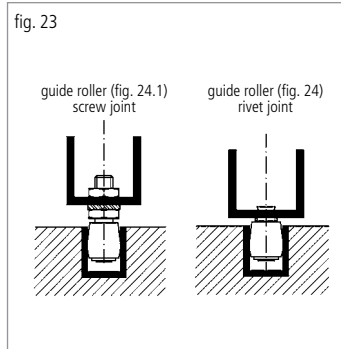
HELM Guide roller angle bracket and flange fixing

Guide roller with angle bracket (fig. 21) and flange fixing (fig. 22). Suitable in combination with bottom guide profile for timber leaves.



HELM Guide roller for steel leaves

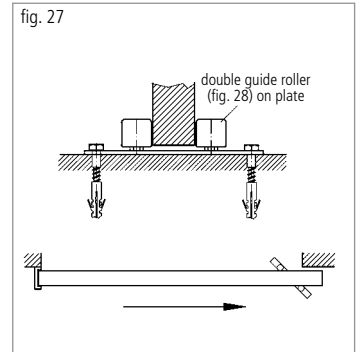
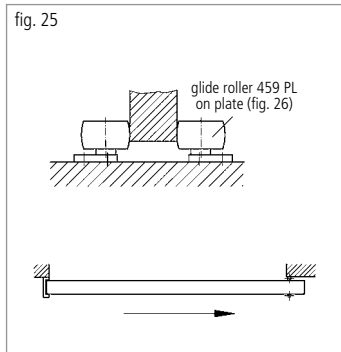
Guide roller (fig. 24 and fig. 24.1) for steel leaves with screw or rivet or welded joint. Zinc-plated with plastic or brass roller. Used in combination with bottom guide profile.



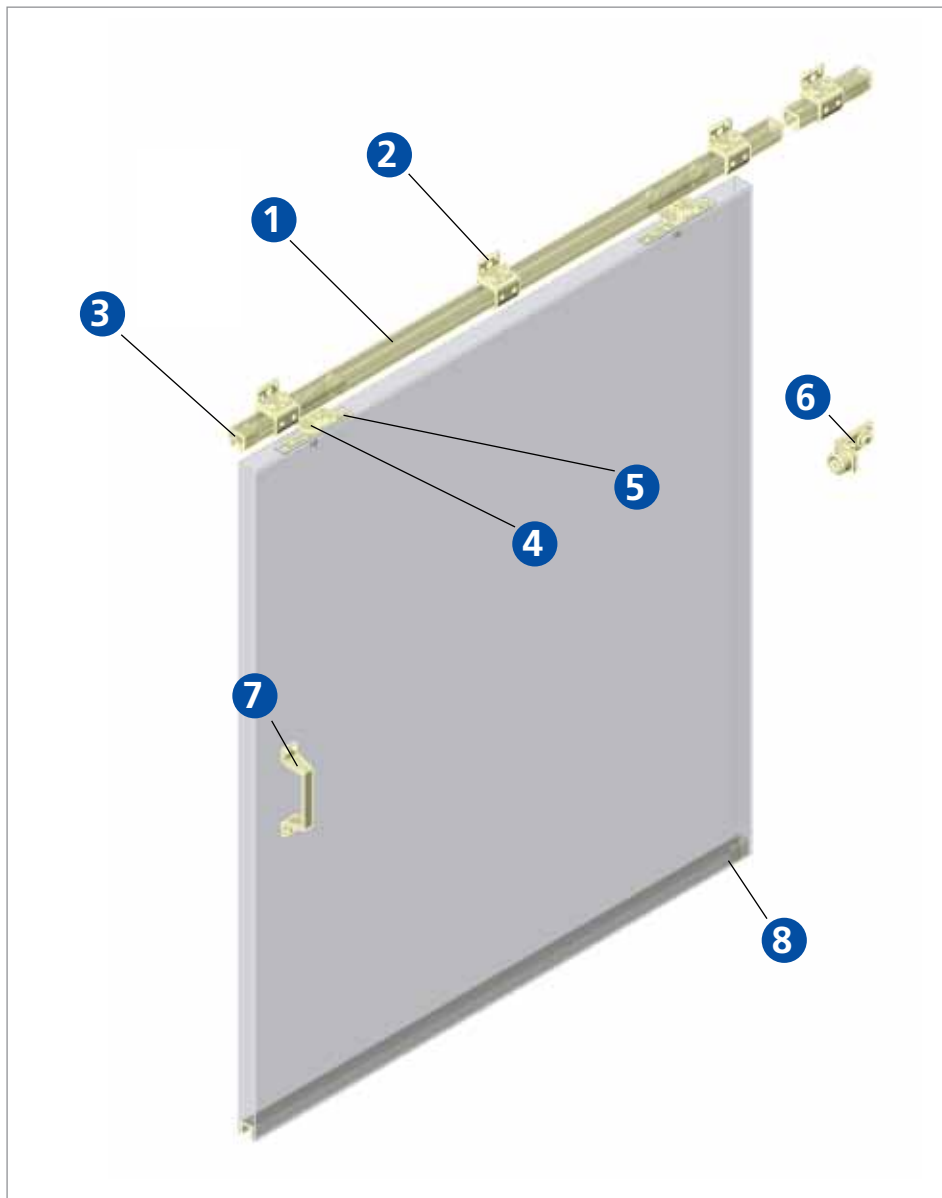
HELM Guide rollers with plate

Guide roller on plate (fig. 26) for bolting down or with plastic plug for boring in.

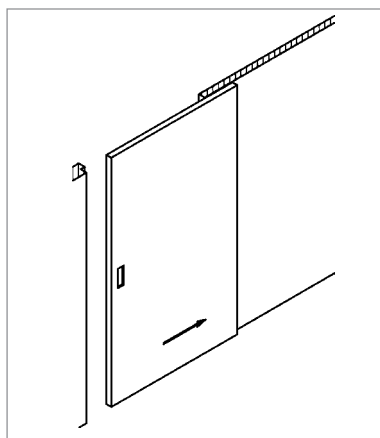
Double guide roller on plate (fig. 28) for boring in. Through inclination of the base plate is a continuous adjustment to the leaf thickness possible.



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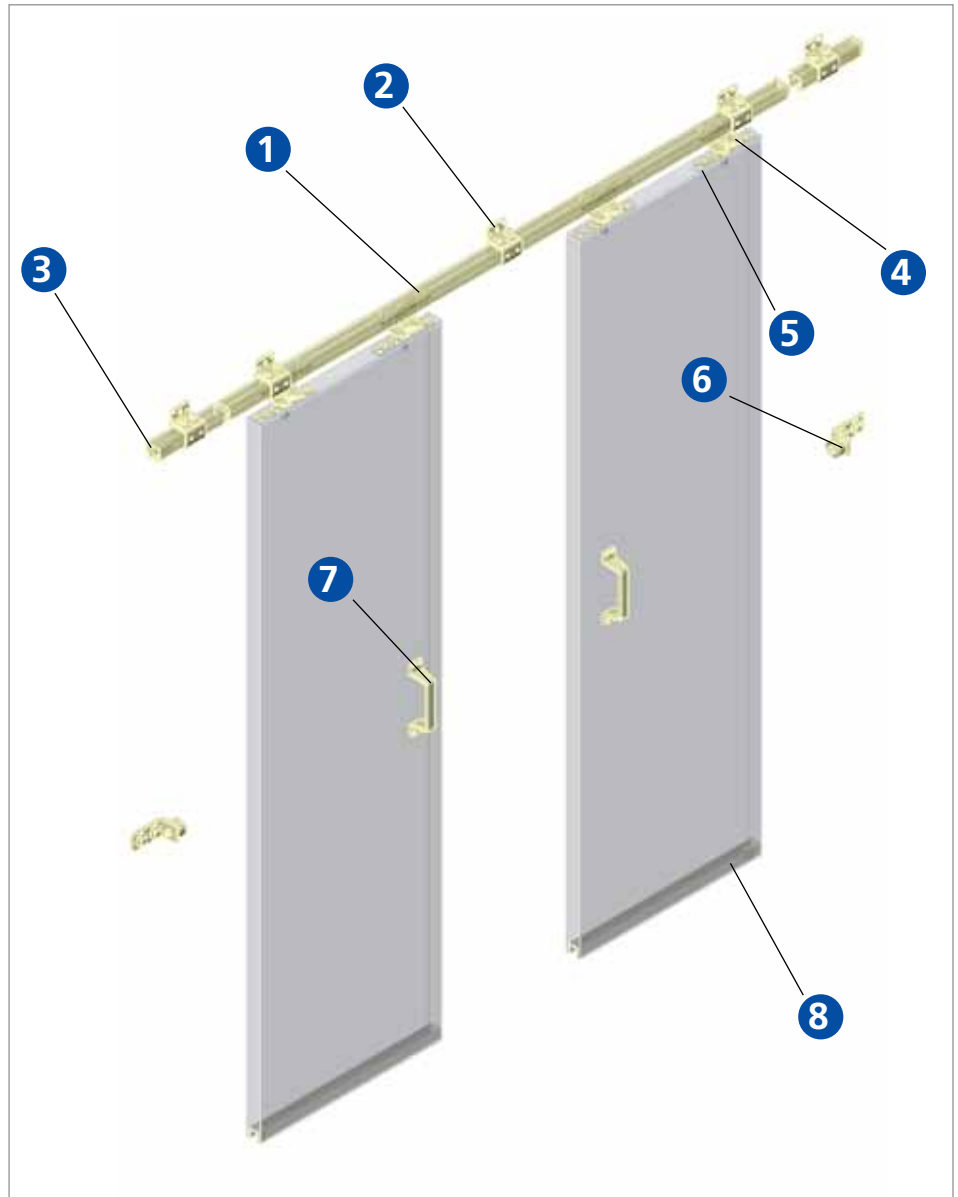
Scope of supply one-leaf sliding gate



Part	Scope of supply	Page	Quantity
1	track profile	26	1
2	open side wall mounting bracket -01 ¹	26	x ²
3	rail stop	30	2
4	trolley hanger -91	32	2
5	flange -93	36	2
6	door stop-60	38	1
7	handle 256	38	1
8	bottom guides depending on choice from	39	

¹every 750 mm

²quantity depends on the track length

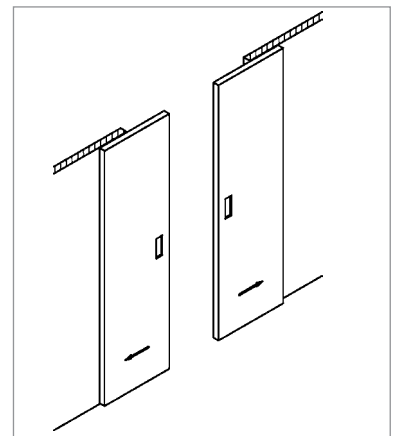


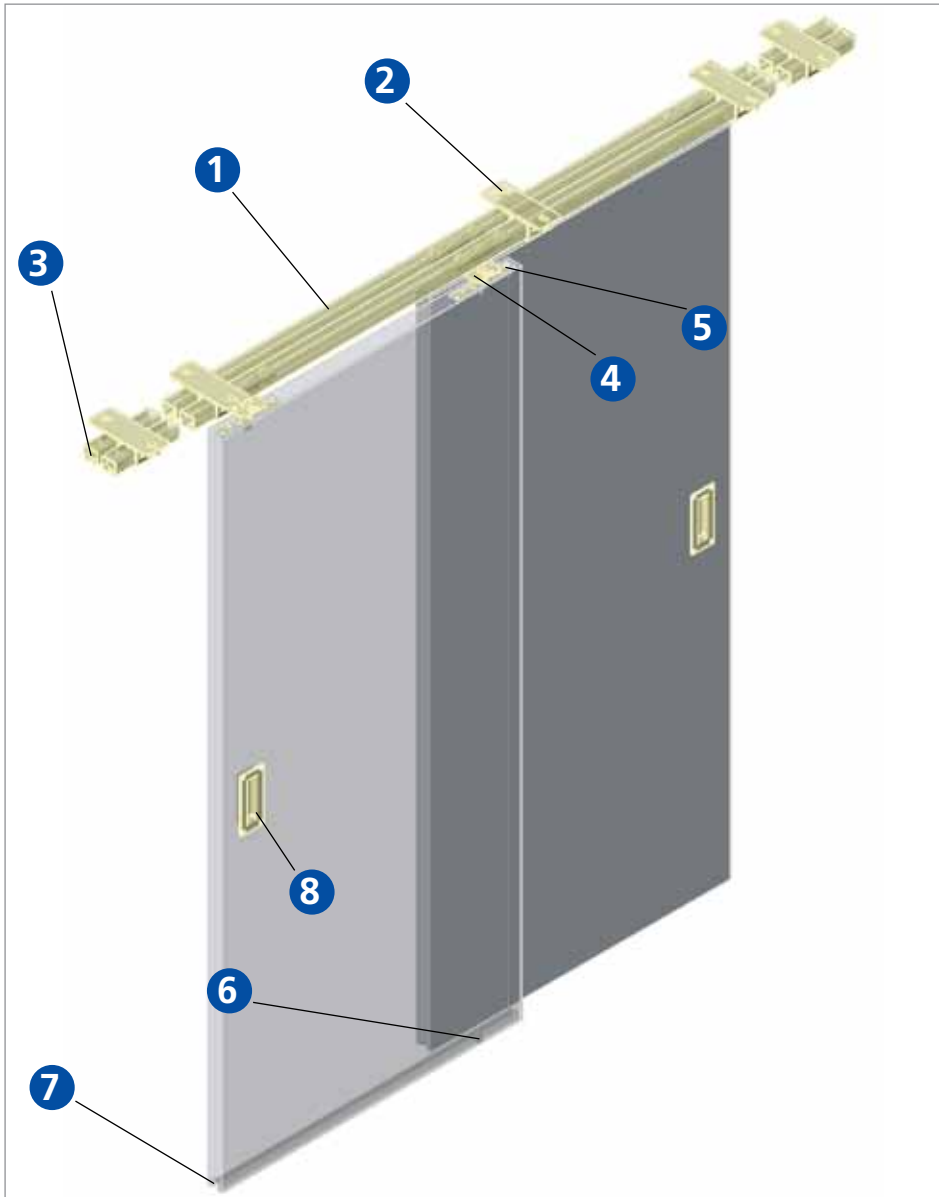
Scope of supply double leaf sliding gate

Part	Scope of supply	Page	Quantity
1	track profile	26	1
2	open side wall mounting bracket -01 ¹	26	x ²
3	rail stop	30	4
4	trolley hanger -91	32	4
5	flange -93	36	4
6	door stop-60	38	2
7	handle 256	38	2
8	bottom guides depending on choice from	39	

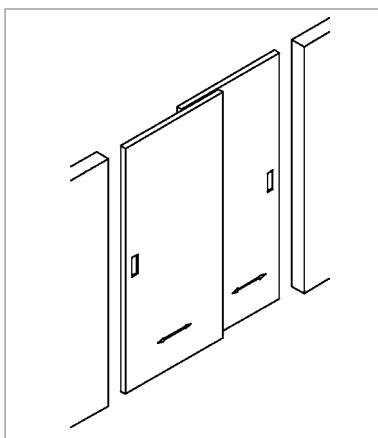
¹every 750 mm

²quantity depends on the track length





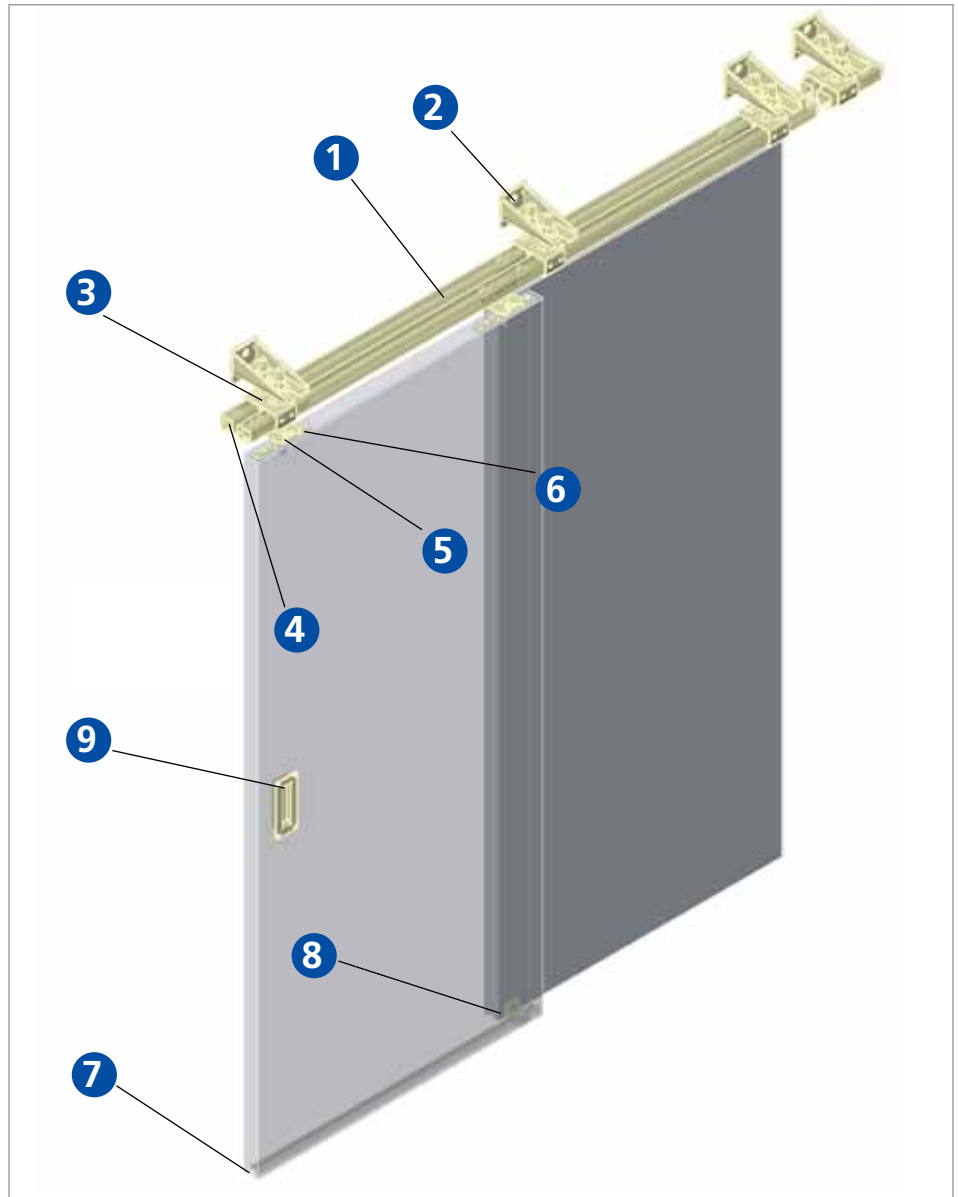
Scope of supply double leaf sliding gate (running in the reveal)



Part	Scope of supply	Page	Quantity
1	track profile	26	2
2	double joint ceiling bracket -02 D ¹	27	x ²
3	rail stop	30	4
4	trolley hanger -91	32	4
5	flange -93	36	4
6	guide roller -58 DÜ	42	2
7	bottom guide profile -40	44	2
8	flush handle	92	4

¹every 750 mm

²number depends on the track length

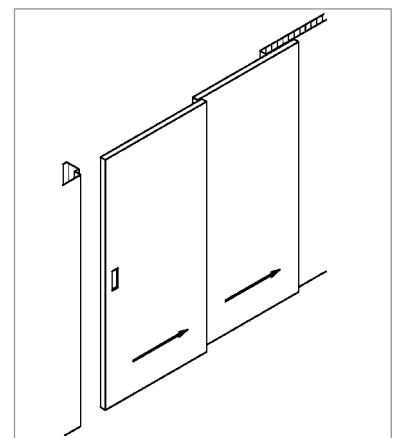


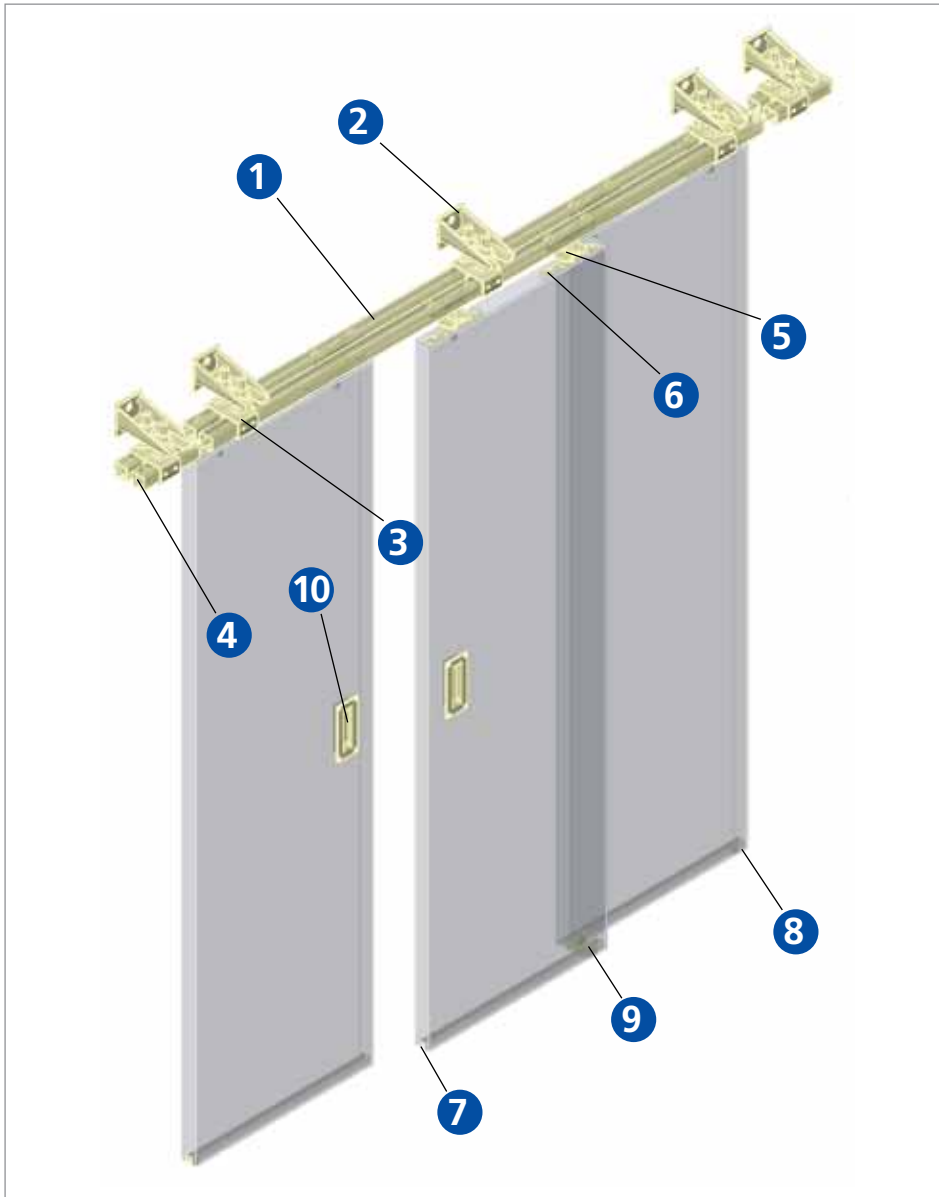
Scope of supply double leaf sliding gate

Part	Scope of supply	Page	Quantity
1	track profile	26	2
2	angle bracket -04 WD ¹	29	x ²
3	height-adjustable bracket -04 ¹	28	x ²
4	rail stop	30	4
5	trolley hanger -91	32	4
6	flange -93	36	4
7	bottom guide profile -40	44	2
8	guide roller -58 DÜ	42	1
9	flush handle	92	2

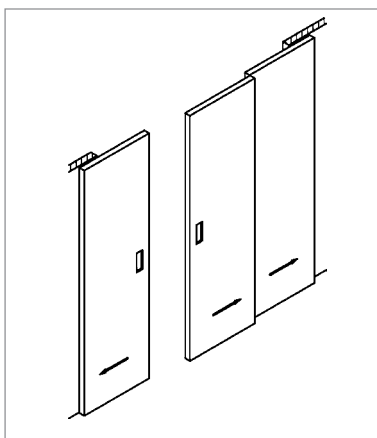
¹every 750 mm

²quantity depends on the track length





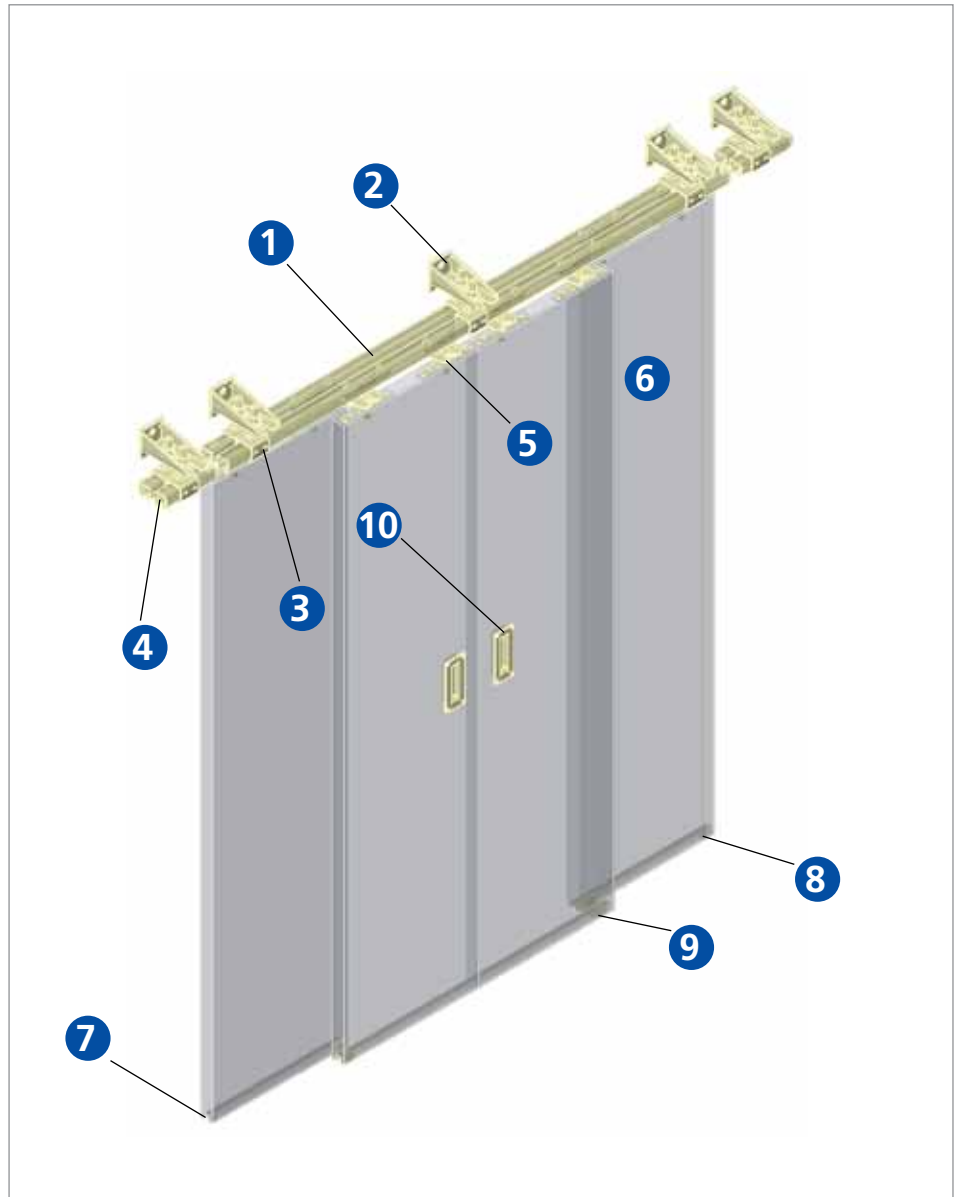
Scope of supply three-leaf sliding gate



Part	Scope of supply	Page	Quantity
1	track profile	26	2
2	angle bracket -04 WD ¹	29	x ²
3	height-adjustable bracket -04 ¹	28	x ²
4	rail stop	30	6
5	trolley hanger -91	32	6
6	flange -93	36	6
7	bottom guide profile -40	44	3
8	guide roller -58 DÜ	42	2
9	guide roller 153/240 or 153/340	42	1
10	flush handle	92	4

¹every 750 mm

²number depends on the track length

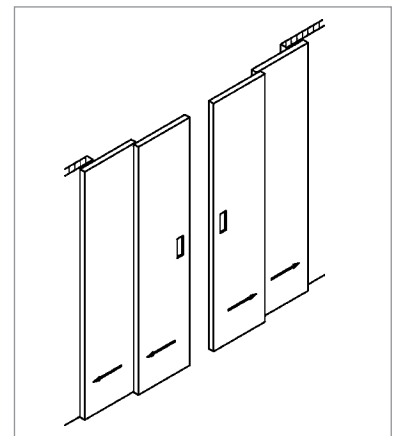


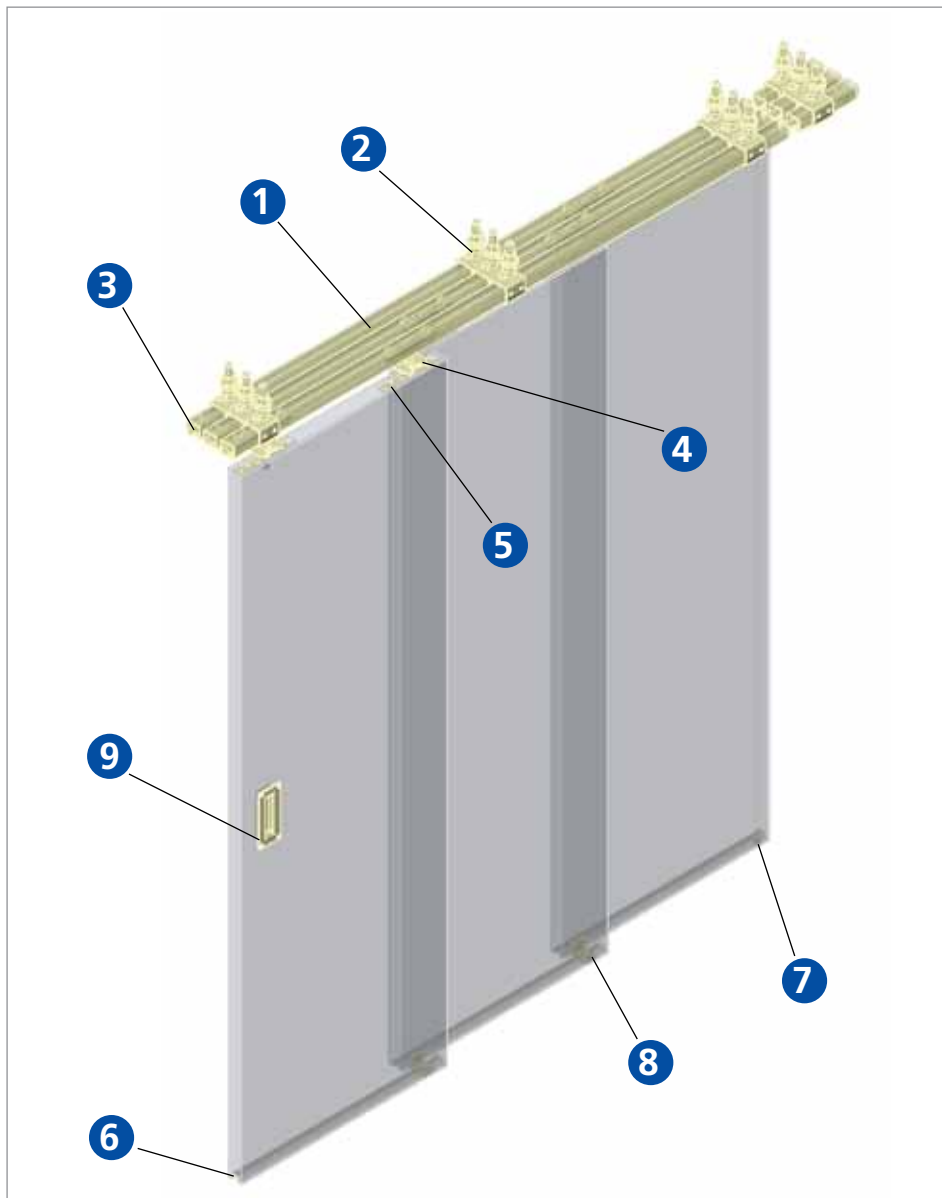
Scope of supply four-leaf sliding gate

Part	Scope of supply	Page	Quantity
1	track profile	26	2
2	angle bracket -04 WD ¹	29	x ²
3	height-adjustable bracket -04 ¹	28	x ²
4	rail stop	30	8
5	trolley hanger -91	32	8
6	flange -93	36	8
7	bottom guide profile -40	44	4
8	guide roller -58 DÜ	42	2
9	guide roller 153/240 or 153/340	42	2
10	flush handle	92	4

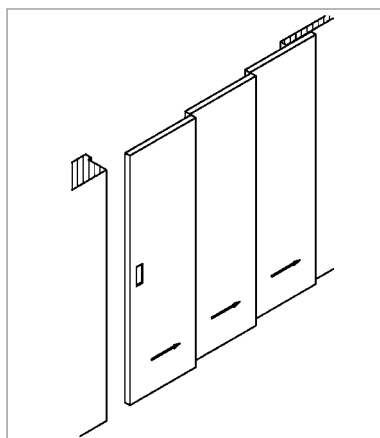
¹every 750 mm

²quantity depends on the track length





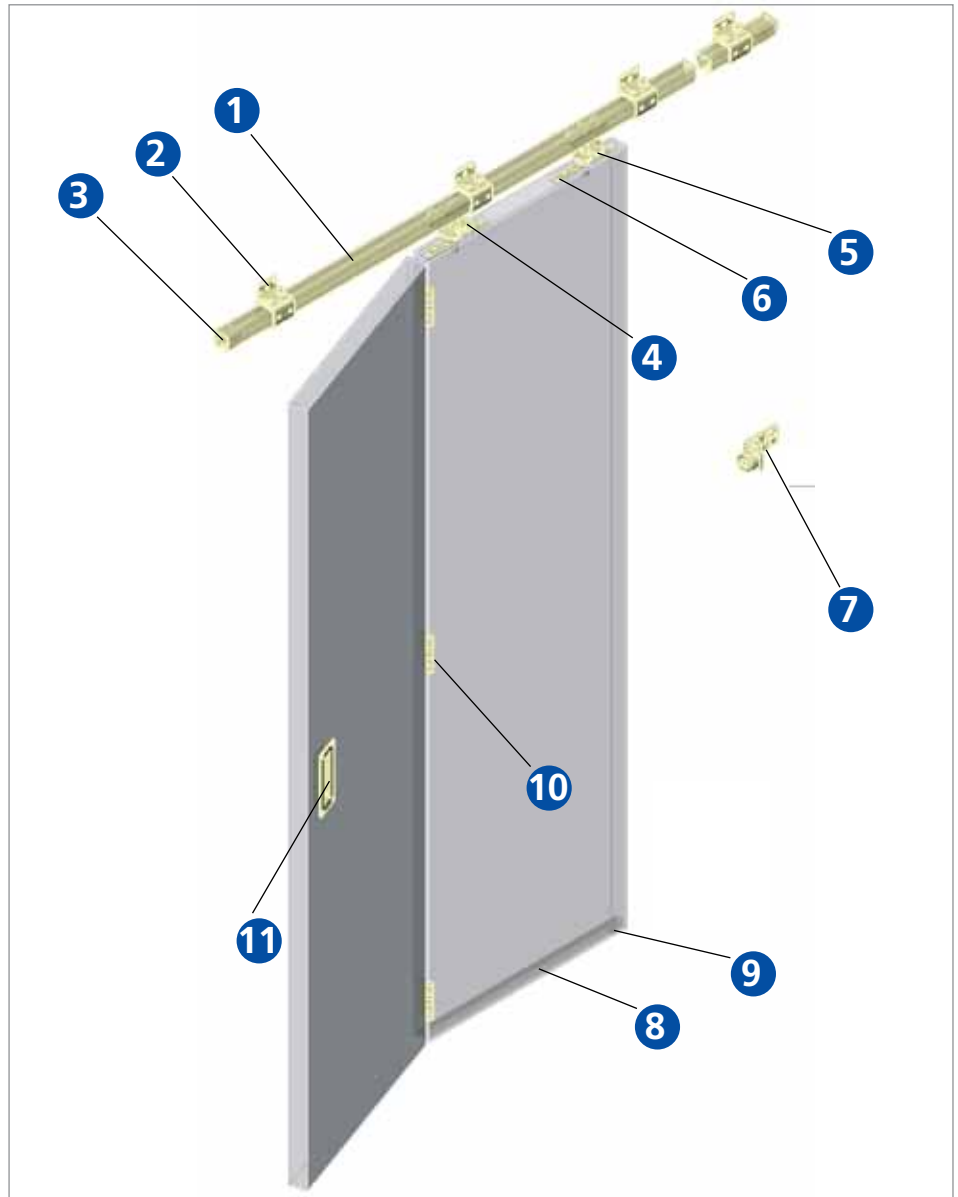
Scope of supply three-leaf sliding gate



Part	Scope of supply	Page	Quantity
1	track profile	26	3
2	height-adjustable bracket -04 ¹	28	x ²
3	rail stop	30	6
4	trolley hanger -91	32	6
5	flange -93	36	6
6	bottom guide profile -40	44	3
7	guide roller -58 DÜ	42	1
8	guide roller 153/240 or 153/340	42	2
9	flush handle	92	2

¹every 750 mm

²number depends on the track length

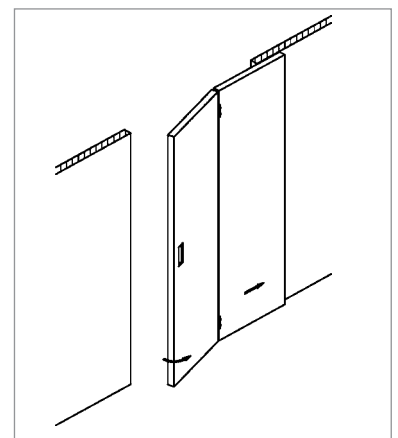


Scope of supply one-leaf sliding gate with swing element

Part	Scope of supply	Page	Quantity
1	track profile	26	1
2	open side wall mounting bracket -01 ¹	26	x ²
3	rail stop	30	2
4	trolley hanger -91	32	1
5	trolley hanger -92	34	1
6	flange -93	36	2
7	door stop -60	38	1
8	bottom guide profile -40	44	1
9	guide roller -58 DÜ	42	1
10	hinge		3
11	flush handle	92	2

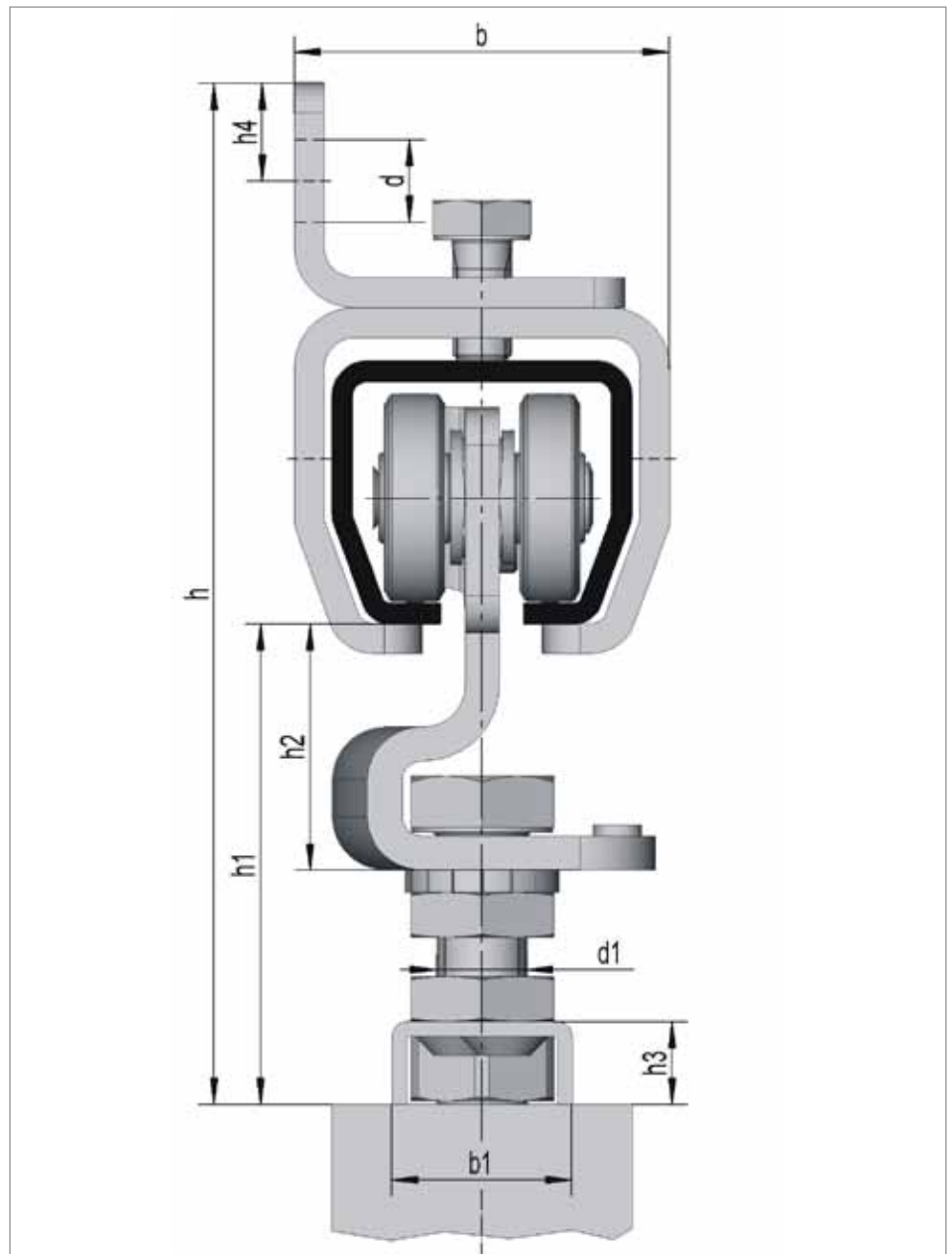
¹every 750 mm

²quantity depends on the track length



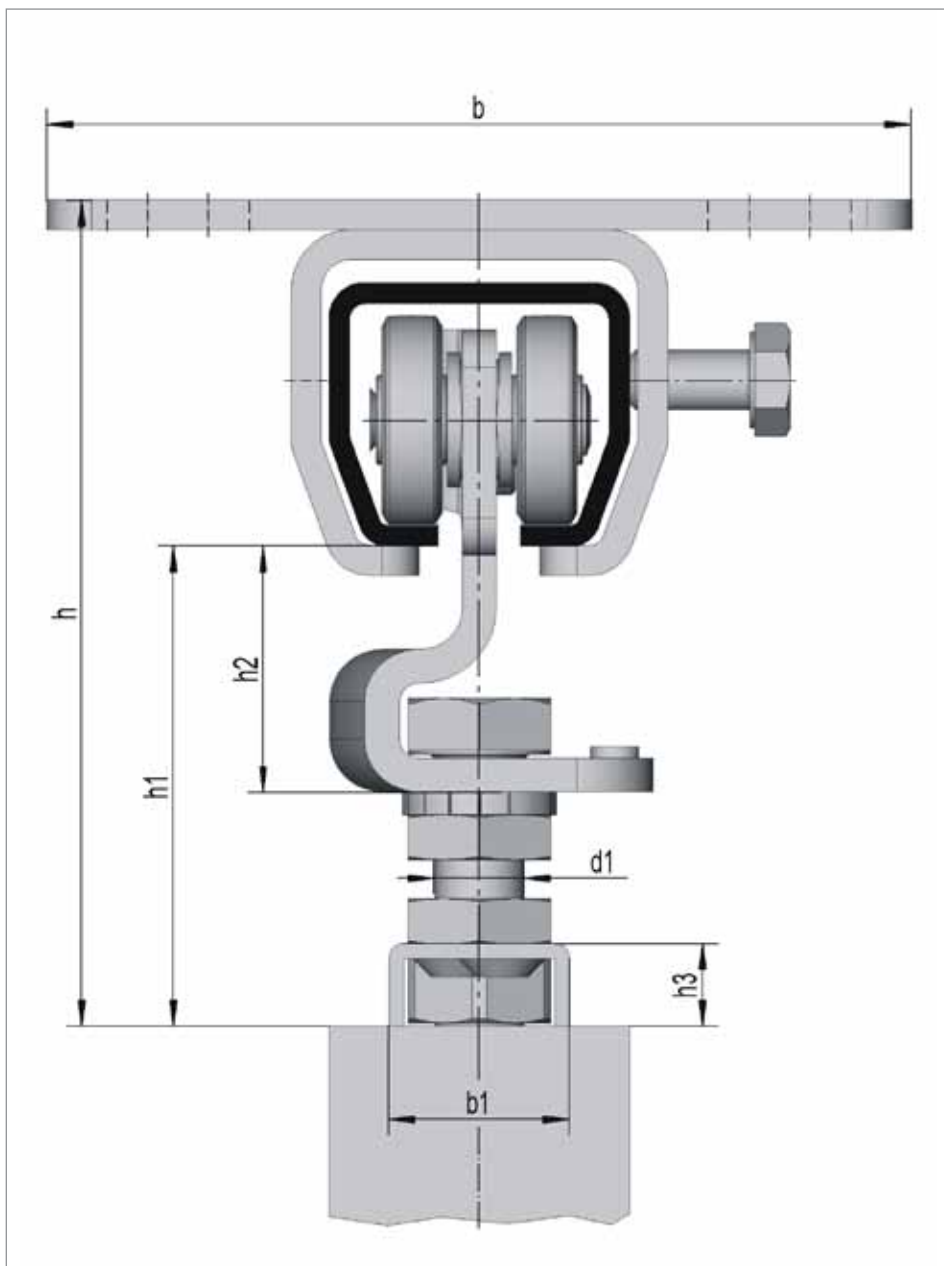
Installation cross-section with open side wall mounting bracket

The figure depicts the installation cross-section with the trolley hangers 191 to 791 and open side wall mounting brackets 101 to 701.



Part no.	100	300	400	500	600	700
Profile	100	300	400	500	600	700
b	38	50	60	80	100	115
b1	20	24	30	38	50	60
d	8	11	13	17	22	26
d1	M10	M12	M16	M20	M24	M30
h	107+10	135+20	165+20	213+17	274+75	348+75
h1	50+10	63+20	75+20	97+17	125+75	150+75
h2	25	33	37	47.5	65	74
h3	8	11	15	20	25	30
h4	10	13	16.5	17.5	25	30

Installation cross-section with lock joint ceiling bracket

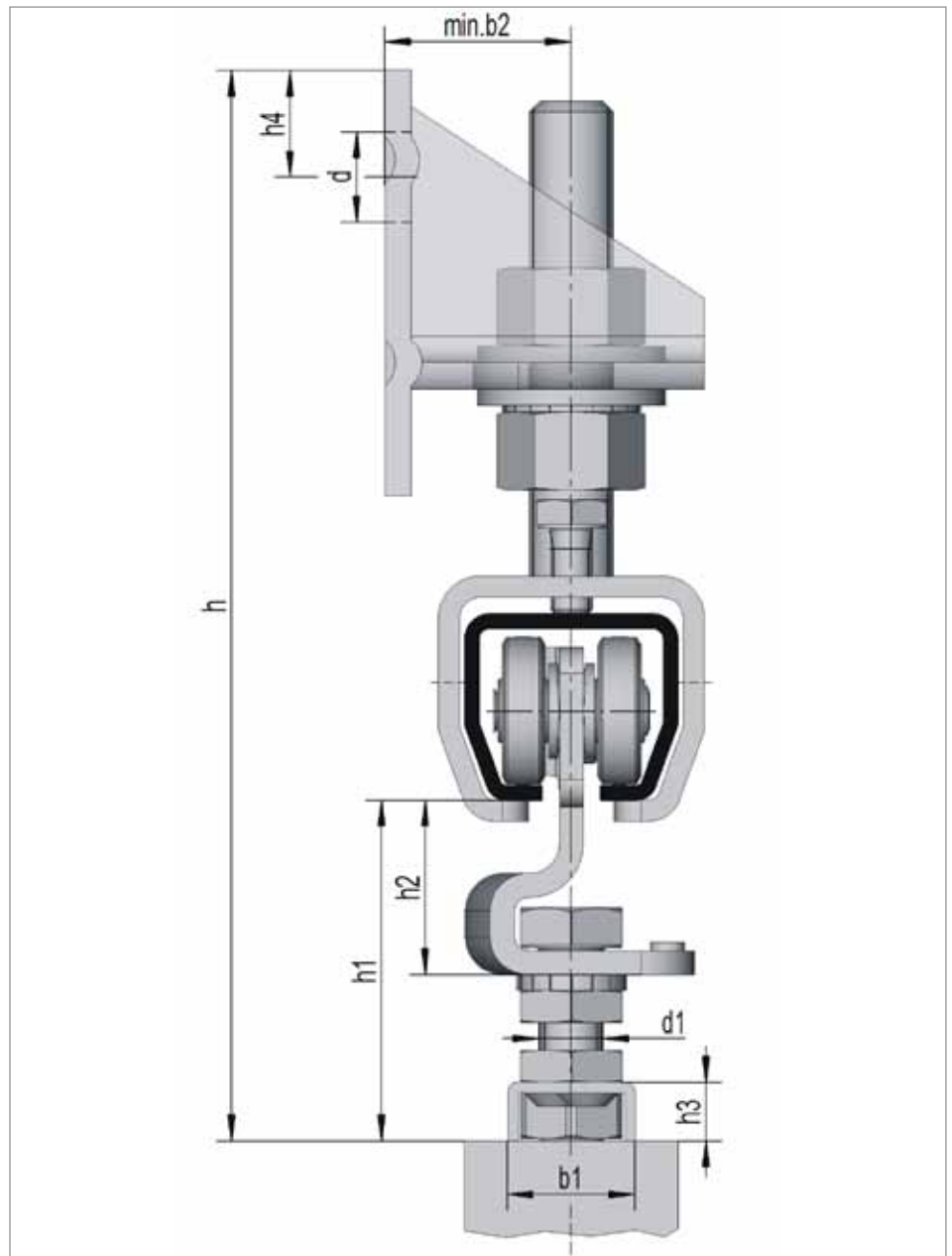


The figure depicts the installation cross-section with the trolley hangers 191 to 791 and lock joint ceiling brackets 102 to 702.

Part no.	100	300	400	500	600	700
Profile	100	300	400	500	600	700
b	90	115	130	170	211	260
b1	20	24	30	38	50	60
d1	M10	M12	M16	M20	M24	M30
h	86+10	110+20	130+20	172+17	221+75	285+75
h1	50+10	63+20	75+20	97+17	125+75	150+75
h2	25	33	37	47.5	65	74
h3	8	11	15	20	25	30

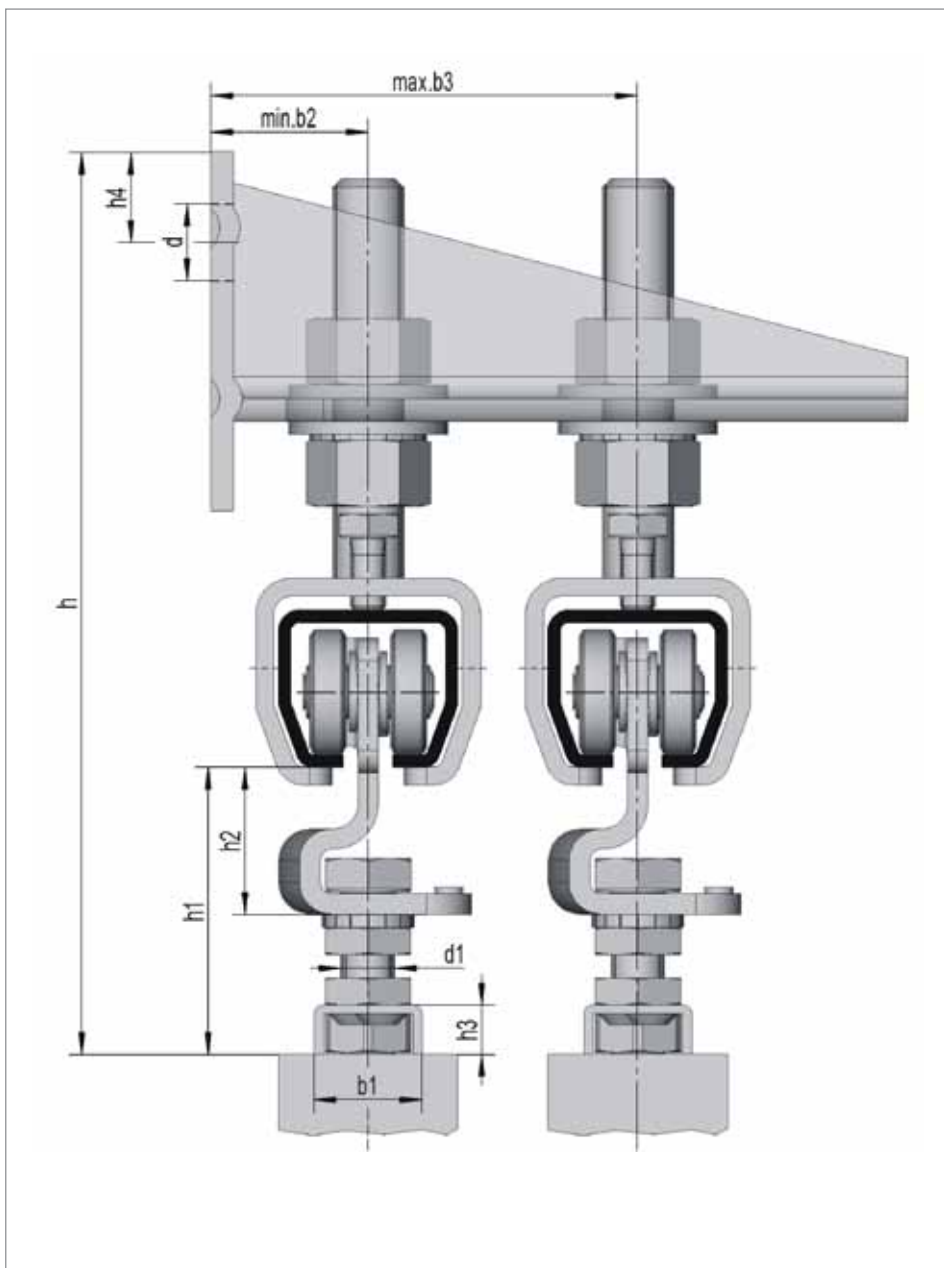
Installation cross-section with height-adjustable bracket and wall mounting bracket

The figure depicts the installation cross-section with the trolley hangers 191 to 791 in combination with open side wall mounting brackets 104 W to 604 W and height-adjustable bracket 104 to 704.



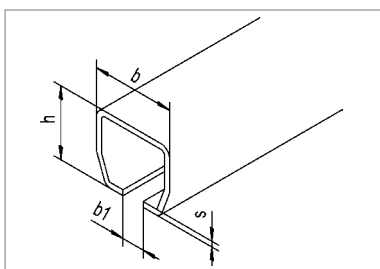
Part no.	100	300	400	500	600	700
Profile	100	300	400	500	600	700 with WD
b1	20	24	30	38	50	60
b2	21+17	25+15	30+10	42+40	50+30	57.5+120
d	13	17	17	18	18	18
d1	M10	M12	M16	M20	M24	M30
h	156+30	200+45	220+35	290+75	340+110	410+160
h1	50+10	63+20	75+20	97+17	125+75	150+75
h2	25	33	37	47.5	65	74
h3	8	11	15	20	25	30
h4	16.5	20	20	25	25	30

Installation cross-section with height-adjustable bracket and double wall mounting bracket



The figure depicts the installation cross-section with the trolley hangers 191 to 791 in combination with open side wall mounting brackets 104 WD to 704 WD and height-adjustable bracket 104 to 704.

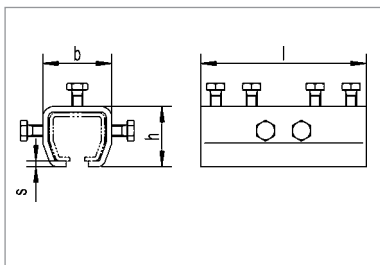
Part no.	100	300	400	500	600	700
Profile	100	300	400	500	600	700
b1	20	24	30	38	50	60
b2 min.	21	25	30	42	50	57.5
b3 max.	85	135	135	190	190	180
d	13	17	17	18	18	18
d1	M10	M12	M16	M20	M24	M30
h	156+30	200+45	220+35	290+75	340+110	410+160
h1	50+10	63+20	75+20	97+17	125+75	150+75
h2	25	33	37	47.5	65	74
h3	8	11	15	20	25	30
h4	16.5	20	20	25	25	30



HELM Track profile -00

in blank steel, zinc-plated or stainless steel, in stock lengths of approx. 6000 mm or cut to size

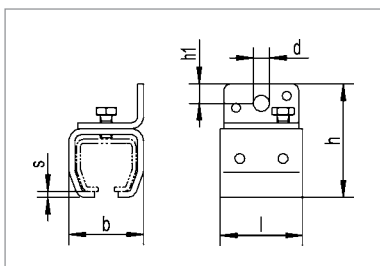
Part no.	100	300	400	500	600	700
Profile	100	300	400	500	600	700
b	30	40	48,5	65/64*	80	90
b1	8	11	15	18	22	25
h	28	35	43,5	60/59*	75	110
s	1,75/1,6*	2,75/3,0*	3,2/3,1*	3,6/3,5*	4,5	6,5
EDP no.						
stock length, zinc-plated	010020	030020	040020	050020	060020	070020
cut to length, zinc-plated	010021	030021	040021	050021	060021	070021
stock length, steel blank	010010	030010	040010	050010	060010	070010
cut to length, steel blank	010011	030011	040011	050011	060011	070011
stock length, stainless steel	010030	030035	040030	050030	-	-
cut to length, stainless steel	010031	030036	040031	050031	-	-



HELM Connection bracket -03

in blank steel, zinc-plated or stainless steel, with adjusting screws for precisely fitting connections of two tracks

Part no.	1103	1303	1403	1503	1603	1703
Profile	100	300	400	500	600	700
b	38	50	60/61*	80	100	115
h	36	43,5/45,5*	54/56*	74/75*	94	132,5
l	85/100*	120	150	180	200	250
s	3	4	4,5/5,0	6	8	10
EDP no.						
zinc-plated	110320	130320	140320	150320	160320	170320
steel blank	110310	130310	140310	150311	160311	170311
stainless steel	110330	130330	140330	150330	-	-



HELM Open side wall mounting bracket -01

zinc-plated or stainless steel, track holder for wall mounting for one track, without level adjustment

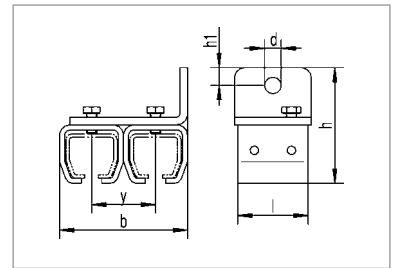
Part no.	101	301	401	501	601	701
Profile	100	300	400	500	600	700
b	38	50	60	80	100	114
d	8/8,5*	11	13	17	22	26
h	60/60,5*	76/77*	93,5/94*	122	157	210
h1	10,5/10*	13	16,5	17,5	25	30
l	40	55	68	90	110	120
s	3	4	4,5/5*	6	8	10
EDP no.						
zinc-plated	010120	030120	040120	050120	060120	070120
stainless steel	010130	030130	040130	050130	-	-

*Indicated dimensions for tracks (-00), lock joint soffit brackets (-01) of stainless steel

HELM Open double side wall mounting bracket -01 D

zinc-plated, double track holder for wall mounting for two tracks, without level adjustment

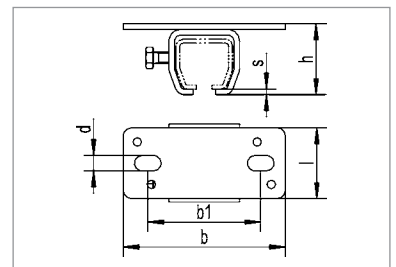
Part no.	101 D	301 D	401 D	501 D
Profile	100	300	400	500
b	83	100	120/140/150	165
d	11,5	13	17	17
h	70,5	91	112,5	130
h1	14	14	18,5	18,5
l	40	55	68	90
y	45	50	60/80/90	85
EDP no.				
zinc-plated	010121	030121	040121	050121
zinc-plated (80)	-	-	040125	-
zinc-plated (90)	-	-	040129	-



HELM Lock joint ceiling bracket -02

zinc-plated or stainless steel, track holder for ceiling mounting for one track, without level adjustment

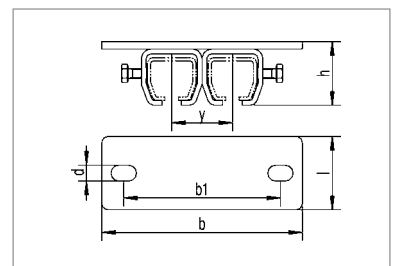
Part no.	102	302	402	502	602	702
Profile	100	300	400	500	600	700
b	88/90*	115	130	170	211	260
b1	63 ± 6,5/65 ± 6,8*	80 ± 8	94 ± 8	123(124*) ± 10	149 ± 12	178,5 ± 23,5
d	8,5/8,2*	11	13	17	22	22
h	39	50/51*	59,5/60*	81	104	144,5
l	40	50	60	80	100	100
s	3	4	4,5/5*	6	8	10
EDP no.						
zinc-plated	010220	030220	040220	050220	060220	070220
stainless steel	010230	030230	040230	050230	-	-



HELM Double lock joint ceiling bracket -02 D

zinc-plated, double track holder for ceiling mounting for two tracks, without level adjustment

Part no.	102 D	302 D	402 D	502 D
Profile	100	300	400	500
b	133	165/185	190/220	260
b1	108 ± 7	129/149 ± 8	152/182 ± 8	214 ± 10
d	8,5	13	13	17
h	39	52	62,5	85
l	40	60	80	80
y	45	50/70	60/80/90	85
EDP no.				
zinc-plated	010221	030221	040221	050221
zinc-plated (70)	-	030222	-	-
zinc-plated (80)	-	-	040225	-
zinc-plated (90)	-	-	040229	-



*Indicated dimensions for ceiling fixing parts (-02) of stainless steel



HELM Lock joint soffit bracket -04

in blank steel or stainless steel, with top (on request also lateral) counter screw, usable for welded installations

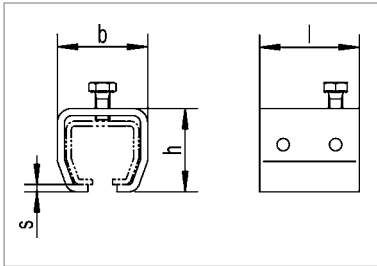
Part no.	1104	1304	1404	1504	1604	1704
Profile	100	300	400	500	600	700
b	38	50	60	80	100	115
h	36	46/45,5*	54,5/55*	75	94	132,5
l	40	55	68	90	110	120
s	3	4	4,5/5	6	8	10

EDP no.

steel blank ¹	110410	130410	140410	150410	160410	170410
steel blank ²	11041001	13041001	14041001	15041001	16041001	17041001
stainless steel ¹	110430	130430	140430	150430		
stainless steel ²	11043001	13043001	14043001	15043001		

¹screw on top

²screw on the side



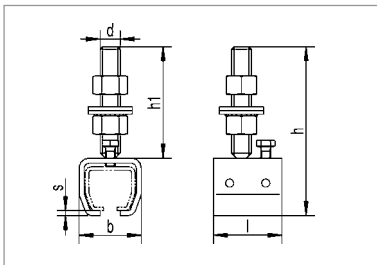
HELM Height-adjustable bracket -04

zinc-plated or stainless steel, track holder with level adjustment, can be used with wall mounting bracket -04 W or -04 WD

Part no.	104	304	404	504	604	704
Profile	100	300	400	500	600	700
b	38	50	60	80	100	115
d	M10	M16	M16	M20	M20	M30
h	98/102*	135/135,5*	141,5/145*	208/207,5*	226,5	322
h1	64/66*	89/90*	87/90*	133/132,5*	132,5	189
l	40	55	68	90	110	120
s	3	4	4,5/5*	6	8	10

EDP no.

zinc-plated	010420	030420	040420	050420	060420	070420
stainless steel	010430	030430	040430	050430	-	-



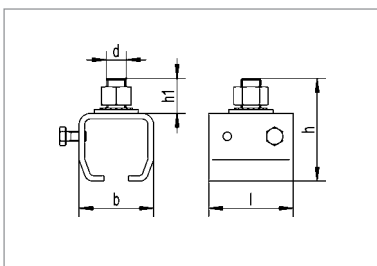
HELM Bracket -04 F

zinc-plated, combination with wall mounting bracket, especially for the use with fire protection gates

Part no.	404 F	504 F	604 F
Profile	400	500	600
b	60	80	100
d	M16	M20	M20
h	95,5	113	132
h1	41	38	38
l	68	90	110

EDP no.

zinc-plated	040428	050424	060424
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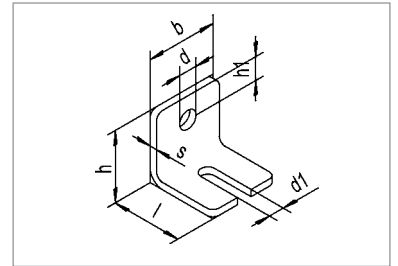
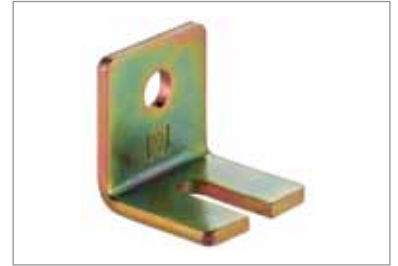


*Indicated dimensions for lock joint soffit brackets (-04) and height-adjustable brackets (-04) of stainless steel

HELM Wall mounting bracket 104 W

zinc-plated or stainless steel, bracket fixing with lateral adjustment option,
can be used with height-adjustable bracket 104

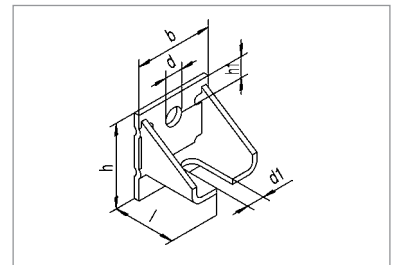
Part no.	104 W
Profile	100
b	50
d	13
d1	11
h	50
h1	16,5
l	50
s	5
EDP no.	
zinc-plated	010421
stainless steel	010431



HELM Wall mounting bracket -04 W

zinc-plated or stainless steel, bracket fixing with lateral adjustment option,
can be used with height-adjustable bracket -04

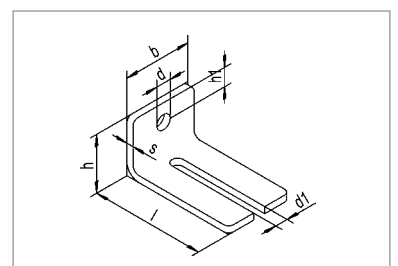
Part no.	404 W	604 W
Profile	300/400	500/600
b	75	120
d	17	18
d1	17	21
h	80	110
h1	20	25
l	60	102
EDP no.		
zinc-plated	040421	060421
stainless steel	040431	060431

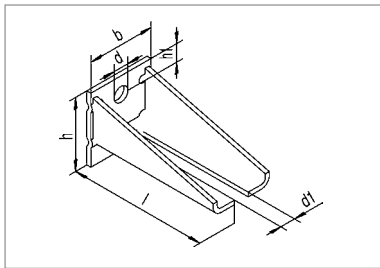


HELM Double wall mounting bracket 104 WD

zinc-plated or stainless steel, bracket fixing with lateral adjustment option,
can be used with two height-adjustable brackets 104

Part no.	104 WD
Profile	100
b	60
d	13
d1	11
h	50
h1	16,5
l	100
s	6
EDP no.	
zinc-plated	010422
stainless steel	010432

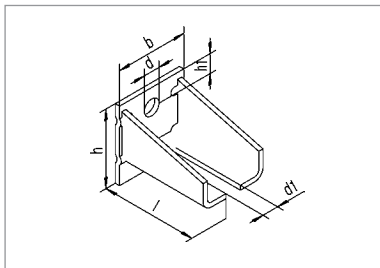




HELM Double wall mounting bracket -04 WD

zinc-plated or stainless steel, bracket fixing with lateral adjustment option, can be used with two height-adjustable brackets -04

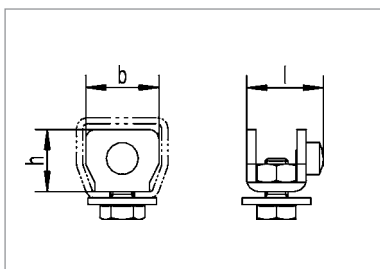
Part no.	404 WD	604 WD	704 WD
Profile	300/400	500/600	700
b	75	120	120
d	17	18	18
d1	17	21	32
h	80	110	110
h1	20	25	25
l	155	212	212
EDP no.			
zinc-plated	040422	060422	070422
stainless steel	040432	060432	-



HELM Double wall mounting bracket -04 WDF

zinc-plated, bracket fixing with lateral adjustment option, can also be used with bracket -04 F

Part no.	404 WDF	604 WDF
Profile	300/400	500/600
b	75	120
d	17	18
d1	17	21
h	80	110
h1	20	25
l	100	162
EDP no.		
zinc-plated	040422-100	060423



HELM Rail stop 100 P - 500 P

zinc-plated or stainless steel, travel path limiter, prevents the trolley hangers from running off the rail. **Not suitable for the sole stopping of the sliding leaves!**

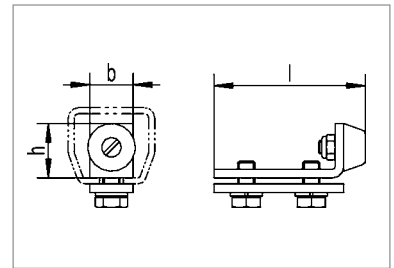
Part no.	100 P	300 P	400 P	500 P
Profile	100	300	400	500
b	25	32	39	55
h	23	27	34	51
l	25,5	33,5	33,5	50
EDP no.				
zinc-plated	010080	030080	040080	050080
stainless steel	010081	-	-	-

HELM Rail stop 1300 P-1600 P

zinc-plated or stainless steel, travel path limiter. Prevents the trolley hangers from running off the rail.
Not suitable for the sole stopping of the sliding leaves!

Part no.	1300 P	1400 P	1500 P	1600 P
Profile	300	400	500	600/700
b	20	30	40	50
h	25	29/28*	50	60
l	70	75/76*	113	130
EDP no.				
zinc-plated	130020	140020	150020	160020
stainless steel	130030	140030	150030	

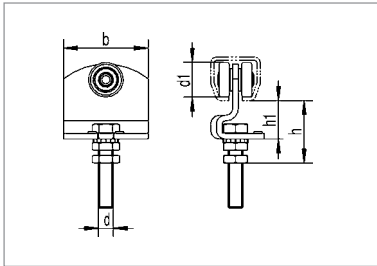
*Indicated dimensions for rail stop 1400 P of stainless steel





HELM Trolley hanger -90

zinc-plated, one-pair trolley hanger with pendulum hinge of plastic or steel, height-adjustable. For profile 100-500, available with plastic-sheathed rollers (190-590)

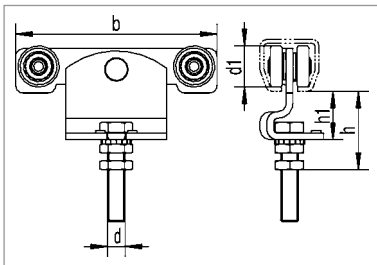


Part no.	190	390	490	590	690	790
Profile	100	300	400	500	600	700
b	50	68	80	110	130	160
d	M10x40	M12x60	M16x70	M20x80	M24x150	M30x170
d1	22	28	34	48	60	89
h	41+10	52+20	60+20	77+17	100+75	130+70
h1	24,5	31	37	46,5	65	74
EDP no.						
zinc-plated	019020	039020	049020	059020	069020	079020



HELM Trolley hanger -91

zinc-plated or stainless steel, double-pair, with pendulum hinge of stainless steel or plastic, height-adjustable. On request available with special lubrication, "cowshed" grease (ammonia resistant) and plastic-sheathed rollers (191-591)



Part no.	191	391	491	591	691	791
Profile	100	300	400	500	600	700
b	105	136	180	238	234	308
d	M10x40	M12x60	M16x70	M20x80	M24x150	M30x170
d1	22/19*	28	34/33,5*	48	60	89
h	42+10	52+20	60+20	76+17	100+75	116+85
h1	25	33	35/37*	46,5	65	74
EDP no.						
zinc-plated ¹	019120	039120	049120	-	-	-
zinc-plated ²	-	039125	049125	059120	069120	079120
stainless steel ¹	019130	039130	049130	-	-	-
stainless steel ²	-	039130-002	049135	059130	-	-

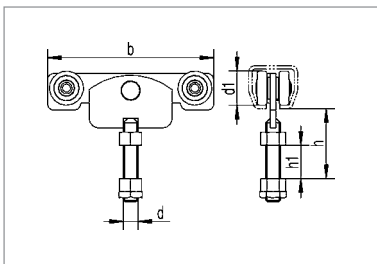
¹pendulum hinge of plastic ²pendulum hinge of stainless steel

*Indicated dimensions for trolley hanger 191/491 of stainless steel



HELM Trolley hanger -10

zinc-plated, double-pair, with pendulum hinge of plastic or steel, height-adjustable

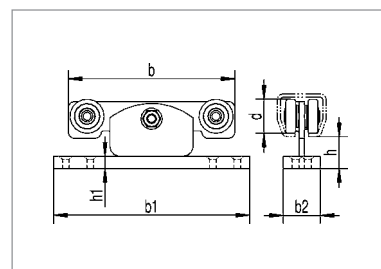


Part no.	110	310	410	510	610
d	M10	M12	M16	M20	M24
h1	19	27	40	51	40
h	44	57	78	104	125
b	105	136	180	238	234
d1	22	28	34	48	60
EDP no.					
zinc-plated	011020	031020	041020	051020	061020

HELM Trolley hanger -12

zinc-plated, double-pair, with pendulum hinge of plastic or steel. No adjustment and detaching option. Benefit: low headroom installation

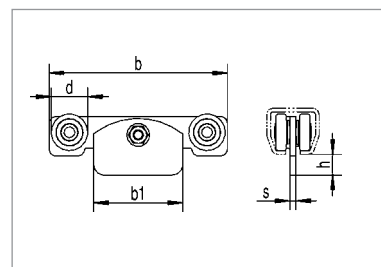
Part no.	112	312	412	512
b	105	136	180	238
h	16	25	30	39,5
b1	100	160	210	265
h1	4	10	10	12
b2	20	30	40	50
d	22	28	34	48
EDP no.				
zinc-plated	011220	031220	041220	051220



HELM Trolley hanger -91 S

zinc-plated, double-pair, with pendulum hinge of plastic or steel. Web has to be welded on, no adjustment option. Benefit: low headroom installation

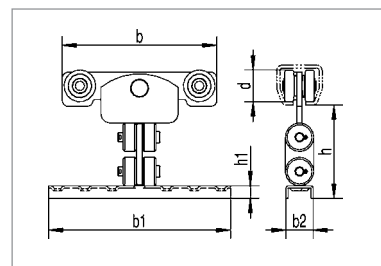
Part no.	191 S	391 S	491 S	591 S	691 S	791 S
Profile	100	300	400	500	600	700
b	105	136	180	238	234	308
b1	50	68	90	110	60	80
d	22	28	34	48	60	89
h	11,75	16	20,5	28	18,5	29
s	3	4,5	6	8	15	19,5
EDP no.						
zinc-plated	019121	039121	049121	059121	069121	079121



HELM Double hinge trolley hanger -00

zinc-plated, double-pair, with pendulum hinge of plastic or steel, including flange and double hinge for tight-closing gate installations

Part no.	300	400	500
Profile	300	400	500
b	136	180	238
b1	160	210	264
b2	24	30	38
d	28	34	48
h	82	101,5	122
h1	11	15	20
EDP no.			
zinc-plated	039123	049123	059123

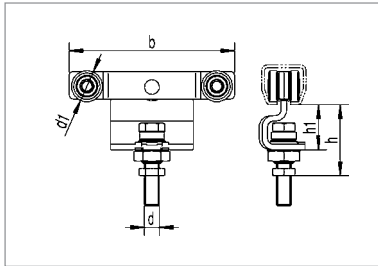




HELM Trolley hanger -91/85

zinc-plated, double-pair, with pendulum hinge of steel for fire protection sliding gates, height-adjustable

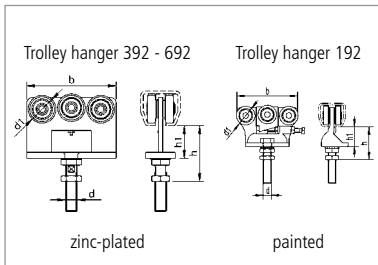
Part no.	491/85	591/85	691/85
Profile	400	500	600
b	180	238	234
d	M16x80	M20x110	M24x180
d1	34	48	60
h	77+12	98+29	116+79
h1	49	65	69,5
EDP no.			
zinc-plated	049124	059124	069124



HELM trolley hanger -92

double-pair, with pendulum hinge, with counter pressure roller for sliding leaves with top-hung gates, height-adjustable

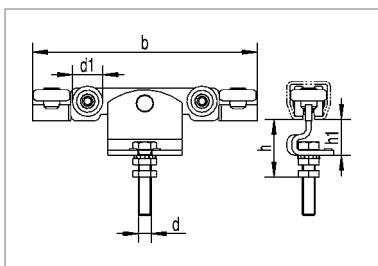
Part no.	192	392	492	592	692
Profile	100	300	400	500	600
b	65	90	120	160	190
d	M10x40	M12x60	M16x70	M20x90	M24x160
d1	22	28	34	48	60
h	40+8	52+20	59+18	77+17	100+75
h1	25	32,8	34	36,4	57
EDP no.					
cast iron painted	019220	-	-	-	-
zinc-plated	-	039220	049220	059220	069220



HELM Trolley hanger -91 EL

zinc-plated double-pair, with pendulum hinge of plastic or steel, with 2 transverse rollers for electrically operated gates, height-adjustable

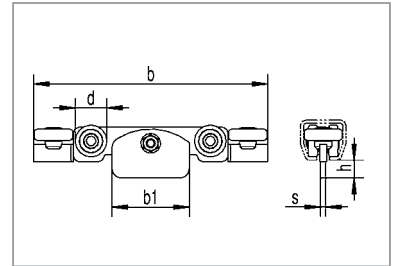
Part no.	391 EL	491 EL	591 EL	691 EL	791 EL
Profile	300	400	500	600	700
b	206	270	358	374	468
d	M12x60	M16x70	M20x80	M24x150	M30x160
d1	28	34	48	60	89
h	52+20	63/60+20	77+17	100+75	125+75
h1	33	38	47,5	65	74
EDP no.					
zinc-plated	039122	049122	059122	069122	079122



HELM Trolley hanger -91 SEL

zinc-plated double-pair, with pendulum hinge of plastic or steel, with 2 transverse rollers for electrical operated gates. Web has to be welded on, no adjustment option. Benefit: low headroom installation

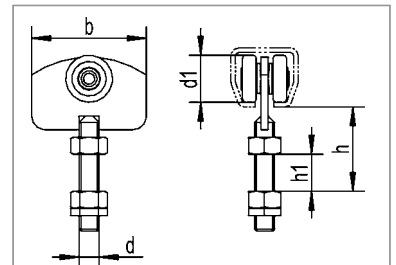
Part no.	391 SEL	491 SEL	591 SEL	691 SEL	791 SEL
Profile	300	400	500	600	700
b	206	270	358	374	468
b1	68	90	110	60	80
d	28	34	48	60	89
h	16	20,5	28	19	29
s	4,5	6	8	15	19,5
EDP no.					
zinc-plated	039112	049112	059112	069112	079112



HELM trolley hanger -09

zinc-plated, one-pair, with pendulum hinge of plastic or steel, height-adjustable

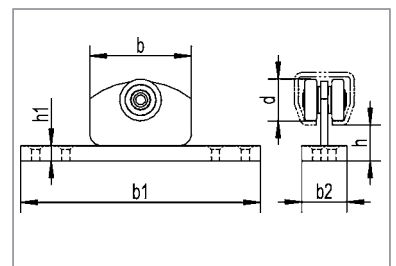
Part no.	109	309	409	509	609
Profile	100	300	400	500	600
b	50	68	90	110	60
d	M10	M12	M16	M20	M24
d1	22	27,9	34	48	60
h	44	50	75,5	111	125
h1	19	22	35	63	50
EDP no.					
zinc-plated	010920	030920	040920	050920	060920



HELM Trolley hanger -11

zinc-plated, one-pair adjustment and detaching option. Benefit: low headroom installation

Part no.	111	311	411	511
Profile	100	300	400	500
b	50	68	90	110
b1	100	160	210	265
b2	20	30	40	50
d	22	27,9	34	48
h	16	23,5	29,3	39,5
h1	4	10	10	12
EDP no.				
zinc-plated	011120	031120	041120	051120

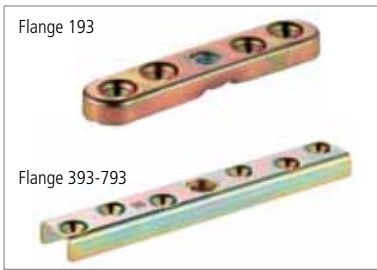
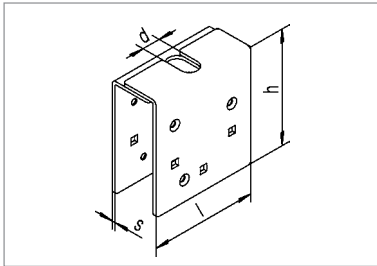




HELM Reinforcing soffit bracket -98

zinc-plated, for timber leaves, for the additional stabilisation of the flange fixing

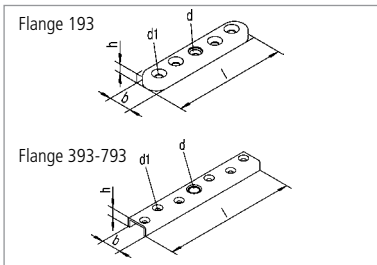
Part no.	198	498	698
Profile	100	300/400	500/600
leaf thicknesses	20-40	35-70	55-105
l	50	100	150
d	11	17	26
h	82	107	160
s	3	3	5
EDP no.			
zinc-plated	019820	049820	069820



HELM Flange -93

zinc-plated or stainless steel, for timber leaves, for screwing on, with thread positioned in the centre

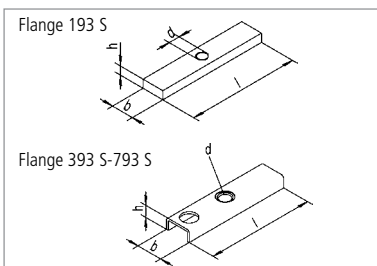
Part no.	193	393	493	593	693	793
Profile	100	300	400	500	600	700
b	20	24	30	38	50	60
d	M10	M12	M16	M20	M24	M30
d1	6	5,3	6,8	7,5	11	11
h	8	11	15	20	25	30
l	100	160	210	264	350	500
EDP no.						
zinc-plated	019320	039320	049320	059320	069320	079320
stainless steel	019330	039330	049330	059330	-	-



HELM Flange -93 S

in steel blank, for steel leaves, for welding on, with thread positioned in the centre

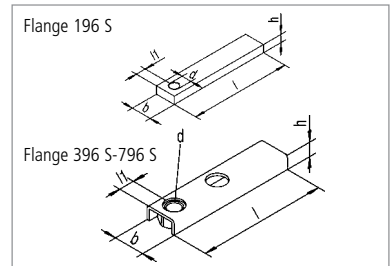
Part no.	193 S	393 S	493 S	593 S	693 S	793 S
Profile	100	300	400	500	600	700
b	20	24	30	38	50	60
d	M10	M12	M16	M20	M24	M30
h	8	11	15	20	25	30
l	100	100	120	140	150	180
EDP no.						
steel blank	019311	039311	049311	059311	069311	079311



HELM Flange -96 S

in steel blank, for steel leaves, for welding on, with thread at the side

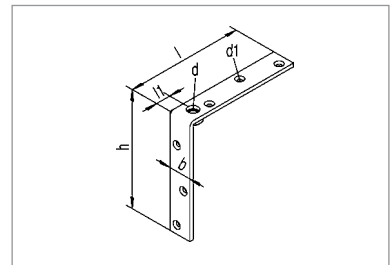
Part no.	196 S	396 S	496 S	596 S	696 S	796 S
Profile	100	300	400	500	600	700
b	20	24	30	38	50	60
d	M10	M12	M16	M20	M24	M30
h	8	11	15	20	25	30
l	100	100	120	140	150	180
l1	10	12	15,5	20	20	25
EDP no.						
steel blank	019611	039611	049611	059611	069611	079611



HELM Angle bracket -94

zinc-plated, for timber leaves, for screwing on or countersinking, with thread on the side

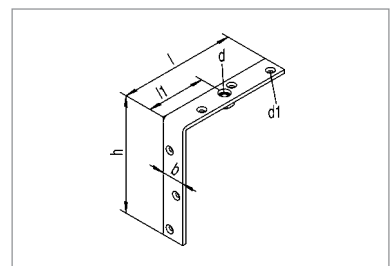
Part no.	194	394	494	594
Profile	100	300	400	500
b	20	30	35	40
d	M10	M12	M16	M20
d1	4,8	5,9	7	8,4
h	124	158	210	260
l	124	158	200	255
l1	15	20	20	30
EDP no.				
zinc-plated	019420	039420	049420	059420



HELM Angle bracket -95

zinc-plated, for timber leaves, for screwing on or countersinking, with thread positioned in the centre

Part no.	195	395	495	595
Profile	100	300	400	500
b	20	30	35	40
d	M10	M12	M16	M20
d1	4,8	5,9	7	8,4
h	124	158	210	260
l	124	158	200	255
l1	70	80	120	155
EDP no.				
zinc-plated	019520	039520	049520	059520

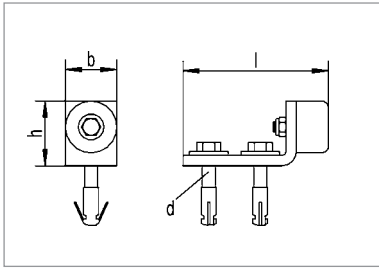




HELM door stop 360/460

zinc-plated, with plugs and screws

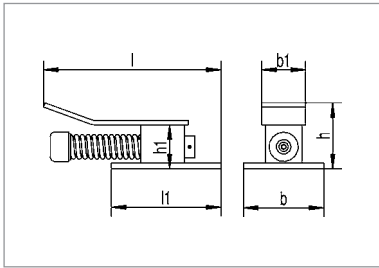
Part no.	360	460
door weight up to	200 kg	300 kg
b	40	50
d	10 x 70	10 x 70
h	50	60
l	113	130
EDP no.		
zinc-plated	036020	046020



HELM Door stop 560 L/560

zinc-plated, with steel spring

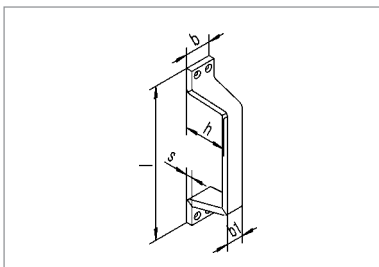
Part no.	560 L	560
door weight up to	600 kg	2000 kg
b	110	110
b1	60	60
h	90	110
h1	60	80
l	243	343
l1	200	200
EDP no.		
zinc-plated	056020	056021



HELM Handle 256 LM

aluminium, silver anodised

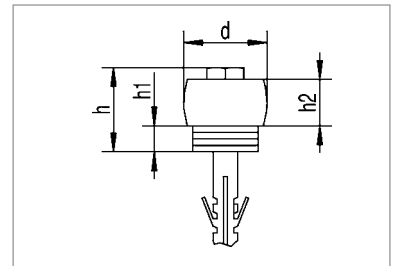
Part no.	256
b	30
b1	20
h	43
l	180
s	7
EDP no.	
aluminium	025650



HELM Pressure roller -59 DÜ

plastic roller with plug and screw

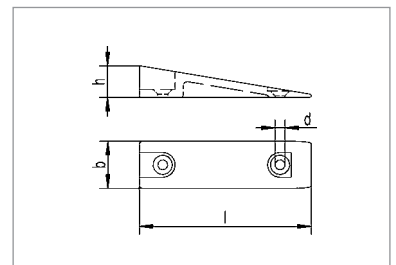
Part no.	459 DÜ	559 DÜ
d	38,5	73,5
h	39	57
h1	12	13
h2	21,5	33
EDP no.		
plastic roller	045961	055961



HELM Wedge -55

plastic, used in combination with pressure rollers and screwed on the leaf

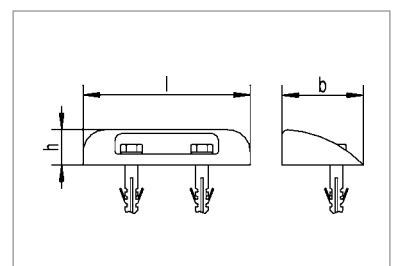
Part no.	355	555
b	30	40
d	6.4	6.5
h	20	25
l	110	120
EDP no.		
plastic	035560	055560



HELM Tortoiseshell-shaped guide 418

plastic glass fibre reinforced, with screws and plugs

Part no.	418
b	74
h	32
l	152
EDP no.	
plastic	041800

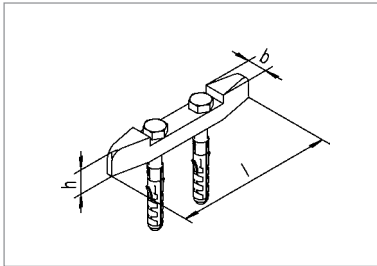




HELM Guide 514 DÜ

malleable cast iron with screws and plugs

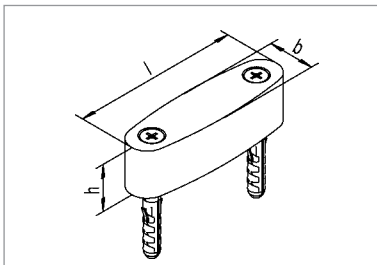
Part no.	514 DÜ
b	19
h	23
l	150
EDP no.	
malleable cast iron	051471



HELM Guide glide -16

plastic, with screws and plugs

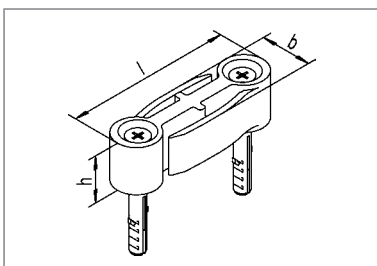
Part no.	216	316
bottom guide profile	240	340
b	12.5	19.5
h	14.5	19.5
l	49.5	69.5
EDP no.		
plastic	021660	031660



HELM Guide glide -16 S

plastic, with screws and plugs, rattle-proof guide

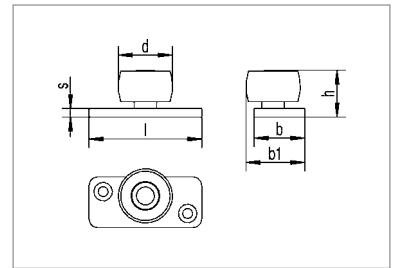
Part no.	216 S	316 S
bottom guide profile	240	340
b	13.5	21.6
h	14.6	19.5
l	49.5	69.5
EDP no.		
plastic	021661	031661



HELM Glide roller on plate 459 PL

plastic roller, on base plate

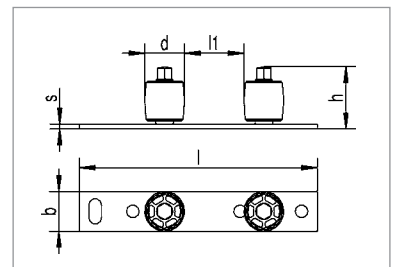
Part no.	459 PL
b	36
b1	42
d	39
h	33
l	80
s	6
EDP no.	
plastic roller	045962



HELM Double guide roller 659

plastic or steel rollers, on base plate
continuous adjustment to the leaf thickness by inclining the base plate

Part no.	659
b	50
d	50
h	59/81 ¹
l	300
l1	75
s	6
EDP no.	
plastic roller	065921
steel roller	065920

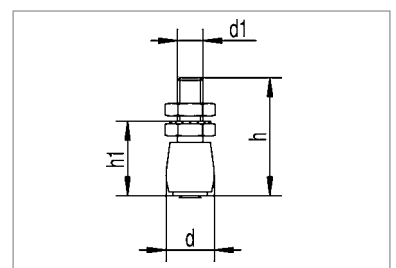


¹dimension "h" for plastic roller

HELM Guide roller -49 S

with screw joint, zinc-plated or stainless steel with plastic or brass roller

Part no.	349 S	449 S	549 S
bottom guide profile	340	440	540
d	19	32	49,5
d1	M10	M16	M20
h	46,5	63	81
h1	32	42,5	52
EDP no.			
plastic roller ¹	034962	044962	054962
plastic roller ²	03496230	-	-
brass roller ¹	034942	044942	054942



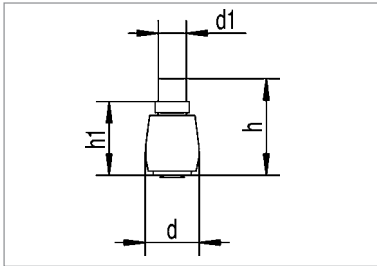
¹screw joint zinc-plated ²screw joint stainless steel



HELM Guide roller -49 N

with rivet joint, zinc-plated with plastic or brass roller

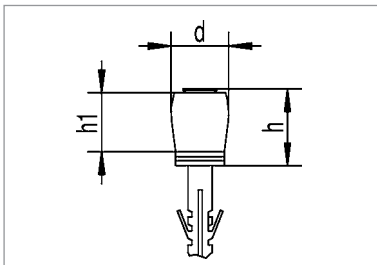
Part no.	349 N	449 N	549 N
bottom guide profile	340	440	540
d	19	32	50
d1	9.8	15.8	19.8
h	35	46	67
h1	27	36	47
EDP no.			
plastic roller	034963	044963	054963
brass roller	034943	044943	054943



HELM Guide roller -58 DÜ

with screw and plug, with plastic or brass roller

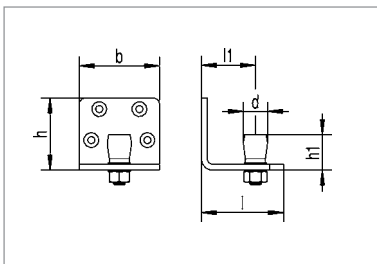
Part no.	258 DÜ	358 DÜ	458 DÜ	558 DÜ
bottom guide profile	240	340	440	540
d	12	19	32	49.5
h	16.5	24	39	48.5
h1	12	19.5	30	39.5
EDP no.				
plastic roller	025860	035860	045860	055860
brass roller	025840	035840	-	-



HELM Guide roller -153 -40

adjustable, zinc-plated angle bracket with plastic roller

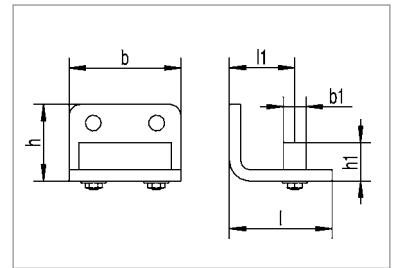
Part no.	153/240	153/340
bottom guide profile	240	340
b	40	40
d	12	19
h	36	36
h1	19	28
l	41	41
l1	22+10	22+10
EDP no.		
plastic roller	015320	015321



HELM Plastic glide 154/240

adjustable, zinc-plated angle bracket with plastic glide

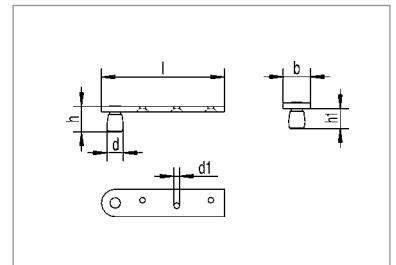
Part no.	154/240
bottom guide profile	240
b	60
b1	12.5
h	41
h1	20.5
l	55
l1	25+20
EDP no.	
plastic glide	015460



HELM Guide roller 249 F

with flange joint and roller at the side, in combination with bottom guide profile 240 with plastic or brass roller

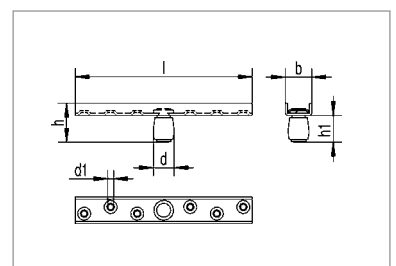
Part no.	249 F
bottom guide profile	240
b	20
d	12
d1	4.2
h	18
h1	14
l	90
EDP no.	
plastic roller	024961
brass roller	024941



HELM Guide roller -49 F

with flange joint and roller in the centre, in combination with bottom guide profile 340, 440 and 540 with plastic or brass roller

Part no.	349 F	449 F	549 F	649 F
bottom guide profile	340	340/440	440/540	540
b	24	30	38	50
d	19	19 ¹ /32 ²	32 ² /49.5 ³	49.5
d1	5.3	6.8	7.5	11
h	36	40 ¹ /50 ²	56 ² /66 ³	77
h1	25	25 ¹ /35 ²	36 ² /46 ³	52
l	160	210	264	350
EDP no.				
plastic roller	034961	044961 ¹	054961 ²	064961
	-	044964 ²	054964 ³	-
brass roller	034941	044941 ¹	054941 ²	-
	-	044944 ²	054944 ³	-



¹for bottom guide profile 340 ²for bottom guide profile 440 ³for bottom guide profile 540

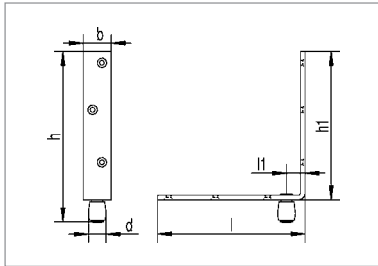


HELM Guide roller -49

with angle bracket fixing and roller at the side, in combination with bottom guide profile 240-540 with plastic or brass roller

Part no.	249	349	449	549
bottom guide profile	240	340	340/440	440/540
b	20	30	35	40
d	12	19	19 ¹ /32 ²	32 ² /49.5 ³
h	138	182	235 ¹ /246 ²	296 ² /306 ³
h1	124	158	210	260
l	124	158	200	255
l1	15	20	20	30
EDP no.				
plastic roller	024960	034960	044960 ¹	054960 ²
	-	-	044965 ²	054965 ³
brass roller	024940	034940	044940 ¹	054940 ²
	-	-	044945 ²	054945 ³

¹for bottom guide profile 340 ²for bottom guide profile 440 ³for bottom guide profile 540

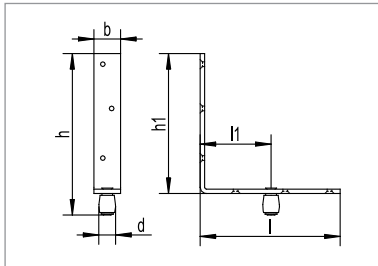


HELM Guide roller -49 1/2

with angle bracket fixing and roller in the centre, in combination with bottom guide profile 240-540 with plastic or brass roller

Part no.	249/1/2	349/1/2	449/1/2	549/1/2
bottom guide profile	240	340	340/440	440/540
b	20	30	35	40
d	12	19	19 ¹ /32 ²	32 ² /49.5 ³
h	138	182	235 ¹ /246 ²	296 ² /306 ³
h1	124	158	210	260
l	124	158	200	255
l1	70	80	120	155
EDP no.				
plastic roller	024968	034968	044968 ¹	054968 ²
	-	-	044969 ²	054969 ³
brass roller	024948	034948	044948 ¹	054948 ²
	-	-	044949 ²	054949 ³

¹for bottom guide profile 340 ²for bottom guide profile 440 ³for bottom guide profile 540

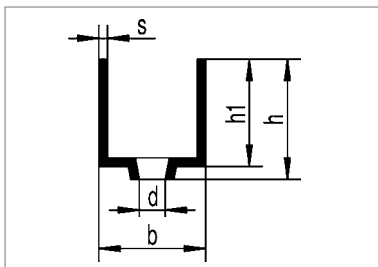


HELM Bottom guide profile -40

perforated, zinc-plated or stainless steel

Part no.	240	340	440	540
Profile				
b	15	25	40	60
d	5.5	6.2	6.0	6.0
h1	15	25	40	50
h	18	28	43	-
s	1	2	3	4
EDP no.				
stock length ¹	024010	034013	044013	054013
cut to length ¹	024019	034019	044019	054019
stock length ²	-	034036	-	-
cut to length ²	-	034037	-	-

¹zinc-plated ²stainless steel

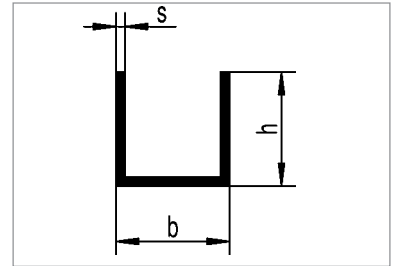


HELM Bottom guide profile -40

not perforated, zinc-plated or stainless steel

Part no.	240	340	440	540
Profile				
b	15	25	40	60
h	15	25	40	50
s	1	2	3	4
EDP no.				
stock length ¹	024016	034016	044016	054016
cut to length ¹	024018	034018	044018	054018
stock length ²	-	034011	-	-
cut to length ²	-	034012	-	-

¹zinc-plated ²stainless steel



Hardware for Sliding Gates

Suspended rolls



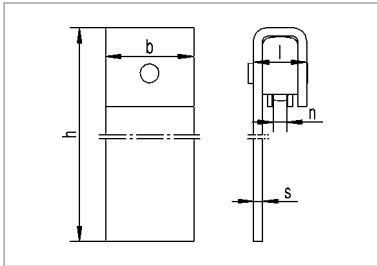
HELM Suspended roll 97- S

Steel roller with protection cap, primed, with ball bearing

Part no.	971 S	972 S
max. bearing capacity kg	160	375
b	70	100
h	300	350
l	41	60
n	12,5	15,3
s	10	10

EDP no.

Steel roller	097111	097211
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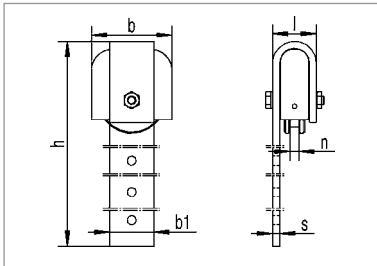
HELM Suspended roll -973 S

Steel roller with protection cap, plated, blue chromated, with ball bearing

Part no.	973 S
max. bearing capacity kg	150
b	92
b1	50
h	400
l	50
n	10
s	8

EDP no.

Steel roller	097311
--------------	--------



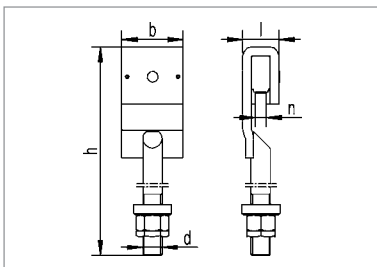
HELM Relief roll 91 - for folding gates

Steel roller, plated, with ball bearing. The roll is to relieve the gate hinges.
Use: e. g. exterior folding gates

Part no.	912	913
max. bearing capacity kg	200	350
b	70	70
d	M16	M22
h	376,5	381,5
l	41	41
n	12,5	12,5

EDP no.

Steel roller	091210	091310
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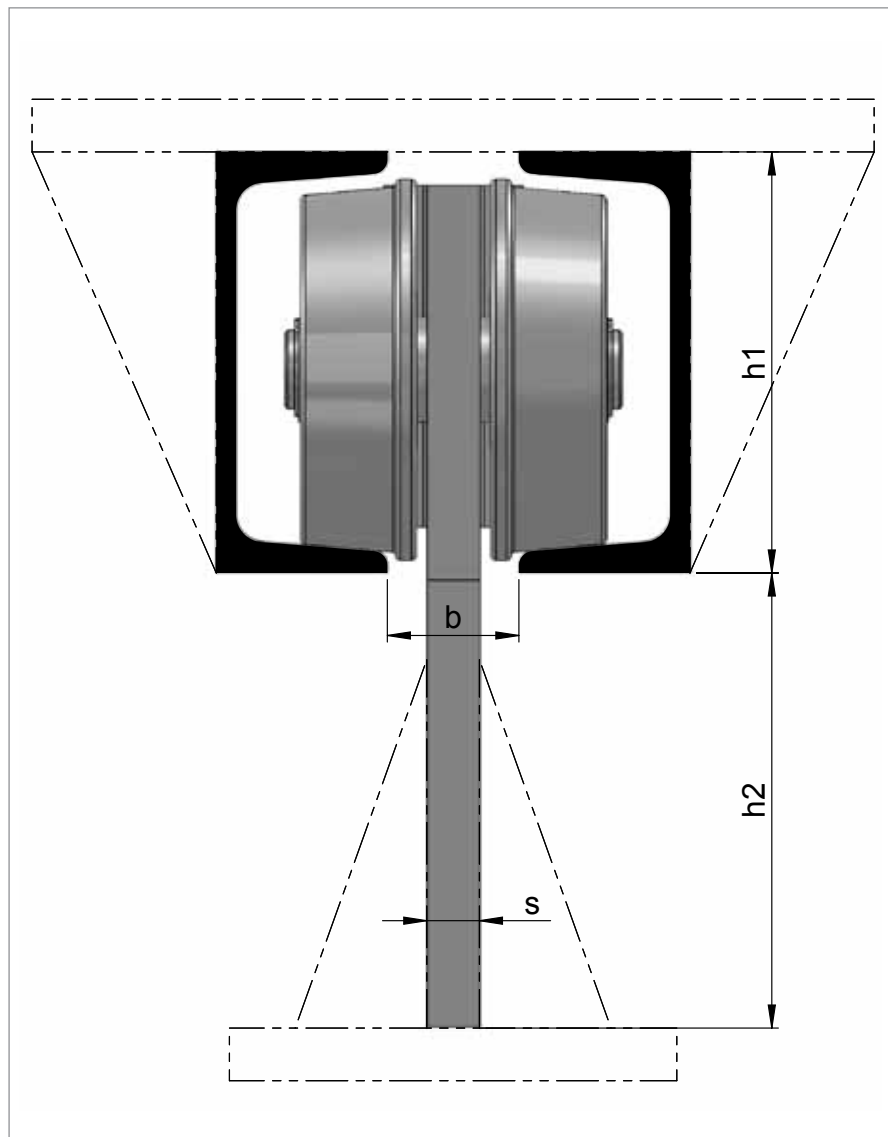
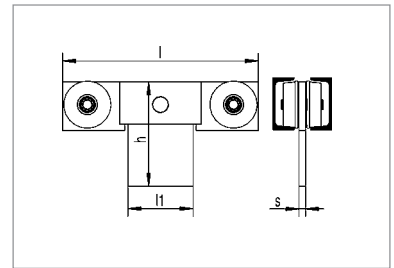


HELM Special rollers 1-T

of steel, with ball bearings, for door weights up to 8000 kg, primed

Special rollers for big hall gates, radiation protection doors or hangar gates. These are used with U-profile steel 160 (DIN 1026 -1), which has to be supplied by the customer. Also the relevant mounting of the profiles is effected by the customer.

Part no.	1T-007	1T-008
max. bearing capacity per trolley hanger (kg)	4000	1500
matching U profile steel h1	[] 200	[] 160
l	660	600
l1	200	200
b	60	50
h1	360	320
h2	174	172
s	25	20
EDP no.		
steel, primed	100710	100810



For door weights up to max. 3000 kg
or up to max. 8000 kg

Required information for top hung sliding gates

Company _____ Telephone _____
 Name _____ Fax _____
 Street _____ E-mail _____
 Postcode/city _____ Contact person _____

Supply exclusively through specialised trade. Please indicate your specialist dealer if appropriate: _____

Order **Enquiry** **Date** _____
Number of required installations _____ pieces **Installation type** _____ (see fig. 1 - fig. 12 bottom)
Number of leaves _____ **Leaf thickness** _____ mm
Leaf widths _____ mm **Leaf material** _____
door weight _____ kg
Leaf material timber steel

Straight sliding installations

Type of drive manual electrical (please observe DIN 13241-1)
track mounting wall mounting ceiling mounting
 height-adjustable by the customer
bottom guide bottom guide profile HELM 240 - 540 Part _____
 guide roller Part _____
door handles*
 door pull 256 Part no.: _____

*more door handles can be found in the catalogue (K3) product range KWS

Installation types

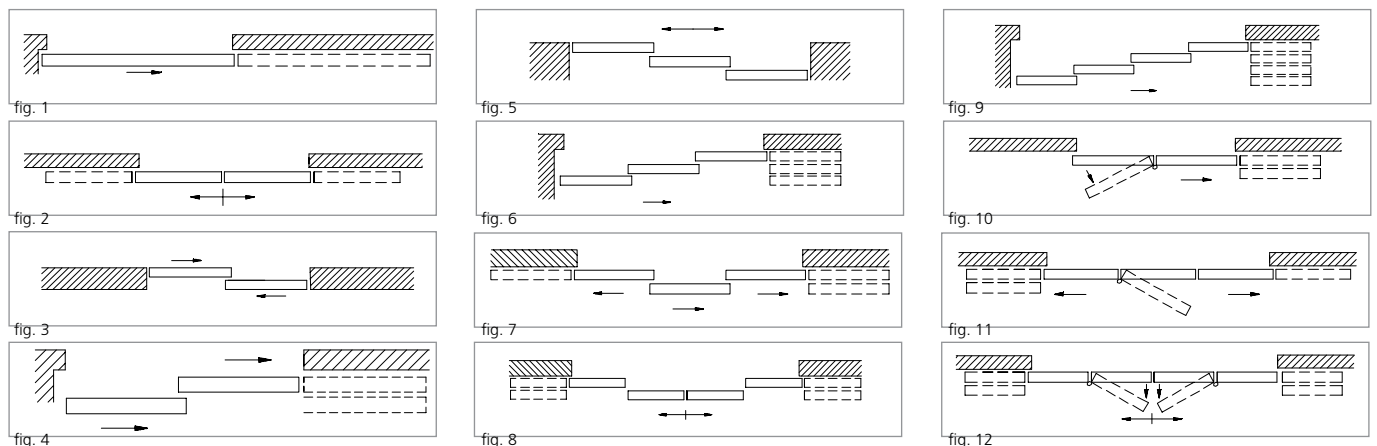


fig. 1

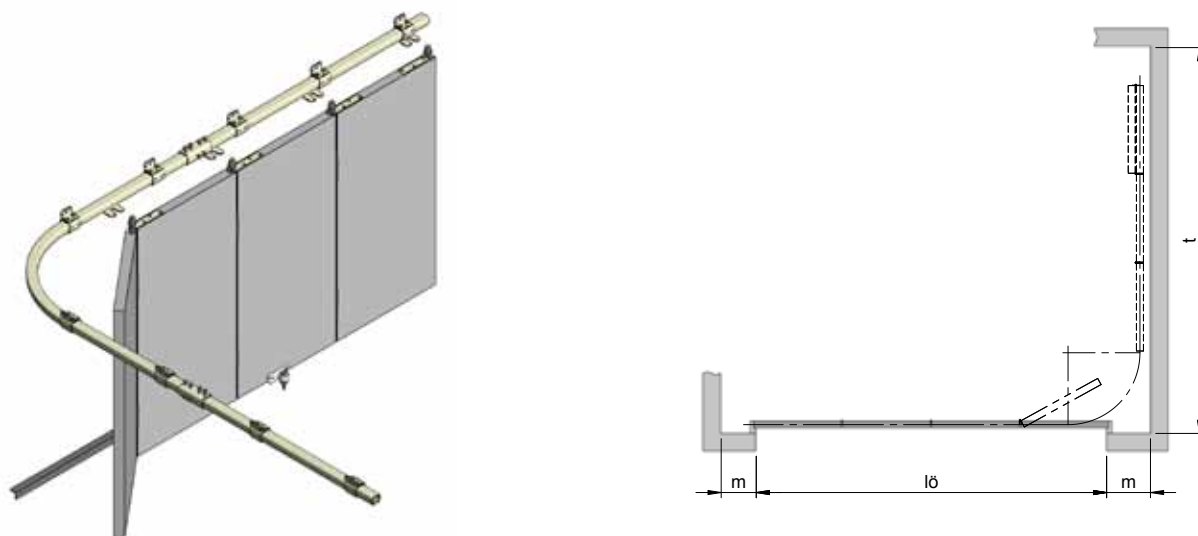
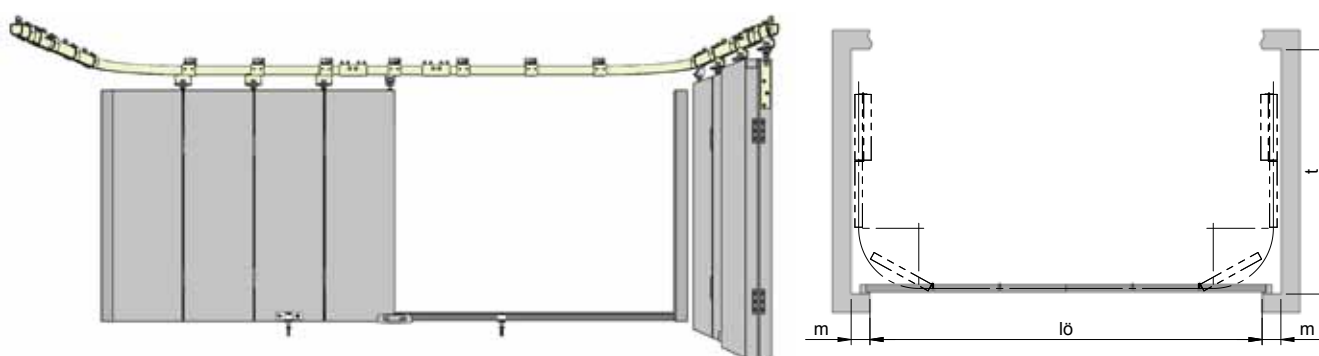


fig. 2

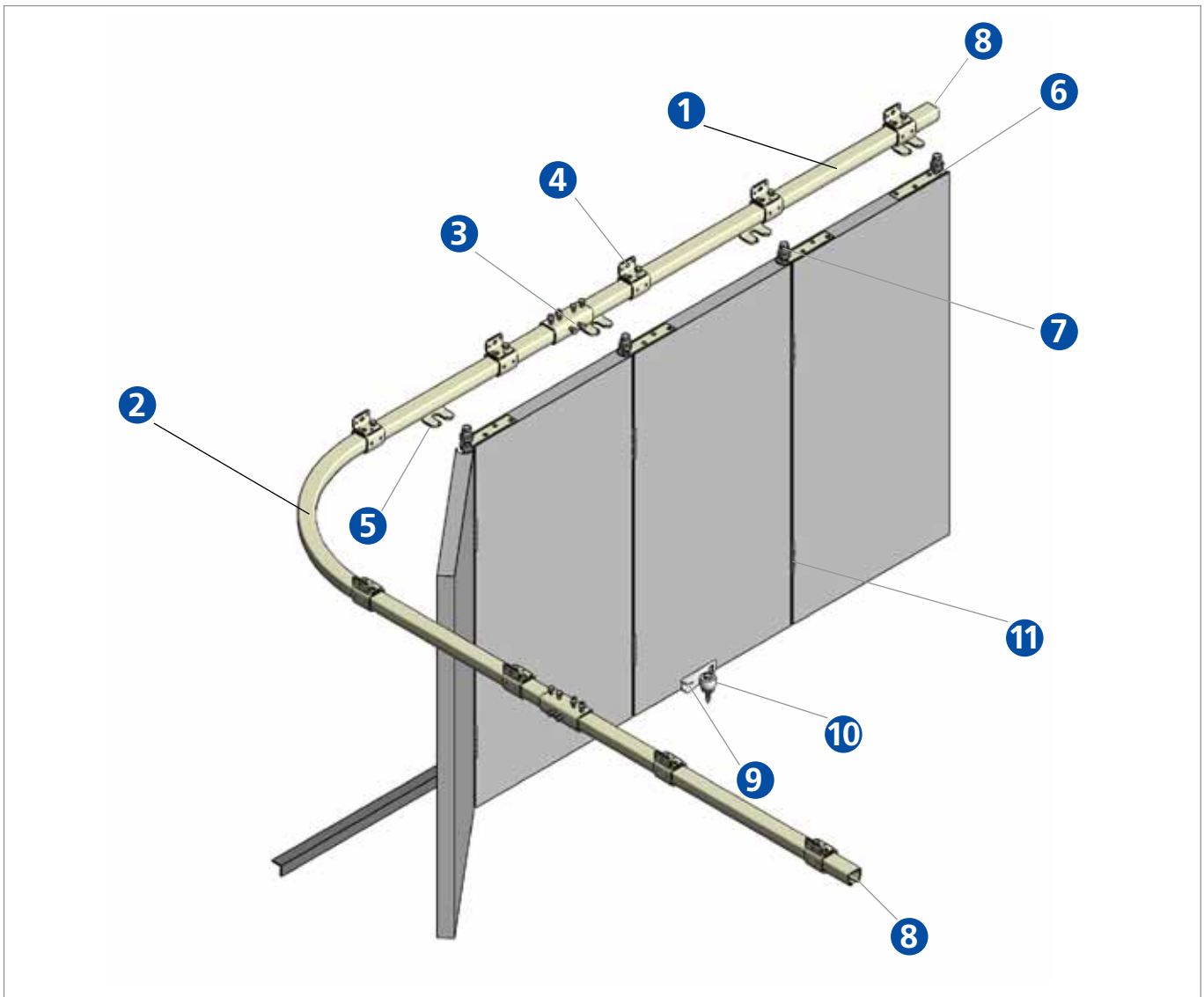


Hardware for Round the Corner Sliding Doors

Round the corner sliding doors are used if there is not enough space in the opening direction for moving a sliding gate leaf. The hardware presented on the following pages makes it possible to guide several gate leaves around the corner. An installation situation is often found in garages and other gateways. Moreover, these gate installations can be fitted with a wicket door leaf.

In case of round the corner sliding doors it is differentiated between one-group and two-group installations. In the case of one-group installations all leaves are pushed to one side, in the case of two-group installation one part of the leaves is pushed to one side, the other part to the other side. In the following we present installation examples, installation cross-sections and special features. With help of the tables presented on page 55 it is possible to determine the system to be employed on the basis of the door weights. Please use the form on page 58 for your enquiries.

Example four-leaf installation



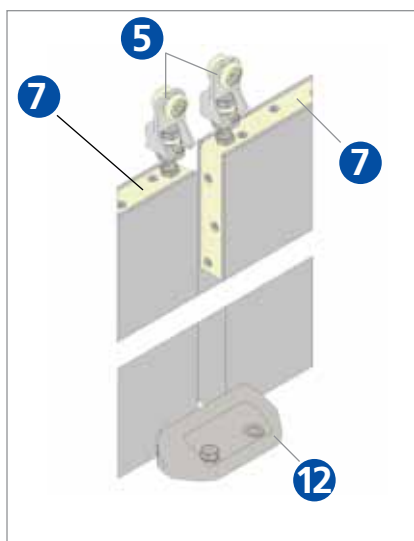
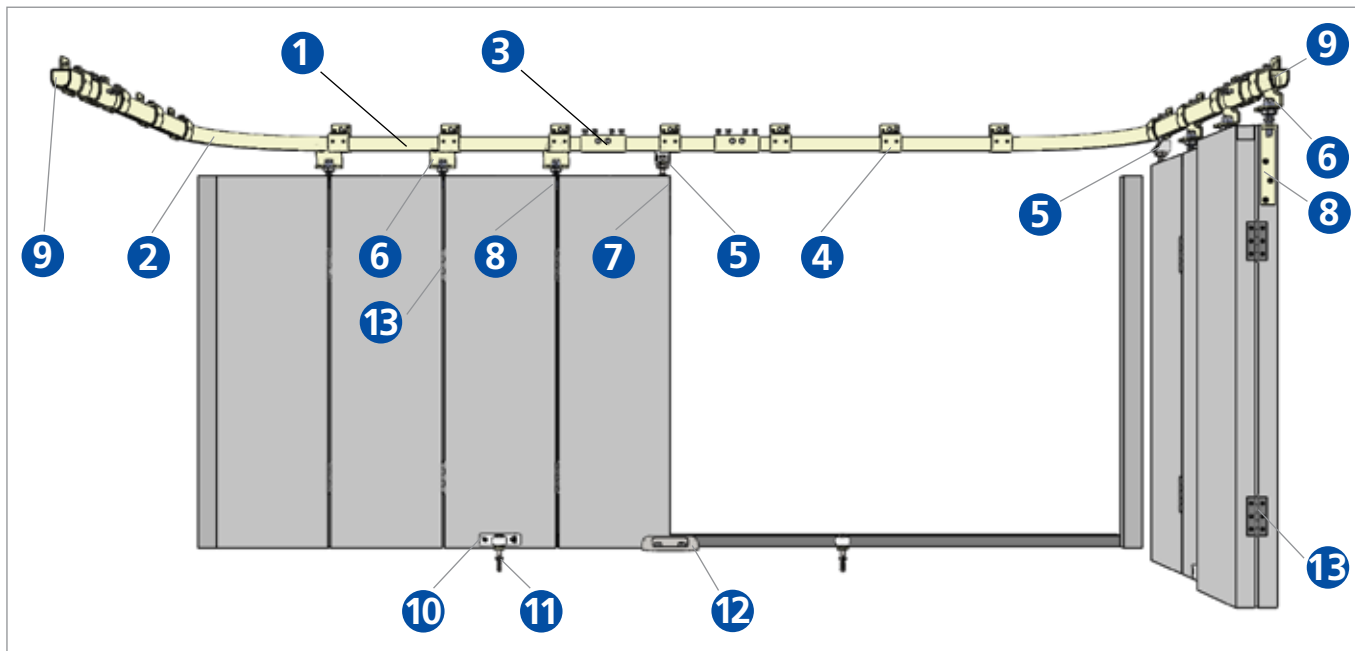
The clearance is divided in such a way that the single leaf widths are 550-850 mm.

Part	Scope of supply	Quantity
1	track	2 piece
2	bend radiuses	1 piece
3	connection brackets -03	2 piece
4	open side wall mounting bracket -01	every 700-750 mm
5	trolley hanger -86 or -24	4 piece
6	angle bracket -94	1 piece
7	angle bracket -96	3 piece
8	rail stop -00 P	2 piece
9	wedge -55	1 piece
10	pressure roller -59 Dü	1 piece
11	hinge -52	6 - 9 piece

Round the Corner Sliding Door Hardware

Structure Hardware, two-group

Example 2 x four-leaf installation



In case of big gate openings it is recommended to use two-group installations with one group moving to the right and the other to the left. Benefit: by splitting the installation into two groups the gate can consequently be operated more effortlessly.

Part	Scope of supply	Quantity
1	track	3 piece
2	bend radiuses	2 piece
3	connection brackets -03	4 piece
4	open side wall mounting bracket -01	every 700-750 mm
5	trolley hanger -22	2 piece
6	trolley hanger -86 or -24	6 piece
7	angle bracket -94	2 piece
8	angle bracket -96	6 piece
9	rail stop -00 P	2 piece
10	wedge -55	2 piece
11	pressure roller -59 Dü	2 piece
12	tortoiseshell-shaped guide 418	1 piece
13	hinge -52	12 - 18 piece

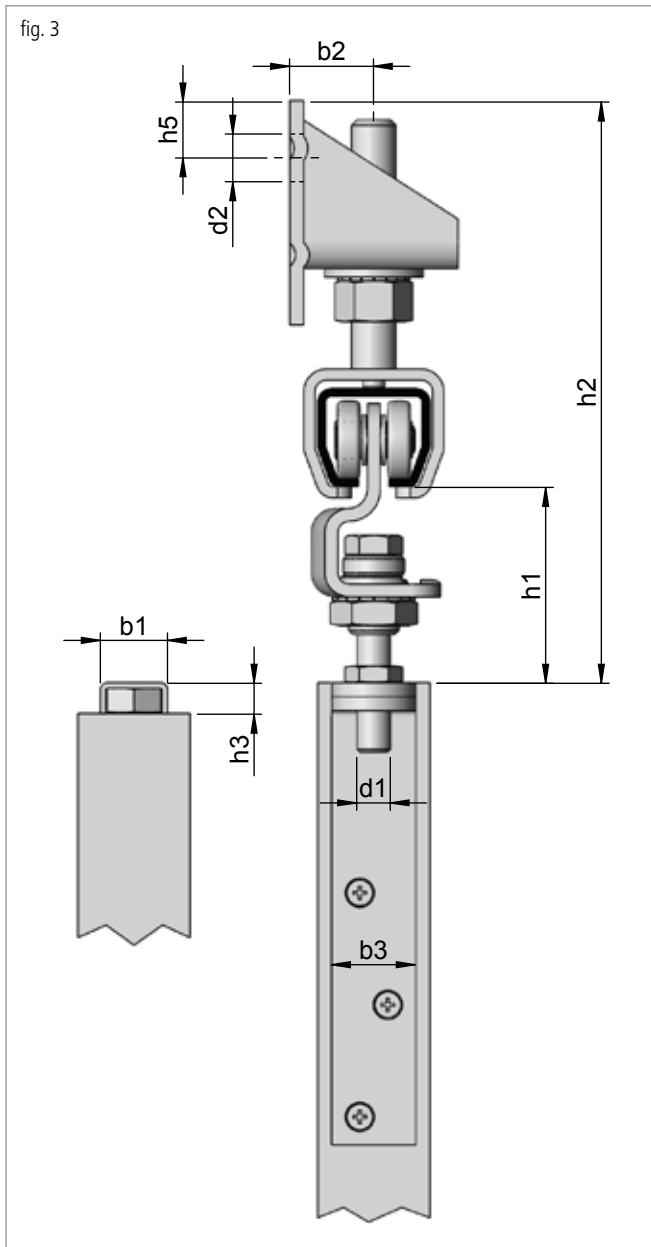


fig. 3 Sliding hardware HELM 100-500 with trolley hangers of the series -86

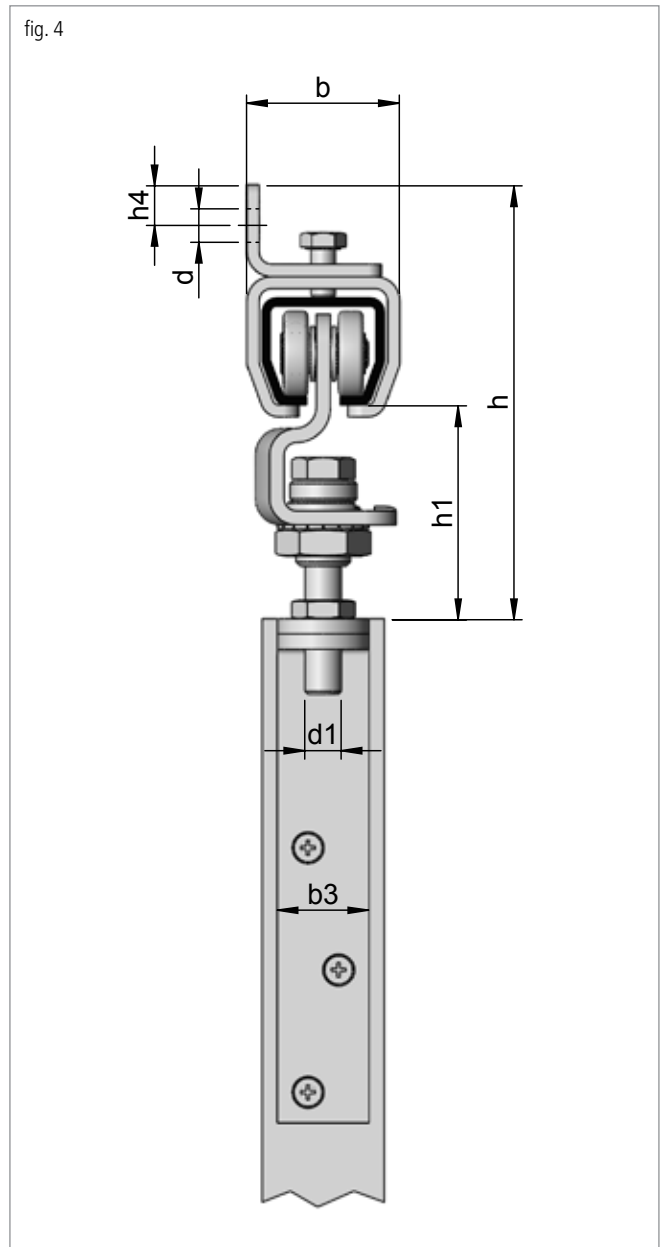


fig. 4: Sliding hardware HELM 100-500 with trolley hangers of the series -86

Part no.	100	300	400	500
Profile	100	300	400	500
b	38	50	60	80
b1	20	24	30	38
b2	21+17	25+15	30+10	42+40
b3	20	30	35	40
d	8	11	13	17
d1	M10	M12	M16	M20
d2	13	17	17	18
h	111+12	135+13	165+13	213+25
h1	54+12	63+13	76+13	97+25
h2	160+30	203+35	224+30	285+80
h3	8	11	15	20
h4	10	13	16.5	17.5
h5	16.5	20	20	25

Round the Corner Sliding Door Hardware

Installation cross-sections

fig. 5

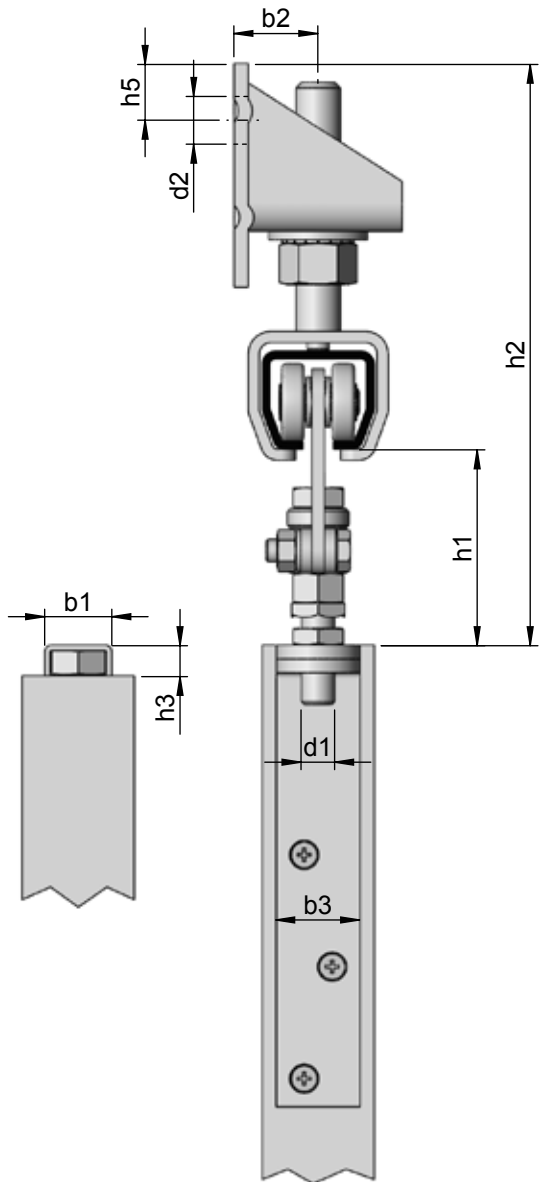


fig. 5 Sliding hardware HELM 100-700 with trolley hangers of the series -24

fig. 6

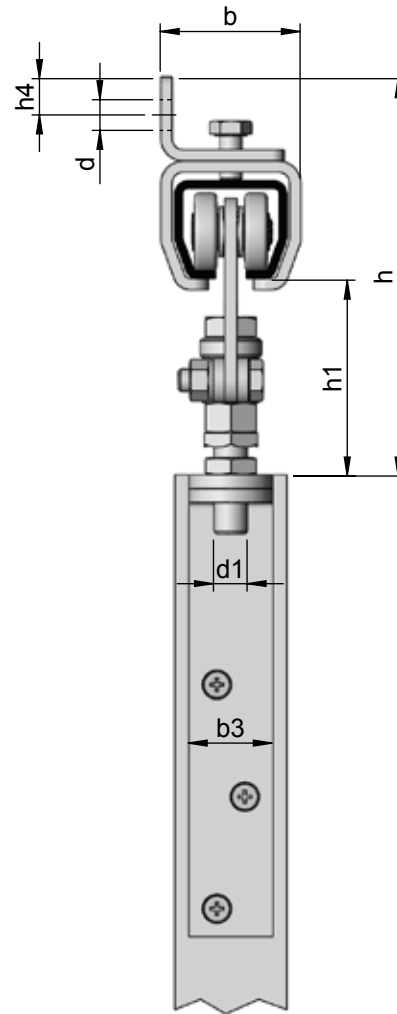
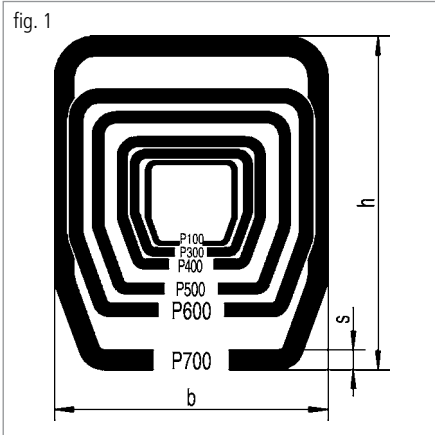


fig. 6 Sliding hardware HELM 100-700 with trolley hangers of the series -24

Part no.	100	300	400	500	600	700
Profile	100	300	400	500	600	700
b	38	50	60	80	100	115
b1	20	24	30	38	50	60
b2	21+17	25+15	30+10	42+40	50+30	57,5+120
b3	20	30	35	40	-	-
d	8	11	13	17	22	26
d1	M10	M12	M16	M20	M24	M30
d2	13	17	17	18	18	18
h	111+7	142+7	171+4	215+15	272+68	366+67
h1	54+7	70+7	82+4	99+15	123+68	166+67
h2	160+25	210+25	230+20	290+70	335+115	425+150
h3	8	11	15	20	25	30
h4	10	13	16.5	17.5	25	30
h5	16.5	20	20	25	25	30

Determining the tracks

We supply tracks, running gears as well as suspension material in six different sizes. The tracks are available in steel blank, zinc-plated and partly in stainless steel.



Track dimensions

Profile no.	100	300	400	500	600	700
h	28.0	35.0	43.5	60.0	75.0	110.0
b	30.0	40.0	48.5	65.0	80.0	90.0
s	1.75	2.75	3.2	3.6	4.5	6.5




Available track types

Profile no.	100	300	400	500	600	700
blank	•	•	•	•	•	•
zinc-plated	•	•	•	•	•	•
stainless steel	•	•	•	•		

On the basis of load bearing capacity of one and double-pair trolley hangers the correct profile and hardware size can be determined with the help of table 1.

When determining the hardware size please take into account that the one-pair trolley hangers -22 are only used as final support rollers for two-group installations.

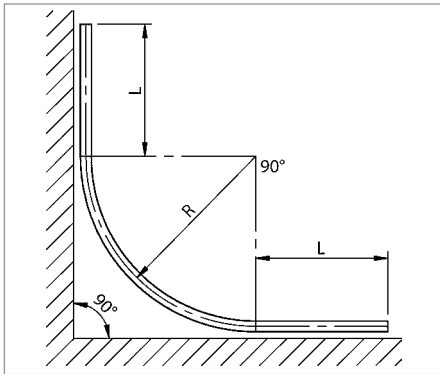
Load bearing capacity of the one and double-pair trolley hangers

Profile	100	300	400	500	600	700	
Series -22	Part no.	-	322	422*	522	622	722
 422	Load bearing capacity in kg per trolley hanger or max. door weight	-	65	100	200	400	700
	Trolley 422 in zinc plated, trolley 322 and trolleys 522 - 722 cast iron painted.						
Series -86	Part no.	186	386	486	586	-	-
	Load bearing capacity in kg per trolley hanger or max. door weight	45	85	150	300	-	-
	Load bearing capacity in kg per trolley hanger or max. door weight for electrical installations	-	70	120	240	-	-
Series -24	Part no.	124	324	424	524	624	724
	Load bearing capacity in kg per trolley hanger or max. door weight	45	85	150	300	600	1000
	Load bearing capacity in kg per trolley hanger or max. door weight for electrical installations	-	70	120	240	475	700

Round the Corner Sliding Door Hardware

Bend Radiuses, zinc-plated and blank steel

Determining the track bend radiuses (zinc-plated/blank steel)



The following radiuses guarantee a trouble-free movement of the trolley hangers through the bends. Depending on the radius (R) the oversizes (L) of the track bends can vary.

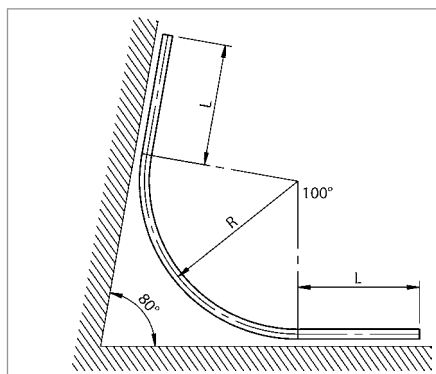
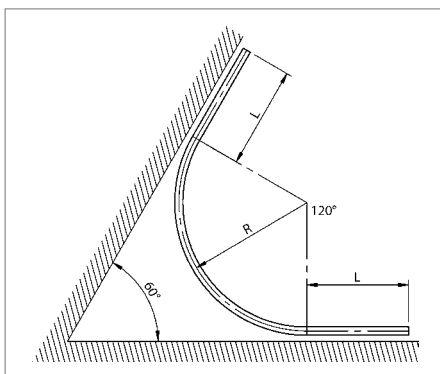
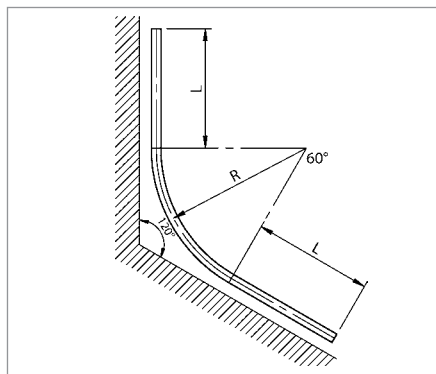
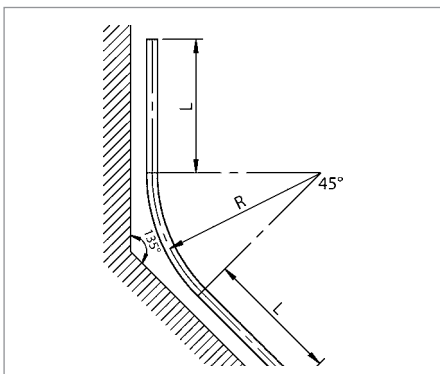
The track bends can be manufactured as various constructions according to the table (bend types).

Bend types (R)	205	300	320	400	410	415	605	610	630	650	790	875	905	1035	all if R >
profile 100	•	•		•						•					900
profile 300			•		•				•						950
profile 400						•		•					•		1100
profile 500							•					•			1300
profile 600											•				1300
profile 700														•	1500

oversizes (L) approx.

15 degrees	960	950	940	940	940	940	910	910	910	900	890	870	870	850
30 degrees	940	910	900	890	880	880	830	830	820	820	780	760	750	820
45 degrees	910	870	860	840	830	830	750	750	740	740	830	640	630	830
60 degrees	880	830	820	780	770	770	670	670	660	650	830	530	510	950
90 degrees	830	750	740	680	660	660	510	510	490	480	870	550	530	680
180 degrees	670	520	490	610	590	590	540	530	490	470	*	610	570	*

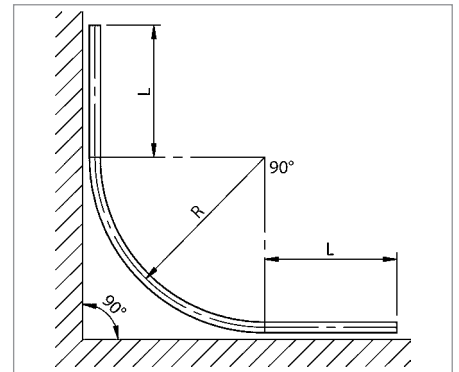
*max. 125 degrees possible



Determining the track bend radiuses (stainless steel)

The following radiuses guarantee a trouble-free movement of the trolley hangers through the bends. Depending on the radius (R) the oversizes (L) of the track bends can vary.

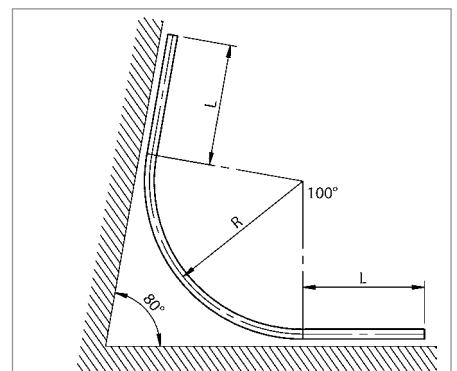
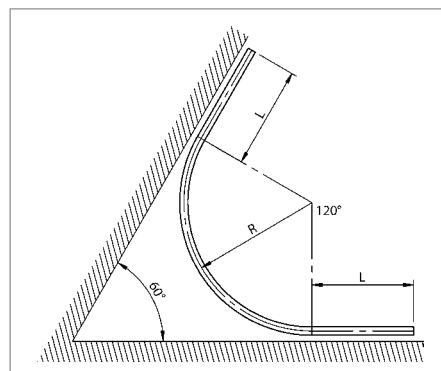
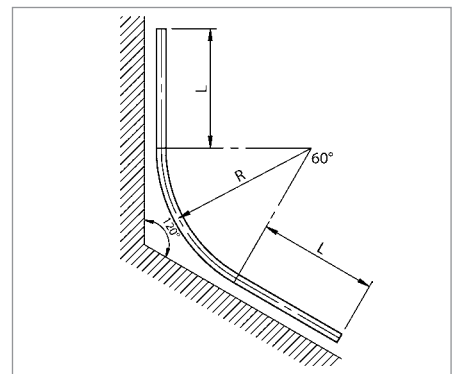
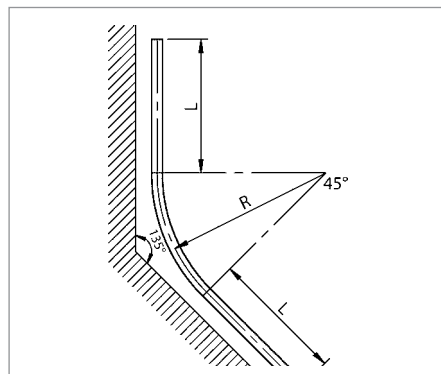
The track bends can be manufactured as various constructions according to the table (bend types).



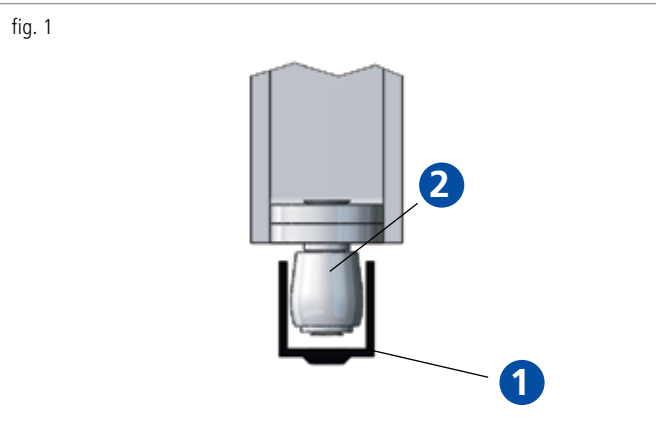
Bend types (R)	225	435	645	650	690
profile 100	•				•
profile 300		•		•	
profile 400		•		•	
profile 500			•		

oversizes (L) approx.	225	435	645	650	690
15 degrees	970	940	960	960	950
30 degrees	940	880	880	870	860
45 degrees	910	820	790	790	770
60 degrees	880	770	710	700	680
90 degrees	820	650	540	530	500
180 degrees	640	*	-	-	-

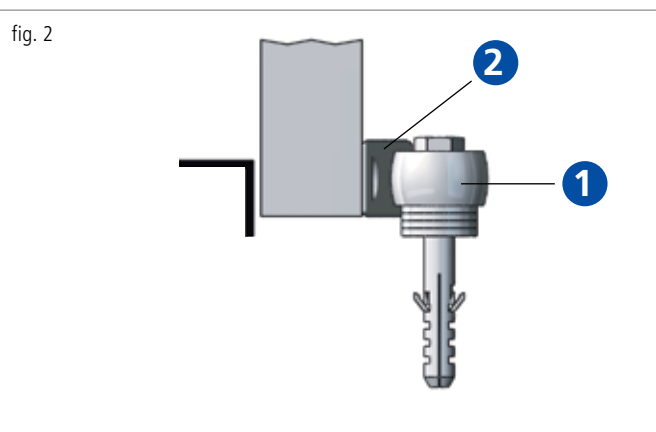
*max. 125 degrees possible



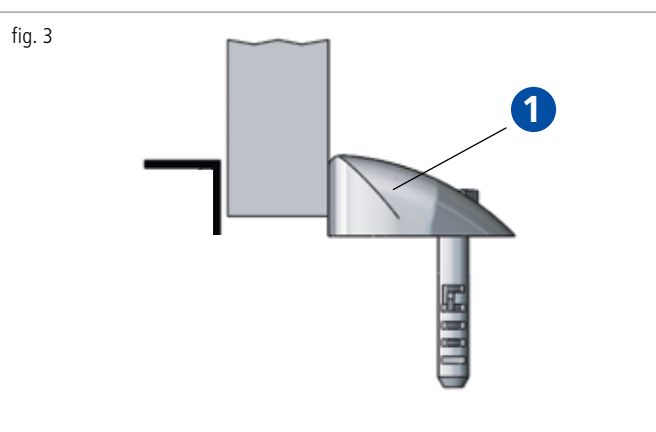
Installation examples



- 1 Bottom guide profile
- 2 Guide roller



- 1 Pressure roller
- 2 Wedge



- 1 Tortoiseshell-shaped guide

Required information for round the corner sliding doors

Company _____ Telephone _____
 Name _____ Fax _____
 Street _____ E-mail _____
 Postcode/city _____ Contact person _____

Supply exclusively through specialised trade. Please indicate your specialist dealer if appropriate: _____

Order **Enquiry** **Date** _____

We would ask you to submit a sketch and the following information:

Clear opening lö: _____ mm
 Clear height lh: _____ mm
 Wall projection m: _____ mm
 Lintel height s: _____ mm

Type of operation: manual
 electrical
 (please observe DIN 13241-1)

Drawing showing exact dimensions: _____
Only required in case of walls with an obtuse or acute angle

Measure t: _____ mm

Mounting type of track: wall mounting
 ceiling mounting

Type of installation: one-group, movable to the right
 one-group, movable to the left
 two-group

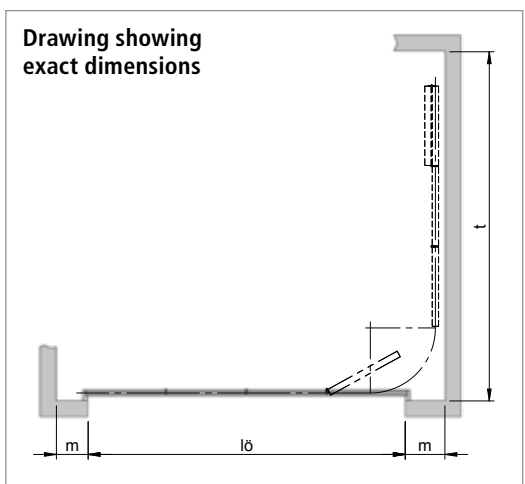
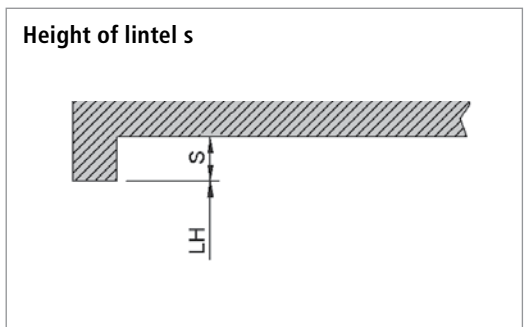
Leaf material: timber
 steel

Number of leaves: _____ piece

Leaf thickness: _____ mm

Weight of single leaf: _____ kg

Type of bottom guide: type 1: bottom guide profile with guide rollers
 type 2: Pressure roller and wedge
 type 3: tortoiseshell-shaped guide





Hardware for Folding Doors and Concertina Doors

For space-saving door and partition wall solutions HELM offers various folding and concertina hardware in the profile sizes 100 - 500 of steel. The folding hardware can be used up to a maximum door weight of 150 kg and leaf widths of 600 to 900 mm. The concertina hardware can be used up to 500 kg with the same leaf widths.

On the following pages you will find the various installation situations and hardware combinations. To facilitate enquires please use the form shown on Page 74.

Folding doors:

- Door weights up to 150 kg
- Trolley hangers are attached to the corners of the leaves.
- Benefit: Leaves swing only to one side and can thus also be pushed against a wall.
- Bottom guide track is required.
- Three hanging options: a) butt-enclosed, B) rebate-mounted, C) butt front-mounted.
- All leaves are pivoted.

Concertina doors:

- Door weights up to 500 kg
- Trolley hangers are attached in the middle of the leaves.
- Benefit: Bottom guide track is not required.
- Concertina doors always begin with a half leaf.
- All leaves are pivoted.

HELM folding door hardware, butt-enclosed, type "A"

for door weights up to 150 kg with a single leaf width of 600-900 mm

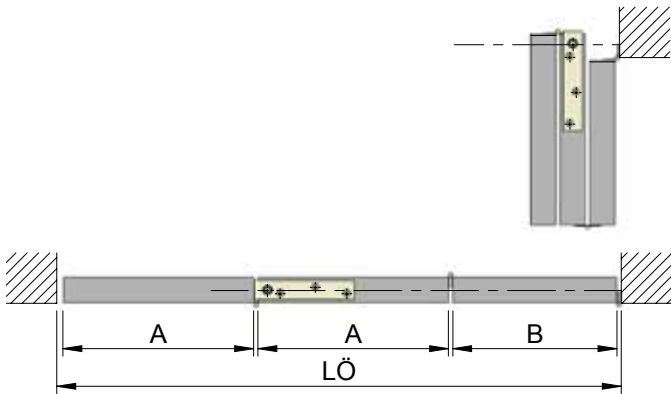
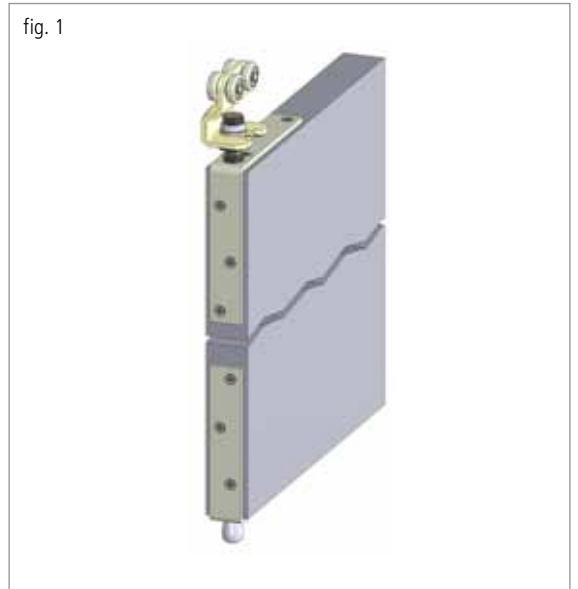


fig. 1



HELM folding door hardware, rebate-mounted, type "B"

for door weights up to 150 kg with a single leaf width of 600-900 mm

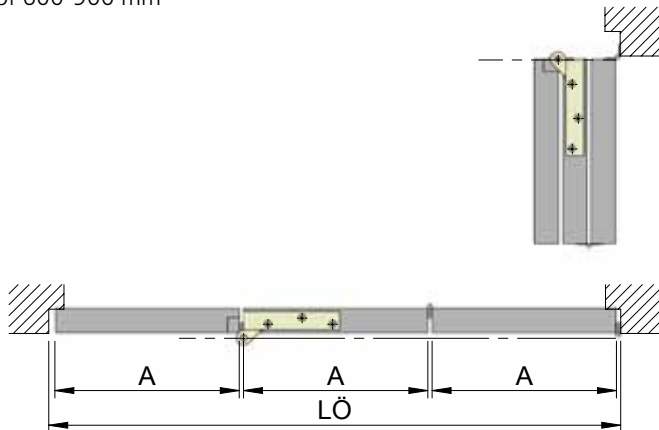
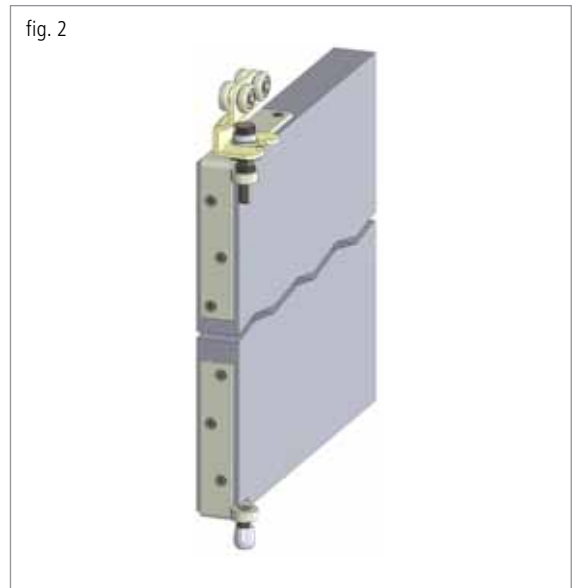


fig. 2



HELM folding door hardware, butt front-mounted, type "C"

for door weights up to 150 kg with a single leaf width of 600-900 mm

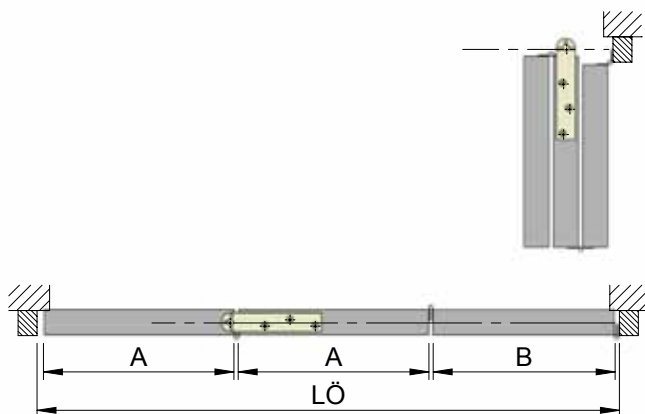
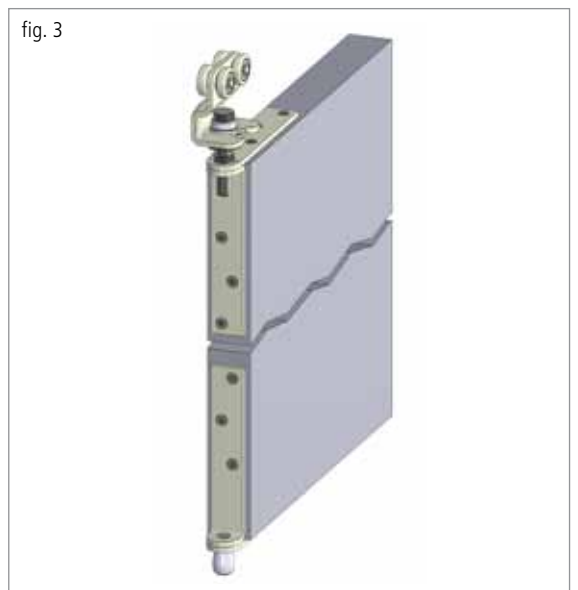
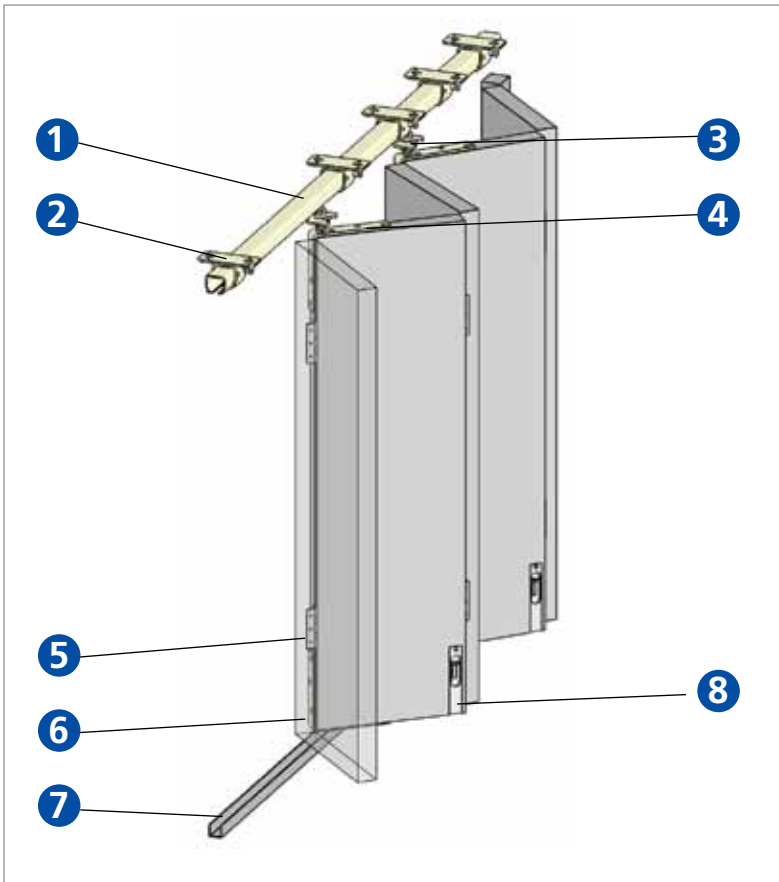


fig. 3

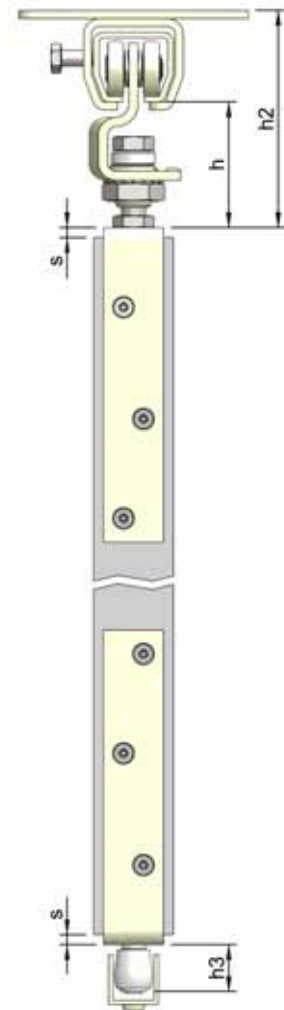


Type "A" – butt-enclosed



Hardware combination

- 1 Track profile -00
- 2 Wall or ceiling bracket -01/-02
- 3 Trolley hanger -86/-24
- 4 Angle bracket -94
- 5 Hinge -52
- 6 Guide roller -49
- 7 Bottom guide track -40
- 8 Flush bolt



Profile	100	300	400	500
angle bracket	194	394	494	594
guide roller	249	349	449	549
load bearing capacity (kg)	22	42	75	150
roller Ø	12	19	19 ¹ /32 ²	32 ² /50 ³
bottom guide profile	240	340	340/440	440/540

Profile	100	300	400	500
h	54 + 12	63 + 13	76 + 13	97 + 25
h2	90 + 12	109 + 13	131 + 13	172 + 25
h3	14	23,5	25 ¹ /36 ²	32,5 ² /46,5 ³
s	4	5	6	8

¹for bottom guide profile 340

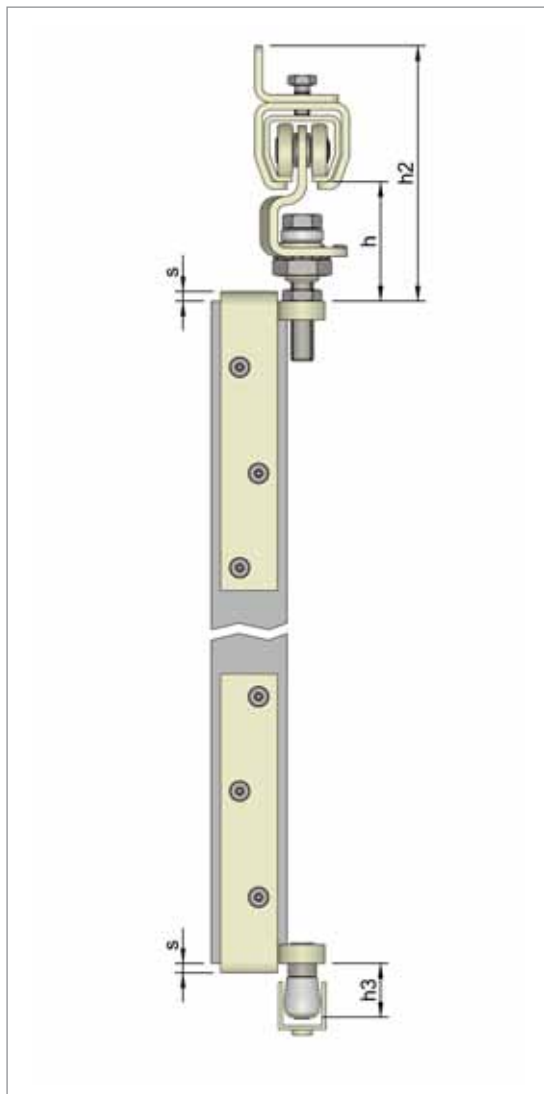
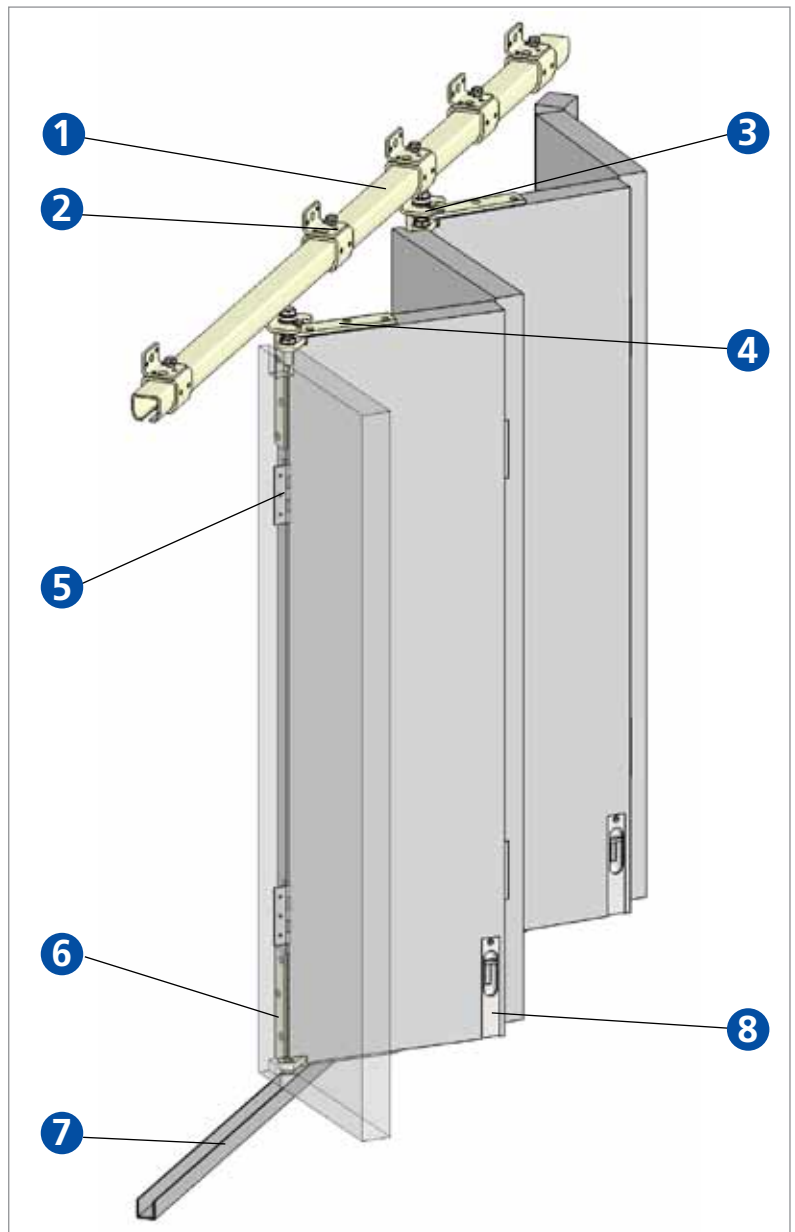
²for bottom guide profile 440

³for bottom guide profile 540

Type "B" – butt front-mounted

Hardware combination

- 1 Track profile -00
- 2 Wall or ceiling bracket -01/-02
- 3 Trolley hanger -86/-24
- 4 Angle bracket -97 right or left
- 5 Hinge -52
- 6 Guide roller -50 right or left
- 7 Bottom guide track -40
- 8 Flush bolt



Profile	100	300	400	500
angle bracket	197	397	497	597
load bearing capacity (kg)	22	42	75	150
guide roller	250	350	450	550
roller Ø	12	19	19 ¹ /32 ²	32 ² /50 ³
bottom guide profile	240	340	340/440	440/540

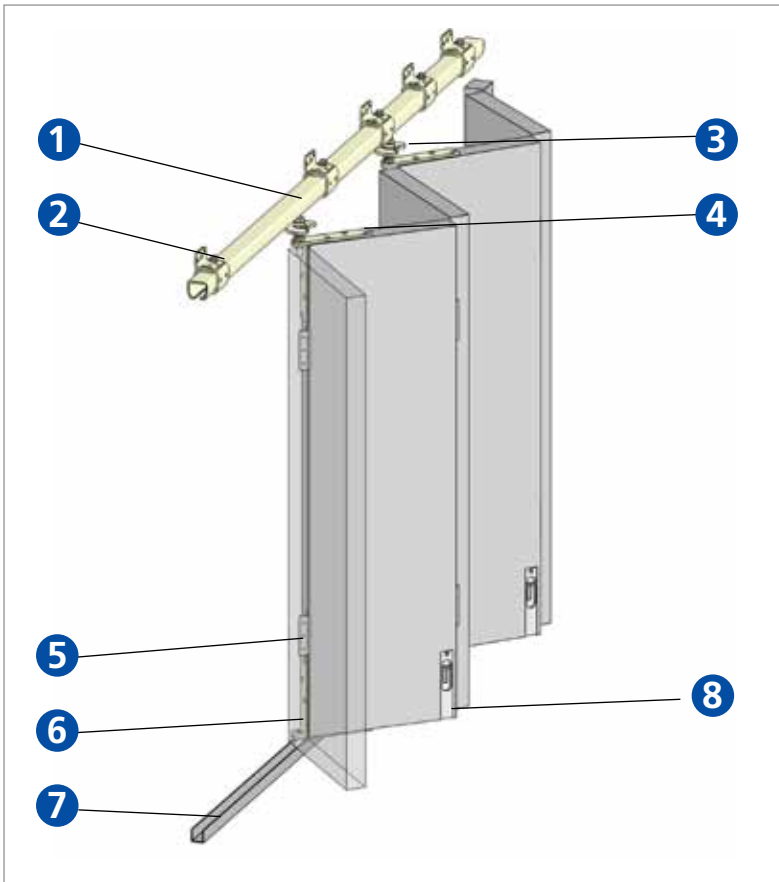
Profile	100	300	400	500
h	54 + 12	63 + 13	76 + 13	97 + 25
h2	111 + 12	135 + 13	165 + 13	213 + 25
h3	18	28,5	29,5 ¹ /38 ²	37 ² /46,5 ³
s	4	5	6	8

¹for bottom guide profile 340

²for bottom guide profile 440

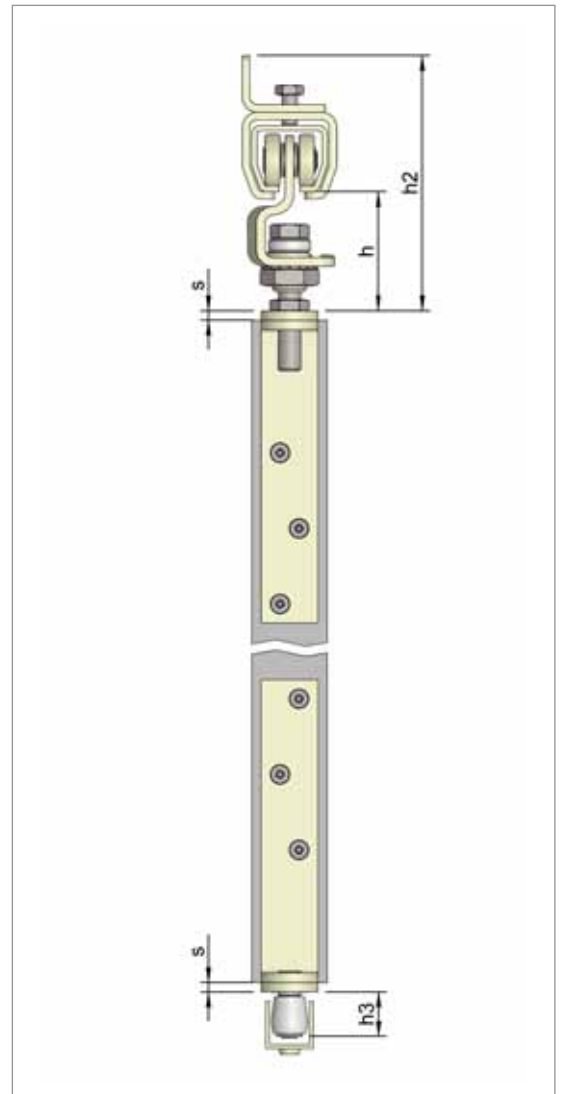
³for bottom guide profile 540

Type "C" – butt front-mounted



Hardware combination

- 1 Track profile -00
- 2 Wall or ceiling bracket -01/-02
- 3 Trolley hanger -86/-24
- 4 Angle bracket -96
- 5 Hinge -52
- 6 Guide bracket -49 A
- 7 Bottom guide track -40
- 8 Flush bolt



Profile	100	300	400	500
angle bracket	196	396	496	596
load bearing capacity (kg)	22	42	75	150
guide roller	249A	349A	449A	549A
roller Ø	12	19	19 ¹ /32 ²	32 ² /50 ³
bottom guide profile	240	340	340/440	440/540

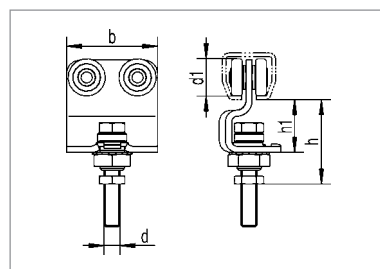
Profile	100	300	400	500
h	54 + 12	63 + 13	76 + 13	97 + 25
h2	111 + 12	135 + 13	165 + 13	213 + 25
h3	14	23,5	25 ¹ /35,5 ²	36 ² /46,5 ³
s	4	5	6	8

¹for bottom guide profile 340 ²for bottom guide profile 440 ³for bottom guide profile 540

HELM Trolley hanger -86

double-pair, zinc-plated

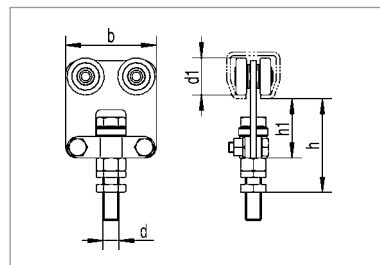
Part no.	186	386	486	586
b	50	68	90	110
d	M10	M12	M16	M20
d1	Ø22	Ø27,9	Ø34	Ø48
h	54 + 12	63 + 13	76 + 13	97 + 25
h1	33	39	48	64
EDP no.				
zinc-plated	018620	038620	048620	058620



HELM Trolley hanger -24

double-pair, for folding and concertina door hardware without frame bracket, zinc-plated

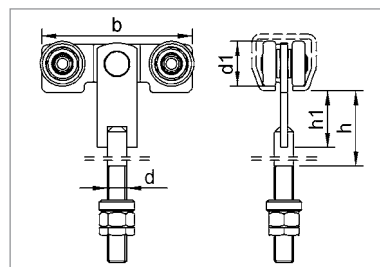
Part no.	124	324	424	524	624	724
b	50	68	90	110	150	200
d	M10	M12	M16	M20	M24	M30
d1	Ø22	Ø27,9	Ø34	Ø48	Ø60	Ø89
h	54 + 7	70 + 7	81,5 + 4	99 + 16	123 + 68	166 + 67
h1	~33	44	49	59	78,5	110
EDP no.						
zinc-plated	012420	032420	042420	052420	062420	072420



HELM Trolley hanger -20 L

double-pair, for folding and concertina door hardware without frame bracket, zinc-plated

Part no.	320 L	420 L	520 L	620 L	720 L
b	94	126	167	234	308
d	M12	M16	M20	M24	M30
d1	Ø27,9	Ø34	Ø48	Ø60	Ø89
h	138,3	152,8	155,4	184,5	279
h1	35,3	34,8	40,4	49,5	69
EDP no.					
zinc-plated	032020	042020	052020	062020	072020

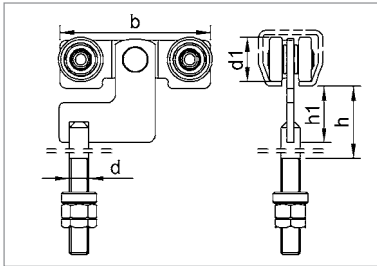




HELM Trolley hanger -20 L

double-pair, for folding and concertina door hardware without frame bracket, zinc-plated

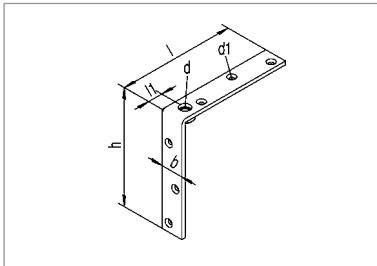
Part no.	321 L	421 L	521 L	621 L	721 L
b	94	126	167	234	308
d	M12	M16	M20	M24	M30
d1	Ø27,9	Ø34	Ø48	Ø60	Ø89
h	138,3	151,8	154,4	190,5	279
h1	35,3	34,8	39,4	61	69
EDP no.					
zinc-plated	032120	042120	052120	062120	072120



HELM Angle bracket -94

zinc-plated, for timber leaves, for screwing on or countersinking, with thread on the side

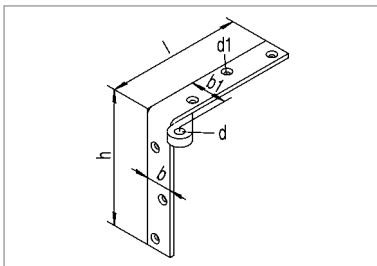
Part no.	194	394	494	594
Profile	100	300	400	500
b	20	30	35	40
d	M10	M12	M16	M20
d1	4,8	5,9	7	8,4
h	124	158	210	260
l	124	158	200	255
l1	15	20	20	30
EDP no.				
zinc-plated	019420	039420	049420	059420



HELM Angle bracket -97

zinc-plated, for timber leaves, for screwing on or countersinking, with thread on the side

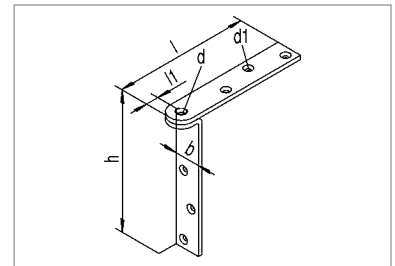
Part no.	197	397	497	597
Profile	100	300	400	500
b	20	30	35	40
d	M10	M12	M16	M20
d1	4,8	5,9	7	8,4
h	124	158	210	260
l	124	158	200	255
b1	32	43	51	75
EDP no.				
right	019720	039720	049720	059720
left	019721	039721	049721	059721



HELM Angle bracket -96

zinc-plated, for timber leaves, for screwing on or countersinking, with thread on the side

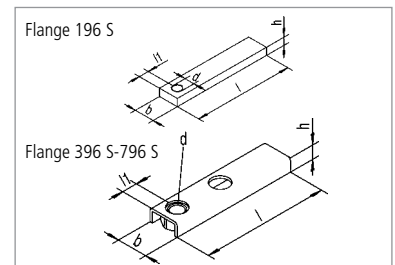
Part no.	196	396	496	596
Profile	100	300	400	500
b	20	30	35	40
d	M10	M12	M16	M20
d1	4,8	5,4	7	8,4
h	120	165	223	260
l	130	160	219	280
l1	10	15	18	20
EDP no.				
zinc-plated	019620	039620	049620	059620



HELM Flange -96 S

in blank steel, for steel leaves, for welding on, with thread at the side

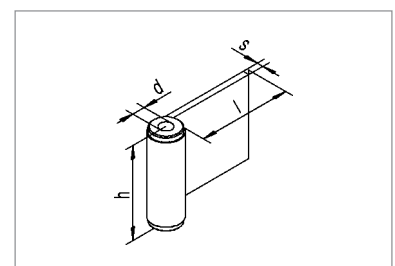
Part no.	196 S	396 S	496 S	596 S	696 S	796 S
Profile	100	300	400	500	600	700
b	20	24	30	38	50	60
d	M10	M12	M16	M20	M24	M30
h	8	11	15	20	25	30
l	100	100	120	140	150	180
l1	10	12	15,5	20	20	25
EDP no.						
steel blank	019611	039611	049611	059611	069611	079611



HELM Hinge strap 320 BL

edged, without holes, with brass sleeves

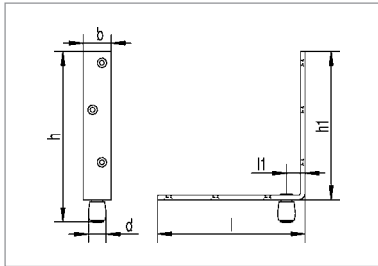
Part no.	320 BL	420 BL	520 BL	620 BL
d	12	16	22	26
h	80	90	110	110
l	150	80	100	100
s	6	6	6	6
EDP no.				
	032042	042044	052044	062044





HELM Guide roller -49

with angle bracket fixing and roller at the side, in combination with bottom guide profile 240-540 with plastic or brass roller



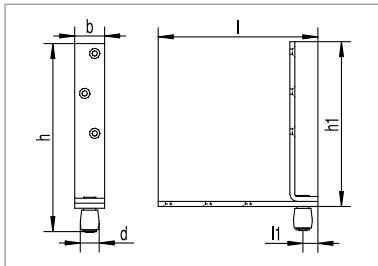
Part no.	249	349	449	549
bottom guide profile	240	340	340/440	440/540
b	20	30	35	40
d	12	19	19 ¹ /32 ²	32 ² /49,5 ³
h	138	182	235 ¹ /246 ²	296 ² /306 ³
h1	124	158	210	260
l	124	158	200	255
l1	15	20	20	30
EDP no.				
plastic roller	024960	034960	044960 ¹	054960 ²
	-	-	044965 ²	054965 ³
brass roller	024940	034940	044940 ¹	054940 ²
	-	-	044945 ²	054945 ³

¹for bottom guide profile 340 ²for bottom guide profile 440 ³for bottom guide profile 540



HELM Guide roller -49 A

with flange joint and roller at the side, in combination with bottom guide profile 340, 440 and 540, with plastic or brass roller



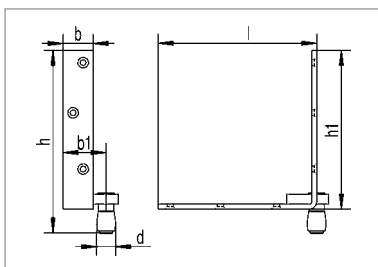
Part no.	249 A	349 A	449 A	549 A
bottom guide profile	240/240 K	340/340 K	340/440 K	440/540 K
b	20	30	35	40
d	Ø12	Ø19	Ø19 ¹ / Ø32 ²	Ø32 ² / Ø49,5 ³
h	142	188,5	248 ² / 258,5 ³	296 ² / 306,5 ³
h1	128	165	223	260
l	130	160	219	280
l1	10	15	18	20
EDP no.				
plastic roller	024966	034966	044966 ¹	054966 ²
			044967 ²	054967 ³
brass roller	024946	034946	044946	054946
			044947	054947

¹for bottom guide profile 340 ²for bottom guide profile 440 ³for bottom guide profile 540



HELM Guide roller -50

with flange joint and roller at the side, in combination with bottom guide profile 240-540, with plastic or brass roller



Part no.	250	350	450	550
bottom guide profile	240	340	340/440	440/540
b	20	30	35	40
b1	32	43	41	75
d	Ø12	Ø19	Ø19 ¹ / Ø32 ²	Ø32 ² / Ø49,5 ³
h	138	181,5	233,5 ¹ /242 ²	289 ² /298,5 ³
h1	124	158	210	260
l	124	158	200	255
EDP no.				
plastic roller right	025060	035060	045060 ¹	055060 ²
			045062 ²	055062 ³
plastic roller left	025061	035061	045061 ¹	055061 ²
			045063 ²	055063 ³
brass roller right	025040	035040	045040 ¹	055040 ²
			045042 ²	055042 ³
brass roller left	025041	035041	045041 ¹	055041 ²
			045043 ²	055043 ³

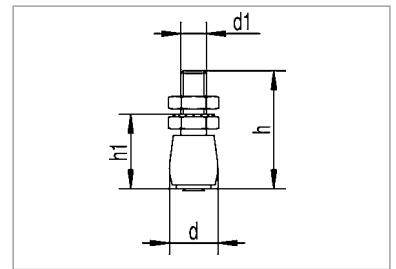
¹for bottom guide profile 340 ²for bottom guide profile 440 ³for bottom guide profile 540

HELM Guide roller -49 S

with screw joint, zinc-plated or stainless steel with plastic or brass roller

Part no.	349 S	449 S	549 S
bottom guide profile	340	440	540
d	19	32	50
d1	M10	M16	M20
h	47,3	63	81
h1	32	42,5	52
EDP no.			
plastic roller ¹	034962	044962	054962
plastic roller ²	03496230	-	-
brass roller ¹	034942	044942	054942

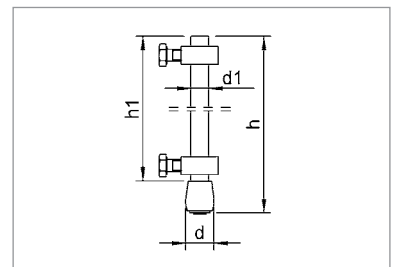
¹screw joint zinc-plated ²screw joint stainless steel



HELM Guide roller -20 F

zinc-plated, bottom guide roll with adjusting ring

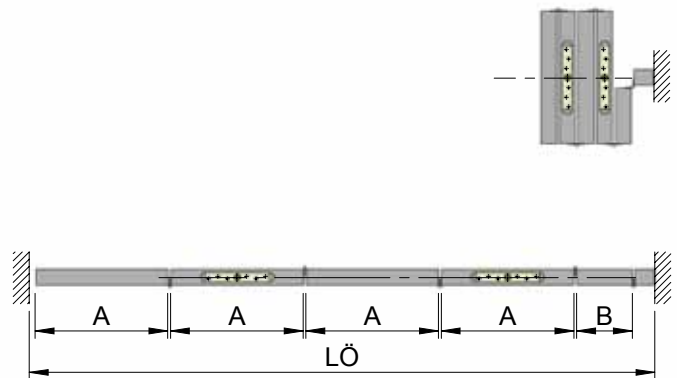
Part no.	320 F	420 F	520 F	620 F	720 F
d	Ø19	Ø32	Ø32	Ø49,5	Ø49,5
d1	Ø12	Ø16	Ø22	Ø26	Ø30
h	160	200	220	240	300
h1	136,5	169,5	189,5	200	258
EDP no.					
brass roller	032041	042041	052041	062041	072041





HELM concertina door hardware

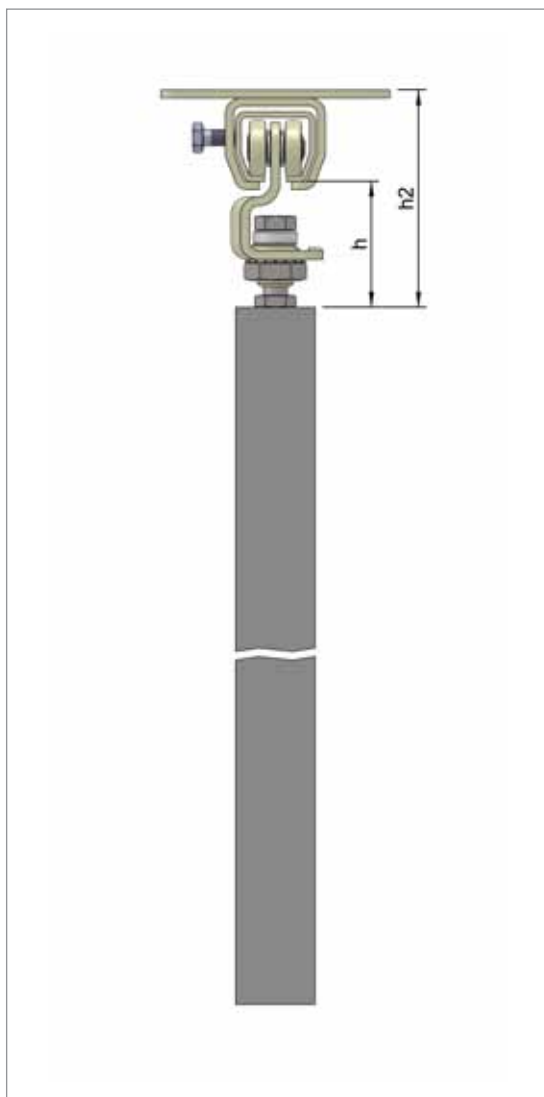
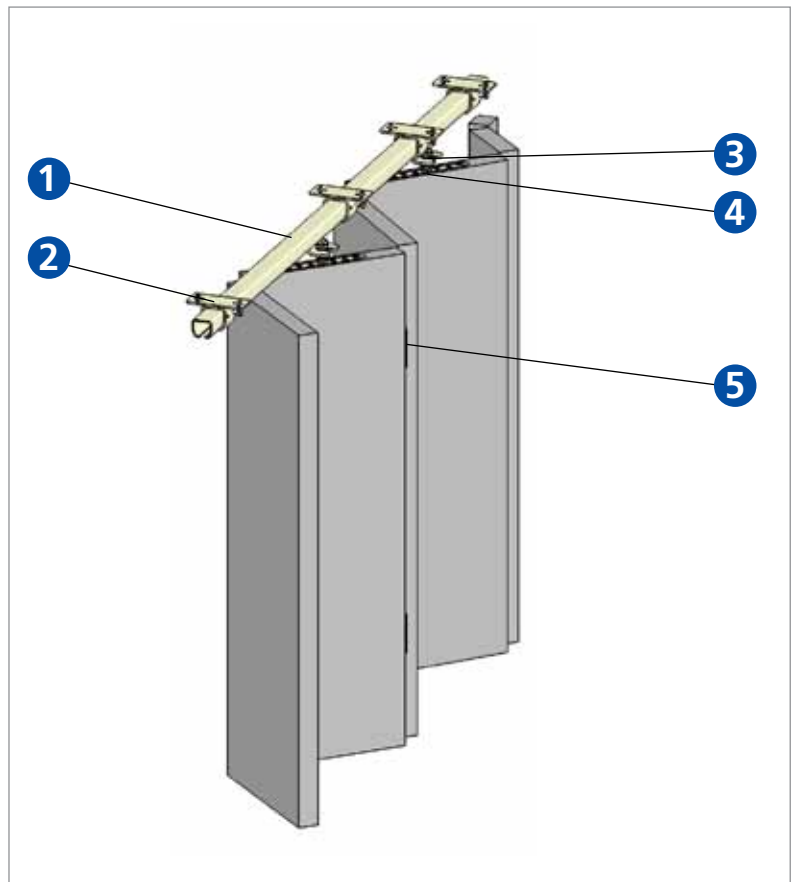
For door weights up to 500 kg with a single leaf width of 600-900 mm.
A bottom guide track is not required.



HELM concertina door

Hardware combination

- 1 Track profile -00
- 2 Ceiling soffit bracket -02
- 3 Trolley hanger -86/-24
- 4 Flange -93
- 5 Hinge -52



Profile	100	300	400	500	600	700
angle bracket	193	393	493	593	693	793
door weight (kg)	22	42	75	150	300	500

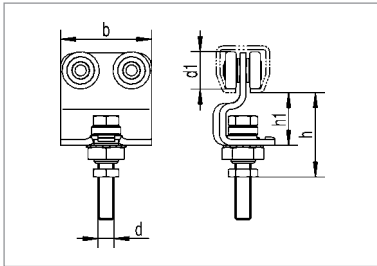
Profile	100	300	400	500	600	700
h	54 + 12	63 + 13	76 + 13	97 + 25		
h2	90 + 12	109 + 13	131 + 13	172 + 25		



HELM Trolley hanger -86

double-pair, zinc-plated

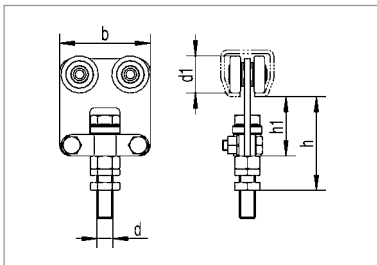
Part no.	186	386	486	586
b	50	68	90	110
d	M10	M12	M16	M20
d1	Ø22	Ø27,9	Ø34	Ø48
h	54 + 12	63 + 13	76 + 13	97 + 25
h1	33	39	48	64
EDP no.				
zinc-plated	018620	038620	048620	058620



HELM Trolley hanger -24

double-pair, for folding and concertina door hardware without frame bracket, zinc-plated

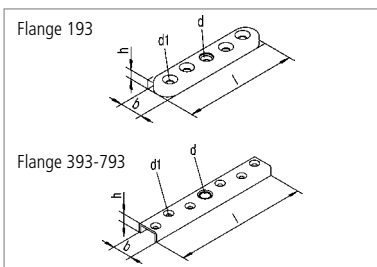
Part no.	124	324	424	524	624	724
b	50	68	90	110	150	200
d	M10	M12	M16	M20	M24	M30
d1	Ø22	Ø27,9	Ø34	Ø48	Ø60	Ø89
h	54 + 7	70 + 7	81,5 + 4	99 + 16	123 + 68	166 + 67
h1	~33	44	49	59	78,5	110
EDP no.						
zinc-plated	012420	032420	042420	052420	062420	072420



HELM Flange -93

zinc-plated or stainless steel, for timber leaves, for screwing on, with thread positioned in the centre

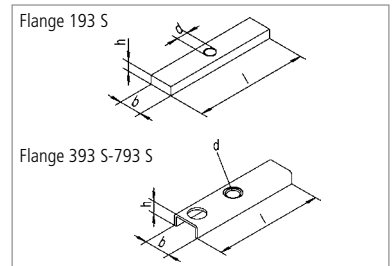
Part no.	193	393	493	593	693	793
Profile	100	300	400	500	600	700
b	20	24	30	38	50	60
d	M10	M12	M16	M20	M24	M30
d1	6	5,3	6,8	7,5	11	11
h	8	11	15	20	25	30
l	100	160	210	264	350	500
EDP no.						
zinc-plated	019320	039320	049320	059320	069320	079320
stainless steel	019330	039330	049330	059330	-	-



HELM Flange -93 S

in steel blank, for steel leaves, for welding on, with thread positioned in the centre

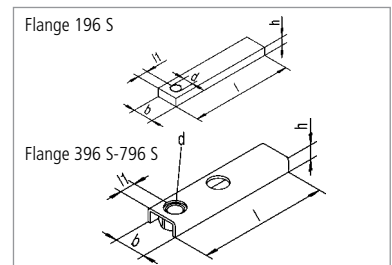
Part no.	193 S	393 S	493 S	593 S	693 S	793 S
Profile	100	300	400	500	600	700
b	20	24	30	38	50	60
d	M10	M12	M16	M20	M24	M30
h	8	11	15	20	25	30
l	100	100	120	140	150	180
EDP no.						
steel blank	019311	039311	049311	059311	069311	079311



HELM Flange -96 S

in steel blank, for steel leaves, for welding on, with thread at the side

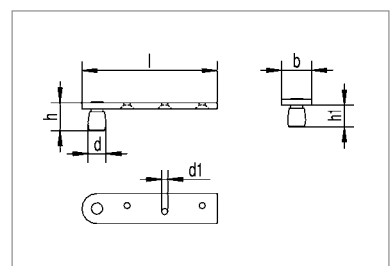
Part no.	196 S	396 S	496 S	596 S	696 S	796 S
Profile	100	300	400	500	600	700
b	20	24	30	38	50	60
d	M10	M12	M16	M20	M24	M30
h	8	11	15	20	25	30
l	100	100	120	140	150	180
l1	10	12	15,5	20	20	25
EDP no.						
steel blank	019611	039611	049611	059611	069611	079611



HELM Guide roller 249 F

with flange joint and roller at the side, in combination with bottom guide profile 240 with plastic or brass roller

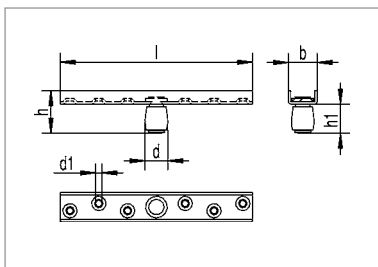
Part no.	249 F
bottom guide profile	240
b	20
d	12
d1	4.2
h	18
h1	14
l	90
EDP no.	
plastic roller	024961
brass roller	024941





HELM Guide roller -49 F

with flange joint and roller in the centre, in combination with bottom guide profile 340, 440 and 540 with plastic or brass roller



Part no.	349 F	449 F	549 F	649 F
bottom guide profile	340	340/440	440/540	540
b	24	30	38	50
d	19	19 ¹ /32 ²	32 ² /49.5 ³	49.5
d1	5.3	6.8	7.5	11
h	36	40 ¹ /50 ²	56 ² /66 ³	77
h1	25	25 ¹ /35 ²	36 ² /46 ³	52
l	160	210	264	350
EDP no.				
plastic roller	034961	044961 ¹	054961 ²	064961
	-	044964 ²	054964 ³	-
brass roller	034941	044941 ¹	054941 ²	-
	-	044944 ²	054944 ³	-

¹for bottom guide profile 340 ²for bottom guide profile 440 ³for bottom guide profile 540

Required information for round the corner sliding doors

Company _____ Telephone _____

Name _____ Fax _____

Street _____ E-mail _____

Postcode/city _____ Contact person _____

Supply exclusively through specialised trade. Please indicate your specialist dealer if appropriate: _____

 Order **Enquiry** **Date** _____

Required information:

Number of required installations: _____ piece

Sliding door hardware: folding door installation type **A** type **B** type **C**

concertina door installation

number of leaves: _____ piece

clear opening: _____ mm

leaf thickness: _____ mm

door weight: _____ kg

Type of track mounting.

wall mounting

ceiling mounting

one-group, movable to the right

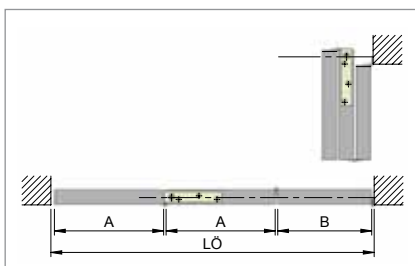
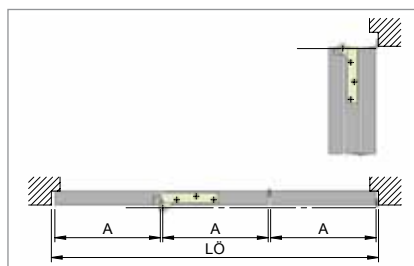
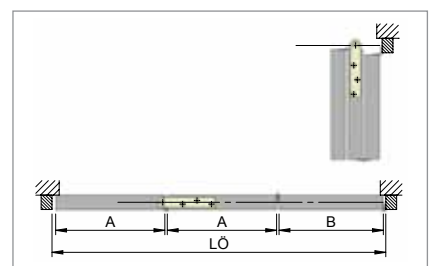
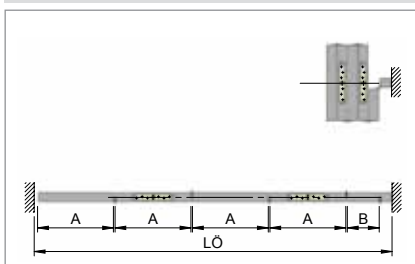
one-group, movable to the left

two-group

Type of installation
Leaf material:

timber

steel

Folding door: Installation type "A"

Folding door: Installation type "B"

Folding door: Installation type "C"

Concertina door




Hardware for sliding stacking doors

Sliding stacking doors offer versatile solutions for room partitions and special applications in the field of sliding gates. The leaves are moved independently of each other into a parking station by means of an automatically changing switch, pivot switches or turning platforms.

The different installation situations resulting from this are depicted schematically on the next few Pages. The number and width of the leaves can be chosen according to the requirements and no bottom guide track is required. We are pleased to design individual installations. Please use the fax form on page 75 for your enquiries.

Max. permissible door weight

Profile	300	400	500	600
steel rollers	140 kg	240 kg	480 kg	960 kg

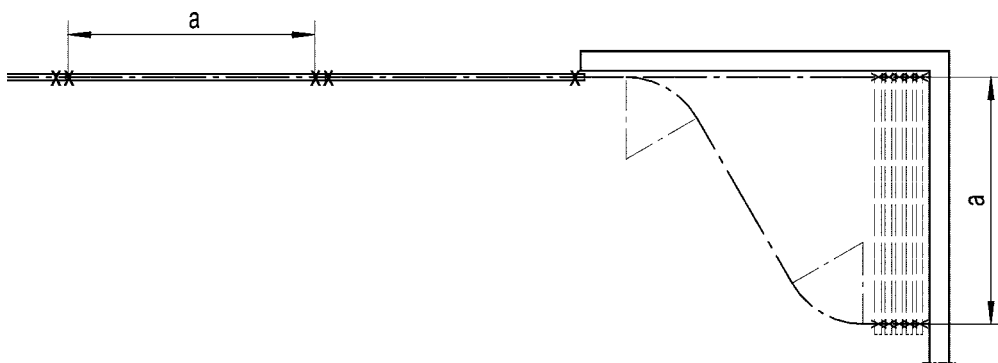
Installations with automatically changing switches

Notes:

- automatic pivoting of the leaves
- no rods required for operating the switches
- fast moving of the leaves
- profile sizes HELM 300 to HELM 600

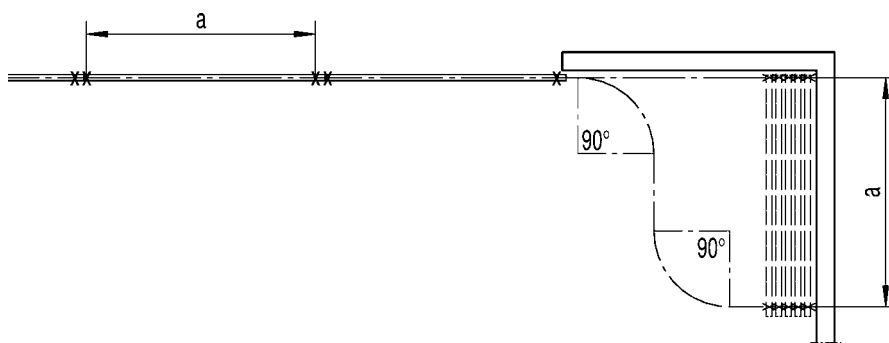
Sliding stacking door with HELM point switch right, various angles possible

fig. 1



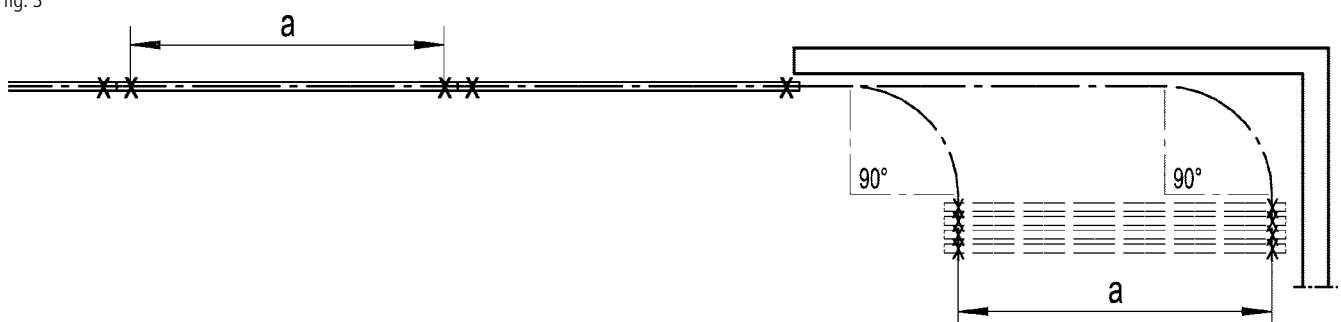
Sliding stacking door with HELM point switch 90° right

fig. 2

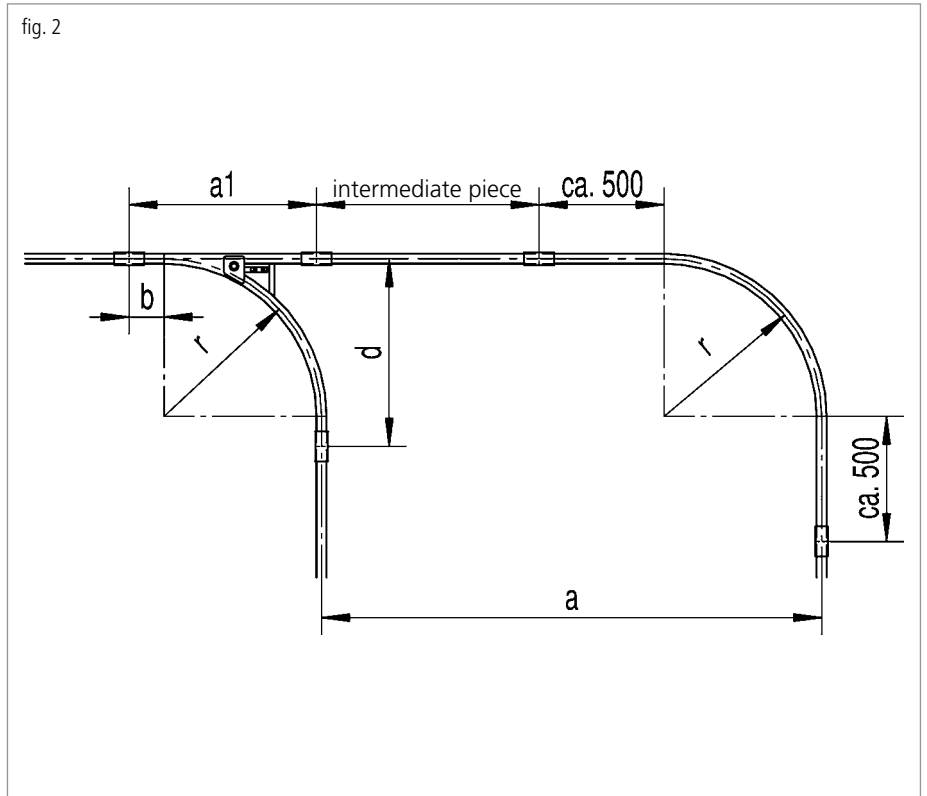
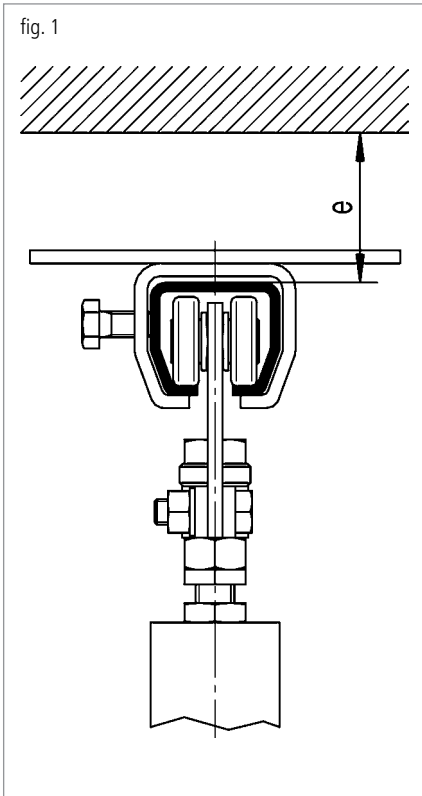


Sliding stacking door with HELM point switch 90° right

fig. 3



In the area of the automatically changing switch the following installation dimensions are to be taken into account:



Automatically changing switch, 90° right

fig. 3

Profile:	300	400	500	600
r standard radius (mm)	630± 15	610± 15	605± 15	790± 15
r more radiuses (mm)	410	415		
a1 (mm)	750	750	750	900
b (mm)	100	100	100	100
d (mm)	750	750	750	1000
e (mm)	40	40	50	50

Installations with pivot switches

Notes:

- max. seven-track parking station possible
- switch operation necessary for each leaf movement
- available in profile sizes HELM 300 to HELM 700
- different leaf widths possible

Installation examples:

Diagram of a parking station with up to 4 tracks

fig. 1

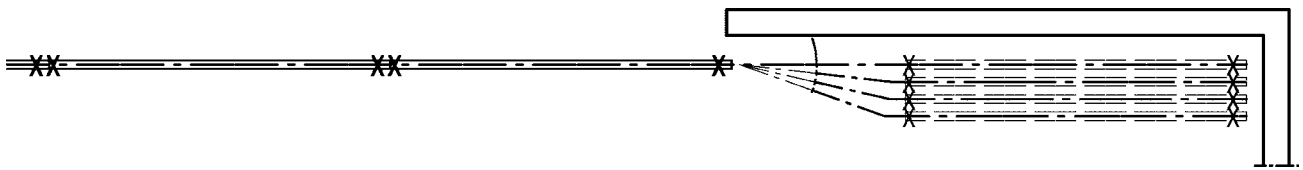
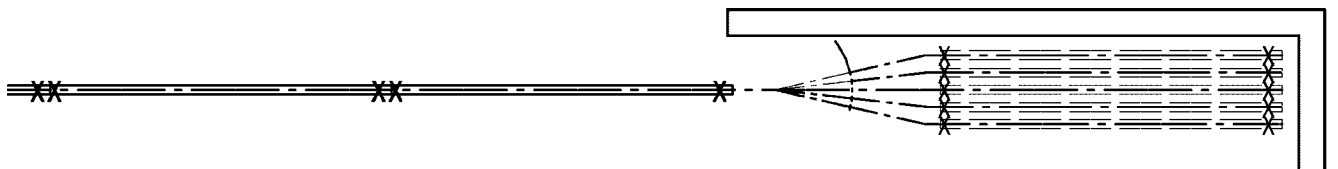


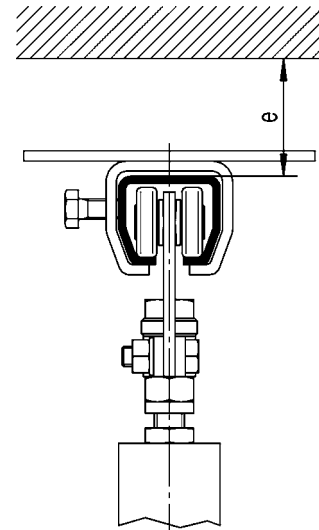
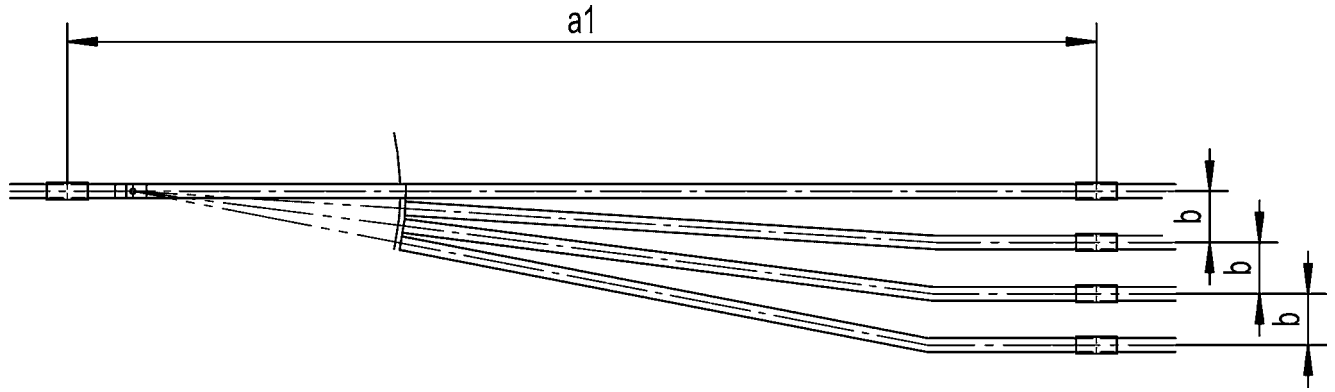
Diagram of a parking station with 5 tracks (also 7 tracks possible)

fig. 2



Installation dimensions pivot switch, triple right

fig. 1



Pivot switch with remote control

Profile:	300	400	500	600	700
a1 (approx. mm)	1400	1400	1800	1800	2200
b (min. mm)	60	70	90	110	130
e (mm)	50	50	50	50	50

Turning platform installations

Notes:

- single leaves can be positioned in a minimum of space in the parking station
- parking stations with parking option on one side or two sides (compare fig. 1 + 2)
- switch operation necessary for each leaf movement
- available in profile sizes HELM 300 to HELM 600

Installation examples:

Diagram of a parking station with parking option on one side

fig. 1

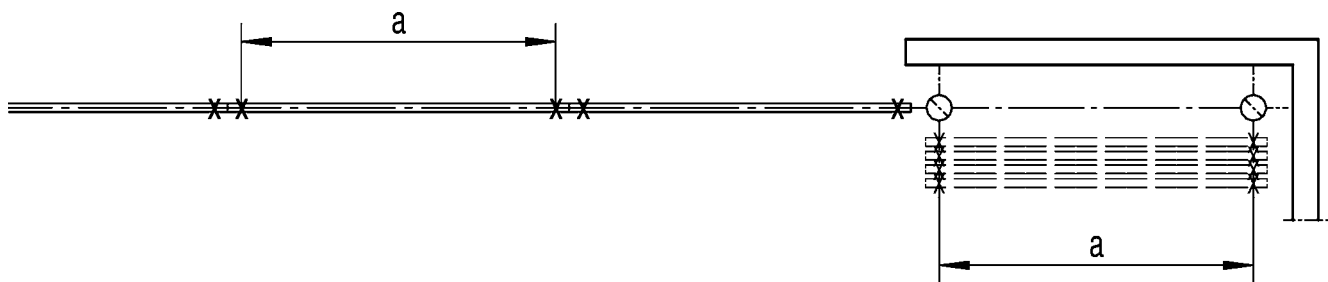
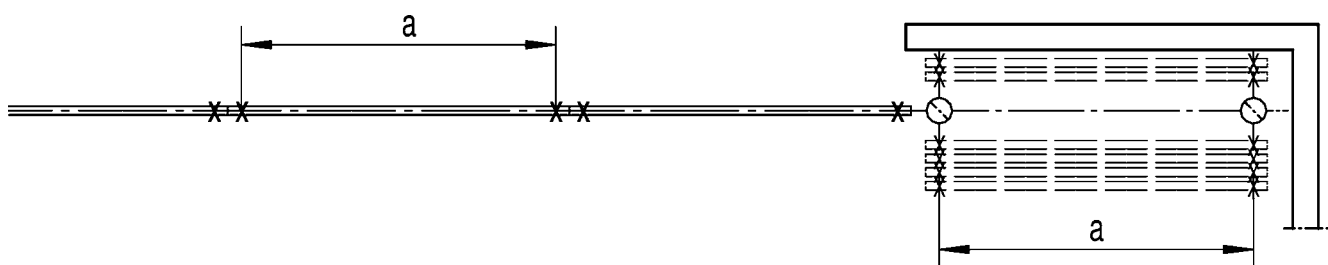


Diagram of a parking station with parking option on both sides

fig. 2



Required information for round the corner sliding doors

Company _____ Telephone _____
 Name _____ Fax _____
 Street _____ E-mail _____
 Postcode/city _____ Contact person _____

Supply exclusively through specialised trade. Please indicate your specialist dealer if appropriate: _____

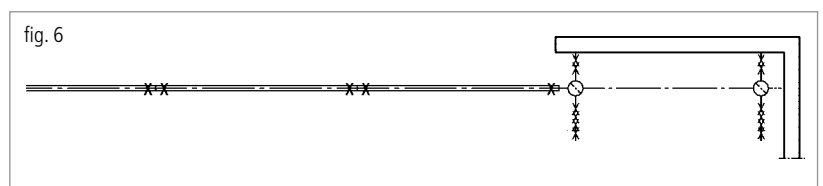
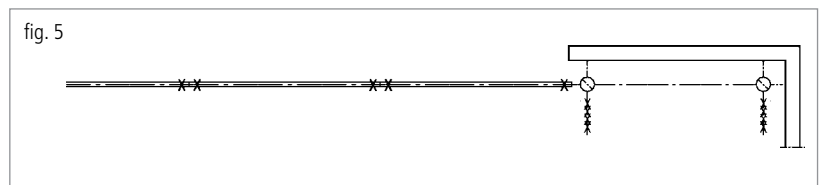
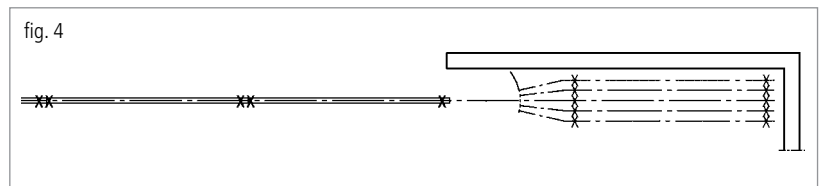
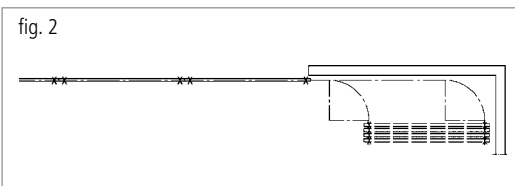
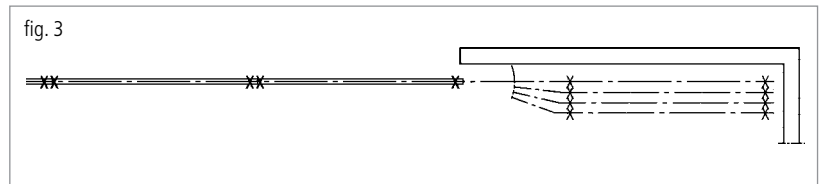
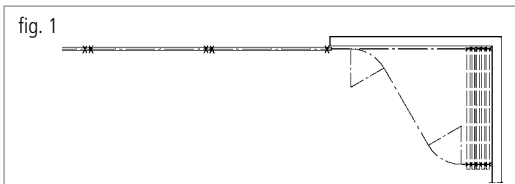
For drawing up an offer a dimensioned floor plan of the installation situation is required.

Order **Enquiry** **Date** _____

Track mounting wall mounting ceiling mounting height-adjustable

Installation type _____ **Leaf widths** _____ mm
Clear opening dimension _____ mm **Leaf thickness** _____ mm
Number of leaves _____ piece **Leaf height** _____ mm
Material _____ **door weight** _____ kg
Parking station area _____ mm

Installation types





Hardware for Flush Sliding Installations

If sliding leaves are to be flush with side walls "flush sliding installations" are used (type 1 + 2). Furthermore, this design is used as an alternative to the parallel sliding stacking installations if the space for a parking station is limited (type 3). These installations can be one-leaf and multi-leaf installations and thus provide manifold application options, also for bigger gate openings.

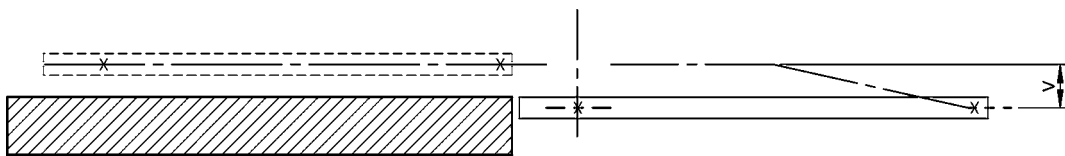
The hardware is suitable for timber, steel and aluminium installations up to door weights of 1500 kg. When planning the installations the dimension v has specifically to be taken into account which indicates how far the leaf is pulled from the wall before it is moved to the side. Please use the fax form on page 90 for your enquiries. If available, we would like to ask you to submit any available construction drawings in order to be able to consult and plan optimally.

Benefits of a flush sliding installation:

- effortless moving to the side
- the full opening is freely accessible
- no maintenance
- simple mounting
- easy hanging of doors or windows
- side and height adjustment (precise adjustment of the door and window installation)
- for timber, steel and aluminium designs

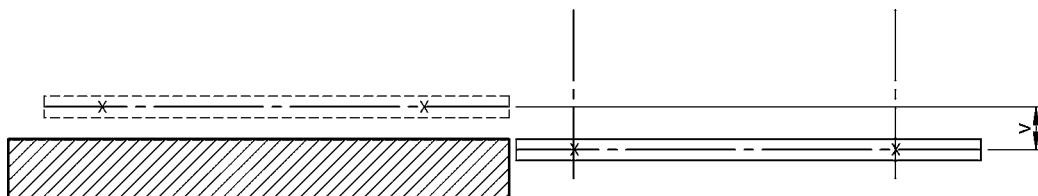
Type 1

fig. 1



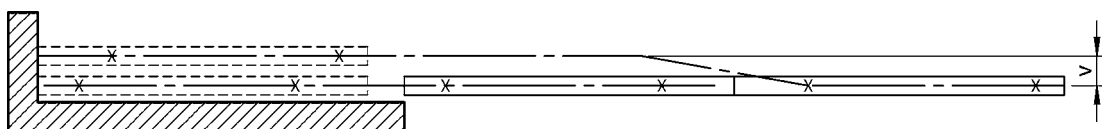
Type 2

fig. 2



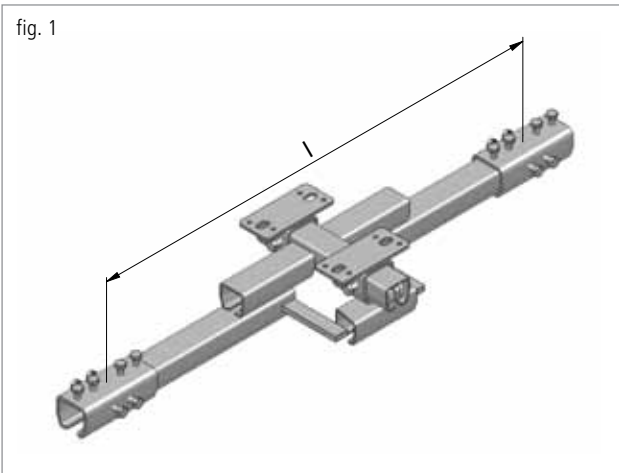
Type 3

fig. 3



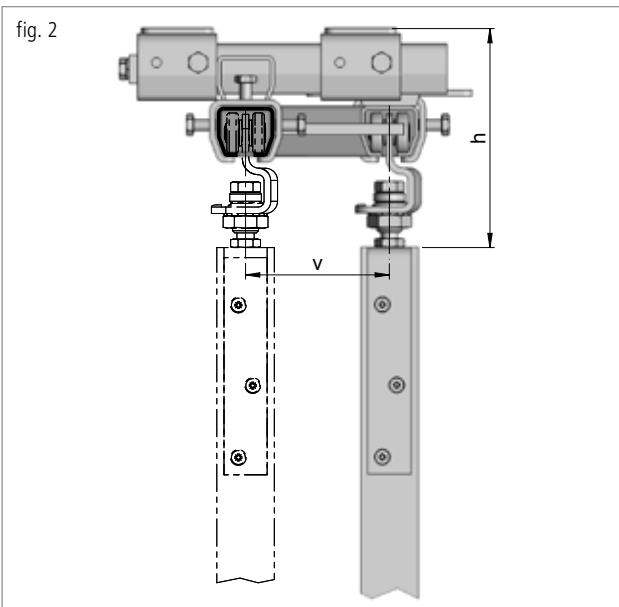
Mounting part Type 1

fig. 1



movable up to max. 200 mm in depth

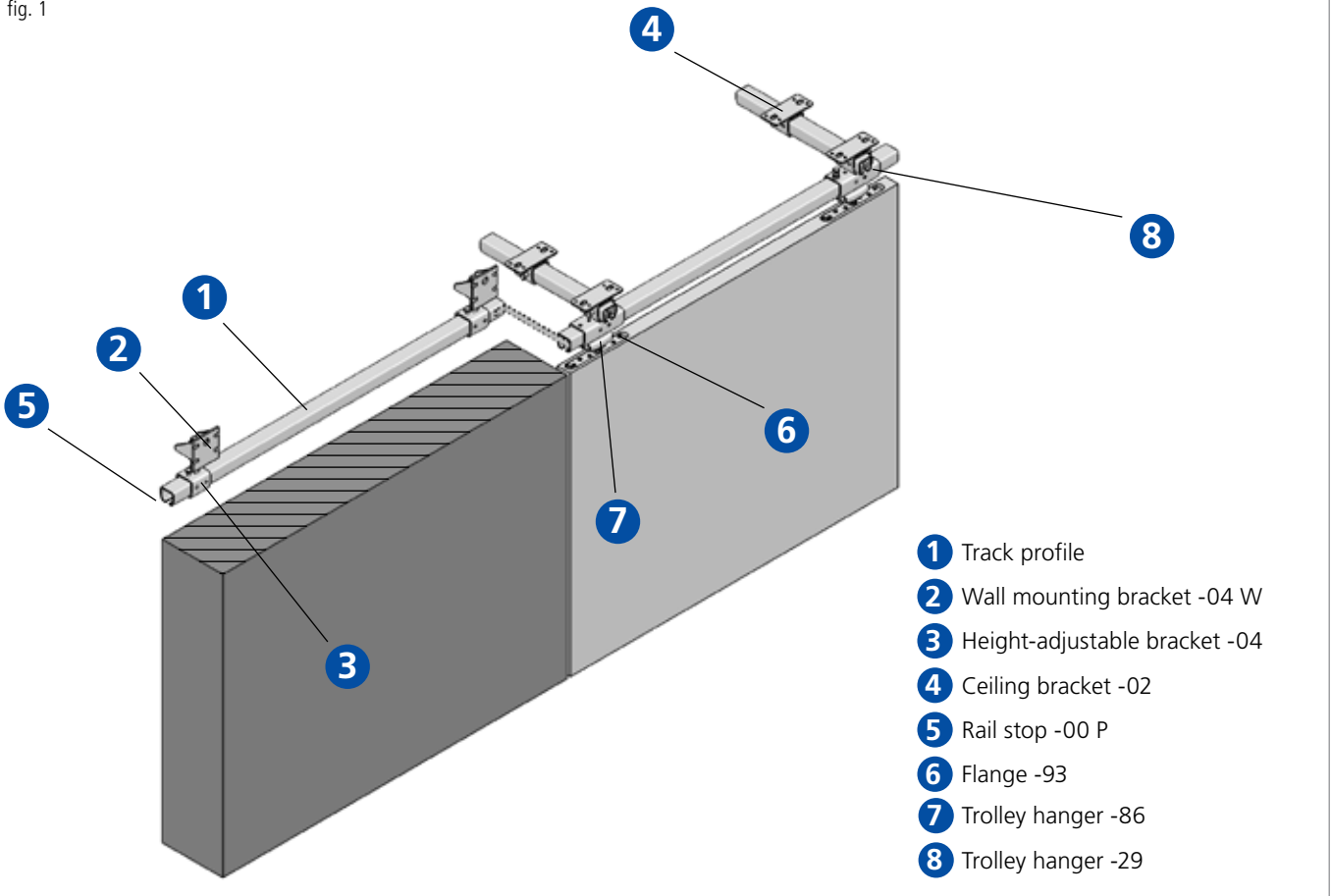
fig. 2



Profile	100	300	400	500	600	700
max. door weight	60 kg	140 kg	240 kg	480 kg	960 kg	1500 kg
dimension L (mm)	600	700	700	700	800	800
dimension h (mm)	127+12	152+13	183+13	244+25	309+68	432+67
dimension v	up to 200 mm	up to 200 mm	up to 200 mm	up to 200 mm	up to 200 mm	up to 200 mm

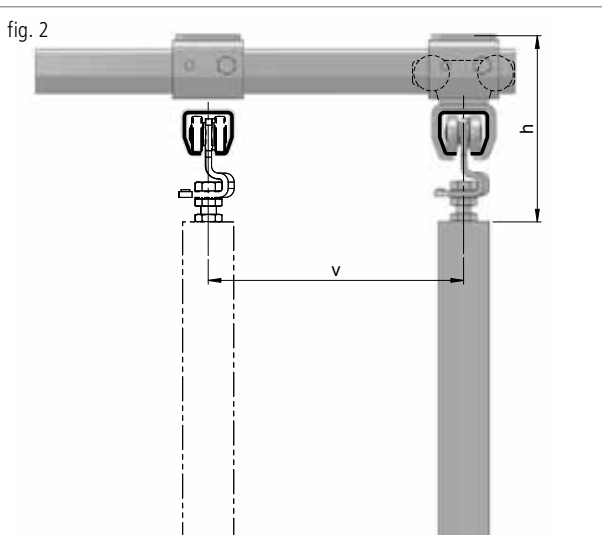
Type 2 – installation example

fig. 1



Installation cross-section

fig. 2

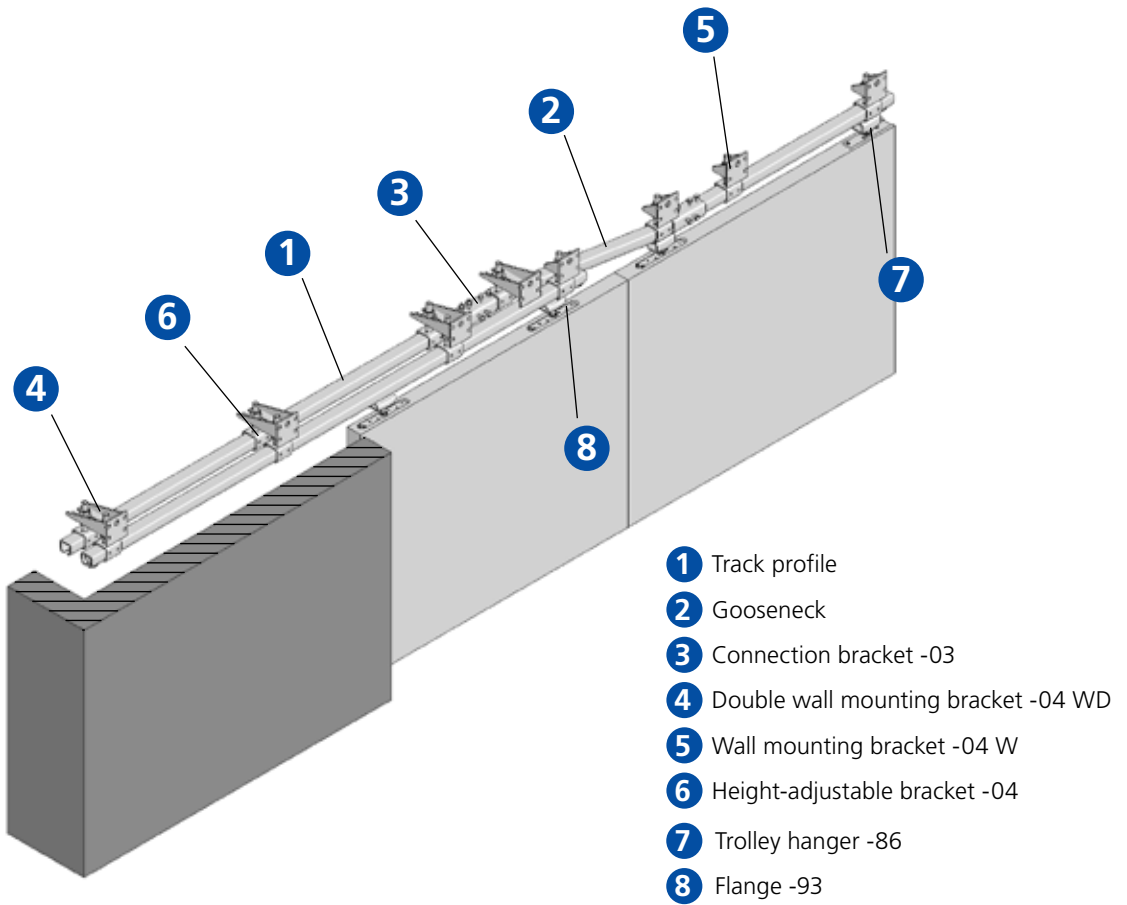


Type 2 is specifically used when the installation has to be pulled more than 200 mm from the wall. For this the leaf is pulled off in parallel to the wall, dimension v is variable.

Profile	100	300	400	500	600	700
max. door weight	60 kg	140 kg	240 kg	480 kg	960 kg	1500 kg
dimension h (mm)	119+10	145+20	175+20	232+17	297+17	392+85
dimension v	variable	variable	variable	variable	variable	variable

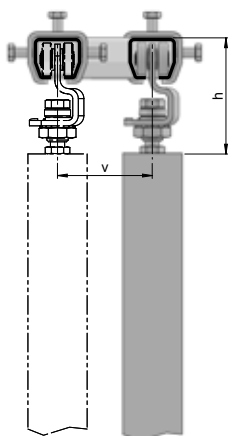
Type 3 – installation example

fig. 1



Dimension "v" in case of protruding track profile

fig. 2



In case of double doors up to 480 kg door weight and limited space for the parking station type 3 is chosen. The mode of operation is similar to a parallel sliding stacking installation, however, in contrast to the latter the pivoting range is shifted into the door opening for lack of space.

Profile	100	300	400	500
max. door weight	60 kg	140 kg	240 kg	480 kg
dimension h	82+12	98+13	119.5+13	157+25
dimension v	variable	variable	variable	variable

Required information for round the corner sliding doors

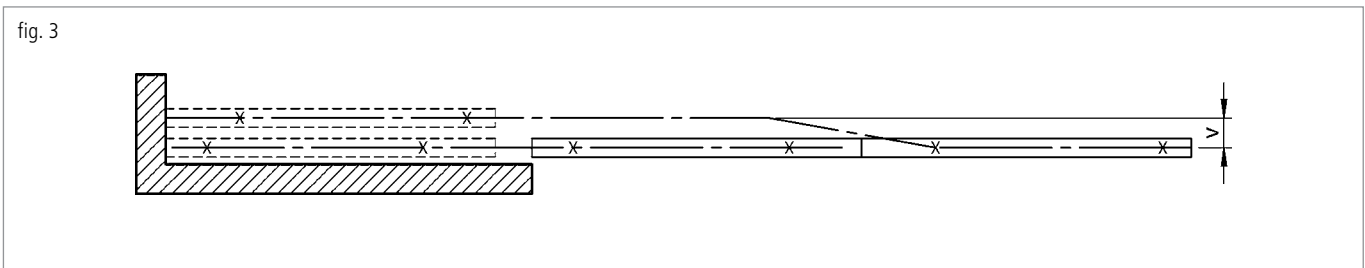
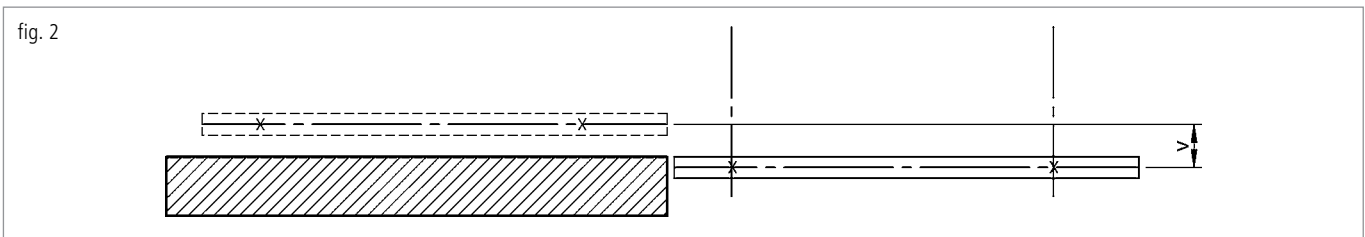
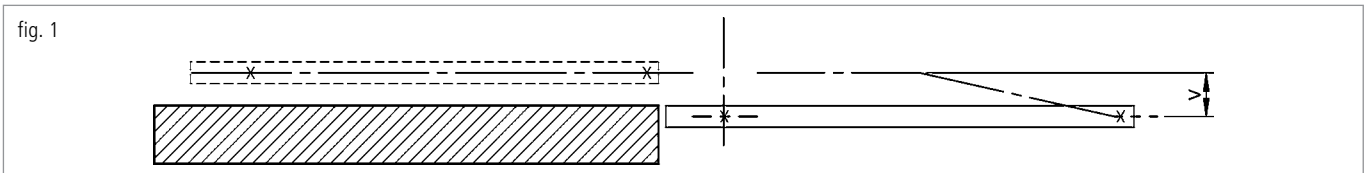
Company _____ Telephone _____
 Name _____ Fax _____
 Street _____ E-mail _____
 Postcode/city _____ Contact person _____

Supply exclusively through specialised trade. Please indicate your specialist dealer if appropriate: _____

Order **Enquiry** **Date** _____

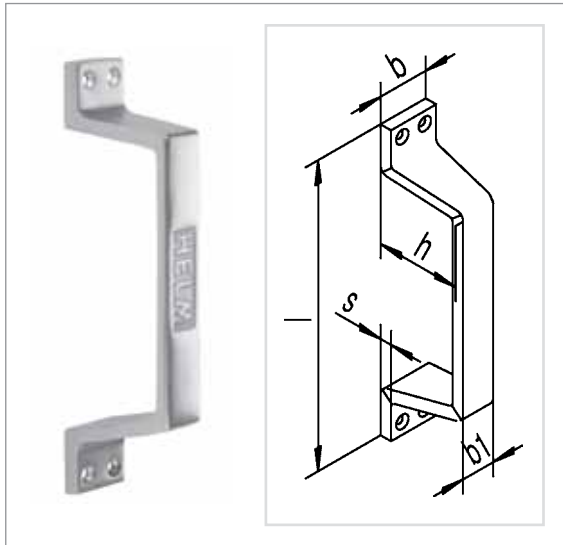
In order to be able to process your enquiry we require a sketch with the above-mentioned details.

Type _____ (see filg. 1-3)
Leaf widths _____ mm **Leaf thickness** _____
door weight _____ kg **dimension v** _____ mm
Leaf material timber steel
Type manuell
Track mounting wall mounting ceiling mounting
 height-adjustable



Accessories

Pull Handles and Flush Handles



HELM Handle 256 LM

aluminium, silver anodised

Part no.	256
Profile	
b	30
b1	20
h	43
l	180
s	7
EDP no.	
aluminium	0256.50



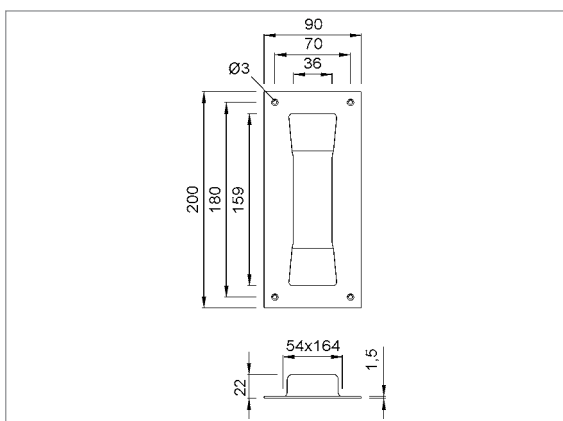
5208..

90 x 200 mm

Note:
For mounting sufficient depth
for flush is required.



Standard type	
steel	
silver stove enamelled	.02
black stove enamelled	.03
zinc-plated	.06
dark brown stove enamelled	.10
coloured plastic-coated	.70
aluminium machined according to E 5	
KWS 1 silver anodised	.31
KWS 2 nickel silver anodised	.32
KWS 3 gold anodised	.33
brushed stainless steel effect anodised	.35
KWS 5 dark bronze anodised	.37
stainless steel	
brushed	.82
polished	.83
unit	10 pieces
piece weight	
steel	0.260 kg
aluminium	0.080 kg
stainless steel	0.260 kg



Example for order		
Piece	Part no.	Design
... Piece	5207	.02

Note: This is only a very small excerpt of our extensive range of KWS pull handles and flush handles. For more information about the KWS door handles, please refer to our catalog TEK_0506



5055

170 x 170 with 8 mm hole

5056

170 x 170 with 8 mm pin

5058

170 x 170 with 9 mm hole

5059

170 x 170 with 9 mm pin

with flush, fixed slewable folding ring handle, pin of the pin part firmly riveted

Cut-out

with or without cut-out, e. g. profile cylinder, key, KABA, smallest distance for profile cylinder cut-out = 55 mm

biggest distance for profile cylinder cut-out = 72 mm

This folding ring flush handle cannot be used in pairs or in combination with a door handle or door knob.

This door hardware is available in similar form in stainless steel: see **5061.. 5062.. and 5064.. 5065..**

Note:

For mounting sufficient depth for flush is required.

Fig. shows right door hardware.

Standard type

steel/aluminium

pull of steel with ring

of aluminium

silver stove enamelled	.02
black stove enamelled	.03
dark brown stove enamelled	.10
coloured plastic-coated	.70

aluminium machined according to E 5

pull of aluminium with ring

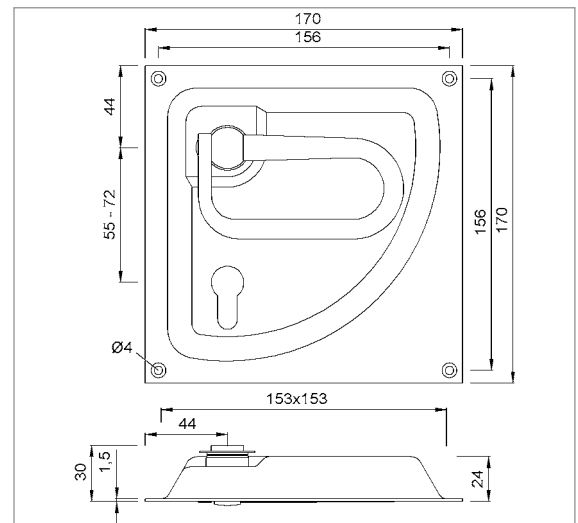
of aluminium

KWS 1 silver anodised	.31
KWS 2 nickel silver anodised	.32
KWS 3 gold anodised	.33
brushed stainless steel effect anodised	.35
KWS 5 dark bronze anodised	.37

unit 2 pieces

piece weight

steel/aluminium	0.440 kg
aluminium	0.230 kg



Example for order

Piece	Part no.	Design	Cut-out	Distance	right/left
... Piece	5055	.02	profile cylinder	72	R