

Installation System MS

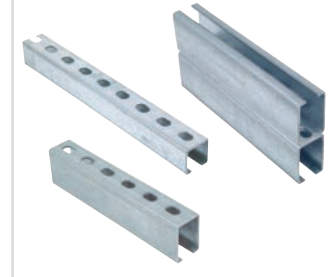


A complete installation system suitable for:

- industrial piping
- heating and sanitary supply pipes
- ventilation, air duct
- electrical installation, like cable trays, data lines etc.
- solar panels installations

Channels

MS 38/40, MS 40/60, MS 40/120 **Page 54**



Cantilever

ALK /ALK Q **Page 56**



Connectors

FHS Clix S **Page 60**



Channel connectors

SF **Page 65**



UWS

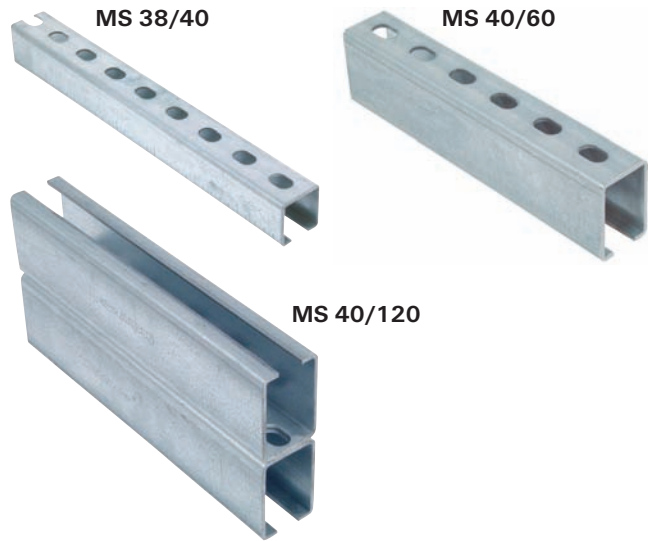
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HS  Page 61	HG  Page 63	SM  Page 62	HK  Page 64
MW  Page 67	TKR  Page 72	SV  Page 58	TSF  Page 66
WK  Page 69	FSB 45°  Page 59	VB  Page 59	UHRS  Page 59

Channel MS

OVERVIEW



Properties:

Material	Steel DX51D+Z 275 MA-C (material no. 1.0226+Z) acc. to DIN EN 10327
Zinc plating	Sendzimir zinc-plated, approx. 20 µm

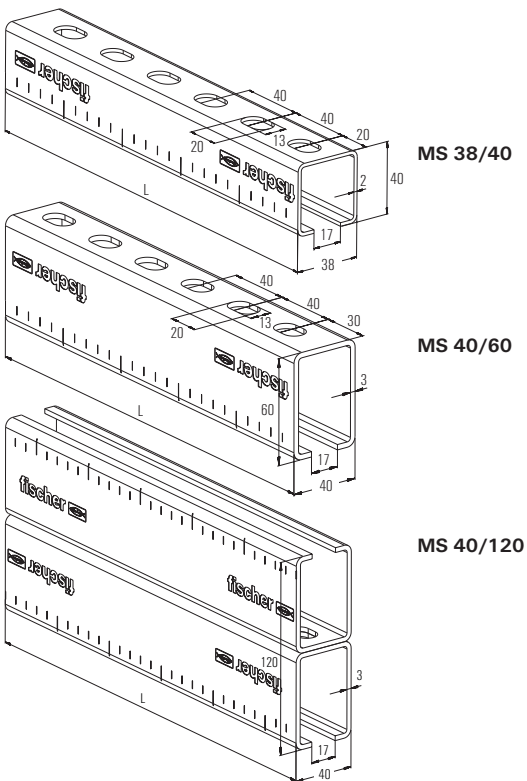
DESCRIPTION

- C-profiled Channel for horizontal and vertical installation.
- Fast and streamlined fastening of pipe tracks and load-bearing constructions.

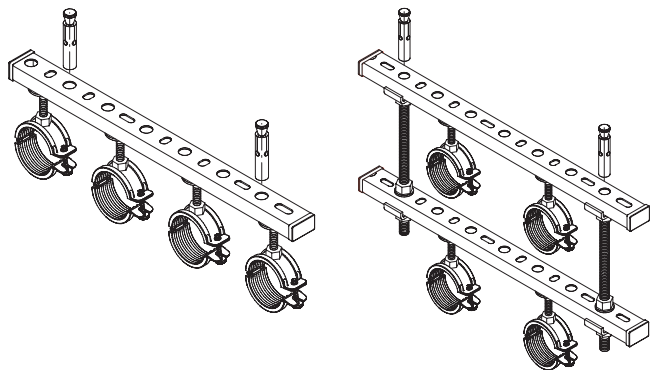
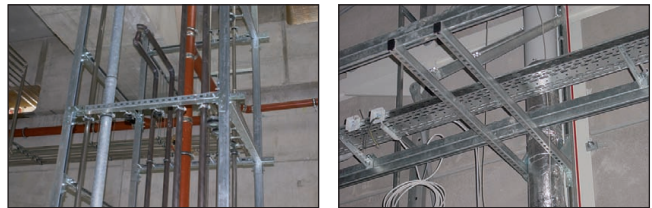
Advantages / Benefits

- Versatile options for wall, floor and ceiling installation.
- Specially synchronized connection parts allow for assembly of simple, safe and versatile load bearing constructions.
- Simple cutting and installation due to stamped grid dimensions on the rail side.

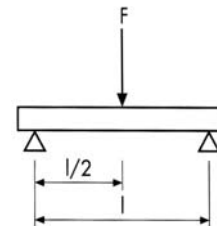
TECHNICAL DATA



INSTALLATION



LOADS



Type	Qty. per box	Length	Profile cross section	Weight	
					pcs.
MS 38/40/2.00 - 2 m	079562	1	2000	2.55	2.00
MS 38/40/2.00 - 3 m	079559	1	3000	2.55	2.00
MS 38/40/2.00 - 4 m	093281	1	4000	2.55	2.00
MS 38/40/2.00 - 6 m	030075	1	6000	2.55	2.00
MS 40/60/3.00 - 4 m	093282	1	4000	4.98	3.91
MS 40/60/3.00 - 6 m	014314	1	6000	4.98	3.91
MS 40/120/3.00 - 6 m	014315	1	6000	9.96	7.82

Type	Span l	admissible load F [kN]		
		1.0 m	2.0 m	3.0 m
MS 38/40/2.00		1.53	0.68	0.3
MS 40/60/3.00		4.21	2.10	1.21
MS 40/120/3.00		12.48	6.23	4.14

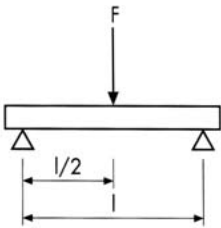
Load-bearing capacity of MS channels

TECHNICAL VALUES

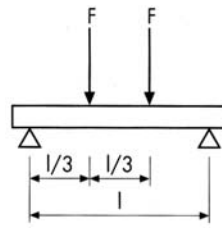
Profile	Profile weight [kg/m]	Profile cross section Δ [cm ²]	Moment of inertia		Section modulus	
			I_y [cm ⁴]	I_z [cm ⁴]	W_y [cm ³]	W_z [cm ³]
Channel MS						
38/40	2.00	2.55	5.39	6.18	2.40	3.25
40/60	3.91	4.98	21.56	13.54	6.58	6.77
40/120	7.82	9.96	117.08	27.08	19.51	13.54

Installation System MS

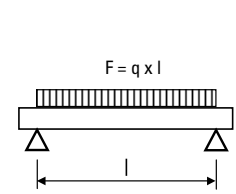
LOAD CASE 1



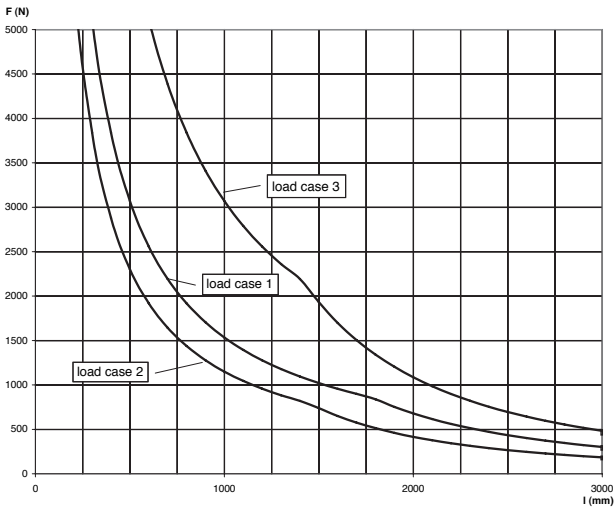
LOAD CASE 2



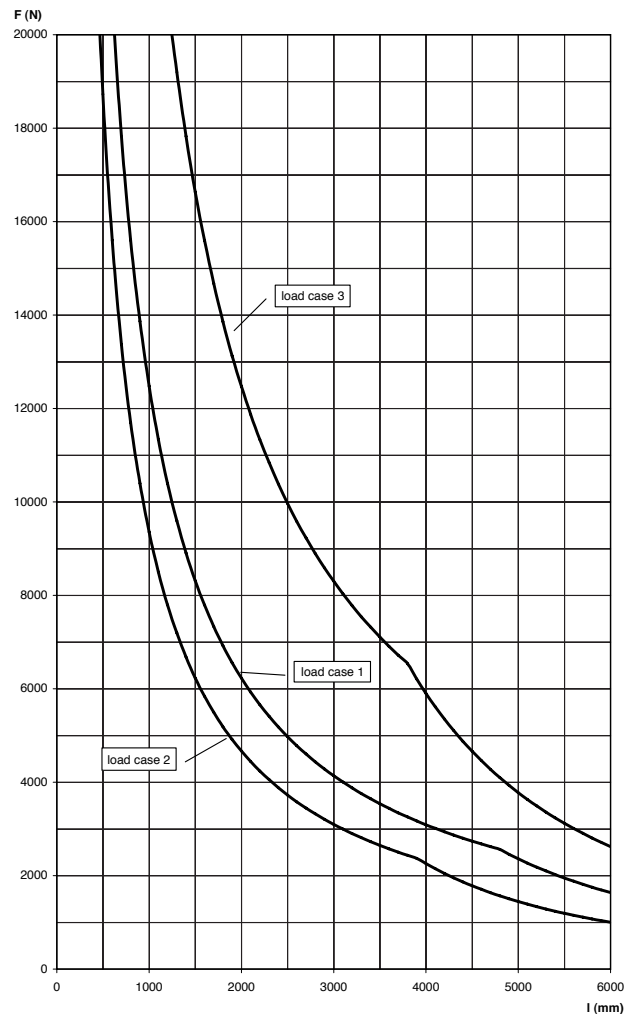
LOAD CASE 3



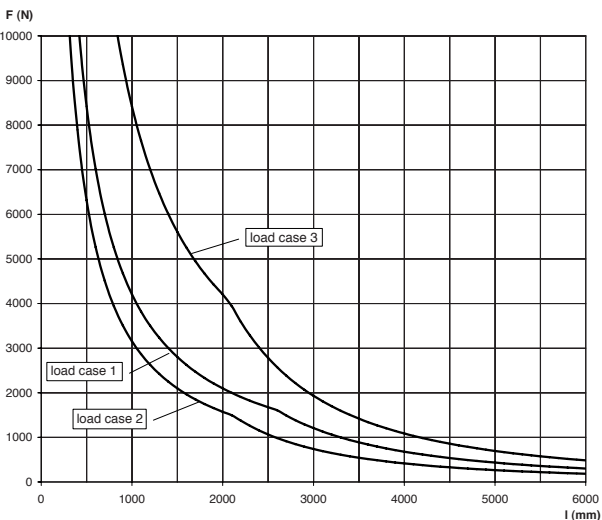
MS 38/40



MS 40/120



MS 40/60

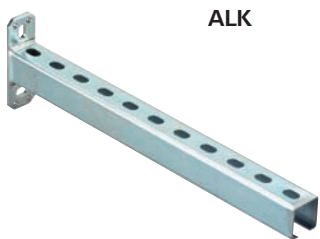


For the load curves, the permissible steel strain $\sigma_{adm.} = 160 \text{ N/mm}^2$ and the maximum deflection under load $l/200$ are not exceeded.

Fixings and screw fastenings must be calculated accordingly.

Cantilever arm ALK / ALK Q

OVERVIEW



ALK

Properties:

Material	Base plate: steel DC01 (material no. 1.0330) acc. to DIN EN 10111 Channel: steel S235JR (material no 1.0037) acc. DIN EN 10025
Zinc plating	Electro zinc plated, min. 8 µm

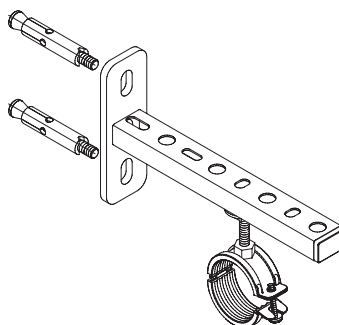
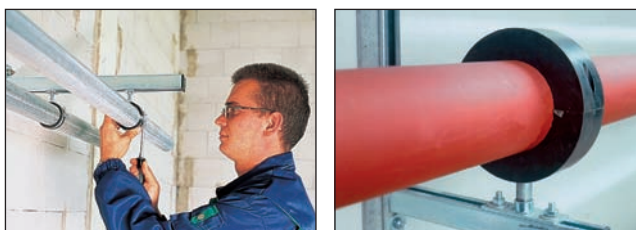
DESCRIPTION

- Cantilever arms made of C profiled channels.

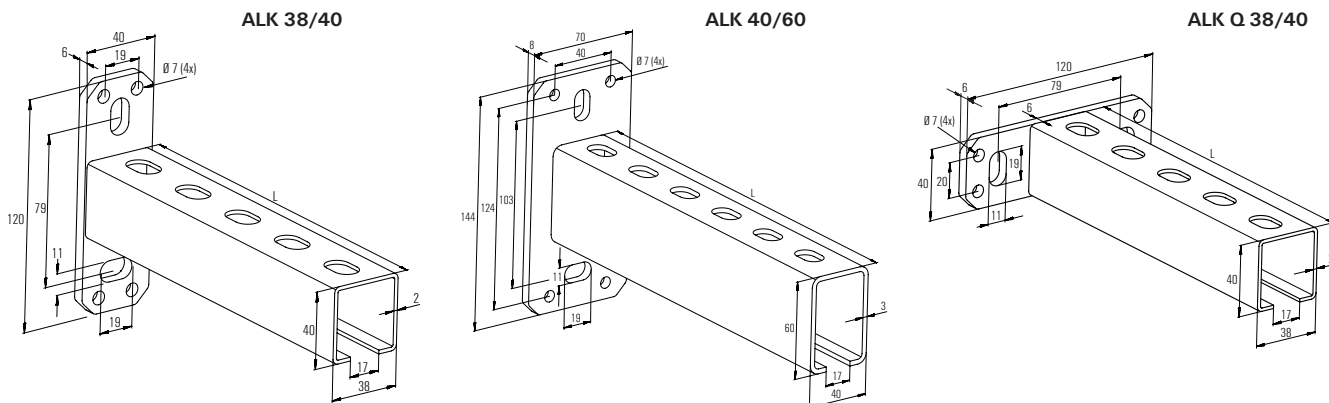
Advantages / Benefits

- Versatile usage possibilities for stepped lengths.
- Slots in the rail offer versatile installation possibilities.

INSTALLATION



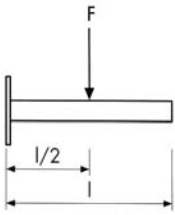
TECHNICAL DATA



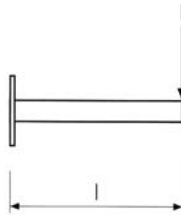
Type	Art. No.	Qty. per box	Profile	Length L [mm]										
		pcs.												
ALK 38/40 - 200	079580	10	38/40	200										
ALK 38/40 - 360	079581	10	38/40	360										
ALK 38/40 - 440	063560	10	38/40	440										
ALK 38/40 - 520	079582	10	38/40	520										
ALK 38/40 - 600	020929	10	38/40	600										
ALK 38/40 - 800	040399	1	38/40	800										
ALK 38/40 - 1000	040400	1	38/40	1000										
ALK 40/60 - 600	063561	5	40/60	600										
ALK 40/60 - 800	063562	1	40/60	800										
ALK 40/60 - 1000	063563	1	40/60	1000										
ALK Q 38/40 - 440	040401	10	38/40	440										
ALK Q 38/40 - 600	040402	10	38/40	600										

Load-bearing capacity of cantilever arm ALK / ALK Q

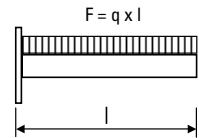
LOAD CASE 1



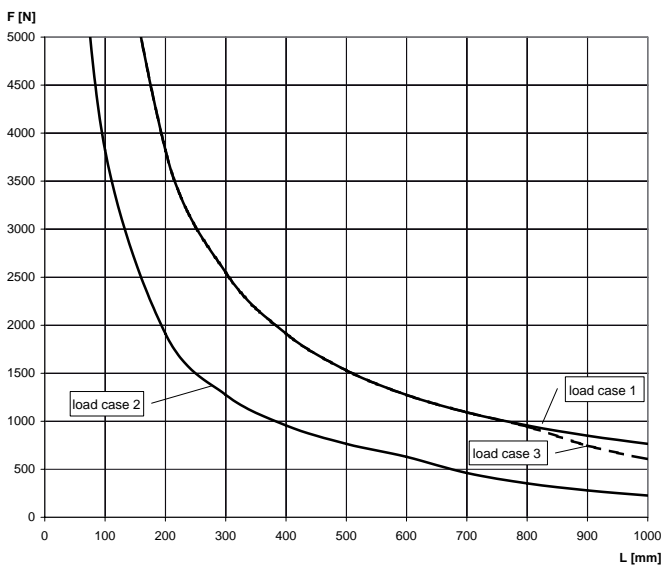
LOAD CASE 2



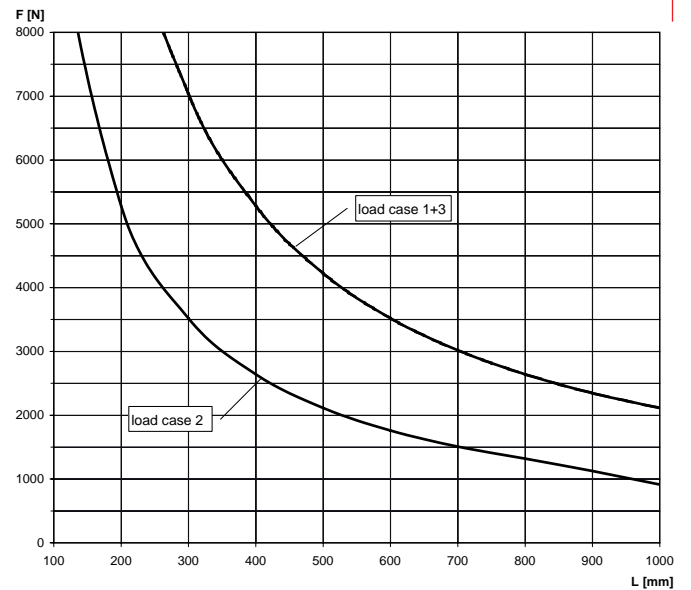
LOAD CASE 3



ALK 38/40



ALK 40/60



For the load curves, the permissible steel strain $\sigma_{adm.} = 160 \text{ N/mm}$ and the maximum deflection under load $l/150$ are not exceeded.

Fixings and screw fastenings must be calculated accordingly.

Installation System IMS

Cover cap AK

OVERVIEW



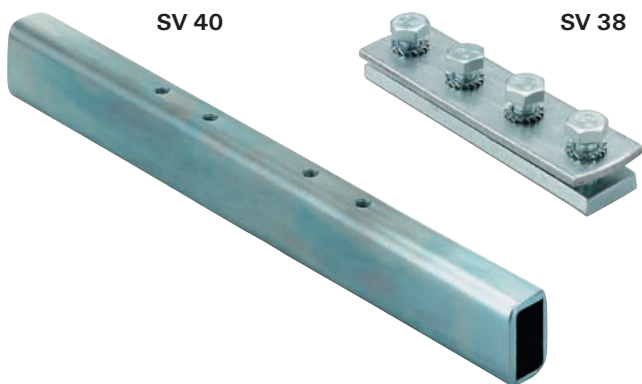
Properties:

Material	Polyethylene, black
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Type	Art. No.	Qty. per box pcs.	For profile
AK 38/40	079567	50	38/40
AK 40/60	048841	25	40/60 + 40/120

Channel connector SV

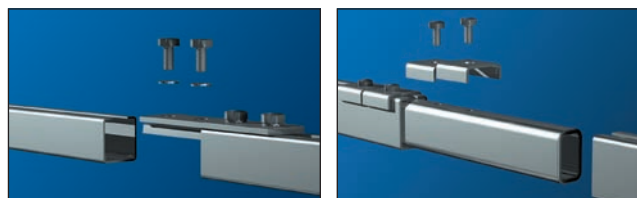
OVERVIEW



Properties:

Material SV 38	Steel DCO1 (material no. 1.0330) acc. to DIN EN 10130
Material SV 40	S235JR (material no. 1.0037) acc. to DIN EN 10025
Zinc plating	Electro zinc plated, 8 µm

INSTALLATION



The channel connector SV 38 is inserted into the rail ends and then screwed tight.

The channel connector SV 40 is introduced into the rails to be connected (MS 40/60 or MS 40/120) and then secured and screwed together using 4 location clamps HK 40.

DESCRIPTION

- Connectors for C-channels.

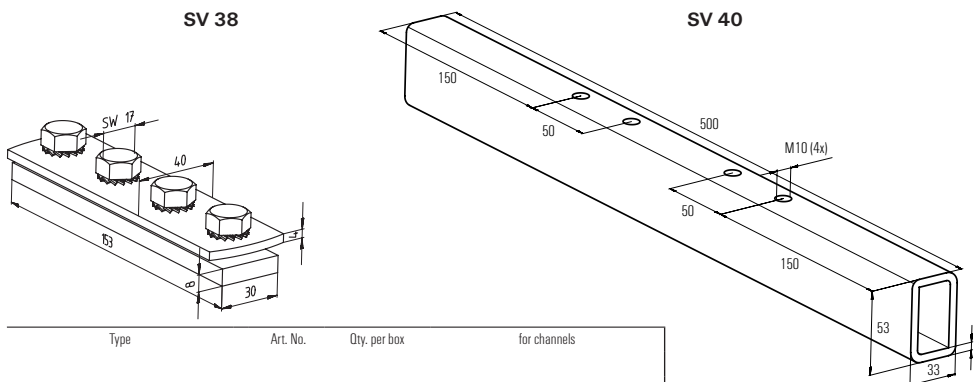
Advantages / Benefits

- SV 38 pre-assembled with screws and washers (special).

Installation tips

- HK 40 and SKS 10 x 20 and U 10 x 28 are not included.

TECHNICAL DATA



Type	Art. No.	Qty. per box pcs.	for channels
SV 38	079661	10	38/40
SV 40	063643	1	40/60 + 40/120

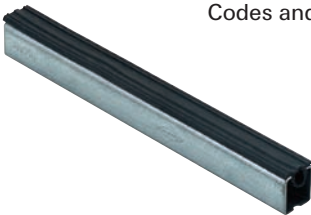
Sliding insert GLK 38

Codes and characteristics see on page 114



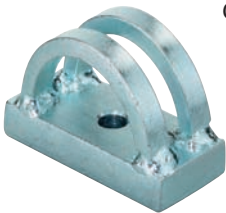
Rubber inlay EMS

Codes and characteristics see on page 125



Universal mounting UHRS

Codes and characteristics see on page 91



Variable bracket VB

Codes and characteristics see on page 92



Threaded rod bracket FSB 45°

Codes and characteristics see on page 94



T-head bolt FHS Clix S

OVERVIEW



FHS Clix-S



Properties:

Material	Steel DD11 (material no. 1.0332) acc. to DIN EN 10111
Zinc plating	Electro zinc plated, min. 5 µm

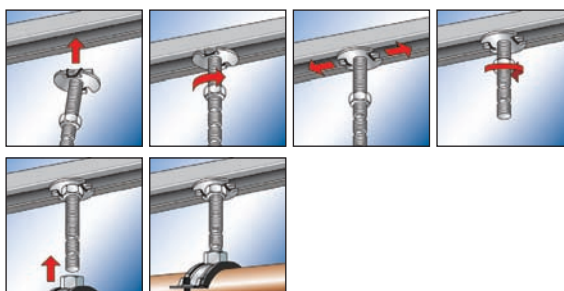
DESCRIPTION

- Quick lock hammer head bolt.

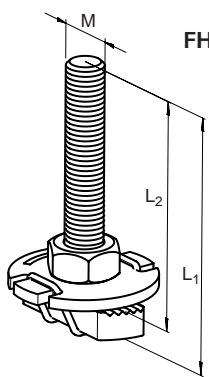
Advantages / Benefits

- Simple, fast and effective installation.
- Retrofitting in rails possible.
- Simple alignment in the rail.
- Fits to FUS and MS channels as well.

INSTALLATION



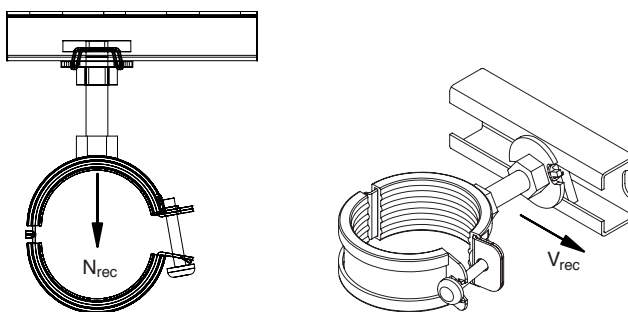
TECHNICAL DATA



FHS Clix-S

Type	Art. No.	Qty. per box	Thread	Length	Length
		pcs.	M	L ₁	L ₂
				[mm]	[mm]
FHS CLIX S 8 x 30	020914	50	M 8	36	30
FHS CLIX S 8 x 40	020915	50	M 8	46	40
FHS CLIX S 8 x 60	020916	50	M 8	66	60
FHS CLIX S 10 x 30	020917	50	M 10	37	30
FHS CLIX S 10 x 40	020918	50	M 10	47	40
FHS CLIX S 10 x 60	020919	50	M 10	67	60
FHS CLIX S 12 x 30	020969	50	M 12	38	30
FHS CLIX S 12 x 40	047316	50	M 12	48	40
FHS CLIX S 12 x 60	504320	50	M 12	68	60

LOADS



Type	Profile	Max. recom. static load (tension)	Max. recom. static load (shear)	Tightening torque
		N _{rec} [kN]	V _{rec} [kN]	[Nm]
M8	38/40	5.0	0.8	15
	40/60	6.5	0.8	
M10	38/40	5.0	2.0	20
	40/60	7.5	2.0	
M12	38/40	5.0	2.5	25
	40/60	8.5	2.5	

T-head bolt HS 38

OVERVIEW



HS 38

Properties:

Base plate material	Steel (material no. 1.0037) acc. to DIN EN 10025
Thread rod	Steel 4.8 acc. DIN 976
Hex-nut	Steel acc. ISO 898-2 Tab. 4 resistance min. 4
Washer	Steel (material no. 1.0037) acc. to DIN EN 10025
Zinc plating	Electro zinc plated, min. 5 µm

DESCRIPTION

- T-head bolt for all standard rail profiles with 15 mm and 17 mm slot width.

Advantages / Benefits

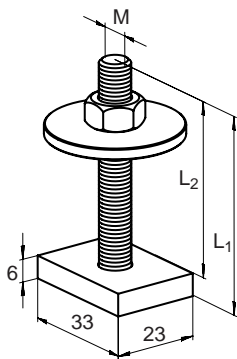
- Simple, fast and effective installation.
- Fewer individual parts than with traditional fixings.
- Simple alignment in the rail.

INSTALLATION

Installation tips

- Introduce the fischer T-head bolt into the rail or bracket from the side.
- After alignment, the T-head bolt should be secured with the nut.

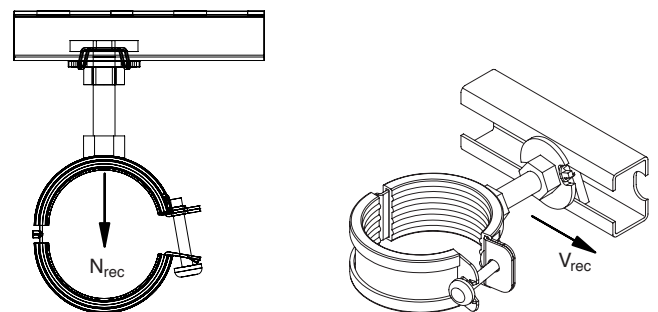
TECHNICAL DATA



HS 38

Type	Art. No.	Qty. per box pcs.	Thread M	Length	
				L ₁ [mm]	L ₂ [mm]
HS 38 M 8 x 30	079610	50	M 8	30	24
HS 38 M 8 x 40	079611	50	M 8	40	34
HS 38 M 8 x 60	079612	50	M 8	60	54
HS 38 M 10 x 25	063956	50	M 10	25	19
HS 38 M 10 x 30	079615	50	M 10	30	24
HS 38 M 10 x 40	079616	50	M 10	40	34
HS 38 M 10 x 60	079617	50	M 10	60	54

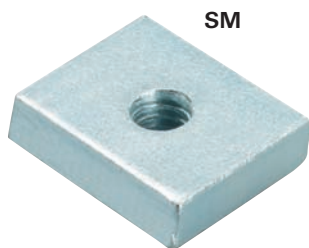
LOADS



Type	Profile	Max. recom. static load (tension)	Max. recom. static load (shear)	Tightening torque [Nm]
		N _{rec} [kN]	V _{rec} [kN]	
HS 38 M8	38/40	6.0	0.8	15.0
	40/60	7.5	0.8	
HS 38 M10	38/40	6.0	1.0	25.0
	40/60	7.5	1.0	

Sliding nut SM

OVERVIEW



SM

Properties:

Material	Steel (material no. 1.0037) acc. to DIN EN 10025
Zinc plating	Electro zinc plated, min. 5 µm

DESCRIPTION

- Threaded plate fitting to MS channels.

Advantages / Benefits

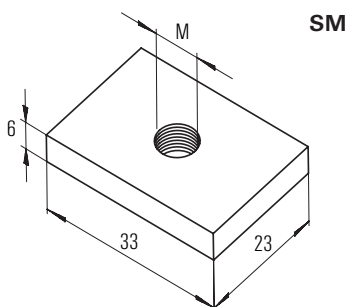
- Simple installation and alignment in the rail.

INSTALLATION

Installation tip

- Introduce the fischer SM nut into the rail or bracket from the side.
- After alignment, the threaded plate should be secured with a nut.

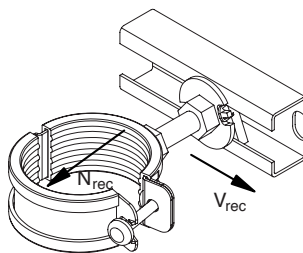
TECHNICAL DATA



SM

Type	Art. No.	Qty. per box	Thread
		pcs.	M
SM 38 M 8	079600	50	M 8
SM 38 M 10	079601	50	M 10

LOADS



Type	Profile	Max. recom. static load (tension) N_{rec} [kN]	Max. recom. static load (shear) V_{rec} [kN]	Tightening torque [Nm]
SM 38 M8	38/40	6.0	0.8	15.0
	40/60	7.5	0.8	15.0
SM 38 M10	38/40	6.0	1.0	25.0
	40/60	7.5	1.0	25.0

Channel nut HG 38

OVERVIEW



HG 38

Properties:

Material	Steel DD11 (material no. 1.0332) acc. to DIN EN 10111
Zinc plating	Electro zinc plated, min. 5 µm

DESCRIPTION

- Threaded plate fitting to MS channels.

Advantages / Benefits

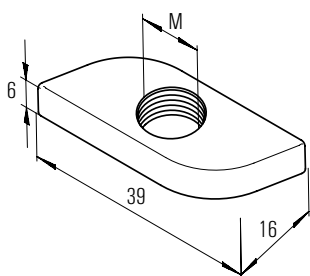
- Simple installation.
- Retrofitting in rails possible.

INSTALLATION

Installation tip

- Insert in to the channel and rotate 90°.

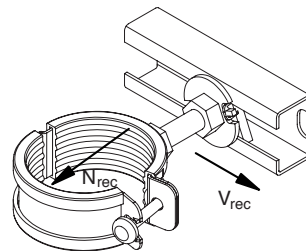
TECHNICAL DATA



HG 38

Type	Art. No.	Qty. per box pcs.	Thread M
HG 38 M 6	077667	100	M 6
HG 38 M 8	024687	100	M 8
HG 38 M 10	024688	100	M 10

LOADS

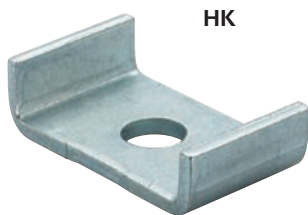


Type	Profile	Max. recom. static load (tension) N _{rec} [kN]	Max. recom. static load (shear) V _{rec} [kN]	Tightening torque [Nm]
HG 38 M6	38/40	3.5	0.5	5.0
	40/60	5.5	0.5	
HG 38 M8	38/40	3.5	0.7	10.0
	40/60	5.5	0.7	
HG 38 M10	38/40	3.5	0.8	15.0
	40/60	5.5	0.8	

Installation System MS

Channel washer HK

OVERVIEW



HK

Properties:

Material	Steel (material no. 1.0037) acc. to DIN EN 10025
Zinc plating	Electro zinc plated, min. 5 µm

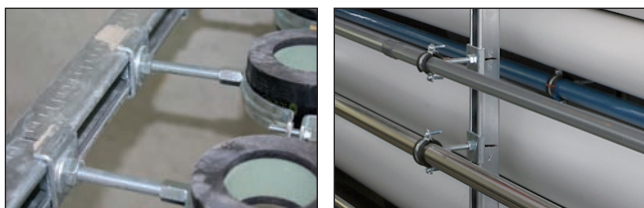
DESCRIPTION

- The channel washer can be used for proper fastening with a fixing, e.g. fischer anchor bolt.
- Used to secure connections.

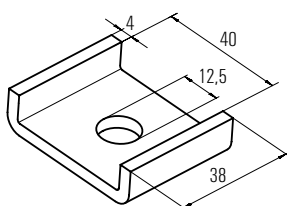
Advantages / Benefits

- Prevents the rail from deformation.

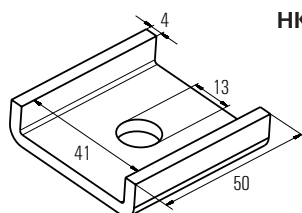
INSTALLATION



TECHNICAL DATA



HK 38

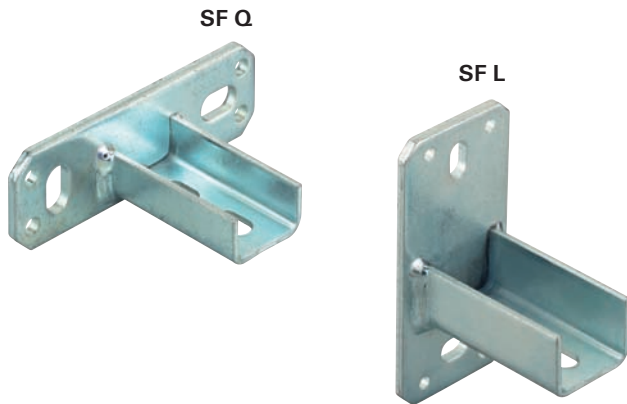


HK 40

Type	Art. No.	Qty. per box	for profile						
		pcs.							
HK 38	079651	50	38/40						
HK 40	020946	100	40/60; 40/120						

Saddle flange SF

OVERVIEW



Properties:

Material	Base plate: Steel DC01 - min. 340 (material no. 1.0037) acc. to DIN EN 10139 U-Profil: S235JR (material no. 10037) acc. to DIN EN 10025
Zinc plating	Electro zinc plated, min. 8 µm

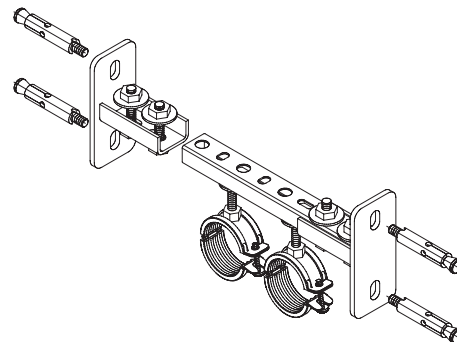
DESCRIPTION

- Connection element between the fischer channels and building.

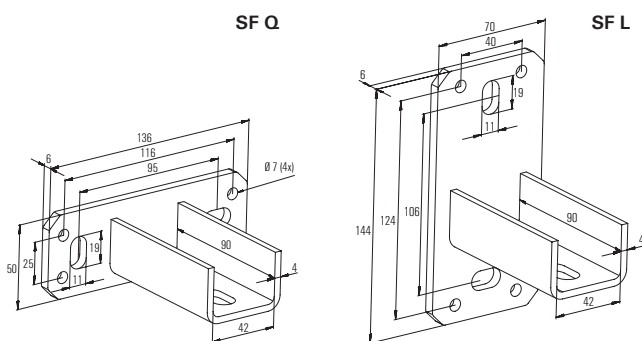
Advantages / Benefits

- Solid connecting element for load-bearing constructions.
- Simple installation by inserting the mounting rail in the saddle.

INSTALLATION

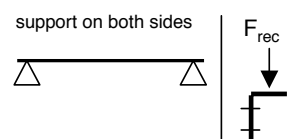


TECHNICAL DATA



Type	Art. No.	Qty. per box	Version	for channel
pcs.				
SF Q 38	079410	10	horizontal	38/40 + 40/60 + 40/120
SF L 38	079586	8	vertical	38/40 + 40/60 + 40/120

LOADS

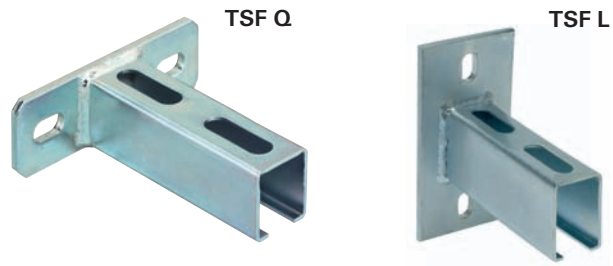


Connector	Channel	double	
		[kN]	Torque [Nm]
HG 38 M10	38/40	1,5	15
	40/--	1,5	15
SM / HS M10	38/40	2	25
	40/--	2	25
FHS Clix S 10	38/40	4	20
	40/--	4	20

Installation System MS

Telescopic flange TSF

OVERVIEW



Properties:

Material	Base plate: Steel DD11 (material no. 1.0332) acc. to DIN EN 10111 / U-Profile: S235JR (material no. 1.0037) acc. to DIN EN 10025
Zinc plating	Electro zinc plated, min. 3 µm

DESCRIPTION

- Ideal, flexible connecting element for producing constructions in connection with the fischer mounting rails.

Advantages / Benefits

- Simple and fast installation using the T-head bolt FHS Clix S.
- Height and length differences up to 5 cm can be compensated quickly and easily.
- Can be used ideally in tight application areas using telescopic function.
- Free rail opening, e.g. for pipe connections.

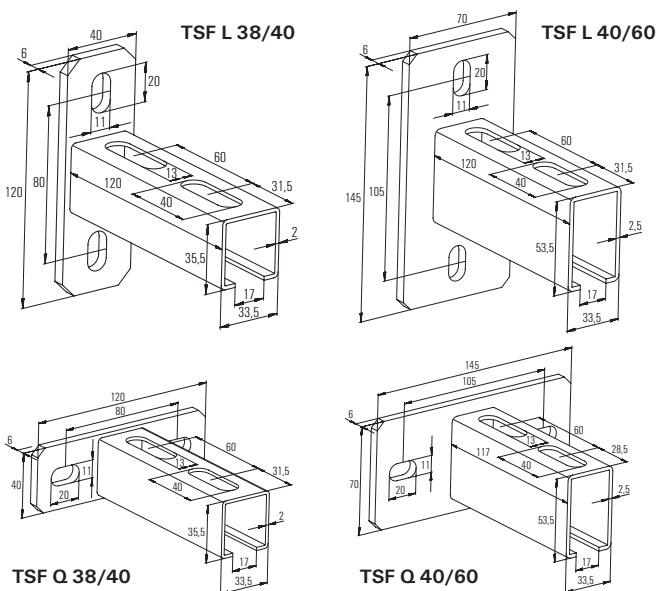
INSTALLATION

Installation tips

- Installation is carried out by sliding into the mounting rail and the fastening by means of FHS Clix S or by screwing.
- Good fixing possibility using suitable anchor.
- Good height adjustment due to long slots in the base plate.



TECHNICAL DATA



LOADS

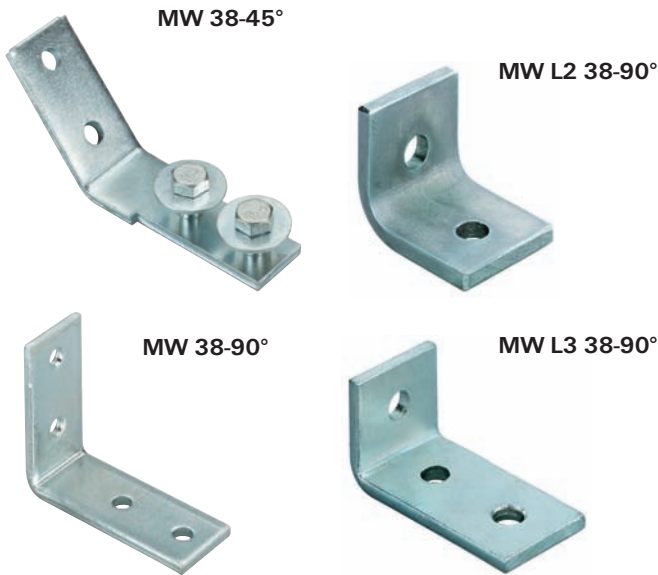
support on both sides

Connector	Channel	double	Torque
		[kN]	[Nm]
HG 38 M10	38/40	1,5	15
	40/--	1,5	15
SM / HS M10	38/40	2	25
	40/--	2	25
FHS Clix S 10	38/40	4	20
	40/--	4	20

Type	Art. No.	Qty. per box	for profile	Version
pcs.				
TSF L 38/40	063611	15	38/40	vertical
TSF Q 38/40	063621	15	38/40	horizontal
TSF L 40/60	063624	15	40/60 + 40/120	vertical
TSF Q 40/60	063629	15	40/60 + 40/120	horizontal

Installation angle bracket MW

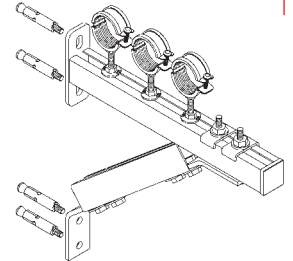
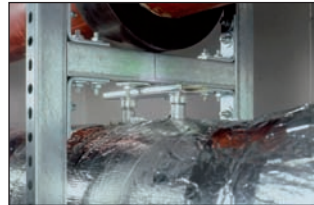
OVERVIEW



Properties:

Material	Steel S235 JR (material no. 1.0332) acc. to DIN EN 10025
Zinc plating	Electro zinc plated, min. 8 µm

INSTALLATION



Installation System MS

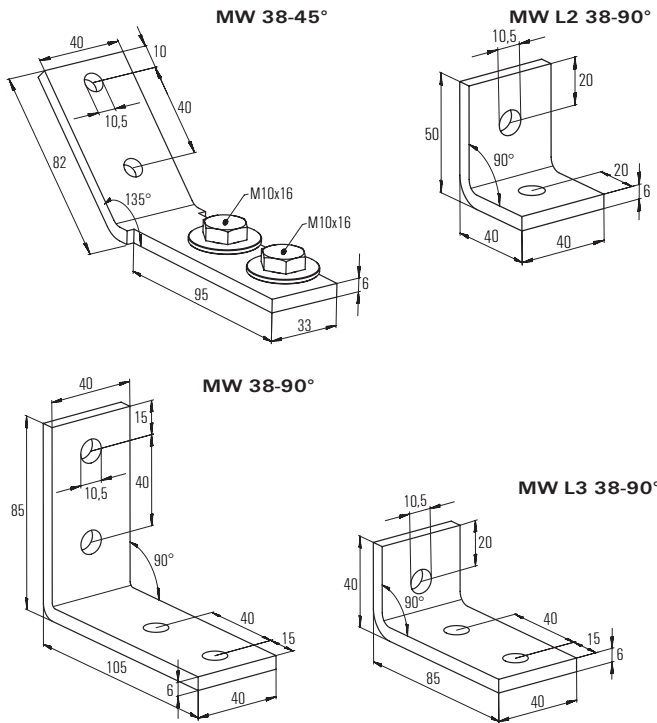
DESCRIPTION

- Angle brackets for connection of channels.

Advantages / Benefits

- Installation advantages in producing load-bearing constructions in connection with fischer mounting rails.
- Variable installation possibilities.
- MW 38-45° is supplied with pre-mounted clamping screw.

TECHNICAL DATA



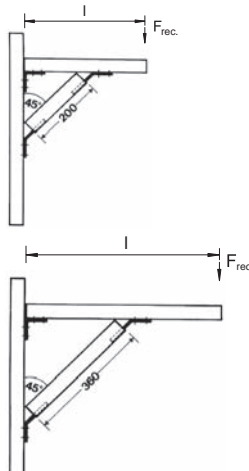
LOADS

MW L2, MW L3, MW 38-90

support on both sides

Connector	Channel	F _{rec}		Torque [Nm]
		double [kN]	single [kN]	
HG 38 M10	38/40	1,5	0,8	15
	40/--	1,5	0,8	15
SM / HS M10	38/40	2	1	25
	40/--	2	1	25
FHS Clix S 10	38/40	4	2	20
	40/--	4	2	20

Load case: Brackets made of MS 38/40 + MW 38-45° + MW 38-90°



Length l in mm	140	280
Max. Load F _{rec} in kN:	3,9	1,7

Length l in mm	125	250	470
Max. Load F _{rec} in kN:	2,4	3,9	1,4

Type	Art. No.	Qty. per box	Angle
		pcs.	
MW 38-45°	079658	10	45°
MW 38-90°	079657	20	90°
MW L2 38-90°	063599	20	90°
MW L3 38-90°	063597	20	90°

Universal bracket UW S

OVERVIEW



UW S

Properties:

Material	Steel DD11 (material no. 10332) acc. to DIN EN 10111
Zinc plating	Electro zinc plated, min. 5 µm

DESCRIPTION

- Stable angle bracket for reinforcing load-bearing constructions.

Advantages / Benefits

- Ideal, flexible construction element due to the option of horizontal and vertical alignment.
- In combination with fischer mounting rails, the universal bracket produces a load-bearing construction with very high stability and safety.

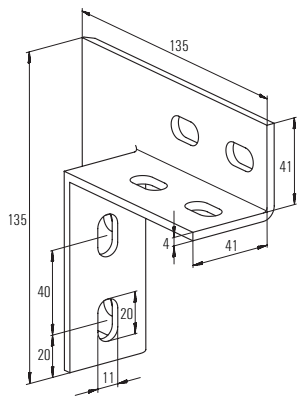
INSTALLATION

Installation tip

- The universal bracket should be used in pairs.

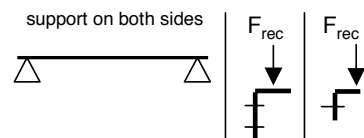


TECHNICAL DATA



Type	Art. No.	Qty. per box
UW S	49479	10

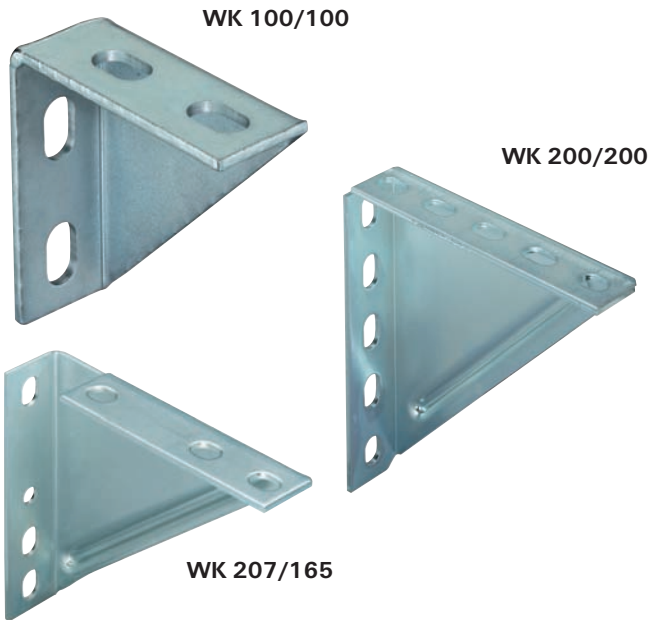
LOADS



Connector	Channel	double	single	Torque
		[kN]	[kN]	
HG 38 M10	38/40	1,5	0,8	15
	40/--	1,5	0,8	15
SM / HS M10	38/40	2	1	25
	40/--	2	1	25
FHS	38/40	4	2	20
Clix S 10	40/--	4	2	20

Angle bracket WK

OVERVIEW



Properties:

Material	Steel DD11 (material no. 1.0332) acc. to DIN EN 10111
Zinc plating	Electro zinc plated, min. 8 µm

DESCRIPTION

- Stable angle bracket for fixing pipe lines and components.
- The angle bracket acts as a reinforcement for load-bearing constructions.

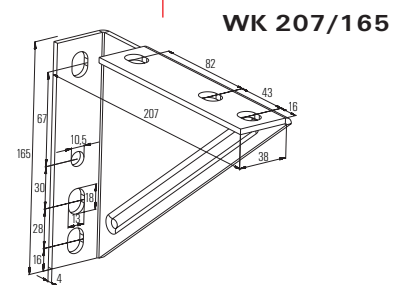
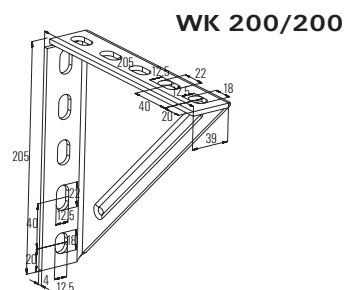
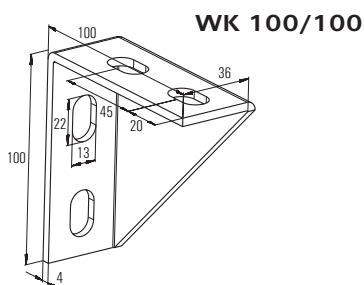
Advantages / Benefits

- Versatile possibilities for wall, floor and ceiling installation, can be used in shafts and also free-standing.
- In combination with fischer mounting rails, the universal bracket produces a load-bearing construction with very high stability and safety.

INSTALLATION

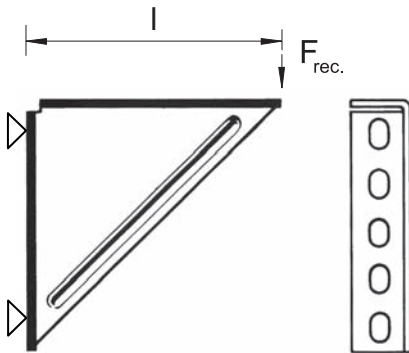


TECHNICAL DATA



Type	Art. No.	Qty. per box							
		pcs.							
WK 100/100	63559	5							
WK 200/200	79570	5							
WK 207/165	79571	6							

Load-bearing capacity of the angle brackets



ANGLE BRACKET WK

Angle bracket WK 100

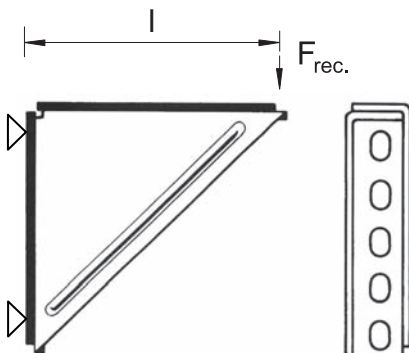
Length l in mm	80
Max. recom. static load in kN:	4.0

Angle bracket WK 200/200

Length l in mm	100	180
Max. load $F_{rec.}$ in kN:	4.0	1.8

Angle bracket WK 207/160

Length l in mm	150
Max. load $F_{rec.}$ in kN:	1.8



ANGLE BRACKET WK, DOUBLE-MOUNTED

Angle bracket WK 200/200. double-mounted

Length l in mm	100	180
Max. load $F_{rec.}$ in kN:	8.0	6.0

Rail hanger SB

OVERVIEW



SB

Properties:

Material	S355 MC (material no. 1.0976) acc. to DIN EN 10149 Alternatively: DD11 (material no. 1.0332) acc. to EN 10111
Zinc plating	Electro zinc plated, min. 8 µm

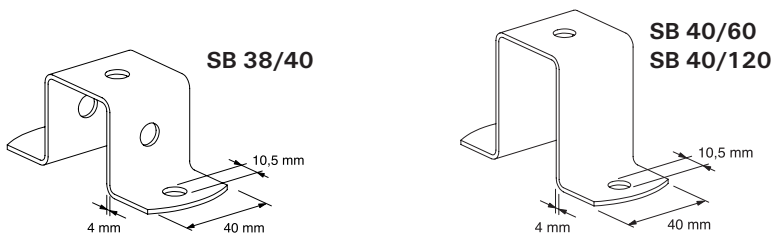
DESCRIPTION

- Universal crosswise connection for channels.

Advantages / Benefits

- Static connection without rotation.
- Variable installation possible due to hole pattern.

TECHNICAL DATA



Type	Art. No.	Qty. per box	for profile						
		pcs.							
SB 38/40	20926	25	38/40						
SB 40/60	20927	25	40/60						
SB 40/120	20928	25	40/120						

Installation System MS

Beam clamp TKR

OVERVIEW



TKR

Properties:

Material	Plate: Steel S235 JR (material no. 10037) acc. DIN EN 10025 U-bolt pipe hanger: Steel S235 JR (material no. 10037) acc. DIN EN 10025 Hexagon nut: Steel acc. ISO 898-2 resistance min. 4
Zinc plating	Electro zinc plated, min. 5 µm

DESCRIPTION

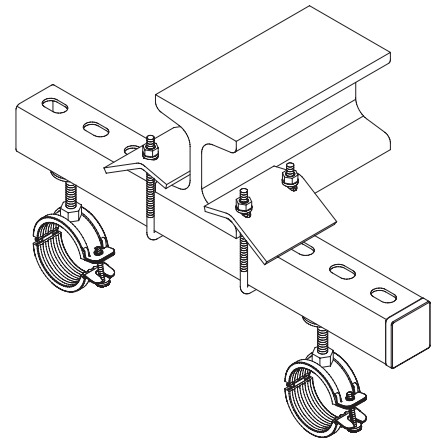
- Stirrup for fastening profile rails to steel beams.

Advantages / Benefits

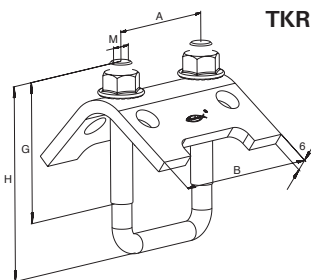
- Easy to add on.
- No drilling or welding necessary.
- Adjustment is possible at any time.
- Due to the different lengths of the claw sides, the fisher clamp support can be fastened to all standard T-beams.

INSTALLATION

- Two clamp supporters are necessary for fastening to the steel beam.



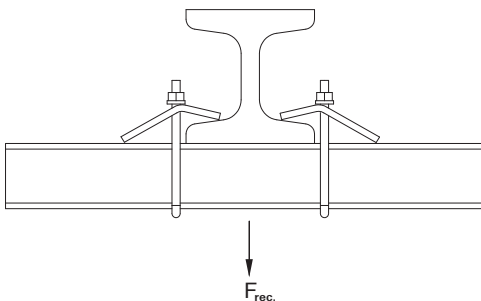
TECHNICAL DATA



TKR

Type	Art. No.	Qty. per box	For profile MS	Width B [mm]	Height H [mm]	Height G [mm]	Thread M [mm]	Width A [mm]
		pcs.						
TKR 21-42	504363	20	38/40	79	97	48	8	52
TKR 82	504366	20	40/60	79	80	137	10	54
TKR 124	504367	10	40/120	79	80	179	10	54

LOADS



Type	Fits profile	Thread	max. load $F_{rec.}$ [kN]	Tightening torque [Nm]
TKR 21/42	38/40	M8	5.00	15
TKR 82	40/60	M10	10.00	20
TKR 124	40/120	M10	10.00	20

