



## SUPPORT SYSTEM

- Overhead Hangers
- Profiles
- Brackets
- Head Plates



Compatible with the individual gutter types, we also offer the various supporting structures in several surface finishes. The range extends from strip galvanised steel to hot-dip galvanised steel and stainless steel.

Different dimensions with corresponding hole patterns as well as various support loads from light to very heavy design give you a free hand for individual attachment to the floor, wall and ceiling.

On the right you will find a selection of the most frequently used articles, more on the following pages.

HU 5050/...



U 6040/...



KTA...



WAI 200 S



## System overview

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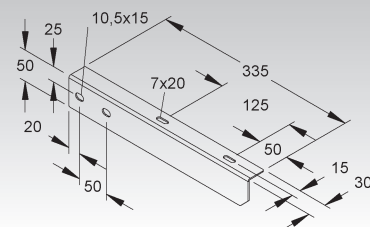


# SUPPORT SYSTEM .....

## Angle Bracket

Model No.	Height H	Width B	Length L	EAN code	Weight in kg per 100 pc.	Smallest packaging unit
	mm	mm	mm			
<b>S</b> <b>WAI 200 S</b>	30	50	335	142842	39,34	1 pc.

for creating suspended structures



## Ceiling Support and Wall Bracket

standard range

Model No.	Height H	Width B	Length L	Load rating at L/2	Incl. accessories	EAN code	Weight in kg per 100 pc.	Smallest packaging unit
	mm	mm	mm	kN				
<b>F</b> <b>KTA 100</b>	45	40	110	2,5	2 FLM 6X12	186907	15,66	20 pcs.
<b>F</b> <b>KTA 150</b>	45	40	160	2,5	2 FLM 6X12	187003	19,05	20 pcs.
<b>F</b> <b>KTA 200</b>	55	40	210	2,5	2 FLM 6X12	187102	27,55	20 pcs.
<b>F</b> <b>KTA 250</b>	55	40	260	2,5	2 FLM 6X12	187201	32,21	20 pcs.
<b>F</b> <b>KTA 300</b>	65	50	310	2,5	2 FLM 6X12	187300	59,17	20 pcs.
<b>F</b> <b>KTA 350</b>	65	50	360	2,5	2 FLM 6X12	187409	66,35	20 pcs.
<b>F</b> <b>KTA 400</b>	75	50	410	2,5	2 FLM 6X12	187508	79,17	20 pcs.
<b>F</b> <b>KTA 450</b>	75	50	460	2,5	2 FLM 6X12	187607	88,02	10 pcs.
<b>F</b> <b>KTA 500</b>	90	50	510	2,5	2 FLM 6X12	187706	111,06	10 pcs.
<b>F</b> <b>KTA 550</b>	90	50	560	2,5	2 FLM 6X12	187805	134,20	10 pcs.
<b>F</b> <b>KTA 600</b>	90	50	610	2,5	2 FLM 6X12	187904	127,48	10 pcs.

for a wall and ceiling mounting

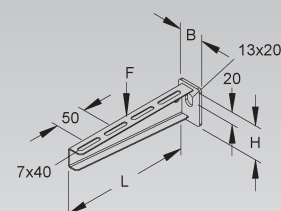
For steel brackets KTA 100-400, the size of oblong hole LL is 7x40 mm.

For steel brackets KTA 500+600, the size of oblong hole LL is 7x38 mm.

For steel brackets KTA 150-550 (intermediate sizes) and for stainless steel brackets KTA 100-600, the size of oblong hole LL is 7x15 mm.

The load data relative to the carrying capacity are only valid if the bolting with the supporting base is sufficient, particularly in case of assembly on ceiling supports according to the mounting instructions.

Also available in stainless steel.



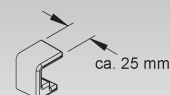
## Protective End Cap

Model No.	Colour	EAN code	Weight in kg per 100 pc.	Smallest packaging unit
<b>K10</b> <b>KA 100-600</b>	<b>yellow</b>	347056	1,4	10 pcs.

to protect the profile ends

**The end caps must be prescribed in areas where the risk of hazard is important!**

Used for: ceiling support and wall bracket KTA 100-600



## Ceiling Support

Profile U

	Model No.	Total length L mm	EAN code	Weight in kg per 100 pc.	Smallest packaging unit
F	HU 5050/200	205	858705	93,08	1 pc.
F	HU 5050/250	255	858729	105,23	1 pc.
F	HU 5050/300	305	858743	117,38	1 pc.
F	HU 5050/400	405	858767	141,67	1 pc.
F	HU 5050/500	505	858781	165,97	1 pc.
F	HU 5050/600	605	858804	190,27	1 pc.
F	HU 5050/700	705	858828	214,57	1 pc.
F	HU 5050/800	805	858842	238,87	1 pc.
F	HU 5050/900	905	858866	263,16	1 pc.
F	HU 5050/1000	1005	858880	287,46	1 pc.
F	HU 5050/1100	1105	858903	311,76	1 pc.
F	HU 5050/1200	1205	858927	336,06	1 pc.
F	HU 5050/1500	1505	858941	408,96	1 pc.
F	HU 5050/2000	2005	858965	530,44	1 pc.

Total length = U profile length, included fixing plate.

HU 5050/200, has limited space for equipment in cable trays (bracket length and height).

Used for: ceiling support and wall bracket KTA...

In order to avoid the deformation of ceiling support during the mounting of brackets, it is necessary for mechanical reason, to take into account of the thickness of the ceiling support when screwing the hexagonal bolts.

For static reasons and to facilitate the mounting of end caps, the bracket must be mounted at  $x=50$  mm above the ceiling support end.

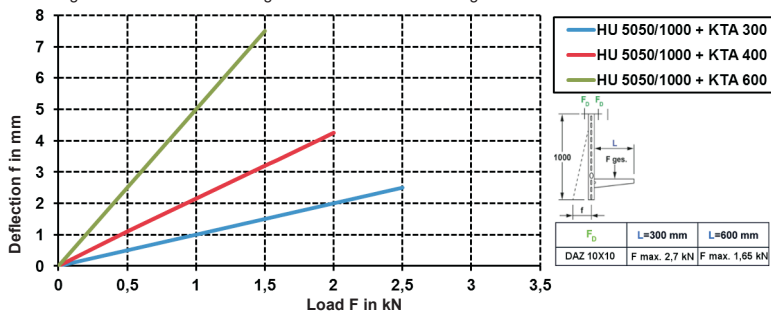
Series of oblong holes (13x40 mm) on 3 profile sides.

If the bracket is fixed on one side to the overhead hanger, the closed side of the bracket should preferably be aligned with the profile web of the overhead hanger.

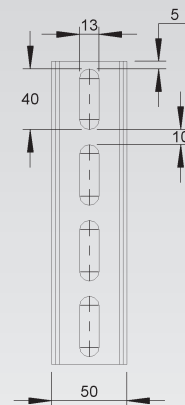
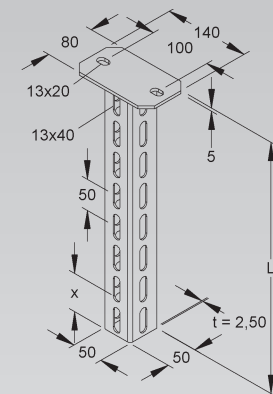
The load specifications only apply if there is sufficient anchoring with the load-bearing substrate. The introduction of the loads into the structure must be coordinated with the site management. The applicable guidelines and regulations must be observed.

Also available in stainless steel.

Load diagram : deflection of the hanger in case of one-sided charges



In case of symmetrical loads, the deflection is not significant.



$$I_y = 12,10 \text{ cm}^4$$

$$I_z = 8,14 \text{ cm}^4$$

$$W_y = 4,84 \text{ cm}^3$$

$$W_z = 2,57 \text{ cm}^3$$



## Ceiling Support Profile

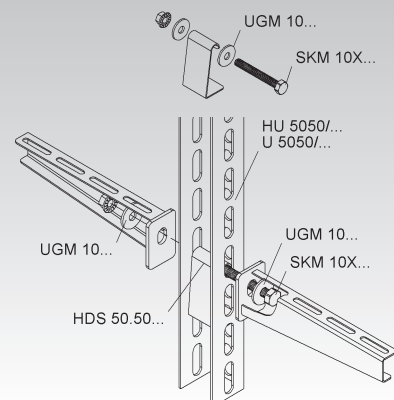
	Model No.	Incl. accessories	EAN code	Weight in kg per 100 pc.	Smallest packaging unit
F	HDS 50.50 F	1 SKM 10X80 F, 2 UGM 10 F	931705	16,52	50 pcs.

Used for: profile U 5050/... and ceiling support HU 5050/...

In order to avoid the deformation of ceiling support during the mounting of brackets, it is necessary for mechanical reason, to take into account of the thickness of the ceiling support when screwing the hexagonal bolts.

If the bracket is fixed on one side to the overhead hanger, the closed side of the outrigger should preferably be aligned with the profile web of the overhead hanger.

Also available in stainless steel.



# SUPPORT SYSTEM .....

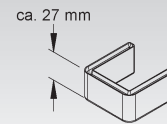
## Protective End Cap

Model No.	Colour	EAN code	Weight in kg per 100 pc.	Smallest packaging unit	
K03	SKU 5050	yellow	188390	1,38	20 pcs.

to protect the profile ends

Used for: profile U 5050/... and ceiling support HU 5050/...

In order to allow easy installation of the protective caps, the bracket must be mounted at a distance of x=50 mm (lower edge of the bracket - end of the suspended support) above the end of the suspended support.



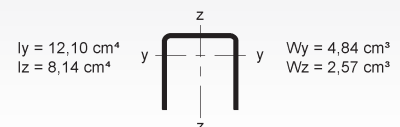
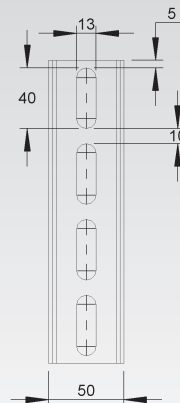
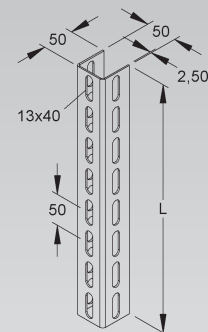
## Profile U 5050

Model No.		Length L	EAN code	Weight in kg per 100 pc./m	Smallest packaging unit
		mm			
F	U 5050/200 F	200	918522	48,60	1 pc.
F	U 5050/250 F	250	918546	60,74	1 pc.
F	U 5050/300 F	300	918560	72,90	1 pc.
F	U 5050/400 F	400	918584	97,20	1 pc.
F	U 5050/500 F	500	918607	121,50	1 pc.
F	U 5050/600 F	600	918621	145,79	1 pc.
F	U 5050/700 F	700	918645	170,09	1 pc.
F	U 5050/800 F	800	918669	194,38	1 pc.
F	U 5050/900 F	900	918683	218,68	1 pc.
F	U 5050/1000 F	1000	918706	242,98	1 pc.
F	U 5050/1100 F	1100	918720	267,28	1 pc.
F	U 5050/1200 F	1200	918744	291,58	1 pc.
F	U 5050/1500 F	1500	918768	364,47	1 pc.
F	U 5050/2000 F	2000	918782	242,98	2 m
F	U 5050/3000 F	3000	859306	242,98	3 m
F	U 5050/6000 F	6000	859320	242,98	6 m

for the manufacturing of ceiling supports and supporting systems made of different elements

Serie of oblong holes (13x40 mm) on 3 profile sides.

Also available in stainless steel.

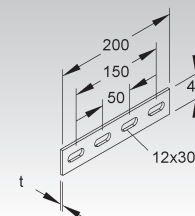


## Straight Splice Plate

Model No.		Material thickness (t) mm	Incl. accessories	EAN code	Weight in kg per 100 pc.	Smallest packaging unit
F	VB 50	4	4 FLM 10X25 F	199303	38,13	20 pcs.

Demand at U 5050/... and HU 5050/...: 2 pieces per joint

Used for: profile U 5050/... and ceiling support HU 5050/...



## Anchor Fixing Plate incl. Bolts

Model No.	Total length L	Thickness of head plates (t)	Incl. accessories	EAN code	Weight in kg per 100 pc.	Smallest packaging unit	
	mm	mm					
F	KU 5050	110	5	2 FLM 10X25 F	191956	86,33	1 pc.

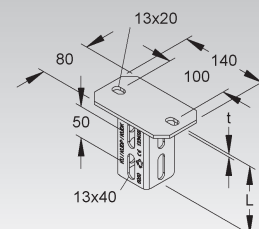
for the mounting on straight ceilings

Total length = length of the U-profile including the head plate

Used for: profile U 5050/...

Serie of oblong holes (13 x 40 mm) on 3 profile sides.

Also available in stainless steel.



## Ceiling Support

Profile U

	Model No.	Total length L mm	EAN code	Weight in kg per 100 pc.	Smallest packaging unit
F	HU 6040/200	206	891450	143,21	1 pc.
F	HU 6040/250	256	891467	160,14	1 pc.
F	HU 6040/300	306	891474	177,08	1 pc.
F	HU 6040/400	406	891481	210,95	1 pc.
F	HU 6040/500	506	891498	244,82	1 pc.
F	HU 6040/600	606	891504	278,67	1 pc.
F	HU 6040/700	706	891511	312,54	1 pc.
F	HU 6040/800	806	891528	346,41	1 pc.
F	HU 6040/900	906	891535	380,28	1 pc.
F	HU 6040/1000	1006	891542	414,15	1 pc.
F	HU 6040/1100	1106	891559	448,02	1 pc.
F	HU 6040/1200	1206	891566	481,89	1 pc.
F	HU 6040/1500	1506	891573	583,50	1 pc.
F	HU 6040/2000	2006	891580	752,83	1 pc.

Total length = U profile length, included fixing plate.

HU 6040/200 has limited space for cable tray equipment (length of the overhead hanger - height of the bracket).

Used for: ceiling support and wall bracket KTA...

In order to avoid the deformation of ceiling support during the mounting of brackets, it is necessary for mechanical reason, to take into account of the thickness of the ceiling support when screwing the hexagonal bolts.

For static reasons and to facilitate the mounting of end caps, the bracket must be mounted at  $x=50$  mm above the ceiling support end.

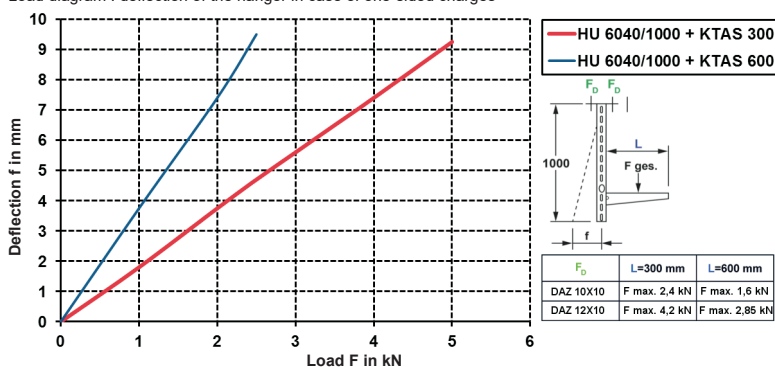
Series of oblong holes (13x40 mm) on 3 profile sides.

If the bracket is fixed on one side to the overhead hanger, the closed side of the bracket should preferably be aligned with the profile web of the overhead hanger.

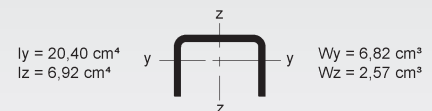
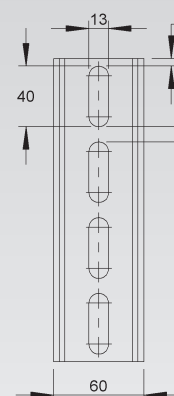
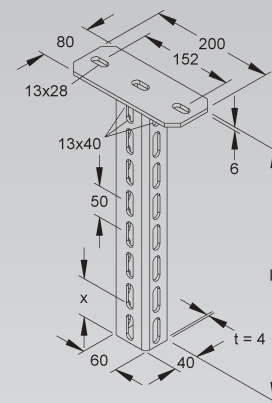
The load specifications only apply if there is sufficient anchoring with the load-bearing substrate. The introduction of the loads into the structure must be coordinated with the site management. The applicable guidelines and regulations must be observed.

Also available in stainless steel.

Load diagram : deflection of the hanger in case of one-sided charges



In case of symmetrical loads, the deflection is not significant.



## Ceiling Support Profile

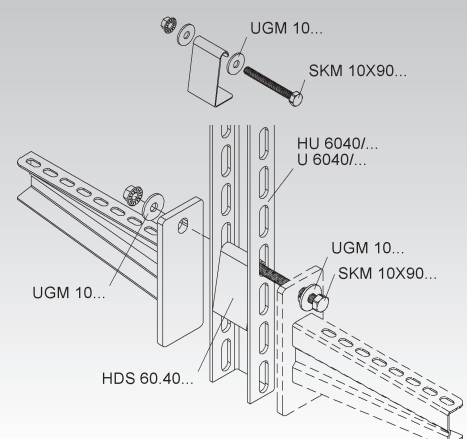
	Model No.	Incl. accessories	EAN code	Weight in kg per 100 pc.	Smallest packaging unit
F	HDS 60.40 F	1 SKM 10X90 F, 2 UGM 10 F	931729	18,59	50 pcs.

Used for: profile U 6040/... and ceiling support HU 6040/...

In order to avoid the deformation of ceiling support during the mounting of brackets, it is necessary for mechanical reason, to take into account of the thickness of the ceiling support when screwing the hexagonal bolts.

If the bracket is fixed on one side to the overhead hanger, the closed side of the outrigger should preferably be aligned with the profile web of the overhead hanger.

Also available in stainless steel.





# SUPPORT SYSTEM

## Protective End Cap

Model No.	Colour	EAN code	Weight in kg per 100 pc.	Smallest packaging unit	
K03	SKU 6040	yellow	912162	1,32	20 pcs.

to protect the profile ends

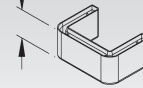
**The end caps must be prescribed in areas where the risk of hazard is important!**

Used for: profile U 6040/..., ceiling support HU 6040/... and vertical cable ladder STUC 60/...

In order to allow easy installation of the protective caps, the bracket must be mounted at a distance of  $x=50$  mm (lower edge of the bracket - end of the suspended support) above the end of the suspended support.



ca. 27 mm



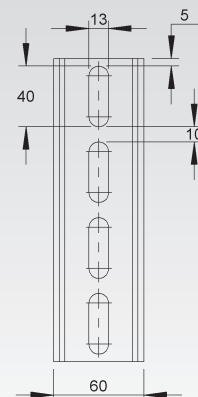
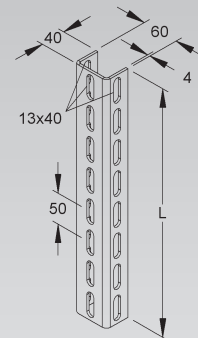
## Profile U 6040

Model No.	Length L	EAN code	Weight in kg per 100 pc./m	Smallest packaging unit
	mm			
F U 6040/200 F	200	891603	67,74	1 pc.
F U 6040/250 F	250	891610	84,67	1 pc.
F U 6040/300 F	300	891627	101,61	1 pc.
F U 6040/400 F	400	891634	135,48	1 pc.
F U 6040/500 F	500	891641	169,35	1 pc.
F U 6040/600 F	600	891658	203,21	1 pc.
F U 6040/700 F	700	891665	237,07	1 pc.
F U 6040/800 F	800	891672	270,94	1 pc.
F U 6040/900 F	900	891689	304,81	1 pc.
F U 6040/1000 F	1000	891696	338,68	1 pc.
F U 6040/1100 F	1100	891702	372,55	1 pc.
F U 6040/1200 F	1200	891719	406,42	1 pc.
F U 6040/1500 F	1500	891726	508,02	1 pc.
F U 6040/2000 F	2000	891733	338,68	2 m
F U 6040/3000 F	3000	891740	338,68	3 m
F U 6040/6000 F	6000	891764	338,68	6 m

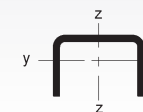
for the manufacturing of ceiling supports and supporting systems made of different elements

Series of oblong holes (13 x 40 mm) on 3 profile sides.

Also available in stainless steel.



$I_y = 20,40 \text{ cm}^4$   
 $I_z = 6,92 \text{ cm}^4$



$W_y = 6,82 \text{ cm}^3$   
 $W_z = 2,57 \text{ cm}^3$

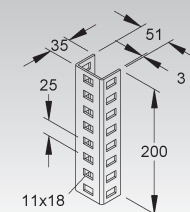
## Straight Splice Plate

Model No.	Incl. accessories	EAN code	Weight in kg per 100 pc.	Smallest packaging unit
F VB 6040	4 FLM 10X25 F	891788	61,2	10 pcs.

Used for: profile U 6040/...

Three-sided slotted hole arrangement 11x18 mm in profile

Also available in stainless steel.



## Anchor Fixing Plate incl. Bolts

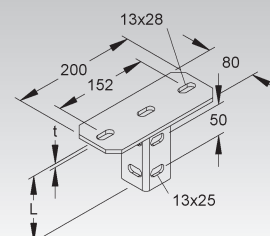
Model No.	Total length L	Thickness of head plates (t)	Incl. accessories	EAN code	Weight in kg per 100 pc.	Smallest packaging unit
	mm	mm				
F KU 6040	106	6	2 FLM 10X25 F	891771	118,01	1 pc.

for the mounting on straight ceilings

**Total length = length of the C-shaped connecting profile incl. the head plate**

Used for: profile U 6040/...

Also available in stainless steel.



## I-Beam Clamping Assembly

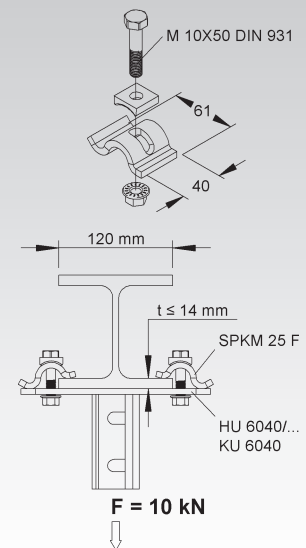
Model No.	For side rail thickness (t)	Incl. accessories	EAN code	Weight in kg per 100 Pair	Smallest packaging unit
	mm				
<b>F SPKM 25 F</b>	0 - 14	1 SK 10X50 DIN 931	931040	44	10 pairs

for attaching headplates or hangers directly to I-beams  
for suspension with girder flange width of 120 mm possible

Used for: direct suspended support HU 6040/... or system-related head plates with profile U 6040/...

Screw tightening torque 46 Nm

Width across flats 16



## I-Beam Clamping Assembly

with sliding nut

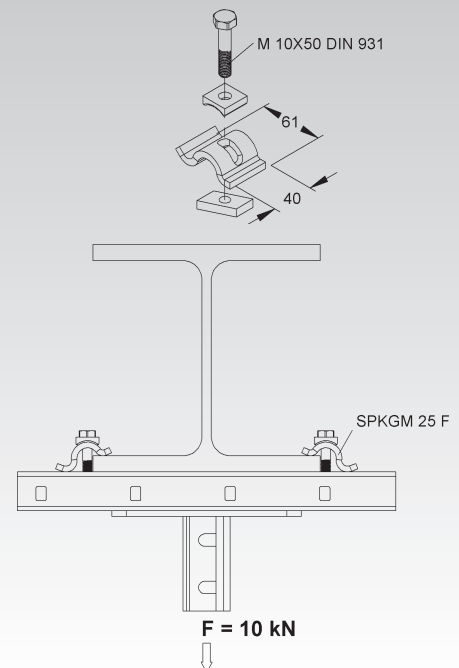
Model No.	Flange thickness (t) 2986	Flange thickness (t) 2988/2996	Incl. accessories	EAN code	Weight in kg per 100 Pair	Smallest packaging unit
	mm	mm				
<b>F SPKGM 25 F</b>	7 - 11	0 - 10	1 SK 10X50 DIN 931	934959	47,3	10 pairs

for fastening suspensions to double T-beam profiles in combination with C-profiles 2986 (slot width 18 mm), 2988 (slot width 18 mm) and 2996Z (slot width 22 mm)

Used for: ceiling supports and profiles

Screw tightening torque 46 Nm

Width across flats 16



## Beam Clamp

incl. slotted shoulder screw M8

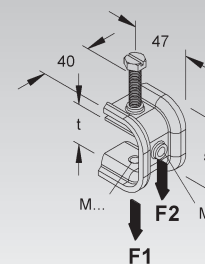
Model No.	Thickness of flange (t)	Thread M	Vertical nominal load F1	Vertical nominal load F2	EAN code	Weight in kg per 100 pc.	Smallest packaging unit
	mm		kN	kN			
<b>F PKS M6/10-40 F</b>	6 - 35	6	1,8	1,6	133871	20,27	25 pcs.
<b>F PKS M8/10-40 F</b>	6 - 35	8	1,8	1,6	077571	21,20	25 pcs.
<b>E3 PKS M8/10-40 E3</b>	6 - 35	8	1,8	1,6	126866	19,40	25 pcs.
<b>E5 PKS M8/10-40 E5</b>	6 - 35	8	1,8	1,6	126873	19,59	25 pcs.

for beam profiles with parallel flanges or slanted flanges with a maximum inclination of 14% as well as supply line to the energy consumers

Depending on the application different fixing material will be used.

Bolting torque: 4 Nm

Wrench size 13



# SUPPORT SYSTEM .....

## Threaded Rod, M6

Model No.	Length L mm	Resistance class	Incl. accessories	EAN code	Weight in kg per 100 pc.	Smallest packaging unit
<b>V M 6/1000</b>	1000	4.6	4 SMU 6	919420	21,72	25 pcs.
<b>E3 M 6/1000 E3</b>	1000	1.4301	4 SMU 6 E3	107544	18,77	25 pcs.



## Threaded Rod, M8

Model No.	Length L mm	Resistance class	Incl. accessories	EAN code	Weight in kg per 100 pc.	Smallest packaging unit
<b>V M 8/1000</b>	1000	4.6	4 SMU 8	203505	35,1	25 pcs.
<b>E3 M 8/1000 E3</b>	1000	1.4301	4 SMU 8 E3	107568	35,1	25 pcs.



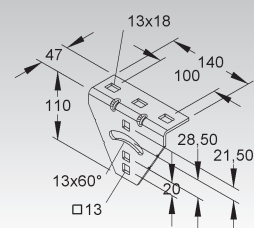
## Adjustable Elbow Bracket

adjustable from -30° to +30°

Model No.	Incl. accessories	EAN code	Weight in kg per 100 pc.	Smallest packaging unit
<b>F AWG 110/140</b>	2 FLM 10X25 F	891801	58,4	10 pcs.

for mounting on inclined ceilings

Used for: U-profiles and C-profiles



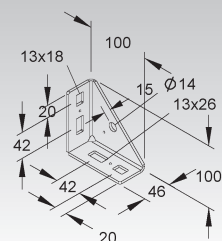
## Angle Connector

Model No.	EAN code	Weight in kg per 100 pc.	Smallest packaging unit
<b>F TRV 40</b>	891795	41,1	10 pcs.

for connecting vertically aligned, T-shaped U-profiles and/or for use as a node angle for suspension systems

Used for: profiles U 5050/..., U 6040/... and C-profiles

Hardware is not included.



## NOTES

A large grid of graph paper for taking notes, consisting of 20 columns and 30 rows of small squares.

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