

Channel MS 27 - 1,25

Group: 2711

#### Application

Element for easily and efficiently pre-assembling crossbars, wall brackets and support structures on site or in workshops.

All products within the Pressix CC 27 range are compatible with Channel MS 27.

#### Installation

Fixation of the channel easily could be achieved using Nail Anchor PN and Bolt Screw Anchor MMS-PR.

[cm]

i<sub>y</sub> : 0.55

iz: 1.10

i<sub>y</sub>: 0.90

iz: 1.15

i<sub>y</sub> : 1.29

#### **Technical Data**

Туре

B/H/s [mm]

27/15/1.25

27/25/1.25

27/37/1.25 W<sub>y</sub>: 1.08

Material: Steel 1.0350, pre-galvanised according to DIN EN 10346

Section modulus | Moment of inertia | Radius of gyration

[cm4 ]

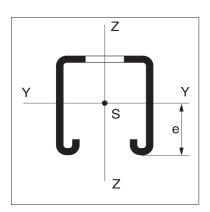
l<sub>y</sub> : 0.22

l<sub>z</sub> : 0.88

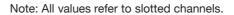
l<sub>y</sub> : 0.80

l<sub>z</sub> : 1.29

l<sub>y</sub> : 2.15



	W₂ : 1.33	I <sub>z</sub> :1.	79 iz:1.	18	
Type B/H/s [mm]	Cross section A [cm <sup>2</sup> ]	Distance e [cm]	Max. point carrying capacity F <sub>max</sub> (traction) [kN]	perm. torsio momen Mq [Nm	ıt
27/15/1.25	0.73	0.84	1.5	10	
27/25/1.25	0.98	1.36	1.5	10	
27/37/1.25	1.28	1.98	1.5	10	



[cm<sup>3</sup>]

W<sub>v</sub>: 0.27

W<sub>z</sub> : 0.65

W<sub>y</sub> : 0.59

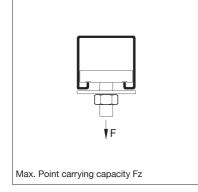
W<sub>z</sub> : 0.96

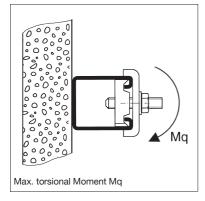
#### Approvals



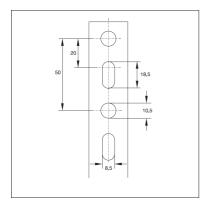
This product has obtained the "RAL Gütezeichen Rohrbefestigung" and is subject to external surveillance according to RAL GZ-655.

Length	Weight	Qty.	Part
[m]	[kg/m]	[m]	number
2	0.59	20	110856
3	0.59	3	112885
2	0.78	20	110857
3	0.78	3	112886
6	0.78	36	110858
2	1.07	20	110569
6	1.07	24	110570
	2 3 2 3 6 2	[m]         [kg/m]           2         0.59           3         0.59           2         0.78           3         0.78           6         0.78           2         1.07	[m]         [kg/m]         [m]           2         0.59         20           3         0.59         3           2         0.78         20           3         0.78         3           6         0.78         36           2         1.07         20





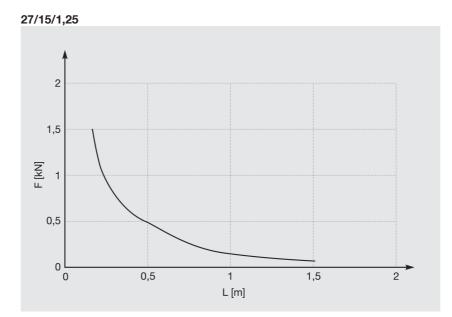




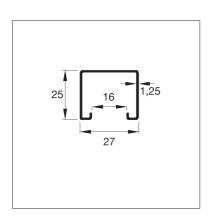
15

Channel MS 27 - 1,25

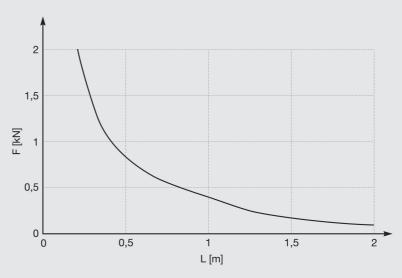
Group: 2711







27

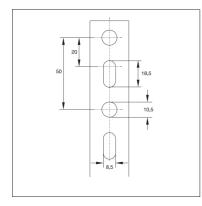


The influence of the channel slots and the channel's dead weight are taken into account in the values.

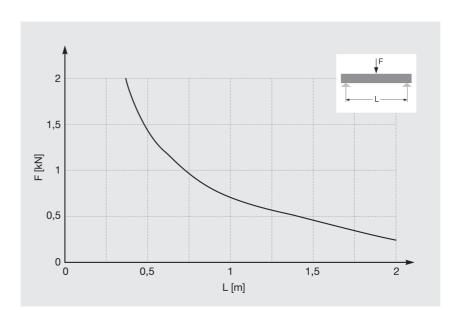


 $\begin{array}{l} \sigma_{perm} \leq 160 \ N/mm^2 \\ f \leq L/200 \end{array}$ 

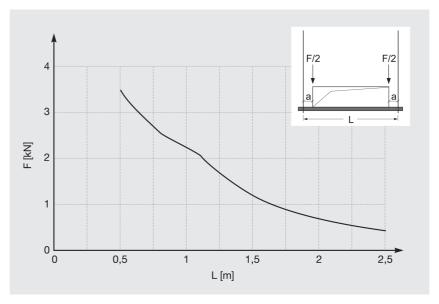




Channel MS 27/37



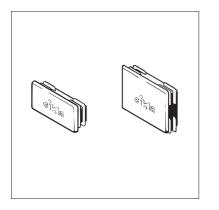




The influence of the channel slots and the channel's dead weight are taken into account in the values.

 $\sigma_{perm} \le 160 \text{ N/mm}^2$ f  $\le L/200$ a  $\le 50 \text{ mm}$ 





# End cap ADK 27

Group: 2704

#### Application

To be used for safe and neat covering the ends of Sikla Channels MS 27.

#### **Technical Data**

Material: HD-PE, yellow

Туре	W [kg]	Quantity [pack]	Part number
27/15	0.01	100	193969
27/25	0.01	100	111463
27/27	0.01	100	193976
27/37	0.01	100	110571

# **Channel Lining SAL 27**

Group: 2710

#### Application

Sound absorption lining for inserting into Sikla Channels MS 27 or fitting around threaded rods; mainly for use in ducting systems, also for sound proof installations as per DIN 4109.

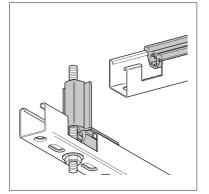
#### Scope of delivery

Rolls of 30 m or pieces of 100 mm each.

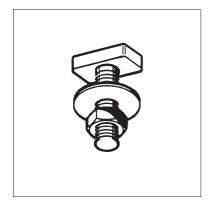
## **Technical Data**

Material:SBR/EPDM, blackTemperature range:-50°C up to +110°CFire resistance:B2 according to DIN 4102, non-drippingHardness:50°+/-5° Shore

Туре	Thread connection	Length of piece [mm]	Roll [m]	W [kg]	Quantity [pack]	Part number
27	M8/M10	-	30	6.00	1 Rolle	195963
27/L100	M8/M10	100	-	0.01	100	195970







# T-Head Bolt HM 27

Group: 2715

**Application** Suitable for Sikla Channels MS 27.

#### Scope of delivery

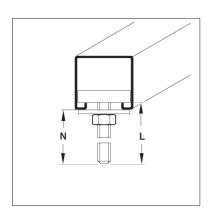
Pre-assembled with washer and nut.

> When using a Holding Bracket for type HM 27 M10, the washer is not needed.

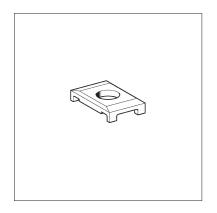
#### **Technical Data**

Material: Steel, cold-forged, electro-galvanised

Туре	Length L [mm]	Available length of thread [mm]	W [kg]	Quantity [pack]	Part number
HM 27 M8 x 10/14	15	10	0.02	50	106467
HM 27 M8 x 15/14	20	15	0.03	50	106476
HM 27 M8 x 25/14	30	25	0.03	50	106485
HM 27 M10 x 15/14	20	15	0.03	50	106494
HM 27 M10 x 25/14	30	25	0.04	50	106500







# Holding Bracket HK 27

Group: 1327

#### Application

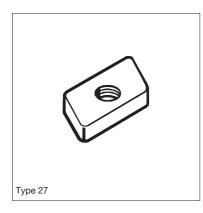
Safety element for Sikla channels to be used instead of simple washers. The Holding Bracket prevents the edges along the opening of the channels from bending, and ensures optimum load distribution. When loads are imposed along the channels, Holding Brackets HK 27 provide additional safety due to embossed teeth, which penetrate the channel.

Suitable for Channels MS 27.

#### **Technical Data**

Material: Malleable iron, electro-galvanised

Туре	Bore	W	Quantity	Part
	[mm]	[kg]	[pack]	number
27/10	11	0.02	50	114422



# **Channel Nut NT 27**

Group: 1314

#### Application

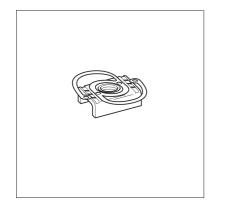
Channel Nuts type 27 are suitable for channels of 27 mm width.

#### **Technical Data**

Material: Malleable cast iron, electro-galvanised

Туре	Load capacity (tension) [kN]	W [kg]	Quantity [pack]	Part number
27-M6	1.7	0.01	100	174188
27-M8	1.7	0.01	100	124382
27-M10	1.7	0.01	100	181577





# Speed Nut NT CC 27

Group: 2714

#### Application

In particular useful for installation in vertical channels or where access is difficult.

Further advantages:

- Can be used in all Sikla Channels MS 27, independent of the channel's height.
- No getting stuck on bolt heads when sliding in the channel.
- No appearance of settlement after tightening.

#### Scope of delivery

Channel Nut and Spring are tightely connected.

#### Installation

After inserting the Speed Nut into the channel opening, exert a slight axial pressure. This will cause the nut to turn to the right and engage into the channel. De-installation simply requires the nut to be turned to the left and pulled free. Installation and de-installation do not require tools and may be repeated several times.

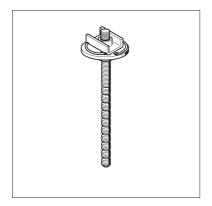
Tighten the part to be connected - that's it!

#### **Technical Data**

Fz =	1.5 kN
Material:	
Channel nut:	Steel, class 5.6, electro-galvanised
Spring washer:	Sheet metal spring steel, rustproof

Туре	W [kg]	Quantity [pack]	Part number
CC 27-M6	0.01	100	195956
CC 27-M8	0.01	100	195949





# Blockset PBS CC 27

Group: 2761

#### Application

Quick-installation element for efficient mounting of pipe clamps and other components to Channels MS 27.

- Time-saving due to a pre-assembled Blockset consisting of 4 individual parts.
- Easy height adjustment within the channel.
- Retains position in horizontal and vertical channels during locational adjustment. But still can be moved easily and freely along the channel as required.
- Grooved rod, prevents unintended unscrewing.
- Easy cutting of the grooved rod cutting grooves every 10 mm using Rod Cutter PBC 1.

#### Scope of delivery

Completely pre-assembled (block with holding bracket, grooved rod and nut).

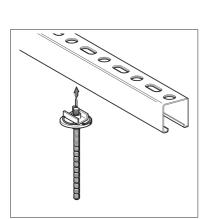
#### Installation

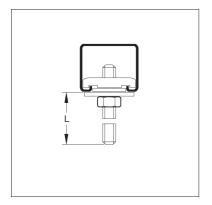
Insert the Blockset into the channel, then tighten the nut to 10 Nm - That's it!

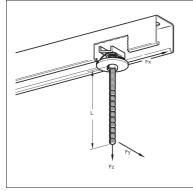
#### **Technical Data**

- Fz = 1,5 kN
- Fx = 0,8 kN
- Fy = Permissible lateral force at the end of the grooved rod

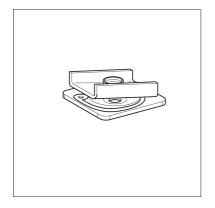
Туре	L [mm]	Fy [N]	W [kg]	Quantity [pack]	Part number
M8 x 35	35	75	0.03	100	195888
M8 x 75	75	35	0.05	100	195895
M8 x 125	125	20	0.06	50	195901
M8 x 175	175	-	0.08	50	195918
M8 x 275	275	-	0.11	50	195925











# Block PB 27

Group: 2760

#### Application

Quick-installation element for efficient mounting of pipe clamps and other components to Sikla Channels MS 27:

- Time-saving due to pre-assembled Block instead of 2 individual parts.
- Retains position in horizontal and vertical channels during locational adjustment. But can still be moved easily and freely along the channel as required.
- To be combined with Pressix Rods PNS, threaded rods, screws or other products with a thread connection.

#### Scope of delivery

Block completely pre-assembled.

#### Installation

Insert the Block into the channel; by turning to the right, the channel nut locks into the channel, then tighten up to 10 Nm - That's it!

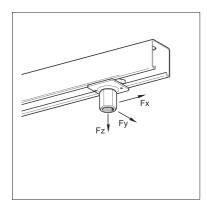
#### Note:

Thread connection M10 practicable by using Reducer f/m 10/8 (article no. 113689)

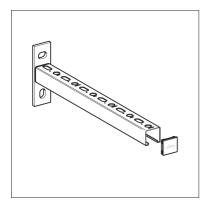
#### **Technical Data**

Fz = 1.5 kN Fx = 0.8 kN

Туре	W	Quantity	Part
	[kg]	[pack]	number
M8	0.01	100	195932







0.00.

Ø

b

# Cantilever Bracket AK 27 - 1,25

Group: 2754

#### Application

Recommended for wall suspension or fixing to other building structures.

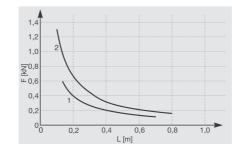
#### Installation

For cantilever projections in excess of 500mm we recommend a vertical brace and for lateral forces on the cantilever, use a lateral brace connected via Fixing Bracket MW S 45/30/90

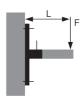
#### **Technical Data**

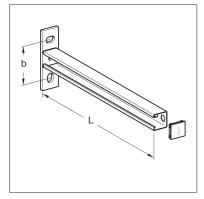
1 = Type 27/25

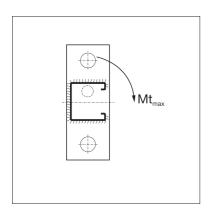




Perm. anchor laods to be considered  $\sigma_{act.} \leq \sigma_{adm.}$  $f_{adm.} \leq L/150$ Max. torsional moment  $Mt_{max}$  without considering the torsional angle  $Mt_{max} = 20 \text{ Nm}$ 

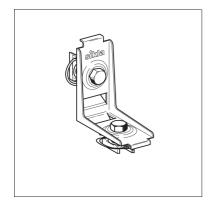






Туре	L [mm]	b [mm]	Dimensions of elongated hole [mm]	W [kg]	Quantity [pack]	Part number
27/25 - 200	203	64	10 x 15	0.25	25	112326
27/25 - 250	253	64	10 x 15	0.29	25	112327
27/25 - 300	303	64	10 x 15	0.34	25	112328
27/25 - 500	503	64	10 x 15	0.49	25	112329
27/25 - 700	703	64	10 x 15	0.65	1	112330
27/25 q - 300	303	64	10 x 15	0.34	25	112366
27/37 - 300	304	64	10 x 15	0.43	25	111458
27/37 - 500	504	64	10 x 15	0.64	25	111459
27/37 - 700	704	64	10 x 15	0.84	1	111460
27/37 - 800	804	64	10 x 15	0.96	1	111461





# 90° Angle Connector CN CC 27

Group: 2726

#### Application

Pre-assembled connecting angle especially for frames made of Channels MS 27. Type W for connection to wall, floor or ceiling.Quick-locking mechanism for 90° junction of CC-27 system.

- By pressing on the bolt head the connector automatically locks into the channel, supporting its own weight and retaining its position, enabling easy adjustment.
- Secure form-locked connection. Serrated channel nut with M8 clamping bolt. Stiff and strong due to high-performance steel and geometric design.

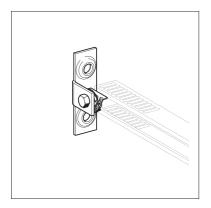
#### **Technical Data**

Working load:	Fx <sub>shear</sub> = 0,8 kN per Angle Connector
Tightening torque:	10 Nm
Material:	Steel, electro-galvanised

Туре	W [kg]	Quantity [pack]	Part number
CC 27-90°	0.09	50	195772
CC 27-90° W	0.07	50	195789







# T Bracket MOS 27

Group: 2730

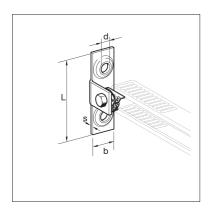
#### Application

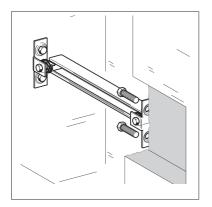
Used for installing crossbars between Channels MS 27 or building structures. Note: Each crossbar requires two T Brackets.

Scope of delivery Pre-assembled with Holding Bracket and Hexagon Bolt.

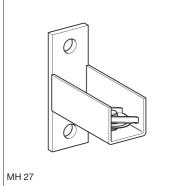
#### **Technical Data**

Туре	b x s	L	d	W	Quantity	Part
	[mm]	[mm]	[mm]	[kg]	[pack]	number
MV 27	26 x 3	88	10.5	0.08	10	195871









# **Channel Holder MOF 27**

Group: 2753

#### Application

To be used for installing crossbars between two Channels MS 27 or as base unit for projecting channels.

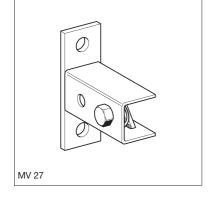
Note: When assembling version MH as cantilever, consider sufficient bracing of the channel. In case of tension load  $F_z$  at channel slot, screws must be

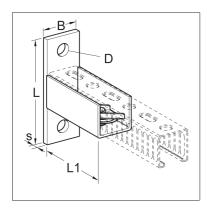
#### Scope of delivery

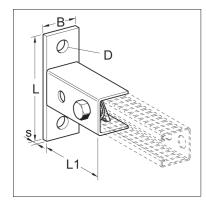
Completely assembled.

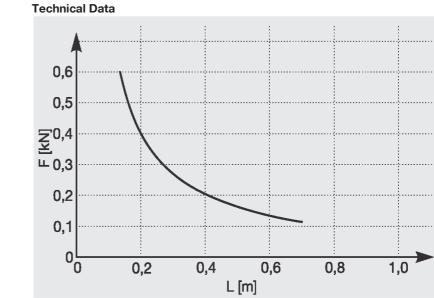
#### Installation

Position the channel into the U-profile. Click in the Speed Nut by pushing on the bolt head and tighten with 10 Nm.



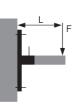






Adm. anchor loads to be respected

Max. adm. load for assembly on ceilings in vertical direction: 0,8 kN



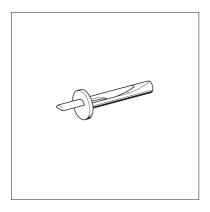
Material: Steel, electro-galvanised

Туре	Wall plate [mm]	D [mm]	L1 [mm]	W [kg]	Quantity [pack]	Part number
MH 27	88 x 30 x 5	9	70	0.20	25	198858
MV 27	88 x 30 x 5	9	70	0.20	25	198865

# displaced.

Siconnect 1-15





# **Nail Anchor PN 27**

Group: 1406

#### Application

Suitable for push-through mounting solutions for quick and safe fixation to concrete ceilings or walls in closed rooms - not suitable for damp locations. • Easy drilling (6 mm only ) and simple impact mounting.

#### Installation

Setting Tool PN is most suited for mounting purposes.

#### **Technical Data**

Permissible load in the tensile zone [kN]					
for installation solutions in concrete ≥ B25 acc. to approval)					
Centre distance a ≥ [mm]	130				
Edge distance a <sub>r</sub> ≥ [mm]	100				
Minimum thickness of component d [mm]	80				
Diameter of drill d₀ [mm]	6				
Depth of bore hole h₀ ≥ [mm]	40				
Anchoring depth h <sub>ef</sub> ≥ [mm]	32				

Material: Steel, electro-galvanised

#### Approvals

ETA-Approval: ETA-06/0259 Approved in the tensile zone for multiple mounting solutions to concrete exposed to mainly dead static loading.

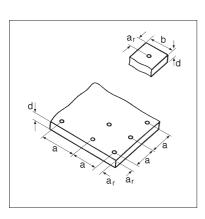
Permissile load fire resistance:

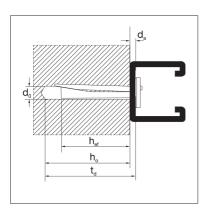
30 min. N <sub>(30)</sub>	=0,45 kN
60 min. N <sub>(60)</sub>	=0,35 kN
90 min. N <sub>(90)</sub>	=0,25 kN
120 min. N <sub>(120)</sub>	=0,20 kN

#### R30 to R120

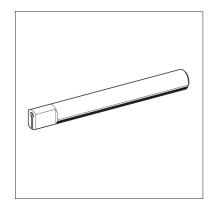
Centre distance  $a \ge [mm]$ 200Edge distance  $a_r \ge [mm]$ 150

Туре	Length of dowel [mm]	Max. eff. length d <sub>a</sub> [mm]	Bore depth when push-through mount. t <sub>d</sub> [mm]	W [kg]	Quantity [pack]	Part number
PN 27 N6 x 35	39	4.5	40	0.01	100	196298









# Setting Tool PN Group: 8103

#### Application

Tool for professional setting of Nail Anchor PN 27 into channel profiles.

The bore of Setting Tool PN is adapted to the nail's head, allowing easy positioning in the channel profile.

#### Installation

Set the Nail Anchor with the bore side, then drive the wedge with the opposite side.

Туре	W	Quantity	Part
	[kg]	[pack]	number
PN	0.56	[pack] 1	196595





# Screwbolt MMS-PR

Group: 1405

#### Application

Suitable for quick and safe installing of Channels MS 27 to concrete ceilings or walls and masonry constructions (of calcareous sandstone, solid bricks, clinker bricks, natural stone). To be applied in closed rooms - not suitable for damp locations.

The nail head diameter is adapted exactly to the hole and hole pattern of the Channels MS 27.

- Easy drilling (6 mm only), no special drill required.
- Small distances due to low expansion pressure.
- Excellent transmission of the torque due to Torx connection.

#### Installation

An impact screwdriver is best suitable for mounting, using a T30 Torx bit. For subsequently adjusting the component to be connected, unscrew the Bolt Screw Anchor a few millimetres and tighten it again afterwards.

#### **Technical Data**

Perm. load (centric tension) in the tension zone for install. [kN] solutions in concrete ≥ B25 (max. B55) acc. to approval	0.5
Permissible load in the pressure zone (concrete ≥ B25) [kN]	2.0
Centre distance a ≥ [mm]	160
Edge distance a <sub>r</sub> ≥ [mm]	80
Minimum thickness of component $d \ge t + 50 \text{ mm} \ge [\text{mm}]$	105
Nominal diameter of drill [mm]	6
Cutting diameter ≤ [mm]	6.4
Minimum depth of bore hole t ≥ [mm]	55
Minimum setting depth ≥ [mm]	45
Maximum tigthening torque when mounting [Nm]	20

For brick walls respect a distance between the fixations and the joggle joints of the bricks of min. 30 mm, otherwise halve the load!

Material: Steel, case-hardened, tempered steel, electro-galvanised

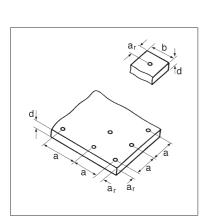
#### Approvals

DIBt Approval No.: Z-21.1-1503:

Approved by the DIBt in the concrete tension zone for mounting light overhead facings and sub-ceilings as well as statically comparable installations up to 1  $kN/m^2$  exposed to mainly dead loading.

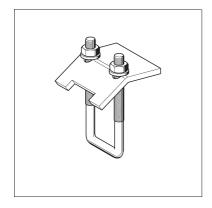
Fire resistance category: F120 ( $F_{max} = 0.5 \text{ kN}$ )

Туре	L	Screw	W	Quantity	Part
	[mm]	tool	[kg]	[pack]	number
MMS-PR 7.5 x 50	50	T 30	0.02	100	157959



Siconnect 1-18





Beam Clamp SB 27

Group: 2731

#### Application

Connecting element to fix Channel MS 27 to beam- and girder structures. Fixing to the channel regardless the orientation of channel opening or slotted side .

#### Scope of delivery

Completely pre-assembled with U-Bolt, Bracket and Flange Nut.

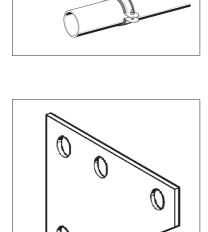
#### Installation

To be used in pairs only. Tightening torque: 20 Nm Length calculation = Beam/Girder flange thickness + min. 2 x 50 mm overhang.

#### **Technical Data**

Max. perm. load tension: Material: 2.0 kN per Beam Clamp Steel, electro-galvanised

Туре	Max. flange thickness [mm]	Thread	W [kg]	Quantity [pack]	Part number
27 - M8	25	M8	0.29	20	195864



# Web Plate KNO

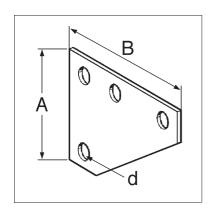
Group: 1351

### Application

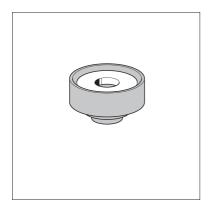
Connecting element for framework structures of Sikla Channels MS 27.

#### **Technical Data**

Туре	A x B x s	d	W	Quantity	Part
	[mm]	[mm]	[kg]	[pack]	number
KNO 1	80 x 90 x 3	10.5	0.20	10	107769







# Sound Absorption Unit SDE 27

Group: 2712

#### Application

Sound Absorption Unit to be used in combination with Sikla Channels MS 27 in ducting systems (respecting sound proof demands according to DIN 4109). The geometry of this element reliably secures sound absorption between channel and suspension.

#### Scope of delivery

Completely assembled with inserted and retained washer.

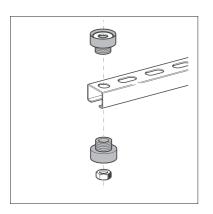
#### Installation

Clamp the Sound Absorption Unit into the round hole of the channel back and into the channel opening. Thread to be pulled through and contered afterwards.

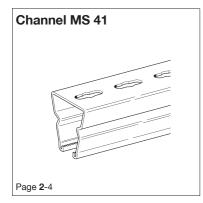
### **Technical Data**

Material: Temperature range: Fire resistance: Hardness: TPE, black -50°C to + 110°C B2 according to DIN 4102, non-dripping 50°+/-5° Shore

Туре	Thread connection	Total- Height [mm]	Height of collar [mm]	W [kg]	Quantity [pack]	Part number
27	M8	15	7	0.01	100	197973

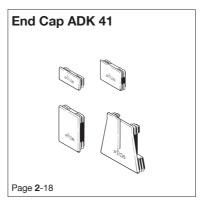




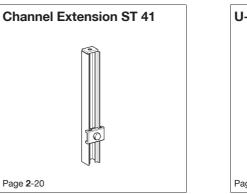


**Channel Lining SAL 41** 

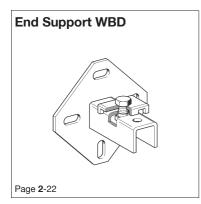
Page 2-19

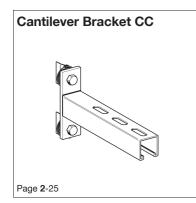








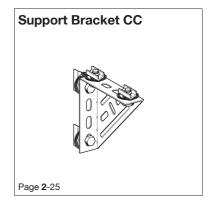






Page 2-20





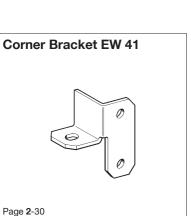


03/2015

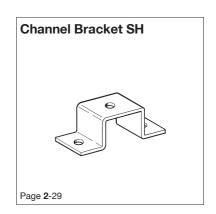


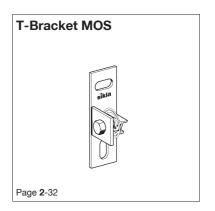


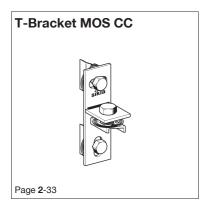




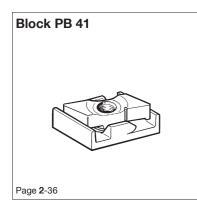




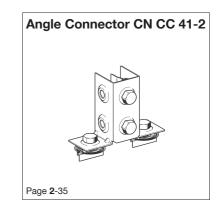


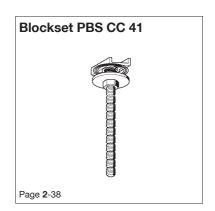






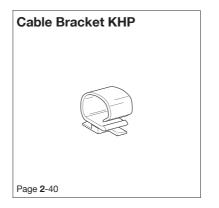




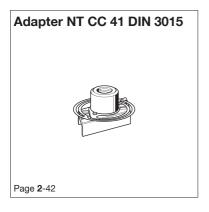








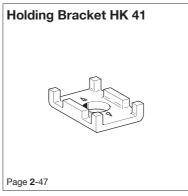


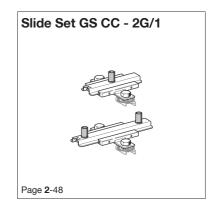


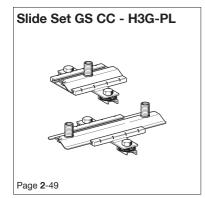


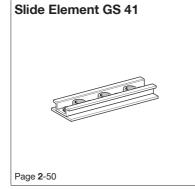






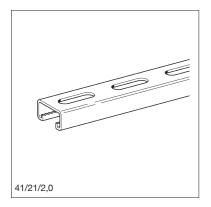


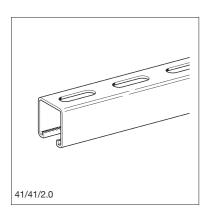












# **Channel MS 41**

Group: 1111

#### Application

Element for easily and efficiently pre-assembling crossbars, wall brackets and support structures on site or in workshops.

#### Scope of delivery

Double channels are joined together by clinching, guaranteeing corrosion protection at the joining.

#### Installation

If required, channels can be joined on site using: Slot pattern II: - Hexagon socket bolt M8 x 16, with a max, spacing of 250 l

- Hexagon socket bolt M8 x 16, with a max. spacing of 250 mm between connecting points one point at each end.

Slot pattern III and IV:

- Clamping Unit KL (for details see product).

All Channels MS 41 are serrated on the inner edges and thus can be combined with many other Sikla products, e.g. Channel Nut, End Support WBD, Beam Clamp TCS 1. Particularly effective combinations are possible using other Pressix components. All 41-types except of 41/41/2.5 D can be used as guide and support channels by inserting Slide Block 41 inside the channel.

#### **Technical Data**

Material: Cold-worked steel strip 1.0305, pre-galvanised according to DIN EN 10346

For further data, please refer to the following pages.

D= Double channel

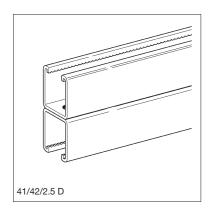
#### Approvals

C



This product has been awarded the RAL quality mark "Pipe Supports" and is subject to continuous external monitoring according to RAL GZ-655.

\* = no RAL quality label

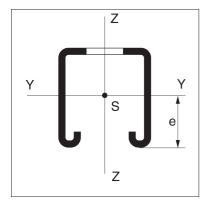


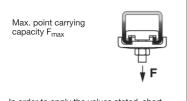
41-75/75/3.0



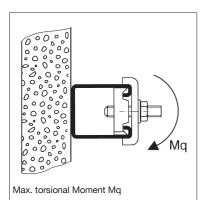
Туре	Length [m]	Weight [kg/m]	Qty. [m]	Part number
41/21/1.5	2	1.10	10	173837
41/21/1.5	6	1.10	6	173846
41/21/2.0	2	1.32	10	193686
41/21/2.0	3	1.32	3	193693
41/21/2.0	6	1.32	6	193709
41/31/2.0	2	1.51	10	198872
41/31/2.0	6	1.51	6	198889
41/41/2.0	2	1.97	10	193723
41/41/2.0	3	1.97	3	193730
41/41/2.0	6	1.97	6	193747
41/41/2.5	2	2.30	10	173909
41/41/2.5	3	2.30	3	173432
41/41/2.5	6	2.30	6	166720
41/45/2.5	2	2.47	10	193754
41/45/2.5	6	2.47	6	193761
41/52/2.5	2	2.82	10	193778
41/52/2.5	6	2.82	6	193785
41/62/2.5	6	3.13	6	193792
41-75/65/3.0	6	4.70	6	173990
41-75/75/3.0	6	5.40	6	173999
41/21/2.0 D *	2	2.64	2	193808
41/21/2.0 D *	6	2.64	6	193815
41/41/2.0 D *	6	3.94	6	193822
41/41/2.5 D *	2	4.60	2	174080
41/41/2.5 D *	3	4.60	3	173441
41/41/2.5 D *	6	4.60	6	166757
41/45/2.5 D *	6	4.93	6	193839
41/52/2.5 D *	6	5.63	6	193846
41/62/2.5 D *	6	6.27	6	193853
41-75/65/3.0 D *	6	9.40	6	174152
41-75/75/3.0 D *	6	10.80	6	174161







In order to apply the values stated, short sections (up to 0.5 m) of ready supplied (clinched) double channels must be joined additionally on both ends if bearing point and point of application of the load are not located on the same side, using - Clamping Unit KL 1 (slot pattern III or IV) - Hex. Socket screws M8 x 16 (slot pattern II).



_		l	
Type W/H/Th [mm]	Section modulus [cm <sup>3</sup> ]	Moment of inertia	Radius of gyration [cm]
41/21/1.5	W <sub>v</sub> : 0.72	l <sub>v</sub> : 0.79	i <sub>v</sub> : 0.79
	W <sub>z</sub> : 1.72	l <sub>z</sub> : 3.52	iz : 1.66
41/21/2.0	W <sub>v</sub> : 0.82	l <sub>v</sub> : 0.92	i <sub>v</sub> : 0.76
	W <sub>z</sub> : 2.12	l <sub>z</sub> : 4.35	i <sub>z</sub> : 1.65
41/31/2.0	W <sub>v</sub> : 1.60	l <sub>v</sub> : 2.77	i <sub>v</sub> : 1.13
	W <sub>z</sub> : 2.88	l <sub>z</sub> : 5.90	i <sub>z</sub> : 1.65
41/41/2.0	W <sub>v</sub> : 2.43	l <sub>v</sub> : 5.16	i <sub>v</sub> : 1.46
	W <sub>z</sub> : 3.65	l <sub>z</sub> : 7.48	i <sub>z</sub> : 1.75
41/41/2.5	W <sub>y</sub> : 2.96	l <sub>y</sub> : 6.19	i <sub>y</sub> : 1.43
	W <sub>z</sub> : 4.41	l <sub>z</sub> : 9.05	i <sub>z</sub> : 1.72
41/45/2.5	W <sub>y</sub> : 3.29	l <sub>y</sub> : 7.70	i <sub>y</sub> : 1.56
	W <sub>z</sub> : 4.73	l <sub>z</sub> : 9.70	i <sub>z</sub> : 1.75
41/52/2.5	W <sub>y</sub> : 4.16	l <sub>y</sub> : 11.20	i <sub>y</sub> : 1.79
	W <sub>z</sub> : 5.37	l <sub>z</sub> : 11.00	i <sub>z</sub> : 1.77
41/62/2.5	W <sub>y</sub> : 5.54	l <sub>y</sub> : 17.70	i <sub>y</sub> : 2.10
	W <sub>z</sub> : 6.27	l <sub>z</sub> : 12.86	i <sub>z</sub> : 1.79
41-75/65/3.0	W <sub>y</sub> : 8.46	l <sub>y</sub> : 31.60	i <sub>y</sub> : 2.27
	W <sub>z</sub> : 10.39	l <sub>z</sub> : 39.23	i <sub>z</sub> : 2.53
41-75/75/3.0	W <sub>y</sub> : 10.31	l <sub>y</sub> : 44.41	i <sub>y</sub> : 2.53
	W <sub>z</sub> : 11.59	l <sub>z</sub> : 43.48	i <sub>z</sub> : 2.50
41/21/2.0 D	W <sub>y</sub> : 2.35	l <sub>y</sub> : 4.93	i <sub>y</sub> : 1.24
	W <sub>z</sub> : 4.24	l <sub>z</sub> : 8.70	i <sub>z</sub> : 1.65
41/41/2.0 D	W <sub>y</sub> : 7.16	l <sub>y</sub> : 29.34	i <sub>y</sub> : 2.45
	W <sub>z</sub> : 7.30	l <sub>z</sub> : 14.96	i <sub>z</sub> : 1.75
41/41/2.5 D	W <sub>y</sub> : 9.02	l <sub>y</sub> : 36.99	i <sub>y</sub> : 2.46
	W <sub>z</sub> : 8.82	l <sub>z</sub> : 18.10	i <sub>z</sub> : 1.72
41/45/2.5 D	W <sub>y</sub> : 9.97	l <sub>y</sub> : 44.87	i <sub>y</sub> : 2.66
44/50/050	W <sub>z</sub> : 9.47	l <sub>z</sub> : 19.41	i <sub>z</sub> : 1.75
41/52/2.5 D	W <sub>y</sub> : 12.79	l <sub>y</sub> : 66.50	i <sub>y</sub> : 3.08
44/00/0 5 0	W <sub>z</sub> : 10.73	l <sub>z</sub> : 22.00	i <sub>z</sub> : 1.77
41/62/2.5 D	W <sub>y</sub> : 17.38	l <sub>y</sub> : 107.75	i <sub>y</sub> : 3.66
41 7E/CE/0 0 D	W <sub>z</sub> : 12.54	Iz: 25.71	iz: 1.79
41-75/65/3.0 D	W <sub>y</sub> : 24.18	l <sub>y</sub> : 157.15	i <sub>y</sub> : 3.58
41-75/75/3.0 D	W <sub>z</sub> : 20.77	l₂: 78.45	i <sub>z</sub> : 2.53
41-73/73/3.0 D	W <sub>y</sub> : 30.72	l <sub>y</sub> : 230.40	i <sub>y</sub> : 4.07
	W <sub>z</sub> : 23.07	l <sub>z</sub> : 86.96	i <sub>z</sub> : 2.50

# **Channel MS 41 - Technical Data**

Group: 1111



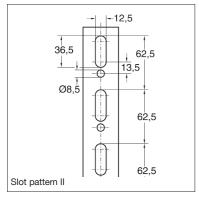
Туре	Cross section	Distance	Max. point carrying moment	Max. torsional moment
W/H/Th [mm]	A [cm <sup>2</sup> ]	e [cm]	F <sub>max</sub> (tension) [kN]	Mq [Nm]
41/21/1.5	1.28	1.11	2.0	44.5
41/21/2.0	1.61	1.12	4.0	44.5
41/31/2.0	2.17	1.73	4.0	44.5
41/41/2.0	2.43	2.12	4.0	44.5
41/41/2.5	3.05	2.09	6.0	44.5
41/45/2.5	3.16	2.34	6.0	44.5
41/52/2.5	3.51	2.70	6.0	44.5
41/62/2.5	4.01	3.20	6.0	44.5
41-75/65/3.0	6.15	3.74	10.0	44.5
41-75/75/3.0	6.95	4.31	10.0	44.5
41/21/2.0 D	3.21	2.10	4.0*	44.5
41/41/2.0 D	4.87	4.10	4.0*	44.5
41/41/2.5 D	6.09	4.10	6.0*	44.5
41/45/2.5 D	6.33	4.50	6.0*	44.5
41/52/2.5 D	7.03	5.20	6.0*	44.5
41/62/2.5 D	8.03	6.20	6.0*	44.5
41-75/65/3.0 D	12.29	6.50	10.0*	44.5
41-75/75/3.0 D	13.90	7.50	10.0*	44.5

D = Double channel

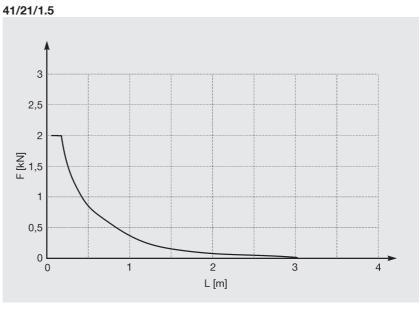
Double channels with max. length up to 0,5 m should be connected at both ends, if bearing and point of load incidence are not on the same side: Slot pattern 2: with Hexagon socket screw M8 x 16 Slot pattern 3 or 4: by means of Clamping Unit KL 1.

All values in both tables refer to slotted channels.





# Channel MS 41/21/1.5



The influence of the channel slots and the channel's dead weight are taken into account in the values.

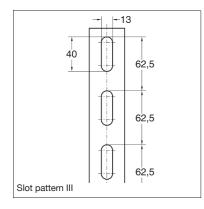


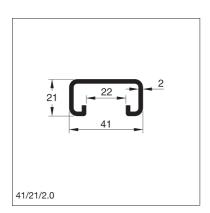
 $\begin{array}{l} \sigma_{\text{perm}} \leq 160 \ \text{N/mm}^2 \\ \text{f} \leq L/200 \end{array}$ 

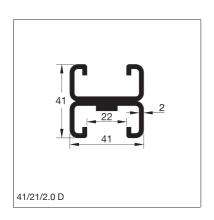
# 

41/21/1.5

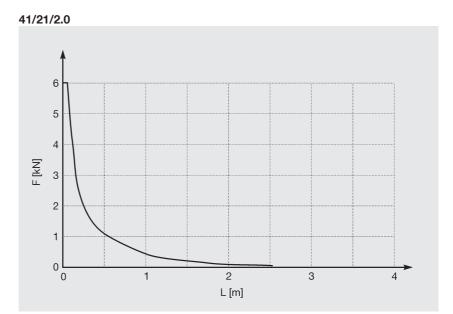




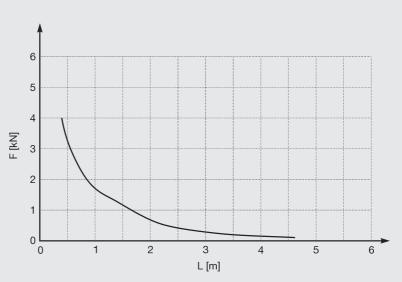




# Channel MS 41/21/2.0



#### 41/21/2.0 D

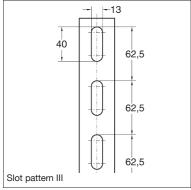


The influence of the channel slots and the channel's dead weight are taken into account in the values.



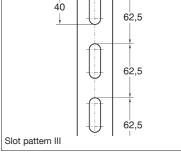
 $\sigma_{\text{perm}} \leq 160 \text{ N/mm}^2$  f  $\leq$  L/200

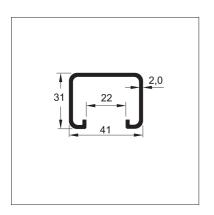


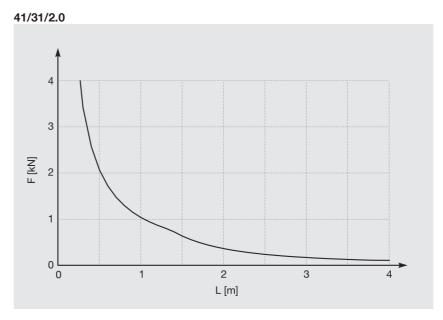


# Channel MS 41/31/2.0

**Technical Data** 





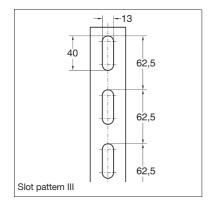


The influence of the channel slots and the channel's dead weight are taken into account in the values.

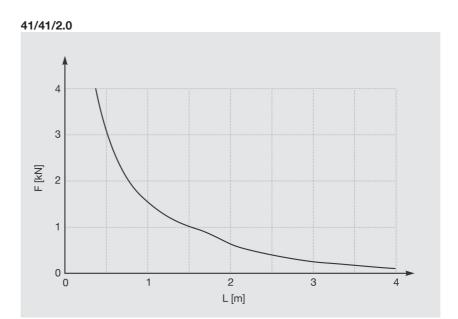


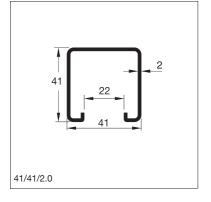
 $\begin{array}{l} \sigma_{\text{perm}} \leq 160 \ \text{N/mm}^2 \\ \text{f} \leq \text{L}/200 \end{array}$ 

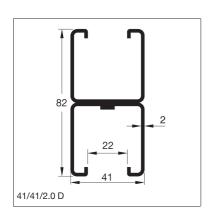




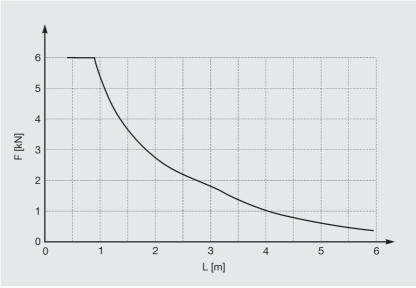
Channel MS 41/41/2.0









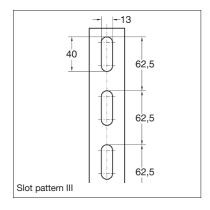


The influence of the channel slots and the channel's dead weight are taken into account in the values.

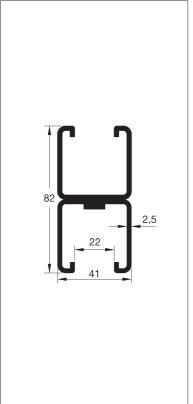


 $\sigma_{\text{perm}} \leq 160 \text{ N/mm}^2$  f  $\leq$  L/200



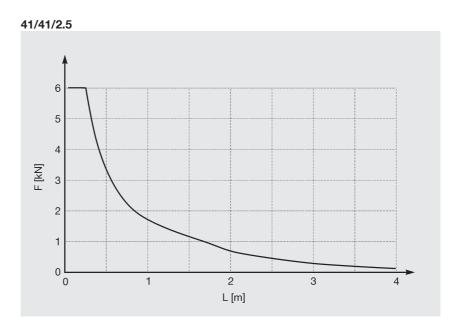


41/41/2.5



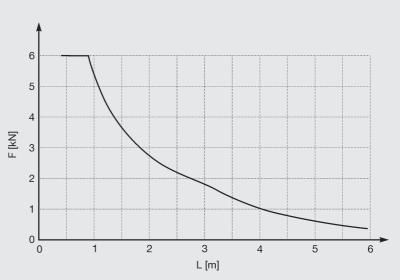
41/41/2.5 D

Channel MS 41/41/2.5





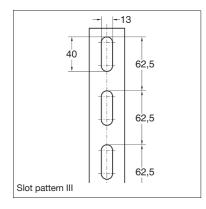
 $\begin{array}{l} \sigma_{perm} \leq 160 \ N/mm^2 \\ f \leq L/200 \end{array}$ 

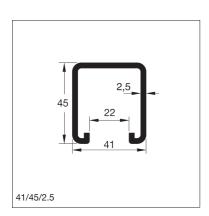


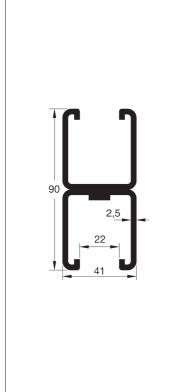
The influence of the channel slots and the channel's dead weight are taken into account in the values.

↓F ↓ ↓



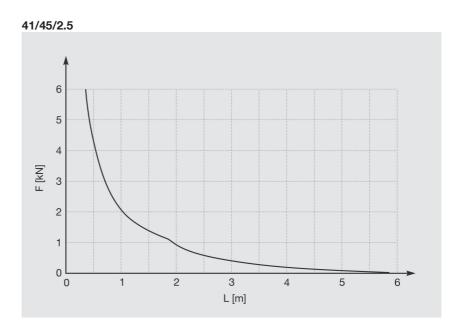




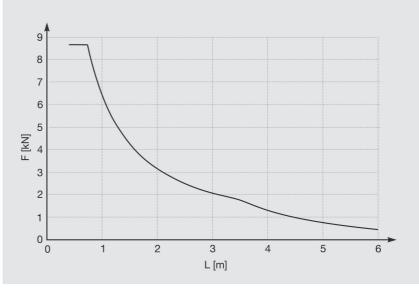


41/45/2.5 D







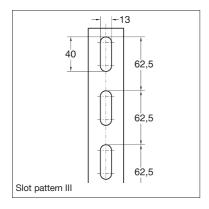


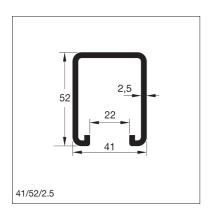
The influence of the channel slots and the channel's dead weight are taken into account in the values.

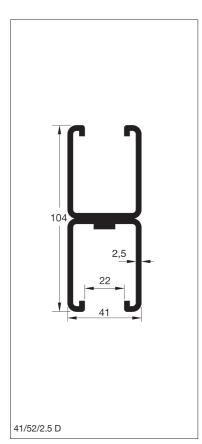


 $\sigma_{\text{perm}} \leq 160 \text{ N/mm}^2$  f  $\leq$  L/200

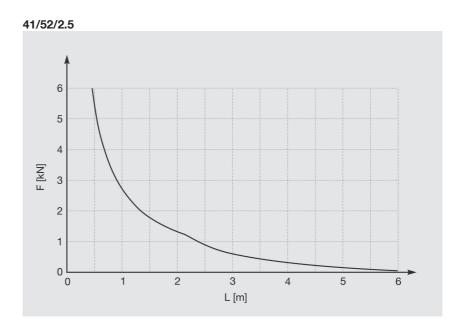




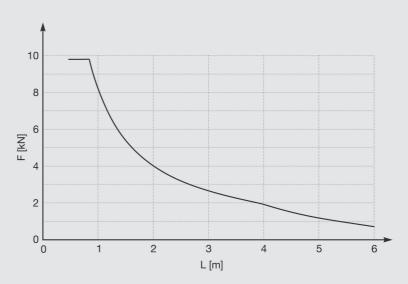




Channel MS 41/52/2.5





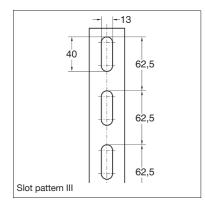


The influence of the channel slots and the channel's dead weight are taken into account in the values.

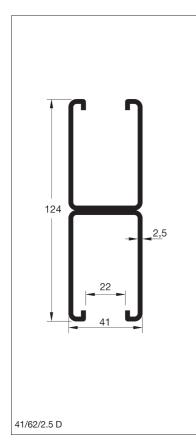
↓F ↓

 $\sigma_{perm} \le 160 \text{ N/mm}^2$ f  $\le$  L/200

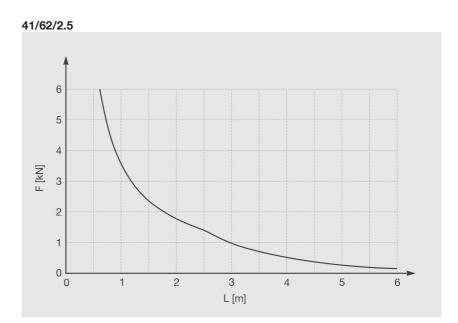




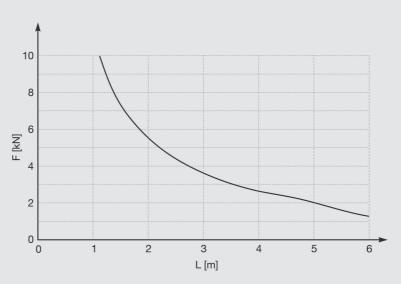
41/62/2.5



Channel MS 41/62/2.5





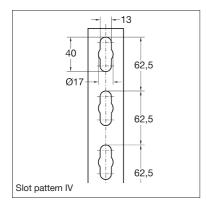


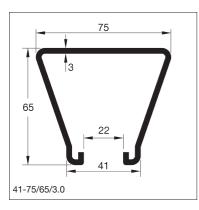
The influence of the channel slots and the channel's dead weight are taken into account in the values.

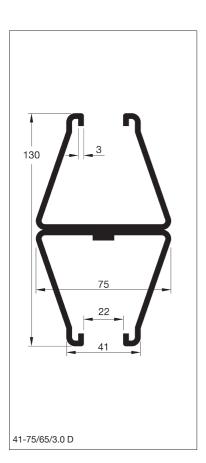


 $\sigma_{\text{perm}} \leq 160 \text{ N/mm}^2$  f  $\leq$  L/200



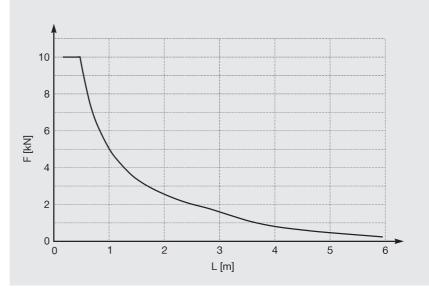




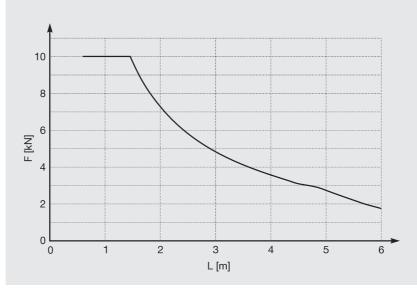


# Channel MS 41-75/65/3.0

#### 41-75/65/3.0





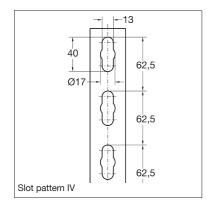


The influence of the channel slots and the channel's dead weight are taken into account in the values.



 $\sigma_{perm} \le 160 \text{ N/mm}^2$ f  $\le$  L/200





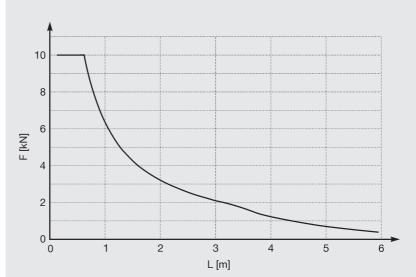
75

3

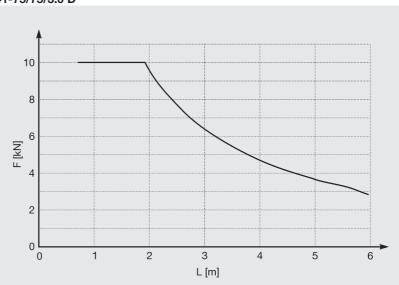
75

## Channel MS 41-75/75/3.0

### 41-75/75/3.0

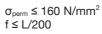


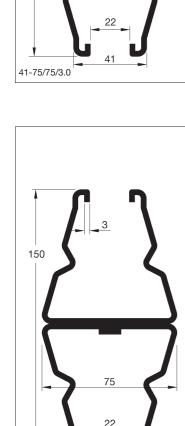




The influence of the channel slots and the channel's dead weight are taken into account in the values.



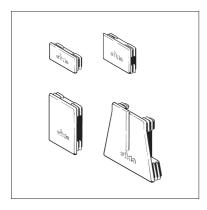




41

41-75/75/3.0 D





# End Cap ADK 41 Group: 1304

#### Application

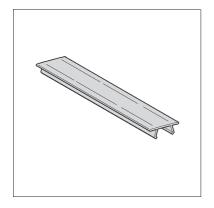
To be used for safely and neatly covering the ends of Sikla Channels. Double channels require 2 End Caps.

#### **Technical Data**

Material: HD-PE, yellow

Туре	For channel	W	Quantity	Part
		[kg]	[pack]	number
41/21	41/21/1.5 und 41/21/2.5	0.01	100	101037
41/31		0.01	100	110477
41/41	41/41/1.8 und 41/41/2.5	0.01	100	177689
41/45	41/45/3.0	0.01	100	108812
41/52	41/52/3.0	0.01	50	177698
41/62	41/62/3.0	0.01	50	153201
41-75/65	41-75/65/3.0	0.01	50	177707
41-75/75	41-75/75/3.0	0.02	50	177716





### **Channel Cover MSA 41**

Group: 1304

#### Application

For covering the opening of channels. Prevents build-up of dirt deposits inside the channel.

Provdes:

- $\blacklozenge$  easy cleaning due to even surface
- dustproof transitions
- tight fit by means of strong clamping
- free of halogens and lack disturbing substances

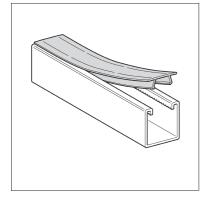
#### Installation

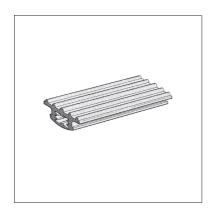
To be mounted by hand without tool.

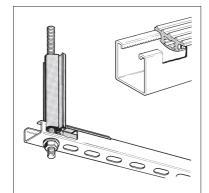
#### **Technical Data**

Material: HDPE (temperature resistance -20°C up to +80°C), yellow

Туре	Weight	Qty.	Part
	[kg/m]	[m]	number
Channel Cover 41	0.10	2	180623







### **Channel Lining SAL 41**

Group: 1611

#### Application

Sound Absorption Lining for inserting into Sikla Channels or fitting around threaded rods; mainly for use in ducting systems, also for sound proof installations as per DIN 4109.

#### Scope of delivery

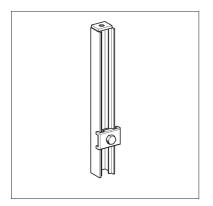
Rolls of 30 m or pieces of 50 mm each.

#### **Technical Data**

Material: Temperature range: Fire resistance: Hardness: SBR/EPDM, black -50°C up to +110°C B2 according to DIN 4102, non-dripping 50°+/-5° Shore

Туре	For Sikla Channel opening	Thread connection	Length of piece [mm]	Roll [m]	W [kg]	Quantity [pack]	Part number
41	22 mm	M8/M10	-	30	14.27	1 Rolle	101189
41/L50	22 mm	M8/M10	50	-	0.02	100	101204





### **Channel Extension ST 41**

Group: 1356

#### Application

Highly variable extension piece for channels and channel constructions.

- Continuously variable from 0 up to 200 mm, simple adjustment, especially for elevated constructions.
- Ideal for the laying of individual or several pipelines with obligatory declines and for companyation of lorge tolerances of the building exact from the place
- and for compensation of large tolerances of the building apart from the plans.
  In combination with Sikla Cantilever Brackets 41/41 continuously variable supports up to 1.2 m height are possible.

Suitable for all Sikla Channels MS 41 (height  $\geq$  41 mm).

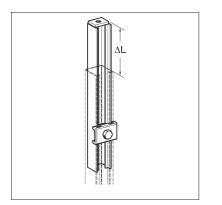
#### Scope of delivery

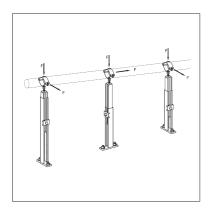
Complete component with pre-assembled Holding Bracket.

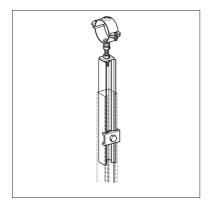
#### **Technical Data**

 $\begin{array}{ll} \mbox{Max. perm. load} & \mbox{F}_{\mbox{perm}} \mbox{ Advance for torque 40 Nm} = 1.5 \ \mbox{kN} \\ \mbox{Material} & \mbox{Steel, electro-galvanised} \\ \end{array}$ 

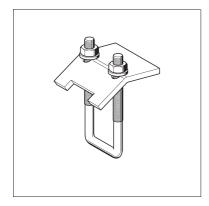
Туре	Thread connection	W [kg]	Quantity [pack]	Part number
ST 41	M10	0.68	10	189740











### U-Holder SB 41

Group: 1331

#### Application

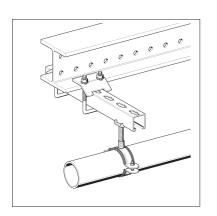
Clamping element for bi-lateral attachment of crossbars to steel beams, independent from the channel's opening.

#### Installation

To be used in pairs. Length calculation = Beam/Girder flange thickness + min.  $2 \times 50$  mm overhang

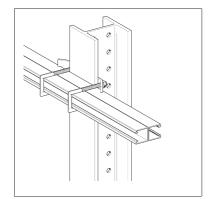
#### **Technical Data**

TypeMax. perm. load tensionTightening torqueM83.5 kN per U-Holder20 NmM105.0 kN per U-Holder30 Nm

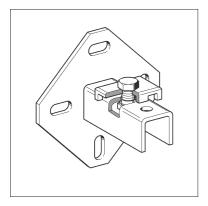


Material: Steel, electro-galvanised

Туре	For channel height [mm]	Max. flange thickness [mm]	Thread	W [kg]	Quantity [pack]	Part number
41 - M8	20 - 62	16	M8	0.31	20	192566
41 - M10	20 - 62	16	M10	0.41	20	183620
41 D - M10	80 - 124	16	M10	0.48	20	191657







### **End Support WBD**

Group: 1356

#### Application

- In combination with a channel, End Support WBD is particularly suitable
- + for setting up support structures attached to walls, floors and ceilings
- as a base for frame structures made of Sikla Channels.

The generous dimensions and the diamond shape of the mounting plate provide a high bending moment and safely stabilise lateral loads.

#### Installation

Normally, two bolts grouped opposite to each other and along the load axis are sufficient. Only in exceptional cases (e.g. tall uprights in frameworks) four bolts are required.

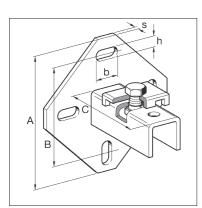
Minimum torque values for the hexagon bolts of the 41 Holding Brackets are:

Types	Holding Brackets [pcs]	Bolt for Holding Bracket	Accessories	Torque [Nm]
41/21-31 up to 41/41-45	1	M10	pre-assembled	40
41/52 up to 41-75/75	2	M12	pre-assembled	60
41/21 D up to 41/45 D	1	M10	in loose form	40
41/52 D up to 41-75/75 D	1	M12	in loose form	60

For ceiling mounting under high loads (up to 7.0 kN), we recommend the use of at least one fully traversing bolt for connecting the channel to the End Support WBD (for examples see "Installation Guideline").

#### **Technical Data**

Туре	Suitable for für Sikla Channel	A [mm]	s [mm]	B [mm]	b [mm]	h [mm]	C [mm]
41/21-31	41/21/1.5 - 2.0 41/31/2,0	135	6	100	25	11	95
41/41-45	41/41/2.0 - 2.5 41/45/2.5	135	6	100	25	11	95
41/52	41/52/2.5	170	6	120	25	13	131
41/62	41/62/2.5	170	6	120	25	13	131
41-75/65	41-75/65/3.0	210	8	170	25	13	131
41-75/75	41-75/75/3.0	210	8	170	25	13	131
41/21 D	41/21/1.5 - 2.0 D	135	6	100	25	11	125
41/41-45 D	41/41/2.0 - 2.5 D 41/45/2.5 D	210	8	170	25	13	125
41/52 D	41/52/2.5 D	210	8	170	25	13	135
41/62 D	41/62/2.5 D	255	8	205	25	13	135
41-75/65 D	41-75/65/3.0 D	255	8	205	25	13	135
41-75/75 D	41-75/75/3.0 D	255	8	205	25	13	135
41-75/75 D	41-75/75/3.0 D	255	8	205	25	13	135



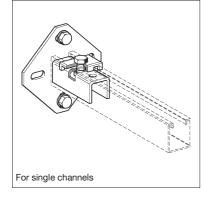
#### Working load for wall mounting:

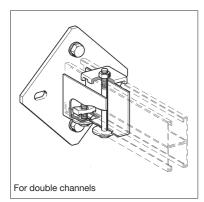
See tables on the following pages. The figures apply on wall applications if two bolts of the load class as stated are used.

Working load for ceiling mounting:

The permissible maximum vertical load for ceiling mounting structures fixed by way of at least one traversing bolt (class 8.8) amounts to 7.0 kN

For End Supports WBD for single channels, the following values apply subject to the condition that all included accessories are assembled correctly.





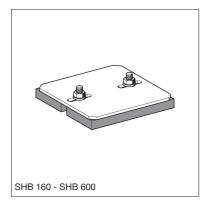


Types	Working load (tension) for ceiling mounting [kN]
41/21-31 up to 41/41-45	2.0
41/52 up to 41-75/75	4.0

Material: Steel, cold-formed, electro-galvanised

Туре	For Sikla Channel	Holding Brackets [number of]	W [kg]	Quantity [pack]	Part number
41/21-31	41/21/2.5	1	0.73	10	177725
41/41-45	41/41/2.5; 41/45/3.0	1	0.83	10	155054
41/52	41/52/3.0	2	1.44	5	177734
41/62	41/62/3.0	2	1.50	5	155063
41-75/65	41-75/65/3.0	2	2.15	5	177743
41-75/75	41-75/75/3.0	2	2.19	5	177752
41/21 D	41/21/2.5 D	1	1.14	5	146469
41/41-45 D	41/41/2.5 D; 41/45/3.0 D	1	2.46	5	106768
41/52 D	41/52/3.0 D	1	2.86	5	177761
41/62 D	41/62/3.0 D	1	4.00	5	155090
41-75/65 D	41-75/65/3.0 D	1	4.18	5	177770
41-75/75 D	41-75/75/3.0 D	1	4.38	5	177779





## Insulated Foot Plate SHB HCP

Group: 1856

#### Application

Complete solution incl. protection pad for flat roofs and plastic sheets, as well as supply centres with laminated floor composition in basements. In combination with the Sikla Assembly System, this element allows the realisation of arbitrarily compositions. The water-proof protection pad allows a secure and reliabe support with constant load spreading. Especially suitable for the assembly of aggregations, pipelines, ductings or travel paths.

Following elements could be assembled to the Insulated Foot Plate: Slide Elements, Mounting Plates, Support Brackets 150/150, Joints JOI 41 T, Channels MS 41, Cantilever Brackets, End Supports WBD for single channel.

#### Installation

Unscrew the nuts, position the distance between the screws according to the slot pattern of the element to be connected and tighten screws.

#### **Technical Data**

roomnour Bata		
Statical E-module:	According to DIN 53513	0.8 - 0.9 N/mm <sup>2</sup>
Dynamic E-module:	According to DIN 53513	0.6 - 2.2 N/mm <sup>2</sup>
Compression set:	DIN 53572	approx. 4.5 % measured 30 min. after release at 50 % compression / 23°C after 72 hrs
Tensile strength:	DIN 53571	0.40 N/mm <sup>2</sup> min.
Ultimate elongation:	DIN 53571	70 % min.
Tear strength:	DIN 53515	3.4 N/mm <sup>2</sup> min.
Fire resistance:	DIN 4102	B2

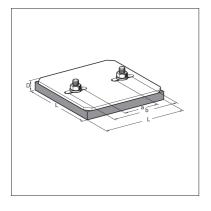
Tests to determine friction values shall be carried out by the customer. Also the statics have to be verified by a qualified engineer. Material: Steel, HCP, caoutchouc compound material

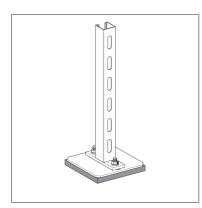
Туре	L [mm]	a [mm]	b [mm]	D [mm]
SHB 160	164 x 164	65	131	20
SHB 300	304 x 304	65	131	20
SHB 450	454 x 454	65	131	21
SHB 600	604 x 604	65	131	23

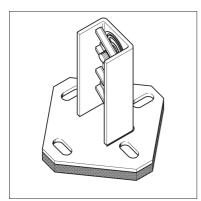
Туре	Channel height h <sub>max</sub> [mm]	Dimensions of the plate [mm]
SHB 41-1	41 - 62	110 x 110
SHB 41-2	41 - 62	160 x 160

For other dimensions, see End Support WBD.

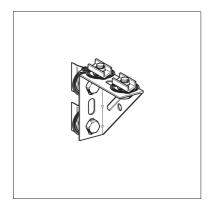
Туре	W [kg]	Quantity [pack]	Part number
SHB 160	1.30	10	113117
SHB 300	4.50	1	113118
SHB 450	11.50	1	113119
SHB 600	26.50	1	113120
SHB 41-1	1.22	10	198902
SHB 41-2	2.30	5	198919











### Support Bracket CC

Group: 1326

#### Application

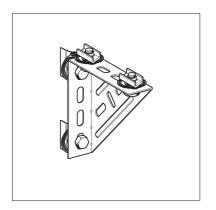
Suitable for use in connection with Sikla Channels.

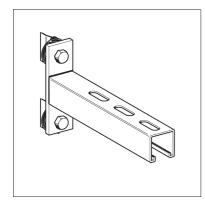
In combination with bolted-on channels, they offer a wide range of possibilities for cantilever arrangements. In addition, the load capacity of cross-bars can be increased by fixing them onto Support Brackets.

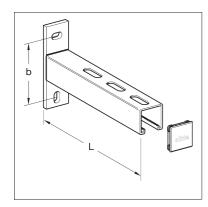
#### **Technical Data**

Material: Steel, electro-galvanised

Туре	W [kg]	Quantity [pack]	Part number
CC 100/100-40	0.33	25	191774
CC 150/150	0.69	10	191783







### **Cantilever Bracket CC**

Group: 1354

#### Application

Ready-to-use bracket mainly for mounting pipes or canal to channels.

#### Installation

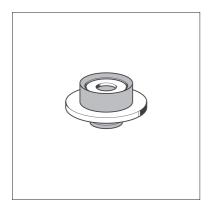
When used in combination with Slide Elements, a Tie Rod is absolutely essential for absorbing the forces running along the centre line of the pipe. For cantilever lengths  $\geq$  500 mm we recommend the integration of a prop-up.

#### **Technical Data**

Material: Steel, electro-galvanised

Туре	L [mm]	Wall plate [mm]	b [mm]	W [kg]	Quantity [pack]	Part number
CC 41/41-200	196	134 x 40 x 8	100	0.79	10	191792
CC 41/41-260	258	134 x 40 x 8	100	0.90	10	191801
CC 41/41-320	321	134 x 40 x 8	100	0.90	10	191819
CC 41/41-445	446	134 x 40 x 8	100	1.27	10	191828
CC 41/41-570	571	134 x 40 x 8	100	1.80	10	191837
CC 41/41-820	821	134 x 40 x 8	100	2.00	1	191846
CC 41/41-1010	1008	134 x 40 x 8	100	2.87	1	191855





### Sound Absorption Element SDE 41

Group: 1610

#### Application

Sound Absorption Element for use in combination with Sikla Channels in ducting systems (suitable also for sound proof requirements according to DIN 4109).

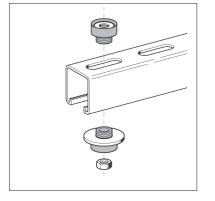
#### Scope of delivery

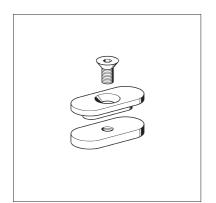
With inserted and retained washer.

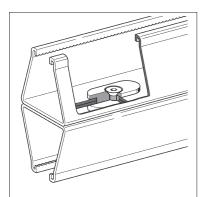
#### **Technical Data**

Material: Temperature range: Fire resistance: Hardness: Washer: TPE, black -50°C up to +110°C B2 according to DIN 4102, non-dripping 50°+/-5° Shore Steel, galvanised

Туре	For channel	Thread connection	Total- Height [mm]	Height of collar [mm]	W [kg]	Quantity [pack]	Part number
41	41	M8/M10	18	10	0.01	100	107802







### **Clamping Unit KL**

Group: 1357

#### Application

Used for assembling double channels made from Sikla Channels with slot pattern III or IV, i.e. with a minimum material thickness of 2.5 mm. This system could be used for pre-assembly in a workshop also. A torque wrench is required in order to ensure that the static values indicated on page 3-7 are achieved.

Attention: These values are only guaranteed when using Sikla Channels.

#### Scope of delivery

Consists of forming plate, pressure plate and a hexagon socket bolt M8 (DIN 7991)

#### Installation

Max. spacing between connecting points is 500 mm, with one point at each end of the channel section. Required number of Clamping Units: channel 2m = 5 pcs., channel 6m = 13 pcs.

For Channel 41/21/2,0 no connecting elements, like channels nuts, etc. could be placed directly above the connectors.

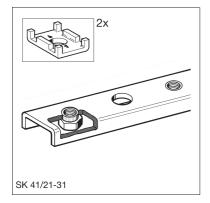
Torque: M = 25 Nm

#### **Technical Data**

Material: Malleable cast iron, electro-galvanised

Туре	For Sikla Channel	W	Quantity	Part
		[kg]	[pack]	number
KL 1	41/21/2.0 bis 41-75/75/3.0	0.11	50	118055





### **Channel Connector SK**

Group: 1353

#### Application

Developed for easily and safely joining Sikla Channels on or for pre-assembly in the workshop with a minimum of individual parts.

The overall design ensures there is no static weak point near the channel connector when single channels are connected. For single channels, the figures as indicated on page 3-7 are applicable.

#### Scope of delivery

With Holding Brackets HK 41 and hexagon nuts (supplied loose).

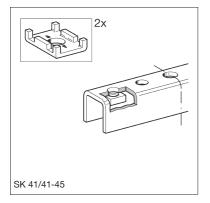
#### Installation

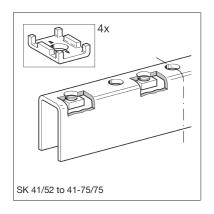
To guarantee the static values, the supplied elements have to be used. For extension of double channels, see advice brochure "Installation Guidelines".

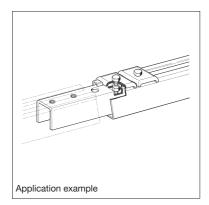
#### **Technical Data**

Material: Malleable iron, electro-galvanised

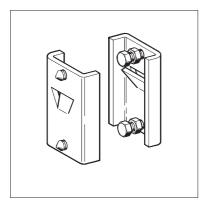
Туре	For channel	Overall length [mm]	W [kg]	Quantity [pack]	Part number
SK 41/21-31	41/21/1.5 - 41/31/2.0	160	0.40	10	177599
SK 41/41-45	41/41/2.0 - 41/45/2.5	160	0.59	10	155115
SK 41/52	41/52/2.5	260	1.10	10	177608
SK 41/62	41/62/2.5	260	1.35	10	155124
SK 41-75/65	41-75/65/3.0	260	1.41	10	177617
SK 41-75/75	41-75/75/3.0	260	1.61	10	177626











В

### **Clamping End SKL**

Group: 1350

#### Application

Mounting element to be fixed within the flanges of I- and U-shaped beams. The systems (such as pipes, etc.) supported this way may run parallel or at right angles to the direction of the I or U beam.

Also suitable as support for crossbars between two vertically adverse arranged profiles.

#### Scope of delivery

Pre-assembled

### Installation

The tightening moment of the clamping bolts must be between 1 (minimum) and 1 1/2 (maximum) turns; then tighten locking nuts.

#### Note:

The length of the channel to be cut : inside diameter of beam less 25 mm

#### **Technical Data**

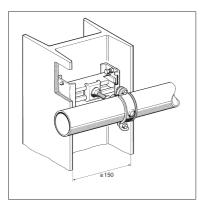
Permissible load per set:

Crossbar support: (2 sets) 5.0 kN/crossbar Single attachment: (1 set) 2.5 kN

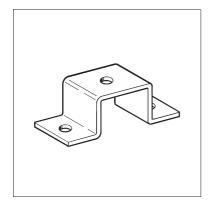
The maximal torsional moment of the channel is to be taken into consideration.

Material: Cold-worked steel, electro-galvanised

Туре	For Channel size	Minimum beam type [mm]					Part number	
SKL	41/41/2.5 u. 41/45/2.5	IP 140. U 200	100	62	0.93	5	145671	







### **Channel Bracket SH**

Group: 1112

#### Application

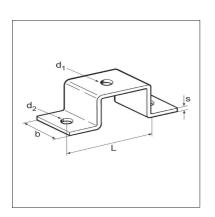
For fixing Sikla Channels:

directly to the building structure or
directly onto other channels for frame assembly.

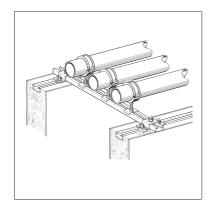
When mounting the Channel Holder onto freestanding or embedded channels, we recommend the use of Speed Nut CC bolts.

#### **Technical Data**

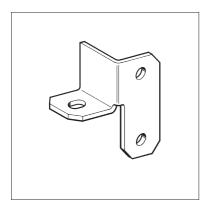
Material: Steel, electro-galvanised



Туре	b x s	L	Ød₁	$Ø d_2$	W	Quantity	Part
	[mm]	[mm]	[mm]	[mm]	[kg]	[pack]	number
41/21	40 x 4	80	11	11	0.15	50	177338
41/31	40 x 4	80	11	11	0.18	50	113645
41/41 u. 41/21 D	40 x 4	80	11	11	0.20	50	177365
41/45	40 x 4	80	11	11	0.21	50	126791
41/52	40 x 4	80	11	11	0.23	50	177347
41/62	40 x 4	80	11	11	0.27	25	177356
41-75/65	50 x 5	120	13	13	0.43	25	177644
41-75/75	50 x 5	120	13	13	0.48	25	177662
41/41 D	40 x4	80	11	11	0.30	10	177374
41/45 D	40 x4	84	13	13	0.33	10	125532
41/52 D	40 x4	84	13	13	0.38	10	177383
41/62 D	40 x4	84	13	13	0.42	10	163000
41-75/65 D	50 x 5	120	13	13	0.69	10	177671
41-75/75 D	50 x 5	120	13	13	0.76	10	177680







### **Corner Bracket EW 41**

Group: 1352

#### Application

Bracket for assembling crossbars made of Channels MS 41:

- 41/21/1.5 ....41/62/3.0 (suitable for double channels also)
- Particularly useful in cases in which the openings of the channels are not facing the crossbars.
- The same bracket can be used on both sides of the crossbar; thus easy stockkeeping and no danger of mix-up.

#### Scope of delivery

Supplied without bolts and nuts.

#### Installation

To be used in pairs.

For easy installation, pre-assemble 3 M10x20 Hexagon Bolts with CC-Nut M10 (use washer for oval hole). This way, the Corner Bracket may be tightened in the channels immediately after insertion.

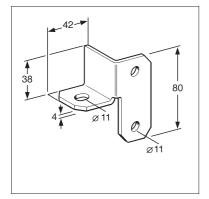
Note: The cutting length of the crossbar should be clearance minus 10 mm (see drawing)

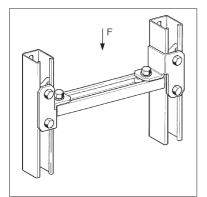
#### **Technical Data**

Material:

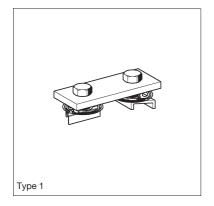
Max. perm. working load: 2.5 kN centre load per crossbar fixed with 2 EW Corner Brackets 41 Steel, electro-galvanised

Туре	W	Quantity	Part
	[kg]	[pack]	number
EW 41	0.17	25	160803









### Flat Fitting ECO CC

Group: 1351

#### Application

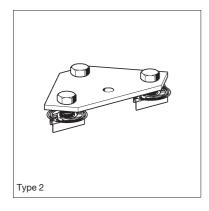
Pre-assembled connecting element for frame structures, optimised for linking channels of the 41 series.

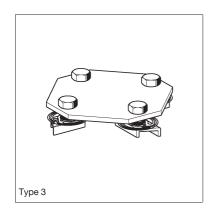
- Locks automatically when being put in place, and supports its own weight.
  Secure, form-locking, non-positive connection. Completely pre-assembled
- with serrated CC nut and clamping screw M10. High stiffness.

#### **Technical Data**

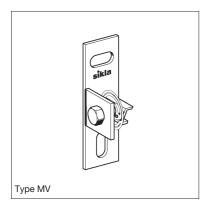
Working load:	F <sub>perm</sub> = 2.0 kN / per Fitting
Torque:	40 Nm
Material:	Steel, electro-galvanised

Туре	W [kg]	Quantity [pack]	Part number
CC-1	0.31	20	181190
CC-2	0.46	10	181199
CC-3	0.67	10	181208









### **T-Bracket MOS**

Group: 1330

#### Application

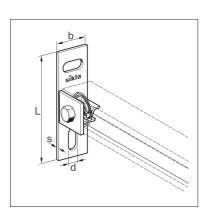
This T-Bracket serves as connecting element for cross bars between two channels.

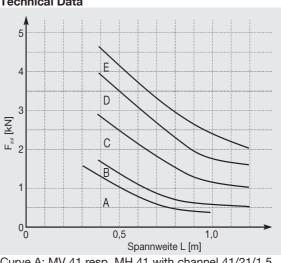
Note: For one cross bar always two T-Brackets should be used.

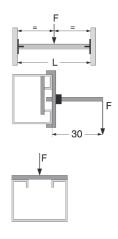
#### Scope of delivery

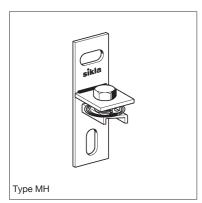
Completely pre-assembled with CC-Speed Nut and Hexagon Bolt.

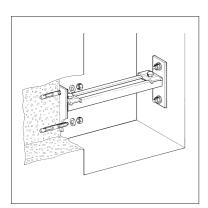
#### **Technical Data**











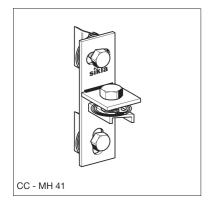
Curve A: MV 41 resp. MH 41 with channel 41/21/1.5 (M8) Curve B: MV 41 with channel 41/41/2.5 (M8) Curve C: MH 41 with channel 41/41/2.5 (M10)

Curve D: MV 41 with channel 41/52/2.5 (M10) Curve E: MH 41 with channel 41/52/2.5 (M10)

Material: Steel, electro-galvanised

Туре	b x s [mm]	L [mm]	d [mm]	W [kg]	Quantity [pack]	Part number
MH 41	40 x 4	135	13	0.29	10	143800
MV 41	40 x 4	135	13	0.29	10	143794





### **T-Bracket MOS CC**

Group: 1330

#### Application

Connecting element for cross bars between two channels.

Note: Per cross bar always two T-Brackets have to be used.

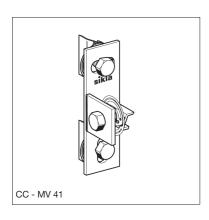
### Scope of delivery

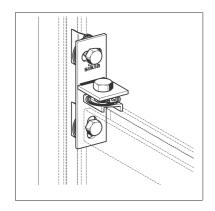
Completely pre-assembled.

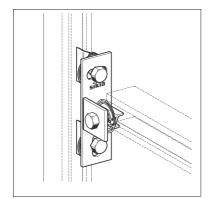
#### **Technical Data**

Material: Steel, electro-galvanised

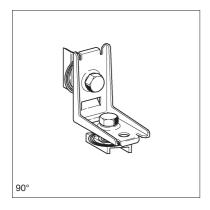
Туре	For channel	Wall plate [mm]	W [kg]	Quantity [pack]	Part number
CC - MH 41	41/21 - 41/52	135 x 40 x 4	0.39	10	191756
CC - MV 41	41/21 - 41/52	135 x 40 x 4	0.39	10	191765











### Angle Connector CN CC 41 Stabil

Group: 1326

#### Application

Pre-assembled connecting element for frame structures made of channels. Version W suitable for connections to wall, floor or ceiling.

- ◆ High-speed assembly system for 90°- and 45°-structures of Channels MS 41.
- Locks automatically by pushing down the bolt head and at the same time supports its own weight
- Secure, form-locking, non-positive connection. Serrated speed nut with clamping bolt M10. Ideal shaping and high-strength material for high stiffness.

#### **Technical Data**

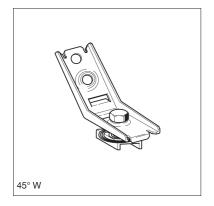
Channel thickness [mm]	FZ [kN]	FQ [kN]
1.5	3.5	2.3
2.0	3.5	2.3
2.5	3.5	3.5
3.0	3.5	3.5

50 Nm

Steel, pre-galvanised



45°



RAL	
GÜTEZEICHEN	
OHRBEFESTIGUE	
Ĵ	

Approvals

Torque:

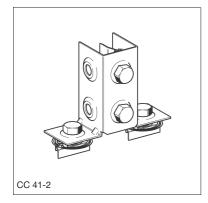
Material:

This product has been awarded the RAL quality mark "pipe supports" and is subject to continuous external monitoring according to RAL GZ-655.

Туре	W [kg]	Quantity [pack]	Part number
CC 41-90° Stabil	0.23	25	191675
CC 41-90° W Stabil	0.17	25	191684
CC 41-45° Stabil	0.23	25	191882
CC 41-45° W Stabil	0.17	25	191891







### Angle Connector CN CC 41-2

Group: 1352

#### Application

Pre-assembled connecting element for three-dimensional frame structures, optimised for linking channels of the 41 series at an angle of 90°. Preferably used in combination with 41/41 square channels.

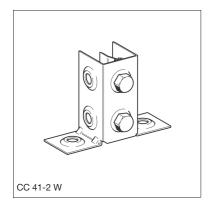
Version W is used for connection to wall, floor or ceilings. The adjustment for the channel opening could still be chosen.

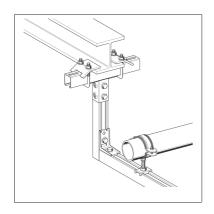
- ◆ Fast-Technique for 90° joints of Channel System 41
- Locks automatically when being put in place and supports its own weight.
   Secure, form-locking, non-positive connection. Serrated Channel Nut with
- Hexagon Bolt M10. Ideal shaping for high stiffness.

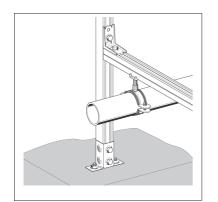
#### **Technical Data**

Working load:	F <sub>perm</sub> = 3.0 kN per Connector
Torque:	50 Nm
Material:	Steel, pre-galvanised

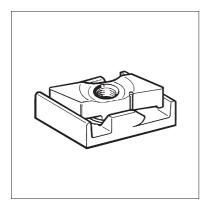
Туре	W [kg]	Quantity [pack]	Part number
CC 41-2	0.55	10	193495
CC 41-2 W	0.45	10	193648











### Block PB 41

Group: 1308

#### Application

Quick-installation element for efficiently mounting pipe clamps and other components to all Sikla Channels of the 41 series. The width is suitable for double channels also.

- Time saving due to pre-assembled block replaces 2 indvidual parts.
- Due to the force of the integrated spring, self-supporting if used for vertical channels; can however still be easily moved along the channel by hand.
- To be combined with Pressix Rods PNS, Grub Screws, Bolts and other threaded elements.

#### Scope of delivery

Pre-assembled.

#### Installation

Insert the Block into the channel; by turning the Holding Bracket by 90° to the right, the Channel Nut locks into the stop position; then tighten nut or other connecting part - the job is done!

#### Note:

Minimum screwing depth from the lower edge of the Holding Bracket = 20 mm.

#### **Technical Data**

The permissible load is determined by the threaded (grooved) rods used. Also the point carrying capacity of the channel and its torsional moment must not be exceeded.

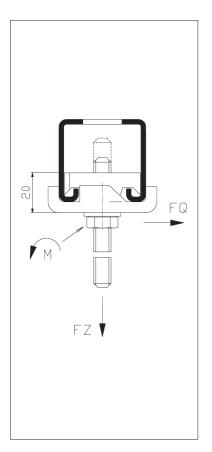
These values can be found in the technical data sheets of the respective products.

- FQ= Permissible lateral force (applicable also against displacing)
- FZ= Permissible tensile force at the Block
- M= Tightening moment of the nut or of another connecting component for reaching the lateral force FQ (applicable to all Grub Screws of class 4.6 and greater without grooves in the tightening area)

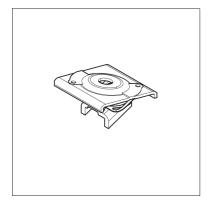
Material: Steel, electro-galvanised

See the nominal loads for Block PB 41 in the following table.

Туре	M [Nm]	FZ [kN]	FQ [kN]	W [kg]	Quantity [pack]	Part number
M8	10	5.8	1.5	0.11	50	160380
M10	18	9.3	2.5	0.11	50	160399
M12	32	10.0	3.0	0.13	50	171287







#### **Block PBH 41**

Group: 1308

#### Application

Quick-installation element for efficiently mounting pipe clamps and other components to all Sikla Channels of the 41 series, suitable for double channels also.

- Time saving due to pre-assembled block replaces 2 individual parts.
- Due to the force of the integrated spring, self-supporting if used for vertical channels; can however still be easily moved along the channel by hand.
- To be combined with Pressix Rods PNS, Grub Screws, Bolts and other threaded elements.

#### Scope of delivery

Pre-assembled

#### Installation

Insert the Block into the channel; by turning the Holding Bracket by 90° to the right, the Channel Nut locks into the stop position; then tighten nut or other connecting part with torsional moment (M) of max. 40 Nm - the job is done!

#### **Technical Data**

Min. material thickness	FZ *	FQ *
Channel MS 41 [mm]	[kN]	[kN]
1.5	4.7	2.0
2.0	5.8	2.0
≥ 2.5	5.8	2.0

Perm. load FZ \* under stress of fire

Min. material thickness Channel MS 41 [mm]	FWD 30 [N]	FWD 60 [N]	FWD 90 [N]	FWD 120 [N]
2.0	≤ 850	≤ 430	≤ 250	
≥ 2.5	≤ 1000	≤ 540	≤ 350	≤ 250

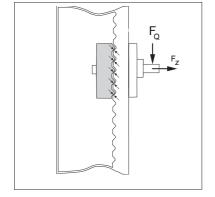
FZ = max. permissible tensile load

FQ = max. permissible lateral force against displacing

\* The load capacity of the connecting parts used is to be considered. This applies particularly under stress of fire.

Material: Steel, electro-galvanised

Туре	W [kg]	Quantity [pack]	Part number
M8	0.05	50	198988
M10	0.05	50	198995
M12	0.05	50	199008







### **Blockset PBS CC 41**

Group: 1309

#### Application

Quick-installation element for efficiently mounting pipe clamps and other components to all Sikla Channels of the 41 series (double channels also).

- ♦ Time-saving due to pre-assembled Blockset instead of 4 single parts.
- Easy height adjustment inside the channel.
- Grooved rod is retained, thus preventing any accidental unscrewing.
- The grooves (distance 10 mm) provide for easy cutting with the Rod Cutter PBC, saw-cutting or finishing is not required.

#### Scope of delivery

Blockset completely pre-assembled.

#### Installation

Insert the Blockset into the channel; tighten nut - the job is done! Dismounting takes place in reverse order by turning the to the left and exerting light pressure on the grooved rod in channel direction.

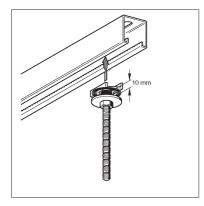
#### **Technical Data**

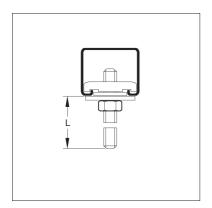
Туре	M [Nm]	FZ [kN]
M8 x	10	3.3
M10 x	18	4.5

FZ = permissible traction at the grooved rod

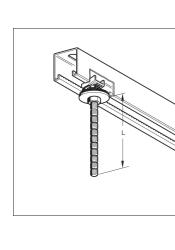
Note: The point carrying capacity of the channel must not be exceeded.

Material: Steel, electro-galvanised





Туре	L [mm]	W [kg]	Quantity [pack]	Part number
M8 x 35	35	0.07	25	191549
M8 x 75	75	0.08	25	191558
M8 x 125	125	0.10	25	191567
M8 x 175	175	0.11	25	191576
M8 x 275	275	0.14	25	191585
M10 x 35	35	0.09	25	191594
M10 x 75	75	0.10	25	191603
M10 x 125	125	0.12	25	191612
M10 x 175	175	0.15	25	191621
M10 x 275	275	0.20	25	191639







### **Rod Cutter PBC**

Group: 2107

#### Application

Provides for easy cutting of grooved M8 and M10 Pressix Rods.

• Sawing and time-consuming chamfering of threads is no longer required; the thread is not damaged.

Note: To be used for Pressix Rods exclusively!

#### Installation

When cutting rods, please observe the pertinent regulations as regards the handling of cutting tools!

### **Technical Data**

Material: Steel, hardened blades.

Туре	Quantity [pack]	Part number
PBC	1	155683





### **Cable Bracket KHP**

Group: E100

#### Application

Clip for connecting cables up to a diameter of 16mm to PV mounting systems. Suitable to slot into the back of all Channels MS 41 with min. profile thickness of 2mm.

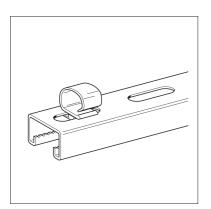
### Installation

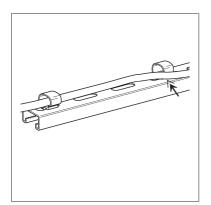
The cable holder is locked by a simple 90 degree right turn in the elongated holes of the mounting rail.

#### **Technical Data**

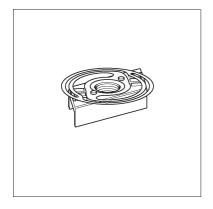
Material: PA, nature

Туре	W	Quantity	Part
	[kg]	[pack]	number
KHP	0.01	500	110879









### Speed Nut NT CC 41

Group: 1314

#### Application

In particular useful when installing in vertical channels or in places of difficult access.

Further advantages:

- For all Sikla Channels MS 41, independent of the height of the channel.
- No getting stuck on bolt heads when sliding in the channel.
- No appearance of settlement after tightening.

#### Scope of delivery

Channel Nut and Spring are tightely connected.

#### Installation

After inserting the Speed Nut into the channel opening, it is - by exerting slight pressure on it - turned to the right as far as it will go; deinstallation may be effected by following the instructions in reverse order.

Installation and deinstallation do not require tools and may be repeated several times.

#### **Technical Data**

	M6	M8	M10	M12	M16	
Tightening torque 8.8 <sup>1)</sup> [Nm]	10	25	40	80	80	

1) Using lower steel classes, the value are to be reduced accordingly.

Channel thickness [mm]	M6 FZ ≤ [kN]	M8 <sup>2)</sup> FZ ≤ [kN]	M10 <sup>2)</sup> FZ ≤ [kN]	M12 FZ ≤ [kN]	M16 FZ ≤ [kN]	M6 FQ ≤ [kN]	M8 FQ ≤ [kN]	M10 <sup>2)</sup> FQ ≤ [kN]	M12 FQ ≤ [kN]	M16 FQ ≤ [kN]
1.5	3.2	4.7	4.7	7.5	7.5	0.7	1.8	2.9	7.5	6
2.0	3.2	5.8	5.8	10	10	0.9	2.1	3.4	9	6
2.5	3.2	5.8	5.8	11	11	1.0	2.6	4.1	9	6
3.0	3.2	5.8	5.8	13	13	1.1	2.8	4.4	9	6

Note: The permissible load capacities of the channels are to be respected.

Material:	
Nut:	Steel class 5.6, electro-galvanised
Spring washer:	Sheet metal spring steel, rustproof, 1,4310

#### **Approvals**

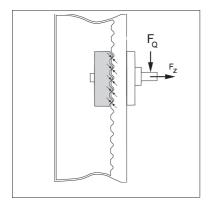


This product has been awarded the RAL quality mark "pipe supports" and is subject to continuous external monitoring according to RAL GZ-655.

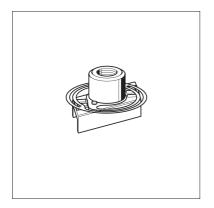


<sup>2)</sup> Tested load values 'connection design' according to certificate 2010-07/2010-09.

Туре	W [kg]	Quantity [pack]	Part number
CC 41-M6	0.03	50	180200
CC 41-M8	0.03	50	180209
CC 41-M10	0.03	50	180218
CC 41-M12	0.06	50	182252
CC 41-M16	0.05	50	182261







### Adapter NT CC 41 DIN 3015

Group: 1314

#### Application

For efficient assembly of fastening clamps DIN 3015 (light and heavy series) to Channels MS 41. Particularly useable for assembly in vertical channels or positions difficult to access, this piece replaces the "3rd hand" and offers following further advantages:

- Compatible with all Sikla Channels MS 41, regardless of the channel's height.
- No getting stuck of screw heads while moving inside the channel.
- Plane fixation without projecting after tightening.

#### Scope of delivery

Channel nut, spring and thread connection pre-assembled.

#### Installation

After inserting the Adapter CC 41 into the channel opening, slightly press on the thread connection. The piece automatically turns into position. Postion the fastening clamp and tighten the screws.

Neither assembly nor removal require a tool and are repeatable as much as is necessary.

#### **Technical Data**

Material: Channel nut, thread connection: Spring washer:

Steel, electro-galvanised Spring steel sheet, rustproof

Pipe clamps DIN 3015-1 (series A, light range)

Pipe size	Pipe-outer dia. [mm]	Connection with with	e1
0	6 to 12	1 x Adapter NT CC 41 M6	
1	6 to 12	2 x Speed Nuts CC 41 M6	20 1)
2	12.7 to 18	2 x Speed Nuts CC 41 M6	26 <sup>1)</sup>
3	19 to 25	2 x Speed Nuts CC 41 M6	33 <sup>1)</sup>
4	26.9 to 30	2 x Adapters NT CC 41 M6	40
5	32 to 42	2 x Adapters NT CC 41 M6	52
6	44,5 to 57	2 x Adapters NT CC 41 M6	66
7	57.2 to 76.1	2 x Adapters NT CC 41 M6	94
8	88.9 to 101.8	2 x Adapters NT CC 41 M6	120

Pipe clamps DIN 3015-2 (series C, heavy-load range)

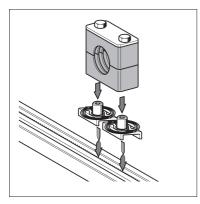
Pipe size	Pipe outer dia. [mm]	Connection with	e1
1	6 to 18	2 x Speed Nuts CC 41 M10	33 <sup>1)</sup>
2	19 to 30	2 x Adapters NT CC 41 M10	45
3	30 to 42	2 x Adapters NT CC 41 M10	60
4	38 to 70	2 x Adapters NT CC 41 M12	90

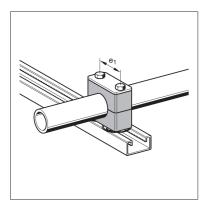
<sup>1)</sup> For these hole distances, the screw plate of the Clamp (see image 4), as well as each two Hexagon bolts and Channel Nuts NT CC 41 are necessary.

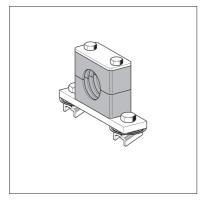
Pipe Clamps DIN 3015-3 (series B, double range)

Pipe size	Pipe outer dia. [mm]	Connection with
i ipe size	Tipe outer ula. [min]	CONTIGUION WITH

1	6 to 12	1 x Adapter NT CC 41 M6
2	12.7 to 18	1 x Adapter NT CC 41 M8
3	19 to 25	1 x Adapter NT CC 41 M8
4	26.9 to 30	1 x Adapter NT CC 41 M8
5	32 to 42	1 x Adapter NT CC 41 M8



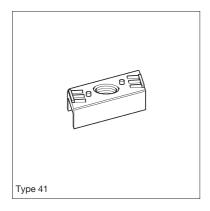






Туре	W [kg]	Quantity [pack]	Part number
M6	0.04	100	110005
M8	0.04	100	110016
M10	0.04	100	110006
M12	0.07	100	110007





### **Channel Nut NT 41**

Group: 1314

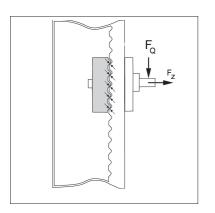
#### Application

Channel Nuts NT 41 are suitable for Channels MS 41.

### **Technical Data**

	M8	M10
Tightening torque 8.8 <sup>1)</sup> [Nm]	25	40

<sup>1)</sup> Using lower steel classes, the value are to be reduced accordingly.



Channel	M8 <sup>2)</sup>	M10 <sup>2)</sup>	M8	M10 <sup>2)</sup>
thickness	FZ ≤	FZ≤	FQ ≤	FQ ≤
[mm]	[kN]	[kN]	[kN]	[kN]
1.5	4.7	4.7	1.8	2.9
2.0	5.8	5.8	2.1	3.4
2.5	5.8	5.8	2.6	4.1
3.0	5.8	5.8	2.8	4.4

Note: The permissible load capacities of the channels are to be respected.

Material: Malleable cast iron, electro-galvanised

#### Approvals

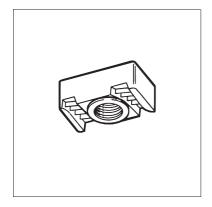


This product has been awarded the RAL quality mark "pipe supports" and is subject to continuous external monitoring according to RAL GZ-655.

<sup>2)</sup> Tested load values 'connection design' according to certificate 2010-07/2010-09.

Туре	W	Quantity	Part
	[kg]	[pack]	number
41-M8	0.03	50	180173
41-M10	0.03	50	180182





### **Channel Nut NT HZ 41**

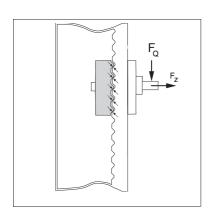
Group: 1314

Application For Channels MS 41.

### **Technical Data**

	M8	M10	M12	M16	
Tightening torque 8.8 <sup>1)</sup> [Nm]	25	40	80	80	

1) Using lower steel classes, the value are to be reduced accordingly.



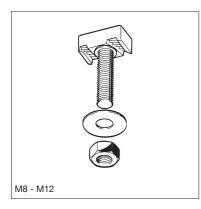
Channel thickness [mm]	M8 FZ ≤ [kN]	M10 FZ ≤ [kN]	M12 FZ ≤ [kN]	M16 FZ ≤ [kN]	M8 FQ ≤ [kN]	M10 FQ ≤ [kN]	M12 FQ ≤ [kN]	M16 FQ ≤ [kN]
1.5	6.0	6.0	7.5	7.5	4	5.5	7.5	6
2.0	7.5	7.5	10	10	4	5.5	9	6
2.5	8.5	8.5	11	11	4	5.5	9	6
3.0	8.5	8.5	13	13	4	5.5	9	6

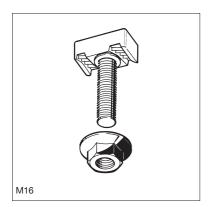
Note: The permissible load capacities of the channels are to be respected.

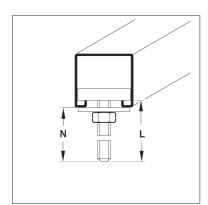
Steel, cold-forged, electro-galvanised Material:

Туре	W [kg]	Quantity [pack]	Part number
HZ 41-M8	0.04	50	151935
HZ 41-M10	0.03	50	151944
HZ 41-M12	0.06	50	182288
HZ 41-M16	0.05	50	182297









### T-Head Bolt TBO HZ 41

Group: 1311

#### Application

Suitable for Channels MS 41.

#### Scope of delivery

With washer and nut (supplied loose).

#### **Technical Data**

Туре	Tightening moment M <sub>dmax</sub> [Nm]	Permissible load (tension) [kN]	Permissible axial load in combination with serrated channels <sup>1)</sup> [kN]	Permissible bending moment <sup>2)</sup> [Nm]
HZ 41 M8	10.0	5.8	1.5	5.0
HZ 41 M10	18.0	9.3	2.5	10.0
HZ 41 M12	32.0	10.0	3.0	17.5
HZ 41 M16	79.0	10.0	3.0	44.5

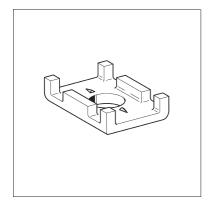
- <sup>1)</sup> The values indicated refer to the point of application of force being near the top edge of the channel. In cases where tension and lateral tension are encountered, the resultant total load may not be greater than the values given.
- <sup>2)</sup> The effective bending moment may not exceed the permissible maximum torsional moment of the channel.

#### Material:

Head:Steel class 5.6, cold-forged, electro-galvanisedBolt:Steel class 4.6, electro-galvanised

Туре	Length L [mm]	Available length of thread [mm]	W [kg]	Quantity [pack]	Part number
HZ 41 M 8 x 15	20	15	0.08	50	151953
HZ 41 M 8 x 20	25	20	0.08	50	151962
HZ 41 M 8 x 25	30	25	0.08	50	151971
HZ 41 M 8 x 35	40	35	0.08	50	151980
HZ 41 M 8 x 55	60	55	0.08	50	151999
HZ 41 M 8 x 75	80	75	0.09	50	152006
HZ 41 M 8 x 95	100	95	0.10	50	152015
HZ 41 M 10 x 15	20	15	0.09	50	152024
HZ 41 M 10 x 20	25	20	0.09	50	152033
HZ 41 M 10 x 25	30	25	0.09	50	152042
HZ 41 M 10 x 35	40	35	0.09	50	152051
HZ 41 M 10 x 55	60	55	0.10	50	152060
HZ 41 M 10 x 75	80	75	0.11	50	152079
HZ 41 M 10 x 95	100	95	0.12	50	152088
HZ 41 M 12 x 20	25	20	0.12	50	152167
HZ 41 M 12 x 25	30	25	0.13	50	152176
HZ 41 M 12 x 35	40	35	0.14	50	152185
HZ 41 M 12 x 55	60	55	0.15	50	152194
HZ 41 M 12 x 75	80	75	0.16	50	152200
HZ 41 M 12 x 95	100	95	0.18	50	152219
HZ 41 M 16 x 25	30	25	0.15	50	152228
HZ 41 M 16 x 35	40	35	0.17	50	152237
HZ 41 M 16 x 55	60	55	0.19	50	152246
HZ 41 M 16 x 75	80	75	0.22	50	152255
HZ 41 M 16 x 95	100	95	0.24	50	152264





### Holding Bracket HK 41

Group: 1327

#### Application

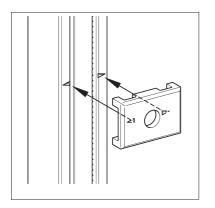
Safety element for Sikla Channels to be used instead of simple washers. The Holding Bracket prevents the edges along the opening of the channels from bending, and ensures optimum load distribution. When loads are imposing along the channels, 41 Holding Brackets provide for additional safety due to embossed teeth, which penetrate the channel. Suitable for single and double channels.

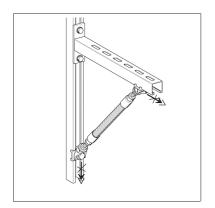
Special blanking guarantees high security and shear force after achieving form closure, especially for screwed through connecting elements.

#### **Technical Data**

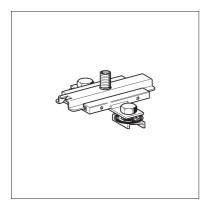
Material: Cast iron, electro-galvanised

Part number	Quantity [pack]	W [kg]	Bore [mm]	Suitable for Sikla channels of width [mm]	Туре
178247	50	0.07	11	41	41/10
178256	50	0.07	13	41	41/12
178265	50	0.07	17	41	41/16









### Slide Set GS CC - 2G/1

Group: 1336

#### Application

Slide Set for single and double mounting of mechanical equipment to be used on Sikla Channels, brick or concrete walls and on bearers.

To be used preferably in combination with Sikla Pipe Clamps Ratio S and Stabil D-3G.

Various connection options with these pipe clamps ranging between M10 and R1".

For adapters for these connection options, see Adapter AD f/f in chapter "Pipe Clamps and Accessories".

Slide rails in polyamide, glass fibre reinforced.

#### Scope of delivery

Slide Set incl. pre-assembled CC-component.

#### Installation

Locking in the channel by exerting slight pressure on the bolt head, then tighten - the job is done!

#### **Technical Data**

Permissible load for ceiling mounting:	0.6 kN
Permissible load for floor mounting:	1.2 kN
Lever L <sub>max:</sub>	300 mm
Max. sliding distance Type 2G-PL:	85 mm
Max. sliding distance Type 2G2-PL:	140 mm
Temperature (permanent exposure):	130°C
Static friction coefficient µ0:	0.18
Sliding friction coefficient µ:	0.14

#### Material: Metal components:

Steel, electro-galvanised

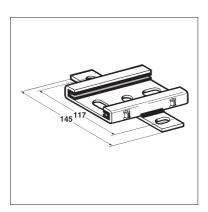
Adm. load FZ \* under stress of fire

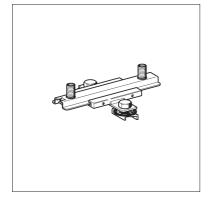
FWD 30	FWD 60	FWD 90	FWD 120
[N]	[N]	[N]	[N]
≤ 600	≤ 430	≤ 280	≤ 200

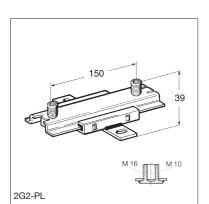
FZ = max. adm. tensile load

\* The load capacity of the connecting elements used is to be respected, this applies in particular under stress of fire.

Туре	W [kg]	Quantity [pack]	Part number
CC - 2G-PL	0.64	25	191711
CC - 2G2-PL	0.71	25	191729

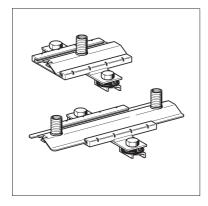


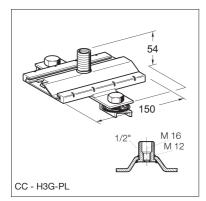


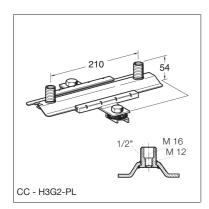


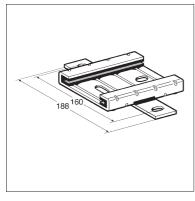
Siconnect 2-48











### Slide Set GS CC - H3G-PL

Group: 1336

#### Application

Heavy-duty Slide Set for plant construction to be used on Sikla Channels, brick or concrete walls and on bearers.

To be used preferably in combination with pipe clamps Stabil D-3G, Ratio S and Chilled Water Clamp SKS.

Various connection options of the pipe clamp depending on the respective load: M12, M16. In combination with 1/2"-adapters (see Adapter f/f) there are even further possibilities.

Especially suitable for ceiling and floor mounting solutions and as a guide for rising pipes.

Sound absorption due to slide rails in PPS glass fibre reinforced.

#### Scope of delivery

Slide Set incl. pre-assembled CC-elements.

#### Installation

Locks automatically in the channel by pushing down the the bolt head, tighten - that's it!

For pipes of NB 100 or larger having to be spaced at a distance from the Slide Set, or under conditions of reversed bending stress, the 3G triple thread nut is to be secured by screwing on a  $1/2^{"}$  Locking Nut.

#### **Technical Data**

Permissible load for ceiling mounting: Permissible load for floor mounting: Maximum lever arm distance L <sub>max</sub> :	5.0 kN 9.0 kN 400 mm
Max. sliding distance	
CC - H3G-PL:	100 mm
CC - H3G2-PL:	135 mm
Temperature range (permanent exposure):	130°C
Static friction coefficient $\mu_{0}$	0.18
Sliding friction coefficient µ:	0.14

Material: Metal components:

Steel, electro-galvanised

Adm. load FZ \* under stress of fire

FWD 30 [N]	FWD 60 [N]	FWD 90 [N]	FWD 120	
≤ 1.000			[N] ≤ 260	

FZ = max. adm. tensile load

\* The load capacity of the connecting elements used is to be respected, this applies in particular under stress of fire.

Туре	W [kg]	Quantity [pack]	Part number
CC - H3G-PL	1.61	10	191747
CC - H3G2-PL	1.95	10	191738



6 kN

8 kN

4 kN

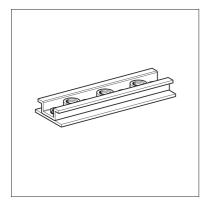
8 kN

0.16

0.14

350 mm

Steel, electro-galvanised





Group: 1336

**Technical Data** 

Single mounting:

Double mounting:

be respected.

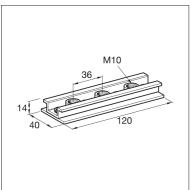
#### Application

Slide element for use in Sikla Channels MS 41. For single and, using a Tandem Connector, double mounting options.

The sliding distance is determined by the length of the rail. Holding Brackets are to be used for securing the slide element. Alternatively, the Sikla Channel Holder SH may be used.

Any option in combination with Sikla Pipe Clamps Ratio S and Stabil D-3G may be realised.

Various connection options with pipe clamps in the range between M12 and R1". For these connection options, the corresponding Mounting Plate could be screwed directly with the slide element by means of bolts M10 x 20. Suitable for ceiling and floor mounting solutions and as a guide for rising pipes.



### Lever arm $L_{max}$ for single mounting: Static friction coefficient $\mu_0$ : Sliding friction coefficient µ: Material: The permissible bending moment of the connection elements (threaded rod or threaded tube) may restrict the application!

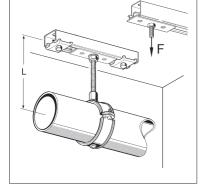
The permissible load capacity of the channel has to

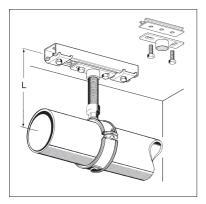
Permissible load overhead mounting:

Permissible load floor mounting: Single mounting/Double mounting:

Single mounting with mounting plate:

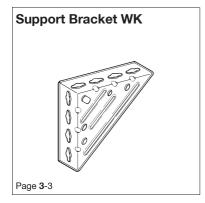
Туре	Thread	W	Quantity	Part
	connection	[kg]	[pack]	number
41 - M10	M10	0.18	10	190658

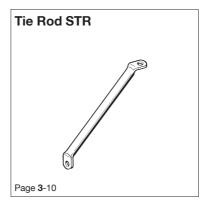




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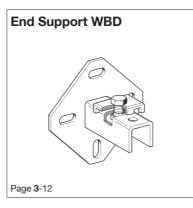


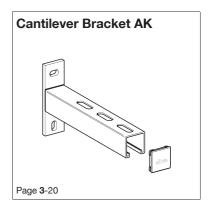


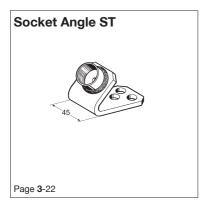




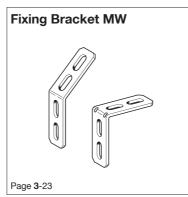


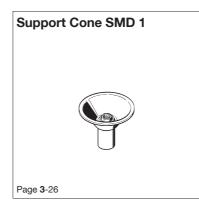




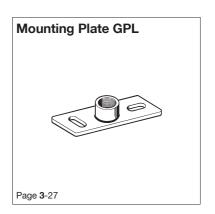




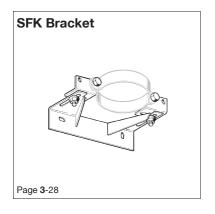




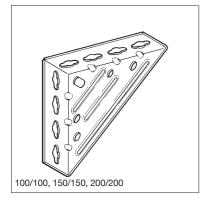












Support Bracket WK

Group: 1326 / 1826

#### Application

Sikla Support Brackets may be used for wall, floor and overhead pipe installation.

Depending on the site, pipes may lie on the support bracket (U bolt), be arranged in vertical position or be suspended (grub screws). In combination with bolted-on channels, the support brackets offer a wide range of possibilities for cantilever arrangements. In addition, the load capacity of

cross-bars can be increased by fixing them onto Support Brackets.

#### **Technical Data**

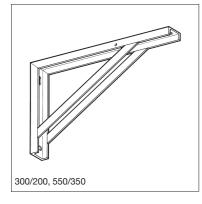
Material:

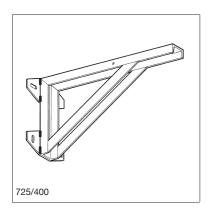
 Steel, sizes up to 550/350 electro-galvanised sizes 725/400 and 880/550 hot-dipped galvanised (hdg)

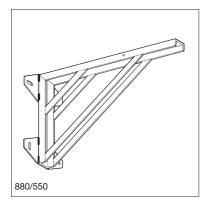
Details on dimensions and carrying capacities: see following pages. The permissible loads depicted by the characteristic curves in the graphs are taking into account the reduced load capacity of the stipulated anchors due to reduced centre distances.

Anchors could be used at your own option, but they must respect the mentioned load capacities according to DIBt approval.

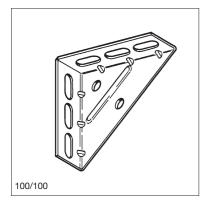
Туре	Channel	W [kg]	Quantity [pack]	Part number
100/100	-	0.16	25	145626
100/100-40	-	0.21	25	163921
150/150	-	0.58	25	155513
200/200	-	1.22	10	118170
300/200	U 50/25	2.32	1	118046
550/350	U 50/25	4.45	1	145635
725/400	U 65/42	12.72	1	151041
880/550	U 65/42	18.43	1	151050

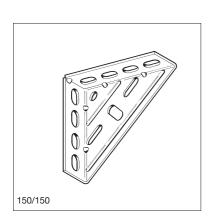






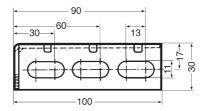


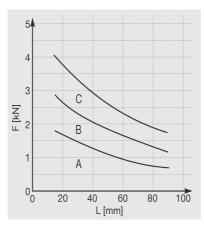




#### Support Bracket WK 100/100, 100/100-40 and 150/150

Width of size 100/100-40 is 40 mm.

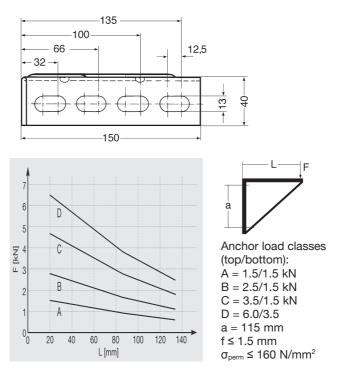




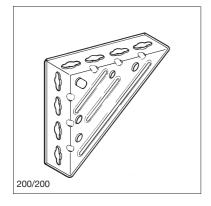


Anchor load classes (top/bottom): A = 1.5/1.5 kN B = 2.5/1.5 kN C = 3.5/1.5 kN a = 70 mm f  $\leq$  1 mm  $\sigma_{perm} \leq$  160 N/mm<sup>2</sup>

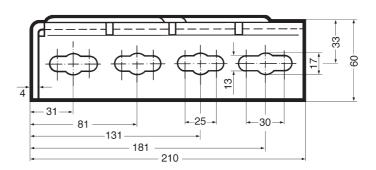
#### Support Bracket 150/150

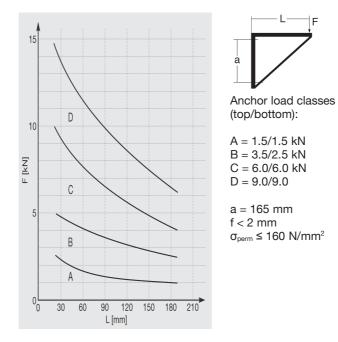






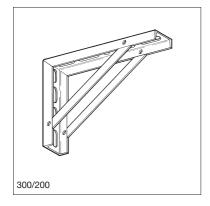
#### Support Bracket WK 200/200



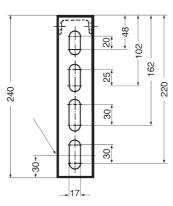


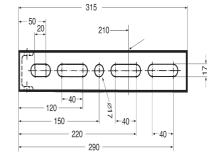




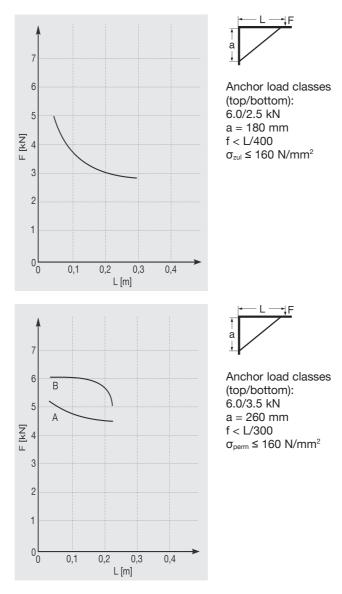


#### Support Bracket WK 300/200

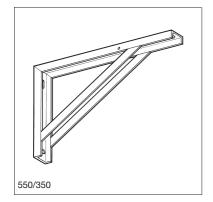




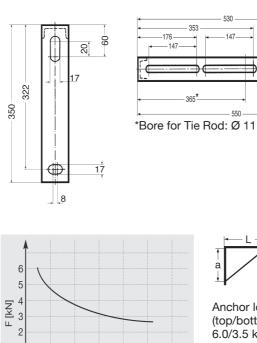
Bore for Tie Rod: Ø 11







#### Support Bracket WK 550/350



0,1 0,2 0,3 0,4 0,5 0,6 L [m]

1 0<sup>L</sup>0



530

- 147-

- 550 -

•

⊅¢

- 353 -

•

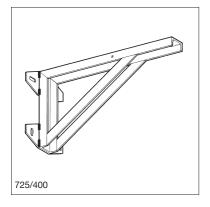
365\*

— 147 —

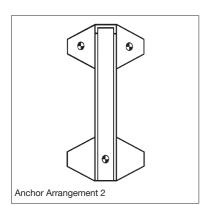
171

Anchor load classes (top/bottom): 6.0/3.5 kN a = 280 mm f < L/400  $\sigma_{perm} \le 160 \text{ N/mm}^2$ 

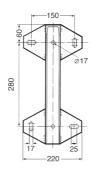


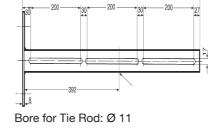


# Anchor Arrangement 1

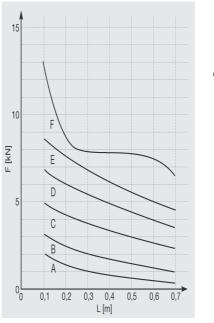


### Support Bracket WK 725/400





725



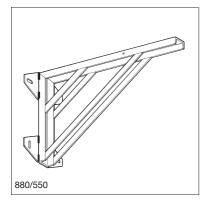
## ↓ L →↓F

 $\sigma_{\text{perm}} \leq 160 \text{ N/mm}^2$ 

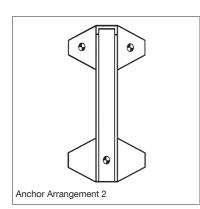
#### Anchor load classes [kN]

Figure	Arrangement 1	Arrangement 2	f <sub>max</sub>
А	2 x 1.5	-	L/3000
	-	-	
В	1 x 3.5	3 x 1.5	L/2000
	1 x 1.5	-	
С	1 x 6.0	2 x 3.5	L/1000
	1 x 2.5	1 x 1.5	
D	1 x 9.0	2 x 6.0	L/900
	1 x 3.5	1 x 2.5	
Е	1 x 13.0	2 x 9.0	L/700
	1 x 3.5	1 x 3.5	
F	-	2 x 13.0	L/500
	-	1 x 6.0	

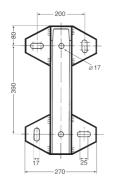


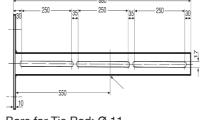


# Anchor Arrangement 1

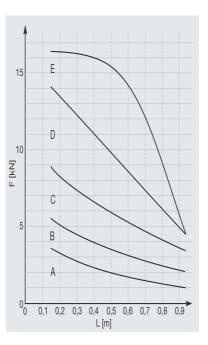


#### Support Bracket WK 880/550





Bore for Tie Rod: Ø 11



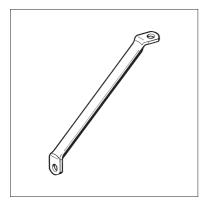
 $\sigma_{\text{perm}} \leq 160 \text{ N/mm}^2$ 

F

#### Anchor load classes [kN]

Figure	Arrangement 1	Arrangement 2	f <sub>max</sub>
А	1 x 3.5	2 x 2.5	L/1000
	1 x 1.5	1 x 1.5	
В	1 x 6.0	2 x 3.5	L/600
	1 x 2.5	1 x 2.5	
С	1 x 9.0	2 x 6.0	L/400
	1 x 3.5	1 x 3.5	
D	1 x 13.0	2 x 9.0	L/300
	1 x 6.0	1 x 6.0	
Е	-	2 x 13.0	L/300
	-	1 x 9.0	





#### **Tie Rod STR**

Group: 1326

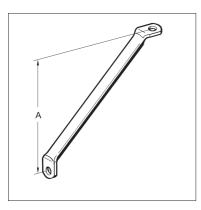
#### Application

Tie Rods cater for the lateral forces applied to Support Brackets. Such lateral forces always occur when pipes are laid, in particular when sliding elements are fixed onto Support Brackets, and **must** be safely absorbed by means of Tie Rods fixed to the brackets.

Otherwise the Support Brackets run the accute risk of being pulled out of their anchoring components by the forces exerted.

#### Installation

Fix the Tie Rod to the bore especially made for such purpose at the overhanging leg of the Support Bracket using the recommended hexagon bolt (see table).

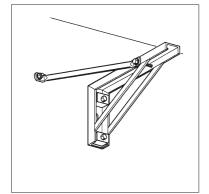




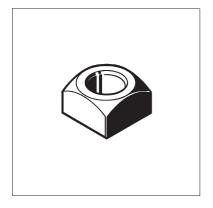
Туре	Recommended bolt for attachement to Support Bracket	Permissible load (tension and pressure)
300/200	M10 x 80	7.0 kN
550/350	M10 x 80	7.0 kN
725/400	M10 x 100	12.0 kN
880/550	M10 x 100	12.0 kN

#### Material: Cold-worked tube DIN 2448, hot-dipped galvanised

Туре	Pipe	Bore [mm]	W [kg]	Quantity [pack]	Part number
300/200	R <sup>1</sup> / <sub>2</sub> "	11	0.26	10	125967
550/350	R <sup>1</sup> / <sub>2</sub> "	11	0.50	10	125994
725/400	R <sup>3</sup> / <sub>4</sub> "	11	0.90	10	151908
880/550	R <sup>3</sup> / <sub>4</sub> "	11	1.17	10	151892







## Spacing Nut DIS So-WK Group: 1327

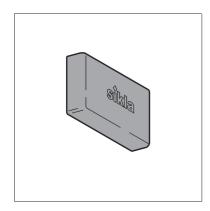
#### Application

For safely installing Support Brackets of size 300/200 and 550/350 and optimising load distribution.

#### **Technical Data**

Material: Steel, electro-galvanised

Туре	a x b [mm]	Height [mm]	Bore [mm]	W [kg]	Quantity [pack]	Part number
So-WK	30 x 30	16	17	0.08	25	114848



## End Cap ADK WK Group: 1304

#### Application

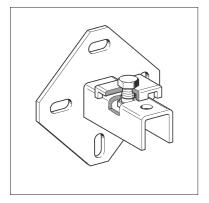
Safety End Cap for Support Brackets 300/200 and 550/350 made from 50/25 mm profile steel.

#### **Technical Data**

Material: HDPE, yellow

Туре	W	Quantity	Part
	[kg]	[pack]	number
WK 300 - 550	0.01	50	101055





#### **End Support WBD**

Group: 1356

#### Application

- In combination with a channel, End Support WBD is particularly suitable
- + for setting up support structures attached to walls, floors and ceilings
- ♦ as a base for frame structures made of Sikla Channels.

The generous dimensions and the diamond shape of the mounting plate provide a high bending moment and safely stabilise lateral loads.

#### Installation

Normally, two bolts grouped opposite to each other and along the load axis are sufficient. Only in exceptional cases (e.g. tall uprights in frameworks) four bolts are required.

Minimum torque values for the hexagon bolts of the 41 Holding Brackets are:

Types	Holding Brackets [pcs]	Bolt for Holding Bracket	Accessories	Torque [Nm]
41/21-31 up to 41/41-45	1	M10	pre-assembled	40
41/52 up to 41-75/75	2	M12	pre-assembled	60
41/21 D up to 41/45 D	1	M10	in loose form	40
41/52 D up to 41-75/75 D	1	M12	in loose form	60

For ceiling mounting under high loads (up to 7.0 kN), we recommend the use of at least one fully traversing bolt for connecting the channel to the End Support WBD (for examples see "Installation Guideline").

#### **Technical Data**

Туре	Suitable for Sikla Channel	A [mm]	s [mm]	B [mm]	b [mm]	h [mm]	C [mm]
41/21-31	41/21/1.5 - 2.0 41/31/2,0	135	6	100	25	11	95
41/41-45	41/41/2.0 - 2.5 41/45/2.5	135	6	100	25	11	95
41/52	41/52/2.5	170	6	120	25	13	131
41/62	41/62/2.5	170	6	120	25	13	131
41-75/65	41-75/65/3.0	210	8	170	25	13	131
41-75/75	41-75/75/3.0	210	8	170	25	13	131
41/21 D	41/21/1.5 - 2.0 D	135	6	100	25	11	125
41/41-45 D	41/41/2.0 - 2.5 D 41/45/2.5 D	210	8	170	25	13	125
41/52 D	41/52/2.5 D	210	8	170	25	13	135
41/62 D	41/62/2.5 D	255	8	205	25	13	135
41-75/65 D	41-75/65/3.0 D	255	8	205	25	13	135
41-75/75 D	41-75/75/3.0 D	255	8	205	25	13	135

## A

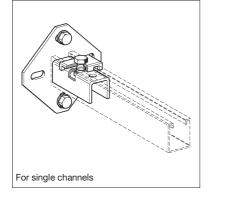
#### Working load for wall mounting:

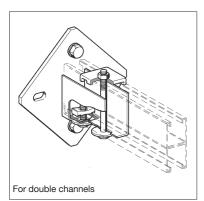
See tables on the following pages. The figures apply on wall applications if two bolts of the load class as stated are used.

Working load for ceiling mounting:

The permissible maximum vertical load for ceiling mounting structures fixed by way of at least one traversing bolt (class 8.8) amounts to 7.0 kN

For End Supports WBD for single channels, the following values apply subject to the condition that all included accessories are assembled correctly.





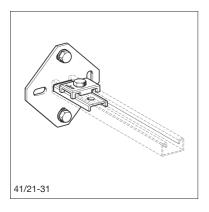


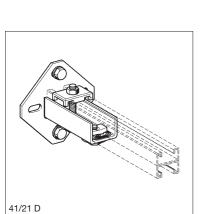
Types	Working load (tension) for ceiling mounting
	[kN]
41/21-31 up to 41/41-45	2.0
41/52 up to 41-75/75	4.0

Material: Steel, cold-formed, electro-galvanised

Туре	For Sikla Channel	Holding Brackets [number of]	W [kg]	Quantity [pack]	Part number
41/21-31	41/21/2.5	1	0.73	10	177725
41/41-45	41/41/2.5; 41/45/3.0	1	0.83	10	155054
41/52	41/52/3.0	2	1.44	5	177734
41/62	41/62/3.0	2	1.50	5	155063
41-75/65	41-75/65/3.0	2	2.15	5	177743
41-75/75	41-75/75/3.0	2	2.19	5	177752
41/21 D	41/21/2.5 D	1	1.14	5	146469
41/41-45 D	41/41/2.5 D; 41/45/3.0 D	1	2.46	5	106768
41/52 D	41/52/3.0 D	1	2.86	5	177761
41/62 D	41/62/3.0 D	1	4.00	5	155090
41-75/65 D	41-75/65/3.0 D	1	4.18	5	177770
41-75/75 D	41-75/75/3.0 D	1	4.38	5	177779

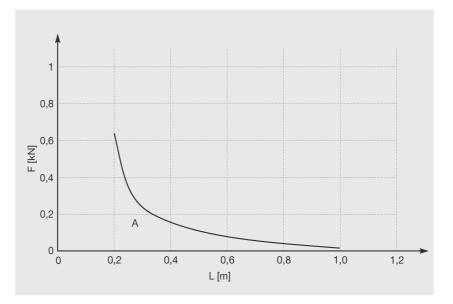






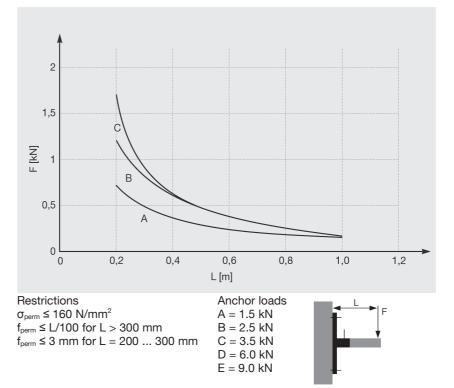
#### End Support WBD 41/21-31

Load chart only applicable in combination with Channel 41/21/2.0 or 41/31/2.0

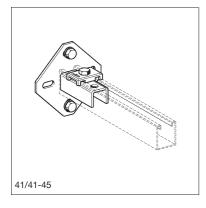


#### End Support WBD 41/21 D

Load chart only applicable in combination with Channel 41/21/2.0 D

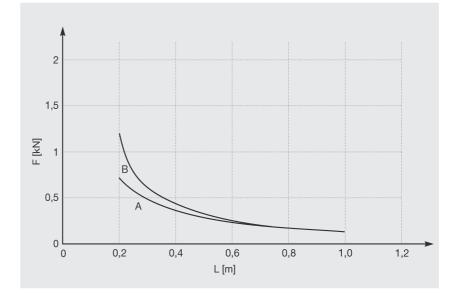






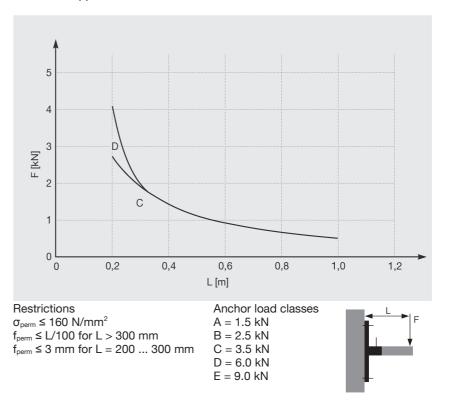
#### End Support WBD 41/41-45

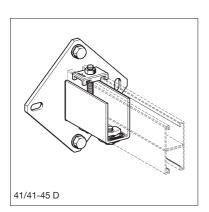
Load chart only applicable in combination with Channel 41/41/2.5 or 41/45/2.5



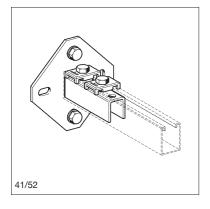
#### WBD-Halter 41/41-45 D

Load chart applicable in combination with Channel 41/41/2.5 D or 41/45/2.5 D





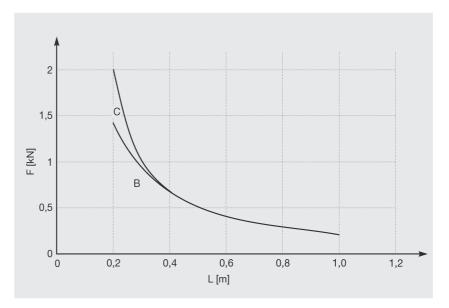




#### End Support WBD 41/52

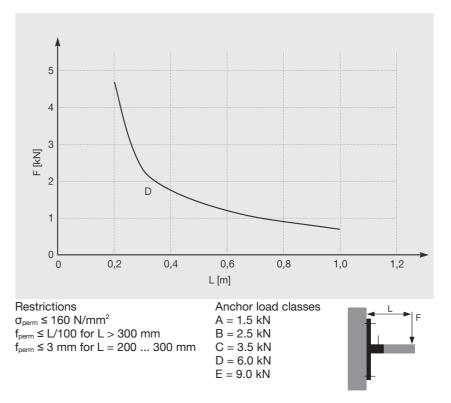
Group: 1356

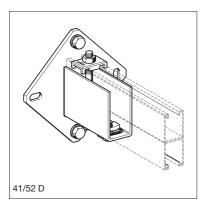
Load chart applicable in combination with Channel 41/52/2.5



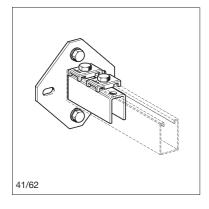
#### End Support WBD 41/52 D

Load chart applicable in combination with Channel 41/52/2.5 D



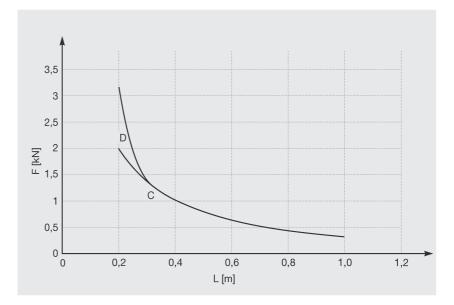






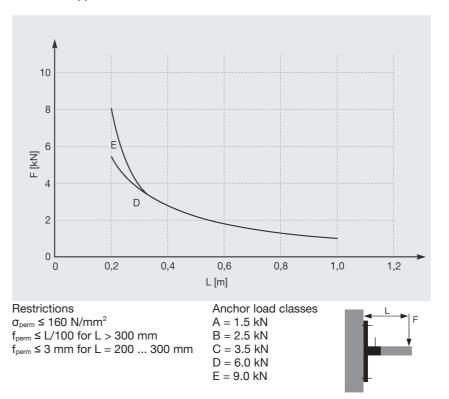
#### End Support WBD 41/62

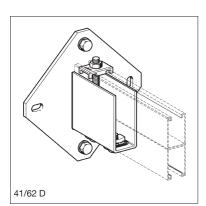
Load chart applicable in combination with Channel 41/62/2.5



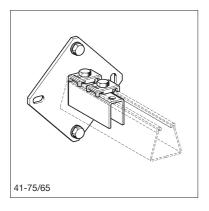
### End Support WBD 41/62 D

Load chart applicable in combination with Channel 41/62/2.5 D



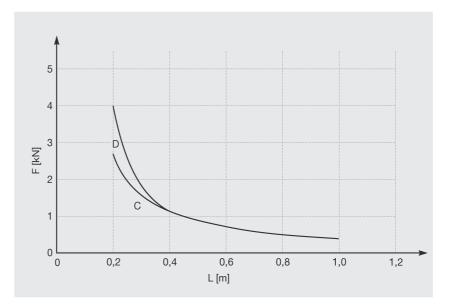






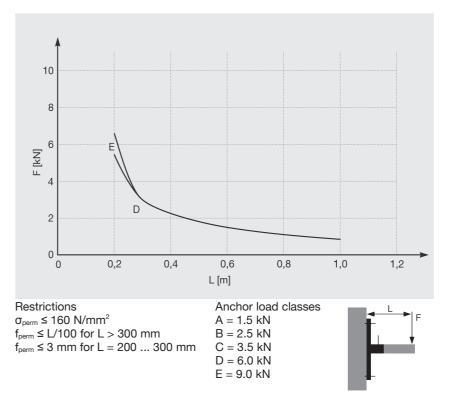
#### End Support WBD 41-75/65

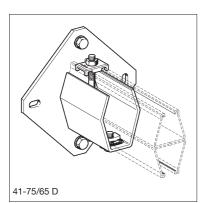
Load chart applicable in combination with Channel 41-75/65/3.0



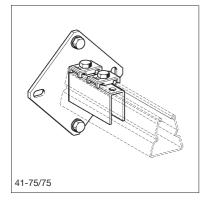
#### End Support WBD 41-75/65 D

Load chart applicable in combination with Channel 41-75/65/3.0 D



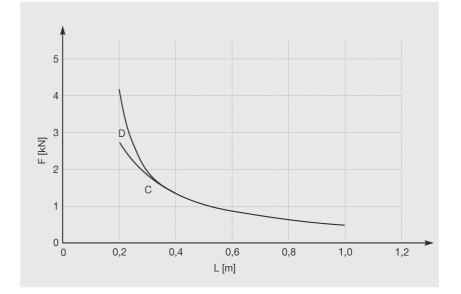






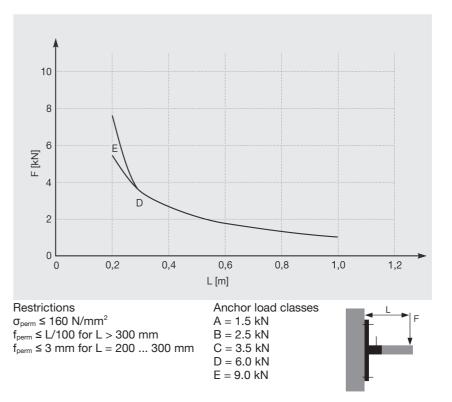
#### End Support WBD 41-75/75

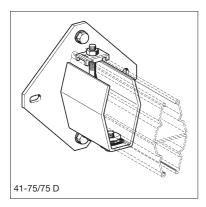
Load chart applicable in combination with Channel 41-75/75/3.0



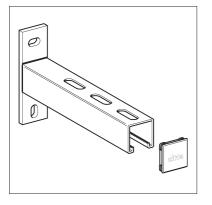
#### End Support WBD 41-75/75 D

Load chart applicable in combination with Channel 41-75/75/3.0 D









#### **Cantilever Bracket AK**

Group: 1354 / 2754

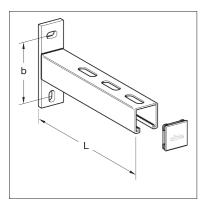
#### Application

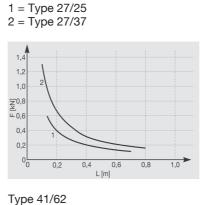
Ready-to-use brackets mainly for mounting pipes to walls. For further options, e.g. double-versions see chapter "HCP Products"

#### Installation

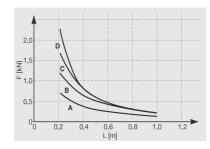
When used in combination with slide elements, a Tie Rod is absolutely essential for absorbing the forces running along the centre line of the pipe. For cantilever lengths  $\geq$  500 mm we recommend the integration of a prop-up (see drawing below).

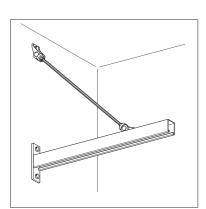
#### **Technical Data**

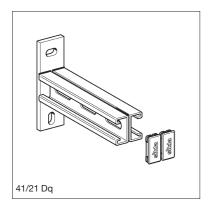




Type 41/41







2,5 2,0 1,5 1,0 0,5 0 0,0,2 0,4 0,6 0,8

L [m]

Anchor load classes A = 1.5 kN B = 2.5 kN C = 3.5 kN





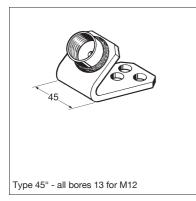
 $\begin{array}{l} \sigma_{perm} \leq 160 \ N/mm^2 \\ f_{perm} \leq L/150 \ for \ L > 450 \ mm \\ f_{perm} \leq 3 \ mm \ for \ L \leq 450 \ mm \end{array}$ 

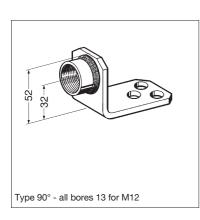
Material: Steel, electro-galvanised, Type Dq = hot dipped galvanised

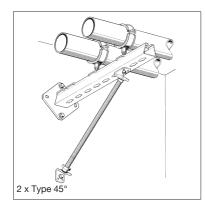


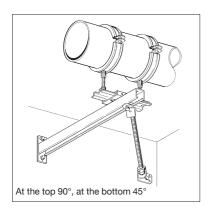
Туре	L [mm]	Wall plate [mm]	b [mm]	Dimensions of elongated hole [mm]	W [kg]	Quantity [pack]	Part number
27/25 - 200	203	88 x 30 x 6	64	10 x 15	0.25	25	112326
27/25 - 250	253	88 x 30 x 6	64	10 x 15	0.29	25	112327
27/25 - 300	303	88 x 30 x 6	64	10 x 15	0.34	25	112328
27/25 - 500	503	88 x 30 x 6	64	10 x 15	0.49	25	112329
27/25 - 700	703	88 x 30 x 6	64	10 x 15	0.65	1	112330
27/37 - 300	304	88 x 30 x 6	64	10 x 15	0.43	25	111458
27/37 - 500	504	88 x 30 x 6	64	10 x 15	0.64	25	111459
27/37 - 700	704	88 x 30 x 6	64	10 x 15	0.84	1	111460
27/37 - 800	804	88 x 30 x 6	64	10 x 15	0.96	1	111461
41/41 - 200	196	134 x 40 x 8	100	13 x 18	0.68	10	115609
41/41 - 260	258	134 x 40 x 8	100	13 x 18	0.81	10	153973
41/41 - 320	321	134 x 40 x 8	100	13 x 18	0.92	10	115618
41/41 - 445	446	134 x 40 x 8	100	13 x 18	1.16	10	115627
41/41 - 570	571	134 x 40 x 8	100	13 x 18	1.41	10	115636
41/41 - 820	821	134 x 40 x 8	100	13 x 18	1.89	1	149268
41/41 - 1010	1008	134 x 40 x 8	100	13 x 18	2.05	1	149277
41/62 - 320	321	134 x 40 x 8	100	13 x 18	1.42	10	113296
41/62 - 445	446	134 x 40 x 8	100	13 x 18	1.76	10	113297
41/62 - 570	571	134 x 40 x 8	100	13 x 18	2.25	10	113298
41/62 - 820	821	134 x 40 x 8	100	13 x 18	3.05	1	113299
41/62 - 1010	1008	134 x 40 x 8	100	13 x 18	3.59	1	113300
27/25 q - 300	303	88 x 30 x 5	64	10 x 15	0.34	25	112366
41/21 Dq - 320	321	134 x 40 x 8	100	13 x 18	1.20	10	180164
41/21 Dq - 570	571	134 x 40 x 8	100	13 x 18	1.95	10	190424











#### Socket Angle ST

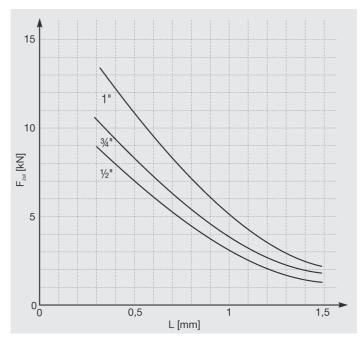
Group: 1355

#### Application

Base element for setting up horizontal and vertical tie rods on site.

#### **Technical Data**

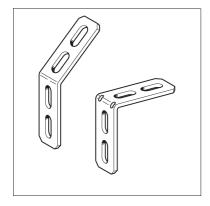
To determine the load capacity of a cantilever construction, please add the permissible load of the bracket with the permissible loads mentioned in the table "Socket Angle".



Material: Steel cold-worked, electro-galvanised

Туре	W [kg]	Quantity [pack]	Part number
<sup>1</sup> / <sub>2</sub> " - 45	0.26	25	143828
<sup>3</sup> / <sub>4</sub> " - 45	0.27	25	143837
1" - 45	0.29	25	143846
<sup>1</sup> / <sub>2</sub> " - 90	0.26	25	148744





## Fixing Bracket MW Group: 1326

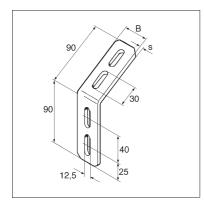
#### Application

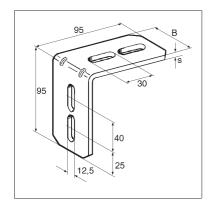
Suitable for Sikla Channel System 41. Useful addition to Support Brackets for integration in crossbars and other structures composed of channels with a width of 41 mm.

#### **Technical Data**

Material: Steel strip, cold-worked, electro-galvanised

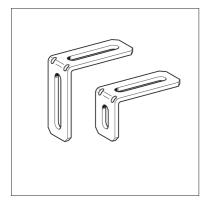
Туре	B [mm]	s [mm]	W [kg]	Quantity [pack]	Part number
90/90/45°	40	5	0.22	25	106759
95/95/90°	40	5	0.22	25	114936





#### **Brackets**





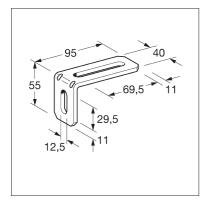
## Fixing Bracket MW LL Group: 1326

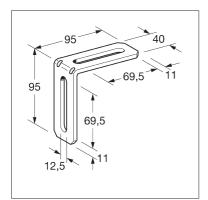
**Application** Suitable for Sikla Channel System 41. Fixing Bracket with wide adjusting range for construction of cross bars and other structures composed of channels.

#### **Technical Data**

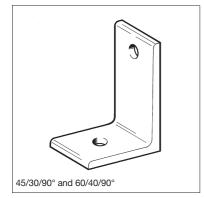
Material: Steel, zinc-plated

Туре	В	s	W	Quantity	Part
	[mm]	[mm]	[kg]	[pack]	number
95/55/90°	40	5	0.17	25	172388
95/95/90°	40	5	0.21	25	172397









#### **Fixing Bracket MW S**

Group: 1326

#### Application

Designed for general mounting purposes as a direct lateral attachment link integrated in binding and bridging beams of concrete or wood, and for similar applications. It may serve as a connecting bracket for framework structures consisting of channels.

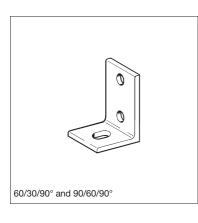
**Sprinkler systems:** See "Technical Data". Types 60/30/90 and 90/60/90 are designed for attachment of pipes to wooden truss according to VdS CEA-standard 15.2.2.

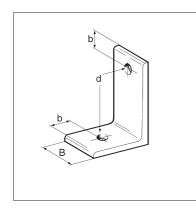
#### **Technical Data**

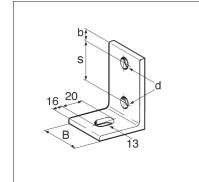
Туре	Working load
45/30/90°	3.5 kN
60/30/90°	3.5 kN
70/40/90°	2.0 kN
60/40/90°	5.0 kN
90/60/90°	5.0 kN

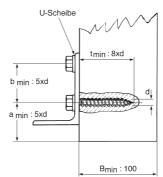
### For Sprinkler systems: Application of 60/30/90 and 90/60/90 to wooden truss

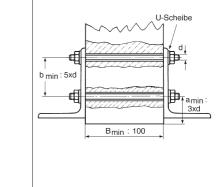
Single Bracket with wooden screw Double Bracket with threaded bolt











#### "d" depending on NB:

	≤ NB 50:	2 x 6 mm
> NB 50	≤ DN 100:	2 x 8 mm
> NB 100	≤ DN 150:	2 x 10 mm

Material: Angle steel profile, electro-galvanised

Туре	Angle steel profile DIN 1029	B [mm]	b [mm]	d [mm]	s [mm]	W [kg]	Quantity [pack]	Part number
45/30/90°	45/30/4	30	13	11	-	0.07	50	115380
60/30/90°	60/30/5	30	10	11	30	0.09	25	156505
70/40/90°	-	40	17/35	10.5	-	0.06	50	191963
60/40/90°	60/40/6	40	20	13	-	0.17	25	115399
90/60/90°	90/60/6	40	15	13	50	0.25	25	114820





#### Support Cone SMD 1

Group: 1325

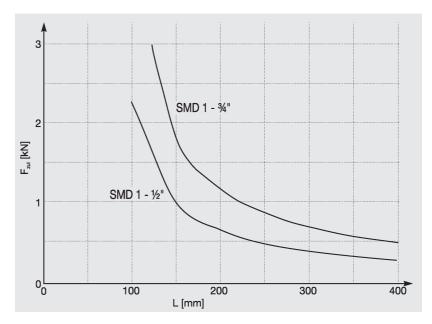
#### Application

Single-point mounting element for use with an anchor for floor, wall and ceiling mounting in M&E services. With its good overall stability, the Support Cone SMD 1 may also be used as a fixed-point mounting element in certain areas. In that case the permissible values for the lateral forces indicated in the characteristic curve are to be taken into consideration. This also applies to wall mounting situations. When used as fixed-point mounting element the pipe clamp is to be connected directly to the support tube. When used as a normal, rigid mounting element, a grub screw may be used between support tube and pipe clamp for height adjustment.

#### **Technical Data**

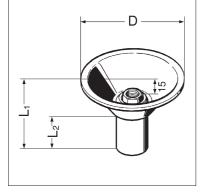
The mentioned dates respect the permissible bending stress.  $\sigma_{\text{perm}} \leq 160 \text{ N/mm}^2$  and the bending  $f_{\text{zul}} \leq 3 \text{mm}.$ 

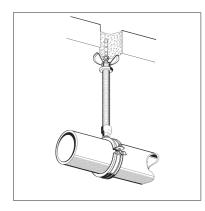
Permissible anchor values may restrict the application.

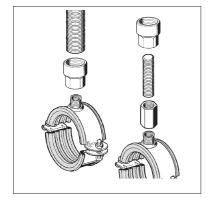


#### Material: Steel, electro-galvanised

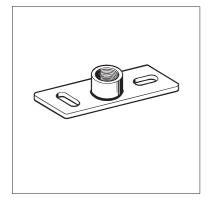
Туре	Connection to system	Connection to building structure	D [mm]	L₁ [mm]	L <sub>2</sub> [mm]	W [kg]	Quantity [pack]	Part number
SMD 1-10	M10	M8	92	71	46	0.24	25	112382
SMD 1-12	M12	M8	92	71	46	0.26	25	117513
SMD 1-16	M16	M10	92	65	39	0.25	25	117984
SMD 1- 1/2"	<sup>1</sup> / <sub>2</sub> "	M10	92	60	34	0.23	25	118125
SMD 1- <sup>3</sup> / <sub>4</sub> "	<sup>3</sup> / <sub>4</sub> "	M12	92	60	36	0.25	25	118134











## Mounting Plate GPL Group: 1227

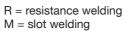
#### Application

For wall, ceiling and floor installation of mounting elements in M&E services.

#### **Technical Data**

Permissible anchor values may restrict the application.

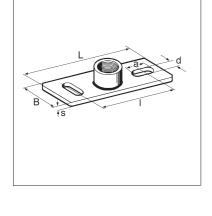
Туре	Working load (tension) [kN]	Max. perm. bending moment* [Nm]	Max. lever arm [mm]	Welding method
Normal M8	1.5	8.8	150	R
Normal M10 / M10 RL	1.5	17.2	200	R
Normal 2G M8/M10	1.5	M8: 8.8	M8: 150	R
		M10: 17.2	M10: 200	
Normal R <sup>1</sup> / <sub>2</sub> "	1.5	25.0	300	R
Stabil M10	4.0	17.2	200	R
Stabil M12	4.0	29.6	300	R
Stabil M16	8.5	70.3	300	Μ
Stabil R 1/2"	8.5	95.0	350	М
Stabil R 3/4"	8.5	180.0	450	М
Stabil R 1"	8.5	350.0	500	М

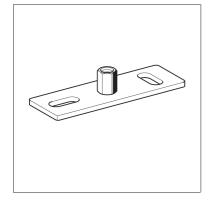


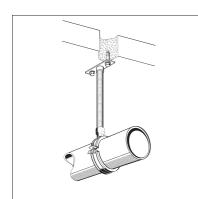
Limitation caused by the Mounting Plate or the loading capacity of the grub screw or of the threaded tube. \*  $\sigma_{perm} \le 160 \text{ N/mm}^2 \text{ f}_{perm} < 5 \text{ mm}$ 

Material: Steel, electro-galvanised

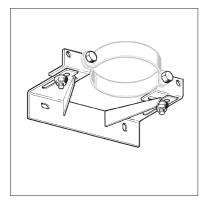
Туре	Dimension L x W x Th [mm]	Elongated hole d x a [mm]	Centre distance I [mm]	W [kg]	Quantity [pack]	Part number
Normal M8	80 x 30 x 3	9 x 16	54	0.05	50	107501
Normal M10	80 x 30 x 3	9 x 16	54	0.06	50	138361
Normal 2G M8/M10	80 x 30 x 3	9 x 16	54	0.06	100	113016
Normal M10 RL	80 x 30 x 3	Ø 4.5	54	0.06	50	199077
Normal R 1/2"	80 x 30 x 3	9 x 16	54	0.08	50	138501
Stabil M10	120 x 40 x 4	11 x 25	80	0.14	50	138343
Stabil M12	120 x 40 x 4	11 x 25	80	0.15	50	107556
Stabil M16	120 x 40 x 5	11 x 25	80	0.19	50	138352
Stabil R 1/2"	120 x 40 x 5	11 x 25	80	0.20	50	138529
Stabil R 3/4"	120 x 40 x 5	11 x 25	80	0.20	50	138538
Stabil R 1"	120 x 40 x 5	11 x 25	80	0.22	50	107592











#### **SFK Bracket**

Group: 1341

#### Application

Support for vertical pipes of NB 100, 125 and 150 - one bracket for three sizes! Preferably used in combination with Pipe Clamp Stabil D-A or, if sound absorption is required, with Stabil D-A with Lining (see below).

Adjustable in two horizontal directions, thus ensuring an exact and tension-free run of vertical pipes.

In case SFK Brackets from pipe manufactures are used, rubber rings are added as insulation.

#### Scope of delivery

Partly pre-assembled. Two M10 bolts and two flange nuts for fixing the pipe clamp are included in loose form.

Supplied without pipe clamp. See table below for suitable clamp.

#### Installation

Distance between wall and pipe: NB 100 (SML 110): min. 5 mm - max. 72 mm NB 125 (SML 135): min. 5 mm - max. 53 mm NB 150 (SML 160): min. 5 mm - max. 40 mm

#### **Technical Data**

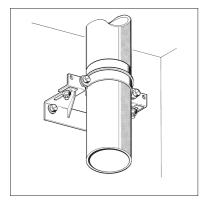
Max. adm. load (pressure): 2,0 kN Material: Steel, cold-worked, electro galvanised

Туре	W	Quantity	Part
	[kg]	[pack]	number
SFK	1.19	5	105110

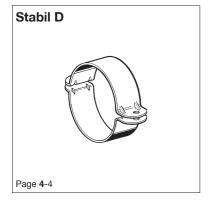


#### Stabil D-A for SFK Bracket

Size range [mm]	NB	W [kg]	Quantity [pack]	Part number
110 - 116	4"	0.30	25	113377
133 - 140		0.65	10	113379
159 - 165		0.72	10	113382
108 - 115 m. E.	4"	0.37	25	147099
131 - 137 m. E.		0.80	10	147105
156 - 162 m. E.	6"	0.93	10	147114



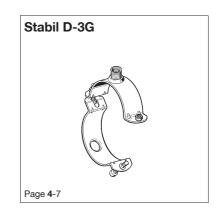


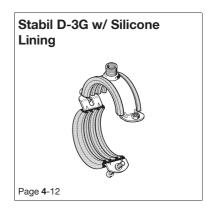


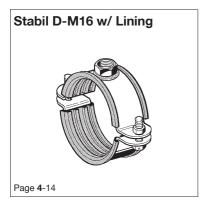




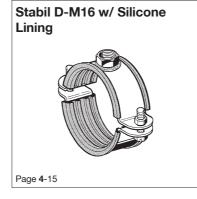


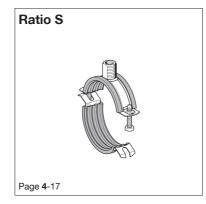




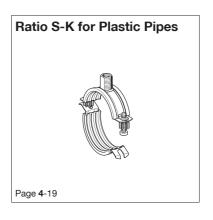




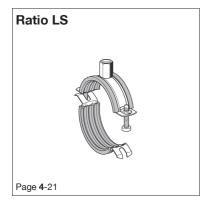






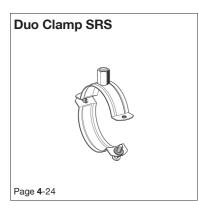




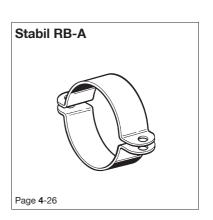


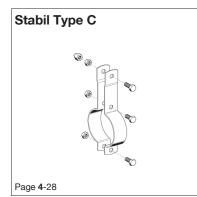


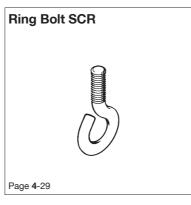




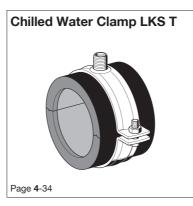


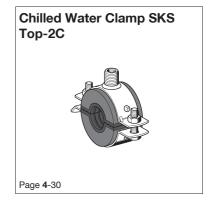


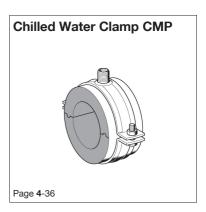




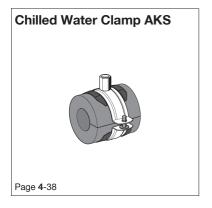


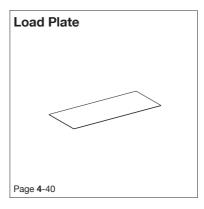


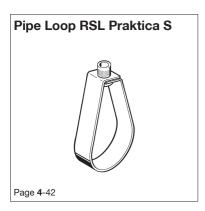




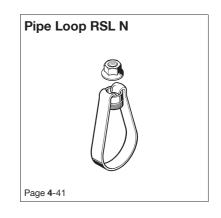








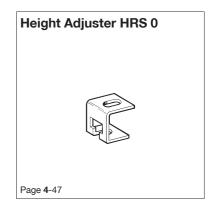




















#### Stabil D

Group: 1239

#### Application

For the installation of pipes required for all M&E services in industrial, residential and public buildings.

#### Scope of delivery

Two parts pipe clamp without clamping bolts and nuts. For suitable clamping bolts, see chapter "Fixings and Fastenings".

#### **Technical Data**

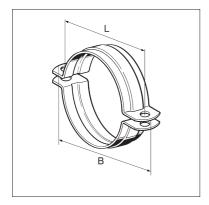
Size [mm]	Working load (tension)
15 - 72	4.0 kN
76 - 129	5.0 kN
133 - 173	8.0 kN
176 - 303	12.5 kN
316 - 521	15.0 kN

Material: Steel, electro-galvanised

#### Approvals

FM-Approval



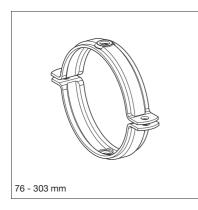




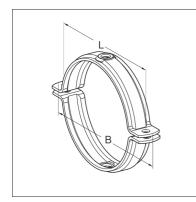
Size range [mm]	NB	Material W x th [mm]	Recommended clamping bolts	B [mm]	L [mm]	W [kg]	Quantity [pack]	Part number
15 - 19	<sup>3</sup> / <sub>8</sub> "	25 x 3.0	M8 x 25	64	42	0.07	50	107732
20 - 24	1/2"	25 x 3.0	M8 x 25	69	47	0.08	50	107741
25 - 30	3/4"	25 x 3.0	M8 x 25	75	53	0.08	50	107750
31 - 35	1"	30 x 3.0	M8 x 25	80	58	0.11	50	106786
40 - 45	<b>1</b> <sup>1</sup> / <sub>4</sub> "	30 x 3.0	M8 x 25	90	68	0.13	50	106795
48 - 53	$1^{1}/_{2}^{"}$	30 x 3.0	M8 x 25	98	76	0.14	50	106801
54 - 59		30 x 3.0	M8 x 25	104	82	0.16	50	106810
60 - 65	2"	30 x 3.0	M8 x 25	110	88	0.18	50	106829
67 - 72		30 x 3.0	M8 x 25	117	95	0.19	50	106838
76 - 81	2 <sup>1</sup> / <sub>2</sub> "	30 x 3.0	M10 x 30	141	114	0.22	25	106847
82 - 87		30 x 3.0	M10 x 30	147	120	0.23	25	106856
88 - 93	3"	30 x 3.0	M10 x 30	153	126	0.25	25	106865
102 - 108		30 x 3.0	M10 x 30	168	141	0.28	25	106874
110 - 116	4"	30 x 3.0	M10 x 30	176	149	0.30	25	106883
124 - 129		30 x 3.0	M10 x 30	189	162	0.32	25	106892
133 - 140		40 x 4.0	M12 x 40	210	178	0.66	10	106908
140 - 148	5"	40 x 4.0	M12 x 40	218	186	0.66	10	115876
149 - 155		40 x 4.0	M12 x 40	225	193	0.72	10	106917
159 - 165		40 x 4.0	M12 x 40	235	203	0.72	10	106926
167 - 173	6"	40 x 4.0	M12 x 40	243	211	0.76	10	106935
176 - 184		40 x 4.0	M16 x 45	271	239	0.83	10	106944
188 - 194		40 x 4.0	M16 x 45	281	249	0.84	10	106953
199 - 205		40 x 4.0	M16 x 45	292	260	0.89	10	106962
207 - 216		40 x 4.0	M16 x 45	303	271	0.36	10	150891
219 - 225	8"	40 x 4.0	M16 x 45	312	280	0.96	10	106971
244 - 250		40 x 4.0	M16 x 45	337	305	1.07	10	107510
267 - 273	10"	40 x 4.0	M16 x 45	359	327	1.13	10	106980
278 - 284		40 x 4.0	M16 x 45	370	338	1.20	10	106999
297 - 303		40 x 4.0	M16 x 45	389	357	1.27	10	107006
316 - 324	324	50 x 5.0	M16 x 60	440	390	2.10	1	103701
348 - 356	356	50 x 5.0	M16 x 60	471	421	2.53	1	103729
360 - 368	368	50 x 5.0	M16 x 60	482	432	2.54	1	103747
399 - 407	407	50 x 5.0	M16 x 60	520	470	2.88	1	103765
411 - 419	419	70 x 6.0	M16 x 60	532	482	4.84	1	103783
500 - 508	508	70 x 6.0	M16 x 60	619	569	5.78	1	103808
513 - 521	521	70 x 6.0	M16 x 60	631	581	5.67	1	103826











#### Stabil D-A

Group: 1239

#### Application

For installation of pipes required for all M&E services in industrial, residential and public buildings. In combination with Triple Thread Connector NT 3G the suspension of pipe clamps up to dia. 303 mm is possible.

#### Scope of delivery

Two parts pipe clamp without clamping bolts and nuts. For suitable clamping bolts, see chapter "Fixings and Fastenings".

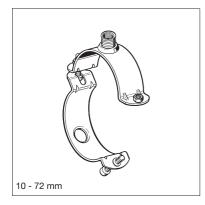
#### **Technical Data**

Size [mm]	Working load (tension)
31 - 72	4,0 kN
76 - 129	5,0 kN
133 - 303	10,0 kN
316 - 521	12,5 kN

#### Material: Steel, electro-galvanised

Size range [mm]	NB	Material W x th [mm]	Recommended clamping bolts	B [mm]	L [mm]	W [kg]	Quantity [pack]	Part number
31 - 35	1"	30 x 2.5	M8 x 20	70.5	52.5	0.09	50	113367
40 - 45	<b>1</b> <sup>1</sup> / <sub>4</sub> "	30 x 2.5	M8 x 20	82	64	0.10	50	113368
48 - 53	<b>1</b> <sup>1</sup> / <sub>2</sub> "	30 x 2.5	M8 x 20	90.5	72.5	0.14	50	113369
54 - 59		30 x 2.5	M8 x 20	101	83	0.16	50	113370
60 - 65	2"	30 x 2.5	M8 x 20	108	90	0.18	50	113371
67 - 72		30 x 2.5	M8 x 20	114	96	0.19	50	113372
76 - 81	$2^{1}/_{2}^{"}$	30 x 3.0	M10 x 30	137	115	0.22	25	113373
82 - 87		30 x 3.0	M10 x 30	143	121	0.23	25	113374
88 - 93	3"	30 x 3.0	M10 x 30	149	127	0.25	25	113375
102 - 108		30 x 3.0	M10 x 30	163	141	0.28	25	113376
110 - 116	4"	30 x 3.0	M10 x 30	171	149	0.30	25	113377
124 - 129		30 x 3.0	M10 x 30	184	162	0.32	25	113378
133 - 140		40 x 4.0	M12 x 40	210	181	0.65	10	113379
140 - 148	5"	40 x 4.0	M12 x 40	218	189	0.66	10	113380
149 - 155		40 x 4.0	M12 x 40	225	196	0.72	10	113381
159 - 165		40 x 4.0	M12 x 40	235	206	0.72	10	113382
167 - 173	6"	40 x 4.0	M12 x 40	243	214	0.76	10	113383
176 - 184		40 x 4.0	M12 x 45	255	226	0.83	10	113384
188 - 194		40 x 4.0	M12 x 45	265	236	0.84	10	113385
199 - 205		40 x 4.0	M12 x 45	276	247	0.89	10	113386
207 - 216		40 x 4.0	M12 x 45	287	258	0.93	10	113387
219 - 225	8"	40 x 4.0	M12 x 45	296	267	0.96	10	113388
244 - 250		40 x 4.0	M12 x 45	321	292	1.02	10	113389
267 - 273	10"	40 x 4.0	M12 x 45	344	315	1.16	10	113390
278 - 284		40 x 4.0	M12 x 45	355	326	1.20	10	113391
297 - 303		40 x 4.0	M12 x 45	374	345	1.27	10	113392
316 - 324	324	50 x 5.0	M16 x 60	440	390	2.10	1	103701
348 - 356	356	50 x 5.0	M16 x 60	471	421	2.53	1	103729
360 - 368	368	50 x 5.0	M16 x 60	482	432	2.54	1	103747
399 - 407	407	50 x 5.0	M16 x 60	520	470	2.88	1	103765
411 - 419	419	70 x 6.0	M16 x 60	532	482	4.84	1	103783
500 - 508	508	70 x 6.0	M16 x 60	619	569	5.78	1	103808
513 - 521	521	70 x 6.0	M16 x 60	631	581	5.67	1	103826





#### Stabil D-3G

Group: 1240

#### Application

For installation of pipes required for all M&E services in industrial, residential and public buildings.

#### Scope of delivery

Sizes 15 to 129 mm are equipped with welded nuts for the clamping bolts. On the joint side, the clamping bolt is pre-assembled; the clamping bolt on the opposite side is mounted into the bore hole and retained by a plastic washer, thus preventing any accidental unscrewing.

For sizes 133 and larger the clamping bolts and the required nuts are supplied in loose form.

With welded in 3G triple thread nut; without sound absorption lining. For further adapter-based connection options via the external thread of the 3G triple thread nut, see product "Adapter AD f/f" (this chapter).

#### **Technical Data**

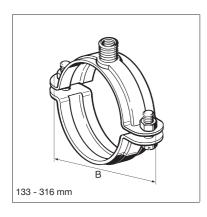
Size [mm]	Working load (tension)
15 - 72	4.0 kN
76 - 129	5.0 kN
133 - 173	8.0 kN
176 - 316	12.5 kN

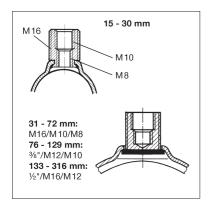
Material: Steel, electro-galvanised

#### Approvals

VdS-Approval No. G4920027, \* = FM Approval (another pipe clamp with FM Approval is: Stabil D-M16)









Size range [mm]	NB	Material W x th [mm]	Thread connection	B [mm]	W [kg]	Quantity [pack]	Part number
15 - 19	<sup>3</sup> / <sub>8</sub> "	25 x 2.0	M16/M10/M8	57	0.07	50	107705
20 - 24	<sup>1</sup> / <sub>2</sub> "	25 x 2.0	M16/M10/M8	62	0.08	50	107714
25 - 30	<sup>3</sup> / <sub>4</sub> "	25 x 2.0	M16/M10/M8	68	0.08	50	107723
31 - 35 *	1"	30 x 2.5	M16/M10/M8	75	0.12	50	107015
40 - 45 *	<b>1</b> <sup>1</sup> / <sub>4</sub> "	30 x 2.5	M16/M10/M8	85	0.13	50	107024
48 - 53 *	<b>1</b> <sup>1</sup> / <sub>2</sub> "	30 x 2.5	M16/M10/M8	93	0.15	50	107033
54 - 59		30 x 2.5	M16/M10/M8	101	0.16	50	107042
60 - 65 *	2"	30 x 2.5	M16/M10/M8	108	0.17	50	107051
67 - 72		30 x 2.5	M16/M10/M8	114	0.18	50	107060
76 - 81 *	2 <sup>1</sup> / <sub>2</sub> "	30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	144	0.28	25	107079
82 - 87		30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	150	0.29	25	107088
88 - 93 *	3"	30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	156	0.31	25	107097
102 - 108		30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	170	0.34	25	107103
110 - 116 *	4"	30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	178	0.36	25	107112
124 - 129		30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	191	0.39	25	107121
133 - 140		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	210	0.74	10	107130
140 - 148 *	5"	40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	218	0.76	10	115885
149 - 155		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	225	0.81	10	107149
159 - 165		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	235	0.82	10	107158
167 - 173 *	6"	40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	243	0.85	10	107167
176 - 184		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	255	0.95	10	107176
188 - 194		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	265	0.98	10	107185
199 - 205		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	276	1.03	10	107194
207 - 216		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	287	1.07	10	148939
219 - 225	8"	40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	296	1.11	10	107200
244 - 250		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	321	1.23	10	107219
267 - 273	10"	40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	344	1.25	10	107228
278 - 284		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	355	1.35	10	107237
297 - 303		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	374	1.42	10	107246
310 - 316		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	387	1.47	10	147600





#### Stabil D-M16

Group: 1232

#### Application

For installation of pipes required for M&E services and in plant construction.

#### Scope of delivery

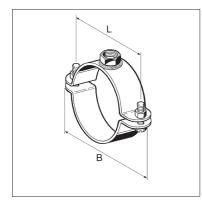
With welded M16 nut; clamping bolts and nuts included in loose form. Other welded nuts (e.g. M20) or inch sockets available on request.

#### **Technical Data**

Material: Steel, electro-galvanised

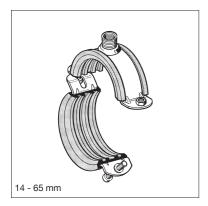
#### Approvals

FM-Approval for DN 218 - 277

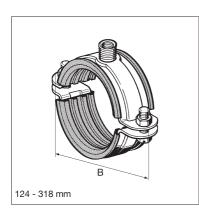


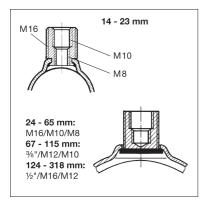
Size range [mm]	Material [mm]	Clamping bolts	B [mm]	L [mm]	W [kg]	Quantity [pack]	Part number
218 - 227	40 x 4	M12 x 40	301	275	1.18	10	118772
271 - 277	40 x 4	M12 x 40	351	325	1.42	10	118198
316 - 326	50 x 5	M16 x 60	440	390	2.60	1	103844
348 - 356	50 x 5	M16 x 60	471	421	2.48	1	103862
360 - 368	50 x 5	M16 x 60	483	431	2.99	1	103871
399 - 407	50 x 5	M16 x 60	520	470	2.95	1	103905
411 - 419	70 x 6	M16 x 60	532	482	5.12	1	103914
500 - 508	70 x 6	M16 x 60	619	569	6.06	1	103941
513 - 521	70 x 6	M16 x 60	631	581	6.34	1	103950





67 - 115 mm





#### Stabil D-3G w/ Lining

Group: 1241

#### Application

For soundproof installation of pipes required for all M&E services in industrial, residential and public buildings.

#### Scope of delivery

Sizes 14 to 115 mm are equipped with welded nuts for the clamping bolts. On the joint side, the clamping bolt is pre-assembled; the clamping bolt on the opposite side is mounted into the bore hole and retained by a plastic washer, thus preventing any accidental unscrewing.

For sizes 124 and larger the clamping bolts and the required nuts are supplied in loose form.

With welded 3G triple thread nut; galvanised; with sound absorption lining. For further adapter-based connection options via the external thread of the 3G triple thread nut, see product "Adapter AD f/f" (this chapter).

#### **Technical Data**

Size [mm]	Working load (tension)	Tightening torque [Nm]
14 - 23	1.8 kN	2
24 - 115	2.0 kN	3
124 - 162	2.9 kN	5
165 - 318	8.0 kN	10

The recommended load is calculated using specific statistical methods relating to break load and is designed to restrict deflection to 1.5 mm or 2 % of the maximum applicable clamping diameter.

#### Perm. load FZ<sub>perm,fi</sub> in case of fire

Size range [mm]	FWD 30 [N]	FWD 60 [N]	FWD 90 [N]	FWD 120 [N]	Deformation δ <sub>max</sub> [mm]	Thread ≥
14 - 23	380	200	140	-	49	M10
24 - 65	500	250	170	120	44	M10
67 - 115	1000	650	500	400	96	M10
124 - 162	2200	1200	850	600	96	M12
165 - 305	2400	1400	1000	850	104	M12

#### Material:

Metal components: Sound absorption lining: Steel, electro-galvanised SBR/EPDM sticked in (black) - (see chapter "Sound Absorption Products")

#### **Approvals**



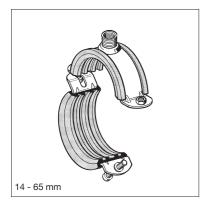
This product has been awared the RAL quality mark "pipe supports" and "fire-tested pipe supports" and is subject to continuous external monitoring according to RAL GZ-655.

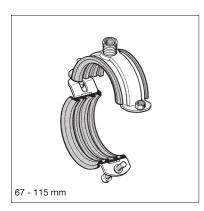
\* = no RAL quality mark

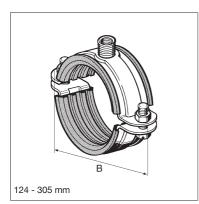


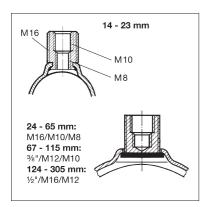
Size range [mm]	NB	Material W x th [mm]	Thread connection	B [mm]	W [kg]	Quantity [pack]	Part number
14 - 18	<sup>3</sup> / <sub>8</sub> "	25 x 2.0	M16/M10/M8	62	0.08	50	107680
19 - 23	<sup>1</sup> / <sub>2</sub> "	25 x 2.0	M16/M10/M8	68	0.09	50	107699
24 - 28	<sup>3</sup> / <sub>4</sub> "	30 x 2.5	M16/M10/M8	75	0.12	50	107255
29 - 33	1"	30 x 2.5	M16/M10/M8	81	0.14	50	107264
33 - 37		30 x 2.5	M16/M10/M8	85	0.15	50	107273
40 - 45	<b>1</b> <sup>1</sup> / <sub>4</sub> "	30 x 2.5	M16/M10/M8	93	0.17	50	107282
47 - 52	<b>1</b> <sup>1</sup> / <sub>2</sub> "	30 x 2.5	M16/M10/M8	104	0.19	50	107291
53 - 58		30 x 2.5	M16/M10/M8	110	0.19	50	107307
60 - 65	2"	30 x 2.5	M16/M10/M8	117	0.21	50	107316
67 - 72		30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	144	0.30	25	107325
73 - 78	2 <sup>1</sup> / <sub>2</sub> "	30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	150	0.31	25	107334
79 - 85		30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	156	0.33	25	107343
88 - 93	3"	30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	164	0.36	25	107352
100 - 106		30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	178	0.39	25	107361
108 - 115	4"	30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	187	0.42	25	107370
124 - 129		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	210	0.89	10	107389
131 - 137		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	218	0.93	10	107398
138 - 144	5"	40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	225	0.96	10	107404
148 - 154		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	235	1.00	10	107413
156 - 162		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	243	1.05	10	107422
165 - 171	6"	40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	255	1.18	10	107431
177 - 183		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	265	1.23	10	107440
188 - 194		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	276	1.25	10	107459
196 - 203		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	287	1.32	10	148911
205 - 214		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	296	1.35	10	148920
219 - 225	8"	40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	307	1.41	10	107468
244 - 250		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	332	1.55	10	107477
267 - 273	10"	40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	355	1.62	10	107486
278 - 284		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	366	1.67	10	112718
299 - 305		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	387	1.80	10	107495
307 - 318 *		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	400	1.95	10	189974











## Stabil D-3G w/ Silicone Lining

Group: 1242

### Application

For soundproof installation of pipes required for all M&E services in industrial, residential and public buildings (as per DIN 4109).

### Scope of delivery

Sizes 14 to 115 mm are equipped with welded nuts for the clamping bolts. On the joint side, the clamping bolt is pre-assembled; the clamping bolt on the opposite side is mounted into the bore hole and retained by a plastic washer, thus preventing any accidental unscrewing.

For sizes 124 mm and larger the clamping bolts and the required nuts are supplied in loose form.

With welded 3G triple thread nut; with silicone sound absorption lining. Sizes  ${}^{3}/_{8}{}^{"}$  and  ${}^{1}/_{2}{}^{"}$ : the silicone lining is only included in the pack, not fitted into the clamps.

For further adapter-based connection options via the external thread of the 3G triple thread, see product "Adapter AD f/f" (this chapter).

### **Technical Data**

Size [mm]	Working load (tension)	Tightening torque [Nm]
14 - 23	1.8 kN	2
24 - 115	2.0 kN	3
124 - 162	2.9 kN	5
165 - 305	8.0 kN	10

The recommended load is calculated using specific statistical methods relating to break load and is designed to restrict deflection to 1.5 mm or 2 % of the maximum applicable clamping diameter.

Material:

Metal components: Sound absorption lining: Steel, electro-galvanised Silicone (see chapter "Sound Absorption Products").

### Approvals

VdS Approval No. G4950064

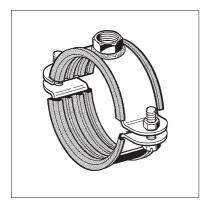


This product has been awarded the RAL quality marks "pipe supports" and "fire-tested pipe supports" and is subject to continuous external monitoring according to RAL GZ-655.



Size range [mm]	NB	Material W x th [mm]	Thread connection	B [mm]	W [kg]	Quantity [pack]	Part number
14 - 18	<sup>3</sup> / <sub>8</sub> "	25 x 2.0	M16/M10/M8	62	0.08	50	108070
19 - 23	<sup>1</sup> / <sub>2</sub> "	25 x 2.0	M16/M10/M8	68	0.09	50	108089
24 - 28	<sup>3</sup> / <sub>4</sub> "	30 x 2.5	M16/M10/M8	75	0.13	50	108098
29 - 33	1 "	30 x 2.5	M16/M10/M8	81	0.14	50	108104
33 - 37		30 x 2.5	M16/M10/M8	85	0.15	50	108113
40 - 45	<b>1</b> <sup>1</sup> / <sub>4</sub> "	30 x 2.5	M16/M10/M8	93	0.16	50	108122
47 - 52	<b>1</b> <sup>1</sup> / <sub>2</sub> "	30 x 2.5	M16/M10/M8	104	0.19	50	108131
53 - 58		30 x 2.5	M16/M10/M8	110	0.20	50	108140
60 - 65	2"	30 x 2.5	M16/M10/M8	117	0.21	50	108159
67 - 72		30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	144	0.31	25	108168
73 - 78	2 <sup>1</sup> / <sub>2</sub> "	30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	150	0.33	25	108177
79 - 85		30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	156	0.32	25	108186
88 - 93	3"	30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	164	0.37	25	108195
100 - 106		30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	178	0.40	25	108201
108 - 115	4"	30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	187	0.43	25	108210
124 - 129		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	210	0.87	10	108229
131 - 137		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	218	0.91	10	108238
138 - 144	5"	40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	225	0.94	10	108274
148 - 154		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	235	1.00	10	108283
156 - 162		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	243	1.05	10	108292
165 - 171	6"	40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	255	1.14	10	108308
177 - 183		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	265	1.18	10	108317
188 - 194		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	276	1.23	10	108326
196 - 203		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	287	1.30	10	154947
205 - 214		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	296	1.40	10	149879
219 - 225	8"	40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	307	1.40	10	108335
244 - 250		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	332	1.51	10	108344
267 - 273	10"	40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	355	1.71	10	108353
299 - 305		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	387	1.79	10	108362





# Stabil D-M16 w/ Lining

Group: 1213

### Application

For soundproof installation of pipes in M&E services and plant construction.

### Scope of delivery

With sound absorption lining; with welded on M16 nut; clamping bolts and nuts included in loose form. Other welded nuts (e.g. M20) or inch sockets available on request.

### **Technical Data**

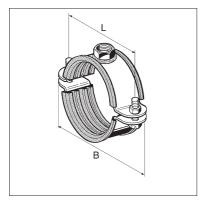
Size range [mm]	Max. adm. load (tension)	Tightening torque [Nm]
315 - 407	9 kN	20
410 - 521	15 kN	20

The max. admissible load has been determined by using statistical methods resulting from the breaking loads, observing a max. admissible deformation of 1.5 mm resp. 2 % of the max. tensible pipe dia.

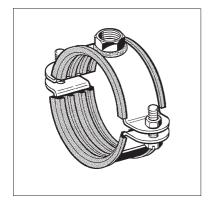
Material: Metal components: Sound absorption lining:

Steel, electro-galvanised SBR/EPDM (black) - (see chapter "Sound Absorption Products")

Size range [mm]	Material [mm]	Clamping bolts	B [mm]	L [mm]	W [kg]	Quantity [pack]	Part number
315 - 326	50 x 5	M16 x 60	454	404	3.10	1	103987
345 - 356	50 x 5	M16 x 60	482	432	3.13	1	103996
359 - 368	50 x 5	M16 x 60	496	446	3.57	1	104003
398 - 407	50 x 5	M16 x 60	534	484	3.66	1	104012
410 - 419	70 x 6	M16 x 60	546	496	5.95	1	104021
498 - 508	70 x 6	M16 x 60	631	581	6.97	1	104030
512 - 521	70 x 6	M16 x 60	645	595	7.43	1	104049







# Stabil D-M16 w/ Silicone Lining

Group: 1214

### Application

For soundproof installation of pipes in M&E services and plant construction (as per DIN 4109).

### Scope of delivery

With silicone sound absorption lining (red); with welded on M16 nut; clamping bolts and nuts included in loose form. Other welded nuts (e.g. M20) or inch sockets available on request.

### **Technical Data**

Size range	Max. adm.	Tightening torque		
[mm]	load tension)	[Nm]		
315 - 407	9 kN	20		
410 - 521	15 kN	20		

The max. admissible load has been determined by using statistical methods resulting from the breaking loads, observing a max. admissible deformation of 1.5 mm resp. 2 % of the max. tensible pipe dia.

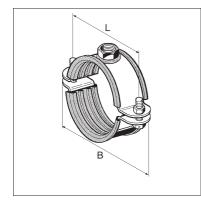
## Material:

Metal components: Sound absorption lining: Steel, electro-galvanised Silicone (see chapter "Sound Absorption Products")

### Approvals

VdS Approval No. G4920027, FM Approval

Size range [mm]	Material [mm]	Clamping bolts	B [mm]	L [mm]	W [kg]	Quantity [pack]	Part number
315 - 324	50 x 5	M16 x 60	454	404	3.08	1	146007
345 - 356	50 x 5	M16 x 60	482	432	3.13	1	146016
359 - 368	50 x 5	M16 x 60	496	446	3.57	1	146025
398 - 407	50 x 5	M16 x 60	534	484	3.66	1	146034







# **Countersink Screw SCR**

Group: 1333

### Application

Connection element for Stabil D-3G Pipe Clamps sizes 3/8" up to 3/4" (with sound absorption lining up to 1/2") for suspending pipe clamps underneath one another.

### **Technical Data**

Material: Steel, electro-galvanised

Туре	W	Quantity	Part
	[kg]	[pack]	number
M8 x 20	0.01	100	114097



# **Triple-Thread Connector NT 3G**

Group: 1333

### Application

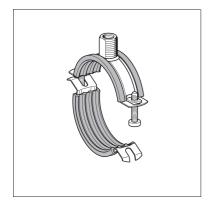
Connecting element for Sikla Stabil D-3G Pipe Clamps larger than 31 mm (with sound absorption lining larger than 24 mm) and Stabil D-A up to 303 mm for suspending pipe clamps underneath one another.

### **Technical Data**

Material: Steel, electro-galvanised

Туре	W	Quantity	Part
	[kg]	[pack]	number
M16/M10/M8	0.02	50	146326





# Ratio S

Group: 1231

### Application

Suitable for installing pipe systems required for all M&E services. For connection options without adapter, see drawing. With Adapter: M12, M16, R  $^{1}/_{2}$ ", R  $^{3}/_{4}$ ", R 1".

Designed for soundproof ceiling, floor and wall mounting.

With sticked interlocking lining, which prevents from accidental loss of lining and allows easy turning and slipping of the pipe during assembly.

### Scope of delivery

Two-piece pipe clamp pre-assembled on one side. With patented quick-set clip on its open side. With 3G triple thread nut. Sizes 1/4" - 1" also available with 2G nut as per drawing.

### **Technical Data**

Size [mm]	Max. perm. working load (tension)	Tightening torque [Nm]
12 - 35	1.0 kN	2
38 - 90	1.5 kN	2
108 - 170	2.2 kN	3

The recommended load is calculated using specific statistical methods relating to break load and is designed to restrict deflection to 1.5 mm or 2 % of the maximum applicable clamping diameter.

Perm. load FZ<sub>perm,fi</sub> in case of fire

Size range [mm]	FWD 30 [N]	FWD 60 [N]	FWD 90 [N]	FWD 120 [N]	Deformation δ <sub>max</sub> [mm]	Thread ≥
12 - 35	270	80	20	-	42	M10
38 - 80	450	140	70	40	41	M10
83 - 90	460	170	80	30	45	M10
108 - 170	570	310	200	150	62	M10

### Material:

Clamp: Sound absorption lining:

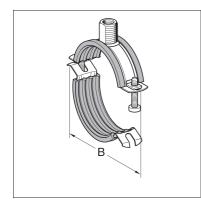
Sound Absorption:

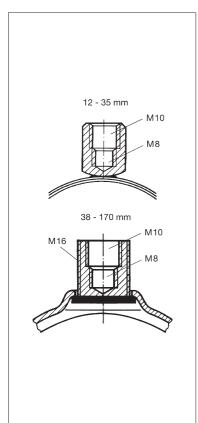
Cold-worked steel, electro-galvanised SBR/EPDM, black (see chapter "Sound Absorption Products") up to 18 dB(A)

### Approvals



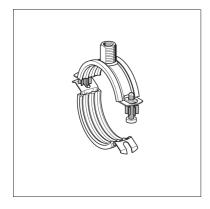
This product has been awarded the RAL quality marks "pipe supports" and "fire-tested pipe supports" and is subject to continuous external monitoring according to RAL GZ-655.





Size range [mm]	NB	Material [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
12 - 20	<sup>1</sup> / <sub>4</sub> " - <sup>3</sup> / <sub>8</sub> "	20 x 1.5	55	0.06	100	154804
21 - 27	<sup>1</sup> / <sub>2</sub> " - <sup>3</sup> / <sub>4</sub> "	20 x 1.5	61	0.07	100	154813
28 - 35	1"	20 x 1.5	71	0.07	100	154822
38 - 45	<b>1</b> <sup>1</sup> / <sub>4</sub> "	20 x 1.5	82	0.09	50	154831
48 - 56	1 <sup>1</sup> / <sub>2</sub> "	20 x 1.5	93	0.09	50	154840
57 - 63	2"	20 x 1.5	104	0.11	50	154859
64 - 71		20 x 1.5	112	0.12	25	154868
73 - 80	2 <sup>1</sup> / <sub>2</sub> "	20 x 1.5	121	0.13	25	154877
83 - 90	3"	25 x 2.0	141	0.22	25	154886
108 - 114	4"	30 x 2.0	170	0.33	25	154895
116 - 125		30 x 2.0	179	0.36	25	154901
127 - 135		30 x 2.0	190	0.38	25	154910
140 - 146	5"	30 x 2.0	205	0.40	25	154929
159 - 170	6"	30 x 2.0	230	0.46	25	154938







Group: 1235

### Application

Two-piece clamp with quick-set clip and special lining for installing coated and uncoated plastic pipes of DIN and ANSI standard. No diffusion of plasticisers from the lining material into the plastic pipe. For ceiling, floor and wall mounting. Connections without adapter: M8, M10. Connections with Adapter (see this chapter): M12, M16, R  $^{1}/_{2}$ ", R  $^{3}/_{4}$ " and R 1".

Up to size 110 equipped with spacers which allow sliding. To stop sliding, the spacers can be detached. For sliding installations from 4" on, we recommend the use of Pipe Clamp Stabil D-3G with Slide Set or Slide Element.

### Scope of delivery

Two-piece pipe clamp pre-assembled on one side. With patented quick-set clip on its open side.

Sizes 40 and larger have a 3G triple thread nut which is inserted and welded. Up to size 110 supplied with spacers.

### **Technical Data**

Size [mm]	Max. perm. working load (tension)	
16 - 75	0.65 kN	
90	1.00 kN	
110	1.20 kN	

The recommended load is calculated using specific statistical methods relating to break load and is designed to restrict deflection to 1.5 mm or 2 % of the maximum applicable clamping diameter.

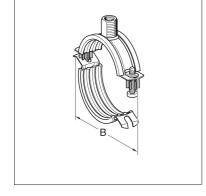
Materia	
Clamp:	

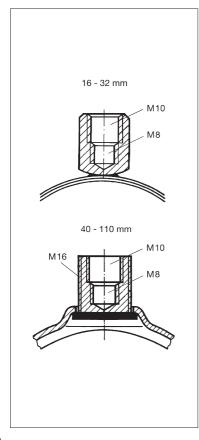
Spacers:

Cold-worked steel, electro-galvanised, Polypropylene (PP)

Lining:

Enning.	
Rubber Profile:	SBR/EPDM, beige
Temperature range:	-50°C up to +110°C
Hardness:	55+ / -5° Shore
Fire resistance:	Material Category B2 (DIN 4102), non-dripping
Tear strength:	600 N/cm <sup>2</sup>
Breaking elongation:	450 %
Impact absorption:	45 %
Durability:	Weatherproof, ageing and ozone- resistant (DIN 53508 and DIN 53509)

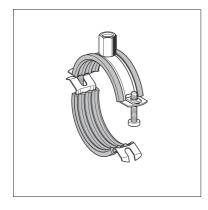






Plastic pipe OD [mm]	Material W x th [mm]	Thread connection	B [mm]	W [kg]	Quantity [pack]	Part number
16	20 x 1.5	M10/M8	55	0.06	100	148771
20	20 x 1.5	M10/M8	61	0.07	100	148780
25	20 x 1.5	M10/M8	61	0.07	100	148799
32	20 x 1.5	M10/M8	71	0.07	100	148805
40	20 x 1.5	M16/M10/M8	82	0.09	50	148814
50	20 x 1.5	M16/M10/M8	93	0.10	50	148823
56	20 x 1.5	M16/M10/M8	104	0.11	50	148832
63	20 x 1.5	M16/M10/M8	112	0.11	50	148841
75	20 x 1.5	M16/M10/M8	121	0.13	25	148850
90	25 x 2.0	M16/M10/M8	141	0.22	25	155993
110	30 x 2.0	M16/M10/M8	170	0.33	25	156000
160	30 x 2.0	M16/M10/M8	230	0.42	25	167509
21.3	20 x 1.5	M10/M8	61	0.06	100	167369
26.7	20 x 1.5	M10/M8	61	0.06	100	167378
33.4	20 x 1.5	M10/M8	71	0.07	100	167387
42.2	20 x 1.5	M16/M10/M8	82	0.08	50	167396
48.3	20 x 1.5	M16/M10/M8	93	0.09	50	167402
60.3	20 x 1.5	M16/M10/M8	112	0.12	50	166915
73.0	20 x 1.5	M16/M10/M8	121	0.13	25	166924
88.9	20 x 1.5	M16/M10/M8	114	0.21	25	166933
114.3	25 x 2.0	M16/M10/M8	170	0.31	25	166942
168.3	30 x 2.0	M16/M10/M8	230	0.42	25	167411





# Ratio LS

Group: 1245

### Application

Two-piece pipe clamp with double threaded nut (M8/M10) for installing pipe systems for M&E services. For soundproof ceiling, floor and wall installations. With time-saving quick-set clip.

From 4" on, or when higher static loads occur, or under reversed bending stress, we recommend the use of a Stabil Pipe Clamp with lining.

### Installation

After pressing together both parts of the clamp, the clamping bolt head must be located behind the angled profiles; then tighten clamping bolt (2 Nm).

### **Technical Data**

Size [mm]	Max. perm. working load (tension)
12 - 84	0.60 kN
83 - 90	0.95 kN
108 - 114	1.15 kN

The recommended load is calculated using specific statistical methods relating to break load and is designed to restrict deflection to 1.5 mm or 2 % of the maximum applicable clamping diameter.

### Perm. load $FZ_{perm, fi}$ in case of fire

Size range [mm]	FWD 30 [N]	FWD 60 [N]	FWD 90 [N]	FWD 120 [N]	Deformation δ <sub>max</sub> [mm]	Thread ≥
12 - 84	270	120	70	40	35	M10
83 - 90	300	110	80	30	45	M10
108 - 114	510	260	170	130	46	M10

### Material:

Clamp: Spring element: Sound absorption lining: Steel, electro-galvanised Spring steel SBR/EPDM (black) (see chapter "Sound Absorption Products") Up to 17 dB(A)

Sound absorption:

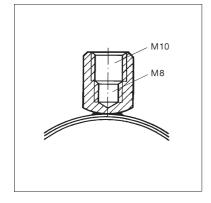
### Approvals



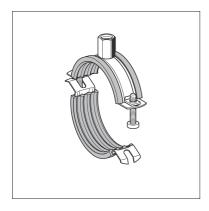
This product has been awarded the RAL quality marks "pipe supports" and "fire-tested pipe supports" and is subject to continuous external monitoring according to RAL GZ-655.

\* = no RAL quality mark "fire-tested pipe supports"

Size range [mm]	NB	Thread connections	W [kg]	Quantity [pack]	Part number
12 - 20	$^{1}/_{4}^{"} - ^{3}/_{8}^{"}$	20 x 1.5	0.05	100	157418
21 - 27	<sup>1</sup> / <sub>2</sub> " - <sup>3</sup> / <sub>4</sub> "	20 x 1.5	0.06	100	157427
28 - 35	1"	20 x 1.5	0.07	100	157436
38 - 45	<b>1</b> <sup>1</sup> / <sub>4</sub> "	20 x 1.5	0.09	50	157445
48 - 56	1 <sup>1</sup> / <sub>2</sub> "	20 x 1.5	0.09	50	157454
57 - 63	2"	20 x 1.5	0.10	50	157463
64 - 71		20 x 1.5	0.12	25	157472
74 - 84	2 <sup>1</sup> / <sub>2</sub> "	20 x 1.5	0.12	25	157481
83 - 90 *	3"	20 x 2.0	0.16	25	157490
108 - 114	4"	25 x 2.0	0.26	25	157506







# **Ratio LS Silicone**

Group: 1244

### Application

Two-piece pipe clamp with double thread nut (M8/M10) for installing pipe systems for M&E services. Suitable for soundproof installation of pipes made of plastic, copper, steel (also stainless steel), mainly for high temperatures. With a time-saving quick-set clip.

From 3" on, or when higher static loads occur, or under reversed bending stress, we recommend the use of a Stabil pipe clamp with silicone lining.

### Installation

After pressing together both parts of the clamp, the clamping bolt head must be located behind the angled profiles; then tighten clamping bolt (2 Nm).

### **Technical Data**

Size [mm]	Max. perm.		
	working load (tension)		
12 - 84	0.60 kN		
83 - 90	0.95 kN		

The recommended load is calculated using specific statistical methods relating to break load and is designed to restrict deflection to 1.5 mm or 2 % of the maximum applicable clamping diameter.

Material:	
Clamp:	Ste
Spring element:	Spr
Sound absorption lining:	Silio
	_

Steel, electro-galvanised Spring steel Silicone red (see chapter "Sound Absorption Products") Up to 16 dB(A)

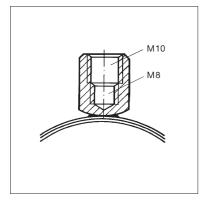
Approvals

Sound absorption:



This product has been awarded the RAL quality marks "pipe supports" and "fire-tested pipe supports" and is subject to continuous external monitoring according to RAL GZ-655.

Size range	For Pipes	Thread	W	Quantity	Part
[mm]	acc. to DIN 2440	connections	[kg]	[pack]	number
12 - 20	$^{1}/_{4}^{"} - ^{3}/_{8}^{"}$	20 x 1.5	0.05	100	166401
21 - 27	<sup>1</sup> / <sub>2</sub> "- <sup>3</sup> / <sub>4</sub> "	20 x 1.5	0.06	100	166410
28 - 35	1"	20 x 1.5	0.07	100	166429
38 - 45	<b>1</b> <sup>1</sup> / <sub>4</sub> "	20 x 1.5	0.08	50	166438
48 - 56	<b>1</b> <sup>1</sup> / <sub>2</sub> "	20 x 1.5	0.09	50	166447
57 - 63	2"	20 x 1.5	0.10	50	166456
64 - 71		20 x 1.5	0.11	25	166465
74 - 84	2 <sup>1</sup> / <sub>2</sub> "	20 x 1.5	0.12	25	166474
83 - 90	3"	20 x 2.0	0.15	25	166483







# Ratio S M8

Group: 1234

### Application

One-piece pipe clamp with thread connection M8 for pipes for M&E services. For soundproof wall, floor and ceiling installation (as per DIN 4109).

With time-saving quick-set clip.

### Installation

After pressing together both parts of the clamp, the clamping bolt head must be located behind the angled profiles; then tighten clamping bolt (2 Nm).

### **Technical Data**

Max. perm. working load (tension)\* 0.37 kN Material: Clamp: Steel (20 mm x 1.0 mm), elec galvanised

Sound absorption lining:

Steel (20 mm x 1.0 mm), electrogalvanised SBR/EPDM, black (see chapter "Sound Absoprtion Products"). Sound absorption up to 17 dB(A)

\* The recommended load is calculated using specific statistical methods relating to break load and is designed to restrict deflection to 1.5 mm or 2 % of the maximum applicable clamping diameter.

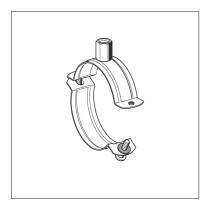
### Approvals



This product has been awarded the RAL quality mark "pipe supports" and is subject to continuous external monitoring according to RAL GZ-655.

Size range [mm]	NB	W [kg]	Quantity [pack]	Part number
10 - 12	10/12 mm	0.03	100	166669
13 - 16	15 mm	0.03	100	157339
17 - 19	<sup>3</sup> / <sub>8</sub> "	0.03	100	157366
20 - 24	<sup>1</sup> / <sub>2</sub> "	0.04	100	157348
25 - 30	<sup>3</sup> / <sub>4</sub> "	0.04	100	157357
31 - 38	1"	0.05	100	157320
40 - 46	<b>1</b> <sup>1</sup> / <sub>4</sub> "	0.05	50	157311
48 - 51	<b>1</b> <sup>1</sup> / <sub>2</sub> "	0.06	50	157302
58 - 63	2"	0.06	50	191864





# **Duo Clamp SRS**

Group: 1223

### Application

Two-piece pipe clamp with double thread connection (M8/M10) for the installation of pipelines.

### Scope of delivery

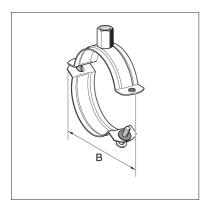
Supplied with two bolts partially mounted on one side and therefore ready for immediate installation. The clamping bolt on the open side is retained by a plastic washer, thus preventing any accidental unscrewing.

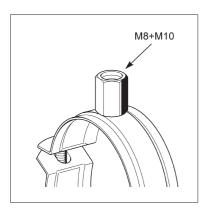
### **Technical Data**

Size [mm]	Max. adm. load (tension)	Tightening torque [Nm]
13 - 73	0.6 kN	2
75 - 167	2.5 kN	2

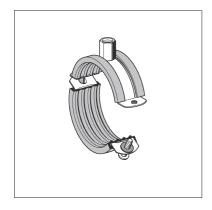
Material: Steel, electro-galvanised

Size range [mm]	Material W x th [mm]	W [kg]	Quantity [pack]	Part number
13 - 18	20 x 1.5	0.04	100	173216
19 - 22	20 x 1.5	0.05	100	173225
23 - 26	20 x 1 .5	0.05	100	111470
27 - 30	20 x 1.5	0.05	100	173234
32 - 36	20 x 1.5	0.05	100	173243
40 - 44	20 x 1.5	0.06	50	173252
48 - 54	20 x 1.5	0.07	50	173261
55 - 59	20 x 1.5	0.08	50	182990
60 - 66	20 x 1.5	0.08	50	173279
68 - 73	20 x 1.5	0.09	25	173288
75 - 80	25 x 2.0	0.15	25	173297
84 - 89	25 x 2.0	0.16	25	173306
90 - 98	25 x 2.0	0.16	25	186023
94 - 101	25 x 2.0	0.17	25	186032
102 - 108	25 x 2.0	0.18	25	173315
110 - 115	25 x 2.0	0.18	25	173324
118 - 125	25 x 2.5	0.24	25	186041
129 - 136	25 x 2.5	0.26	25	191387
138 - 144	25 x 2.5	0.27	25	191396
144 - 153	25 x 2.5	0.29	25	191405
159 - 167	25 x 2.5	0.30	25	191414









# **Duo Clamp SRS with Lining**

Group: 1225

### Application

Two-piece pipe clamp with double thread connection (M8/M10) and sound absorption lining for the installation of pipelines. Applicable for sound-absorbed installations according to DIN 4109 specifications.

### Scope of delivery

Supplied with two bolts partially mounted on one side and therefore ready for immediate installation. The clamping bolt on the open side is retained by a plastic washer, thus preventing any accidental unscrewing.

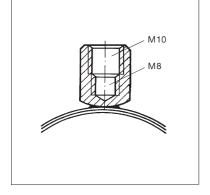
### **Technical Data**

Size [mm]	Working load (tension)	Tightening torque [Nm]
12 - 64	0.6 kN	2
67 - 219	2.5 kN	2

### Material:

Clamp: Sound absorption lining: Steel, electro-galvanised SBR/EPDM (black)

Size range [mm]	NB	Material W x th [mm]	W [kg]	Quantity [pack]	Part number
12 - 15	<sup>1</sup> / <sub>4</sub> "	20 x 1.5	0.05	100	159368
15 - 19	<sup>3</sup> / <sub>8</sub> "	20 x 1.5	0.05	100	159377
20 - 23	1/2"	20 x 1.5	0.06	100	159386
25 - 28	<sup>3</sup> / <sub>4</sub> "	20 x 1.5	0.06	100	159395
32 - 35	1"	20 x 1.5	0.07	100	159401
40 - 45	<b>1</b> <sup>1</sup> / <sub>4</sub> "	20 x 1.5	0.09	50	159614
48 - 52	<b>1</b> <sup>1</sup> / <sub>2</sub> "	20 x 1.5	0.09	50	159623
52 - 58		20 x 1.5	0.10	50	179003
60 - 64	2"	20 x 1.5	0.11	50	159632
67 - 72		25 x 2.0	0.19	25	179012
73 - 80	2 <sup>1</sup> / <sub>2</sub> "	25 x 2.0	0.20	25	159641
81 - 87		25 x 2.0	0.21	25	192665
86 - 91	3"	25 x 2.0	0.21	25	159650
102 - 108		25 x 2.0	0.25	25	179021
110 - 115	4"	25 x 2.5	0.30	25	159669
120 - 128		25 x 2.5	0.34	25	191459
135 - 143		25 x 2.5	0.37	25	191477
149 - 161		25 x 2.5	0.39	25	191486
162 - 170		25 x 2.5	0.40	25	191468
198 - 207		25 x 2.5	0.48	25	191495
207 - 219		25 x 2.5	0.52	25	191504







# Stabil RB-A

Group: 1260

### Application

For particularly high static requirements in plant construction. Design similar to DIN 3567. The perforations on both sides allow the application of standardised bolts and threaded rods out of the Sikla product range.

If fixed on both sides by threaded rods M12 or M16 or threaded tubes, we recommend the application of the Support Cone SMD 1. In addition to be applied for the design of Fixed Points or Sliding Supports by welding to T-Sections.

### Scope of delivery

Two-piece pipe clamp delivered without bolts. For suitable bolts, please see chapter "Fixings and Fastenings".

### **Technical Data**

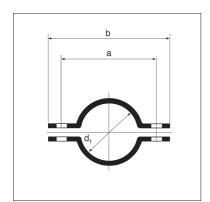
Admissible load valid with fixation on both sides

Size range [mm]	max. adm. load (tension) [kN]	Tightening torque [Nm]
13 - 49	11.0	20
57 - 89	15.5	40
90 - 169	22.0	40
188 - 610	42.0	100

The max. permissible load capacity of the connected parts (e.g. anchors) shall be considered.

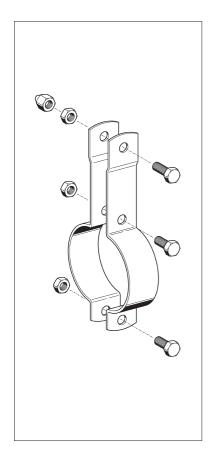
The max. adm. load capacity is determined by the application of statistical methods resulting from the breaking loads, under observance of a max. adm. deformation of 1.5 mm resp. 2% of the max. stretchable pipe dia.

Material: Steel, surface black



Size d₁ [mm]	Size range [mm]	Material W x th [mm]	Recommended clamping bolts	a [mm]	b [mm]	W [kg]	Quantity [pack]	Par numbe
18	13 - 18	30 x 5.0	M10 x 40	54	83	0.17	25	110309
22	17 - 22	30 x 5.0	M10 x 40	56	85	0.18	25	110310
27	23 - 27	30 x 5.0	M10 x 40	63	92	0.20	25	110312
34	30 - 34	30 x 5.0	M10 x 40	71	100	0.22	25	110403
38	34 - 38	30 x 5.0	M10 x 40	76	105	0.24	25	110314
44	40 - 44	30 x 5.0	M10 x 40	83	112	0.26	25	110404
49	45 - 49	30 x 5.0	M10 x 40	88	117	0.28	25	110316
61	57 - 61	40 x 5.0	M12 x 40	106	139	0.42	25	110319
70	66 - 70	40 x 5.0	M12 x 40	116	149	0.46	25	110320
77	73 - 77	40 x 5.0	M12 x 40	123	156	0.53	25	110321
89	85 - 89	40 x 5.0	M12 x 40	135	168	0.52	25	110322
104	90 - 104	50 x 5.0	M12 x 60	146	179	0.75	10	110323
109	103 - 109	50 x 5.0	M12 x 60	155	188	0.83	10	110324
115	109 - 115	50 x 5.0	M12 x 60	161	194	0.87	10	110325
133	119 - 133	50 x 5.0	M12 x 60	176	209	0.92	10	110327
140	134 - 140	50 x 5.0	M12 x 60	187	220	1.01	10	110328
162	156 - 162	50 x 5.0	M12 x 60	209	242	1.15	10	111733
169	163 - 169	50 x 5.0	M12 x 60	216	249	1.18	10	110330
194	188 - 194	50 x 8.0	M12 x 60	252	285	2.17	1	110332
220	214 - 220	50 x 8.0	M12 x 60	279	312	2.39	1	110335
254	248 - 254	50 x 8.0	M16 x 60	320	363	2.81	1	110336
267	261 - 267	50 x 8.0	M16 x 60	333	376	2.94	1	110337
273	265 - 273	60 x 8.0	M16 x 60	339	382	3.56	1	110338
324	316 - 324	60 x 8.0	M16 x 60	390	433	4.12	1	110341
356	350 - 356	60 x 8.0	M16 x 60	422	465	4.36	1	110342
368	360 - 368	60 x 8.0	M16 x 60	434	477	4.67	1	110343
407	402 - 407	70 x 8.0	M16 x 60	473	516	5.94	1	110344
419	412 - 419	70 x 8.0	M16 x 60	485	528	6.32	1	110345
457	450 - 457	70 x 8.0	M16 x 60	523	566	6.87	1	110346
508	501 - 508	70 x 8.0	M16 x 60	575	618	7.32	1	110347
521	512 - 521	70 x 8.0	M16 x 60	588	631	7.86	1	110348
535	529 - 535	70 x 8.0	M16 x 60	602	645	7.93	1	110442
610	603 - 610	70 x 8.0	M16 x 60	677	720	8.79	1	110443





# Stabil Type C Group: 1243

### Application

Pipe clamp for use in plant construction, based on the DIN 3567 Type C standard for suspension elements. The cross-sections are in line with the requirements of the VdS.

### Scope of delivery

With bolts and nuts pre-mounted: M10, class 8.8.

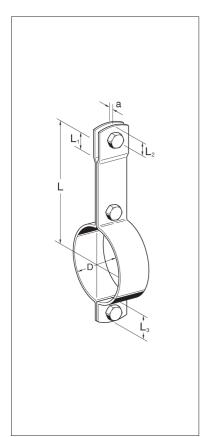
### **Technical Data**

Material: Steel, electro-galvanised

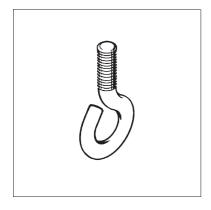
DN	Working load (tension)
15 - 32	10 kN
40 - 200	15 kN

DN	D [mm]	Material [mm]	L [mm]	a [mm]	L₁ [mm]	L₂ [mm]	L₃ [mm]
15	22	25 x 3	81	7	22	17	25
20	27	25 x 3	84	7	22	17	25
25	34	25 x 3	87	7	22	17	25
32	43	25 x 3	92	7	22	17	25
40	50	40 x 3	95	7	22	17	25
50	62	40 x 3	111	7	22	17	25
65	78	40 x 3	134	7	22	17	25
80	91	40 x 3	156	7	22	17	30
100	116	40 x 4	188	7	22	17	30
125	148	40 x 4	204	7	22	17	30
150	173	40 x 4	217	7	22	17	30
200	225	40 x 4	243	7	22	17	30

NB	OD of pipe	W	Quantity	Part
	[mm]	[kg]	[pack]	number
15	21.3	0.27	50	156523
20	26.9	0.30	50	156532
25	33.7	0.31	50	156541
32	42.4	0.30	50	156550
40	48.3	0.44	25	152404
50	60.3	0.51	25	152413
65	76.1	0.56	25	152422
80	88.9	0.65	25	152431
100	114.3	0.78	10	152440
125	139.7	1.08	10	152459
150	168.3	1.18	10	152468
200	219.1	1.39	10	152477







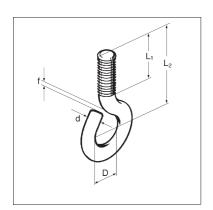
# Ring Bolt SCR Group: 1305

Application For suspension elements in conjunction with Pipe Clamp Stabil Type C.

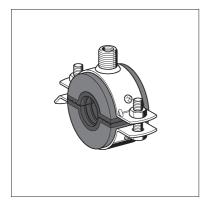
### **Technical Data**

Working load (tension):	15 kN Load figure applies to closed and welded conditions only.						
Material:	Steel, black, open						
Type D c	$L_2$ $L_1$ f W Quantity						

Туре	D	d	L <sub>2</sub>	L <sub>1</sub>	f	W	Quantity	Part
	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]	[pack]	number
M12 x 40	30	10	75	40	10	0.15	50	152981
M16 x 40	30	14	79	40	10	0.24	25	152972
				1				









Group: 1250

### Application

Used for cold-water pipeline systems and refrigeration installations. Fixation of pipe lines degenerated from sound and vibration. First class sound absorption by means of soft foam. One size covers several pipe dimensions. Permissible pipe dia. tolerances are securely adjusted by the elastomer part which also prevents from condensation which may occur due to slots. No sealant is needed - the smooth adhesion of the pipe insulation at the front surface is possible. Suitable also for heavy loads.

### Scope of delivery

The insulation insert is firmly integrated in the Stabil Clamp. With inserted and welded 3G triple thread nut, up to size 70 - 75 with joint.

Retaining and clamping bolts are inserted on both sides of the lower part and cannot fall out due to a plastic washer. The nuts for the retaining bolts are welded to the other clamp part up to size 168 - 172.

Multifaceted connection options via the external thread of the 3G triple thread nut with Adapter AD f/f.

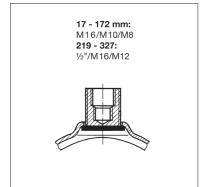
## **Technical Data**

Fire resistance:

Material: Insulating component: Pipe clamp:	Polyurethane (PUR) foam sp.gr. 250 kg/m <sup>3</sup> Steel, galvanised
Compression strength:	0.7 N/mm <sup>2</sup> (for static loads)
Diffusion resistance:	The closed-cell structure of the PUR serves as a
	durable barrier, which develops through the total
	thickness of the insulation
Thermal conductivity:	λ = 0.042 W/mK at 10°C
	λ = 0.043 W/mK at 20°C
	λ = 0.044 W/mK at 30°C
	λ = 0.045 W/mK at 40°C
Temperature range:	From -50°C up to +110°C, short-term excess
	temperature permissible
Insulation insert:	Up to 25.3 dB(A)
	Up to 26.3 dB(A) for system testing

Material Category B2 (DIN 4102) no fire transmission

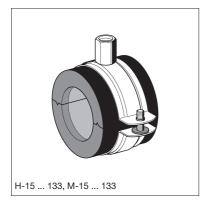
В





Туре	NB	Ins. insert b x s [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
17 - 22	<sup>3</sup> / <sub>8</sub> " - <sup>1</sup> / <sub>2</sub> "	40 x 20	104	0.20	50	191207
23 - 26		40 x 20	111	0.20	50	194980
27 - 32	<sup>3</sup> / <sub>4</sub> "	40 x 20	111	0.20	50	191216
33 - 38	1"	40 x 20	117	0.20	50	191225
38 - 42		40 x 20	169	0.43	25	194997
42 - 47	<b>1</b> <sup>1</sup> / <sub>4</sub> "	40 x 30	169	0.45	25	191234
48 - 54	<b>1</b> <sup>1</sup> / <sub>2</sub> "	40 x 30	169	0.45	25	191243
57 - 62	2"	50 x 30	190	0.55	25	191252
63 - 68		50 x 30	190	0.55	25	195000
70 - 75		50 x 30	190	0.55	25	191261
76 - 81	2 <sup>1</sup> / <sub>2</sub> "	50 x 30	207	0.90	25	191279
89 - 94	3"	50 x 30	222	1.00	25	191288
107 - 112		60 x 40	263	1.30	10	191297
113 - 117	4"	60 x 40	273	1.43	10	191306
125 - 128		60 x 40	301	1.45	10	195048
133 - 137		60 x 40	295	1.49	10	191315
138 - 142	5"	60 x 40	295	1.53	10	191324
157 - 161		60 x 40	329	1.65	10	191333
168 - 172	6"	60 x 40	329	1.70	10	191342
219 - 222	8"	100 x 60	428	3.93	1	191351
272 - 275	10"	100 x 60	481	4.48	1	191369
324 - 327		100 x 60	534	5.18	1	191378





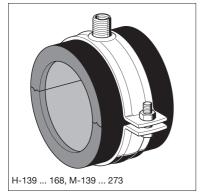


### Application

Suitable for secure prevention of condensation water at the pipe support location of refrigeration and cold-water pipelines. An optimal diffusion-tight connection with the pipe insulation is easily and safely achieved by fixing usual insulation materials to the clamp faces using adhesive. Recommended up to  $-0^{\circ}$ C at normal ambient condition.

### Scope of delivery

Consisting of pipe clamp and insulation insert. The one-piece insulation insert comprising two joined PUR elements forms a comprehensive connection between PUR element and pipe clamp all around the pipe. The outer edges of the PUR elements are equipped with elastomer foam and coated by a black PVC foil.



Туре	Nominal thickness of the insulation [mm]	Size	Length of PUR element b [mm]
LKS H	13	15 - 89	50
		102 - 168	100
LKS M	19	15 - 89	50
		102 - 273	100

### **Technical Data**

The unsupported lengths as listed in DIN 1988 may be applied for types LKS H and LKS M 15 to 168.

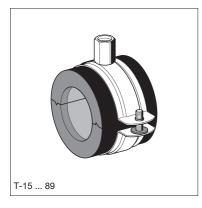
Clamp material: Insulation insert: PUR core: Thermal conductivity:

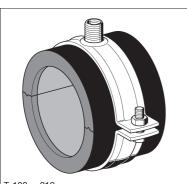
Steam diffusion resistance factor: Fire resistance: Temperature range: Insulation insert: Storage temperature: Storage period: Steel, electro-galvanised

Specific gravity 80 or 120 kg/m<sup>3</sup>  $\lambda = 0.024 - 0.026$  W/(mK) at 0°C  $\lambda = 0.038$  W/(mK) at 10°C  $\lambda = 0.040$  W/(mK) at 40°C  $\mu \ge 7000$ B2 (DIN 4102) -40°C up to +105°C Up to 18 dB(A)  $\ge 10°C$ 1 year

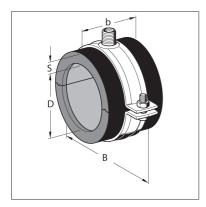
Туре	Pipe Ø D [mm]	B [mm]	Insulation thickness S [mm]	Thread connection	W [kg]	Quantity [pack]	Part number
LKS H-15	15.0	76.0	13.0	M8/M10	0.07	48	184916
LKS H-18	18.0	76.0	13.0	M8/M10	0.07	48	184925
LKS H-22	22.0	91.5	13.0	M8/M10	0.08	36	184934
LKS H-25	25.0	91.5	13.0	M8/M10	0.08	30	184943
LKS H-28	28.0	99.0	13.5	M8/M10	0.09	30	184952
LKS H-30	30.0	99.0	13.5	M8/M10	0.09	30	184961
LKS H-35	35.0	105.0	13.5	M8/M10	0.09	30	184970
LKS H-38	38.0	105.0	14.0	M8/M10	0.10	30	184979
LKS H-42	42.0	112.0	14.0	M8/M10	0.10	24	184988
LKS H-44	44.5	112.0	14.0	M8/M10	0.17	24	184997
LKS H-48	48.3	125.0	14.0	M8/M10	0.17	24	185006
LKS H-54	54.0	134.0	14.0	M8/M10	0.19	24	185015
LKS H-57	57.0	134.0	15.0	M8/M10	0.19	24	185024
LKS H-60	60.3	146.5	15.0	M8/M10	0.20	24	185033
LKS H-64	64.0	146.5	15.0	M8/M10	0.20	18	185042
LKS H-70	70.0	146.5	15.0	M8/M10	0.21	18	185051
LKS H-76	76.1	151.0	15.0	M8/M10	0.22	18	185060
LKS H-80	80.0	159.5	15.0	M8/M10	0.23	18	185069
LKS H-89	88.9	173.0	15.0	M8/M10	0.29	18	185078
LKS H-102	101.6	186.0	15.5	M8/M10	0.32	6	185087
LKS H-108	108.0	193.0	15.5	M8/M10	0.34	6	185096
LKS H-114	114.3	193.0	15.5	M8/M10	0.35	6	185105
LKS H-133	133.0	215.0	16.0	M8/M10	0.39	6	185114
LKS H-139	139.7	240.0	16.0	M12/M16/ <sup>1</sup> / <sub>2</sub> "	1.02	6	185123
LKS H-160	159.0	273.0	16.0	M12/M16/ <sup>1</sup> / <sub>2</sub> "	1.17	6	185132
LKS H-168	168.3	284.0	16.0	M12/M16/ <sup>1</sup> / <sub>2</sub> "	1.22	6	185141
LKS M-15	15.0	91.5	19.0	M8/M10	0.08	42	185150
LKS M-18	18.0	99.0	19.5	M8/M10	0.09	42	185159
LKS M-22	22.0	105.0	19.5	M8/M10	0.10	42	185168
LKS M-25	25.0	105.0	19.5	M8/M10	0.09	42	185177
LKS M-28	28.0	112.0	20.0	M8/M10	0.10	36	185186
LKS M-30	30.0	112.0	20.0	M8/M10	0.10	36	185195
LKS M-35	35.0	125.0	20.0	M8/M10	0.17	24	185204
LKS M-38	38.0	125.0	21.5	M8/M10	0.17	24	185213
LKS M-42	42.0	134.0	21.5	M8/M10	0.18	24	185222
LKS M-44	44.5	134.0	21.5	M8/M10	0.20	24	185231
LKS M-48	48.3	146.5	21.5	M8/M10	0.20	18	185240
LKS M-54	54.0	146.5	21.5	M8/M10	0.20	18	185249
LKS M-57	57.0	151.0	22.0	M8/M10	0.22	18	185258
LKS M-60	60.3	151.0	22.0	M8/M10	0.22	18	185267
LKS M-64	64.0	151.0	22.0	M8/M10	0.22	18	185276
LKS M-70	70.0	159.5	22.0	M8/M10	0.24	18	185285
LKS M-76	76.1	173.0	22.0	M8/M10	0.30	18	185294
LKS M-80	80.0	173.0	22.0	M8/M10	0.30	18	185303
LKS M-89	88.9	186.0	22.0	M8/M10	0.30	10	185312
LKS M-102	101.6	203.0	22.5	M8/M10	0.39	10	185321
LKS M-108	108.0	203.0	22.5	M8/M10	0.40	10	185330
LKS M-114	114.3	215.0	22.5	M8/M10	0.41	8	185339
LKS M-133	133.0	263.0	23.0	M8/M10	0.47	6	185348
LKS M-139	139.7	273.0	23.0	M12/M16/1/2"	1.19	6	185357
LKS M-160	159.0	284.0	23.0	M12/M16/1/2"	1.27	6	185366
LKS M-168	168.3	295.0	23.0	M12/M16/1/2"	1.29	6	185375
LKS M-180	180.0	307.0	25.0	M12/M16/1/2"	1.35	6	113340
LKS M-200	200.0	321.0	25.0	M12/M16/1/2"	1.44	6	113342
LKS M-219	219.0	352.0	23.0	M12/M16/1/2"	1.62	6	185384
LKS M-225	225.0	355.0	25.0	M12/M16/1/2"	1.64	6	113341
LKS M-250	250.0	374.0	25.0	M12/M16/1/2"	1.69	2	113343
LKS M-273	273.0	440.0	23.0	M16	2.77	2	185393







T-108 ... 219



# **Chilled Water Clamp LKS T**

Group: 1255

### Application

Suitable for secure prevention of condensation water at the pipe support location of refrigeration and cold-water pipelines.

An optimal diffusion-tight connection with the pipe insulation is easily and safely achieved by fixing usual insulation materials to the clamp faces using adhesive. Recommended up to  $-0^{\circ}$ C at normal ambient condition.

### Scope of delivery

Consisting of pipe clamp and insulation insert. The one-piece insulation insert comprising two joined PUR elements forms a comprehensive connection between PUR element and pipe clamp all around the pipe. The outer edges of the PUR elements are equipped with elastomer foam and

coated by a black PVC foil.

Туре	Nominal thickness of the insulation [mm]	Size	Length of PUR-element b [mm]
LKS T	32	15 - 70	50
		76 - 273	100

### **Technical Data**

Up to type LKS T-168 the unsupported lengths as listed in DIN 1988 may be applied.

Clamp material: Insulation insert: PUR-core: Thermal conductivity:

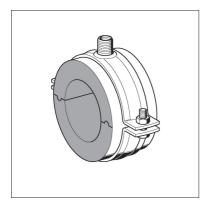
Steam diffusion resistance factor: Fire resistance: Temperature range: Insulation insert: Storage temperature: Storage period: Steel, electro-galvanised

Specific gravity 80 or 120 kg/m<sup>3</sup>  $\lambda = 0.024 - 0.026$  W/(mK) at 0°C  $\lambda = 0.038$  W/(mK) at 10°C  $\lambda = 0.040$  W/(mK) at 40°C  $\mu \ge 7000$ B2 accord. to DIN 4102 -40°C up to +105°C Up to 18 dB(A)  $\ge 10°C$ 1 year



Туре	Pipe Ø D [mm]	B [mm]	Insulation thickness S [mm]	Thread connection	W [kg]	Quantity [pack]	Part number
LKS T-15	15.0	125	31	M8/M10	0.17	24	110514
LKS T-18	18.0	125	31	M8/M10	0.17	24	110515
LKS T-22	22.0	134	31	M8/M10	0.18	24	110516
LKS T-25	25.0	134	31	M8/M10	0.18	24	110517
LKS T-28	28.0	141	31	M8/M10	0.19	24	110518
LKS T-30	30.0	146.5	34	M8/M10	0.20	18	110519
LKS T-35	35.0	151	34	M8/M10	0.21	18	110520
LKS T-38	38.0	159.5	36	M8/M10	0.22	18	110521
LKS T-42	42.0	159.5	36	M8/M10	0.23	18	110522
LKS T-44	44.5	173	37	M8/M10	0.28	18	110523
LKS T-48	48.3	173	37	M8/M10	0.29	18	110524
LKS T-54	54.0	186	38	M8/M10	0.31	12	110525
LKS T-57	57.0	186	38	M8/M10	0.31	12	110526
LKS T-60	60.3	186	38	M8/M10	0.31	12	110527
LKS T-64	64.0	193	39	M8/M10	0.33	10	110528
LKS T-70	70.0	203	39	M8/M10	0.35	10	110529
LKS T-76	76.1	215	42	M8/M10	0.50	8	110530
LKS T-80	80.0	215	42	M8/M10	0.50	8	110531
LKS T-89	88.9	229	42	M8/M10	0.54	6	110532
LKS T-108	108.0	273	42	M12/M16/1/2"	1.25	6	110534
LKS T-114	114.0	284	43	M12/M16/1/2"	1.31	6	110535
LKS T-133	133.0	304	44	M12/M16/1/2"	1.44	6	110536
LKS T-139	137.9	304	43	M12/M16/1/2"	1.45	6	110537
LKS T-160	159.0	329	45	M12/M16/1/2"	1.58	4	110538
LKS T-168	168.3	340	45	M12/M16/1/2"	1.73	4	110539
LKS T-219	219.0	395	46	M12/M16/1/2"	1.93	2	110540
LKS T-273	273.0	432	45	M16	3.53	2	110541





# **Chilled Water Clamp CMP**

Group: 1255

### Application

Chilled Water Clamp with insulation cores of various thickness for fixing coldwater pipeline systems and chilled water installations. Prevents temperature bridging and condensation between pipe and pipe clamp. For steel pipes from outside dia. 114 mm on, we recommend the use of a Load Plate.

### Scope of delivery

Insulation insert: Two interlocking PUR segments joined by outer aluminium foil.

Pipe Clamp: Two-piece Sikla Pipe Clamp with multi-thread connecting nut. See the table below for direct connection options. For adapter/ reducer-based connection clamp and insulation insert are delivered loose.

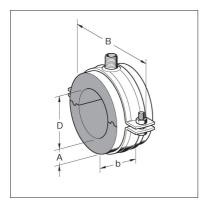
### **Technical Data**

Ø D pipe [mm]	Max. recommended distance between 2 supports [m]*	Suitable Load Plate
21	1.50	-
27, 34	2.00	-
42, 48, 60	2.50	-
76, 89, 102, 108	3.00	-
114, 133, 140	4.00	CMP/PR 240
159, 168, 219	4.00	CMP/PR 340
273	4.00	CMP/PR 400

The values indicated are based on the use of the relevant Load Plate from outside dia. 114 mm on.

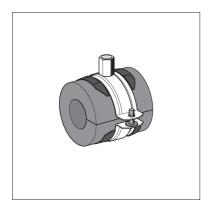
Insulation core: Vapour shield:	PUR, specific gravity 80 kg/m³ Aluminium foil
Temperature range:	0°C up to +105°C
Thermal conductivity:	$\lambda = 0.024 - 0.026$ W/(mk) at 0°C
	λ = 0.038 W(mk) at 10°C
	λ = 0.040 W(mk) at 10°C
Fire resistance:	Insulation and vapour shield: material category B2
Clamp material:	Steel, electro galvanised

In case you require dimensions or material other than those listed, please contact us.



Туре	Pipe Ø D [mm]	Thread connection	b [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
CMP 21/25	21	M8/M10	75	112.0	0.11	25	186896
CMP 27/25	27	M8/M10	75	125.0	0.18	25	186905
CMP 34/25	34	M8/M10	75	134.0	0.19	25	186914
CMP 42/25	42	M8/M10	75	141.0	0.21	25	186923
CMP 49/25	49	M8/M10	75	146.5	0.21	25	186932
CMP 60/25	60	M8/M10	75	159.5	0.24	25	186941
CMP 76/25	76	M8/M10	75	173.0	0.27	25	186959
CMP 89/25	89	M12/M16/1/2"	75	207.0	0.84	10	186968
CMP 102/25	102	M12/M16/1/2"	75	222.0	0.84	10	186977
CMP 108/25	108	M12/M16/1/2"	75	232.0	0.94	10	186986
CMP 114/25	114	M12/M16/1/2"	75	232.0	0.95	10	186995
CMP 133/25	133	M12/M16/1/2"	100	263.0	1.09	10	187004
CMP 140/25	140	M12/M16/1/2"	100	273.0	1.16	10	187013
CMP 159/25	159	M12/M16/1/2"	100	295.0	1.24	10	187022
CMP 168/25	168	M12/M16/1/2"	100	304.0	1.36	10	187031
CMP 219/25	219	M12/M16/1/2"	100	352.0	1.49	10	187040
CMP 273/25	273	M16	100	440.0	2.82	10	187049
CMP 21/30	21	M8/M10	75	125.0	0.12	25	187058
CMP 27/30	27	M8/M10	75	134.0	0.20	25	187067
CMP 34/30	34	M8/M10	75	141.0	0.21	25	187076
CMP 42/30	42	M8/M10	75	151.0	0.23	25	187085
CMP 49/30	49	M8/M10	75	151.0	0.23	25	187094
CMP 60/30	60	M8/M10	75	173.0	0.27	25	187103
CMP 76/30	76	M12/M16/1/2"	75	207.0	0.84	10	187121
CMP 89/30	89	M12/M16/1/2"	75	222.0	0.85	10	187130
CMP 108/30	108	M12/M16/1/2"	75	240.0	0.96	10	187148
CMP 114/30	114	M12/M16/1/2"	75	263.0	1.07	10	187157
CMP 133/30	133	M12/M16/1/2"	100	273.0	1.18	10	187166
CMP 140/30	140	M12/M16/1/2"	100	284.0	1.25	10	187175
CMP 159/30	159	M12/M16/1/2"	100	304.0	1.38	10	187184
CMP 168/30	168	M12/M16/1/2"	100	304.0	1.39	10	187193
CMP 219/30	219	M12/M16/1/2"	100	352.0	1.53	10	187202
CMP 21/40	21	M8/M10	75	151.0	0.23	25	187220
CMP 27/40	27	M8/M10	75	151.0	0.24	25	187229
CMP 34/40	34	M8/M10	75	159.5	0.25	25	187238
CMP 42/40	42	M8/M10	75	173.0	0.28	25	187247
CMP 49/40	49	M10/M12/3/8"	75	190.0	0.50	25	187256
CMP 60/40	60	M12/M16/1/2"	75	207.0	0.86	10	187265
CMP 76/40	76	M12/M16/1/2"	75	232.0	0.97	10	187283
CMP 89/40	89	M12/M16/1/2"	75	240.0	0.97	10	187292
CMP 108/40	108	M12/M16/1/2"	75	273.0	1.17	10	187310
CMP 114/40	114	M12/M16/1/2"	75	273.0	1.18	10	187319
CMP 133/40	114	M12/M16/1/2"	100	295.0	1.30	10	187328
CMP 140/40	140	M12/M16/1/2"	100	304.0	1.42	10	187337
CMP 159/40	159	M12/M16/1/2"	100	329.0	1.60	10	187346
CMP 168/40	168	M12/M16/1/2"	100	329.0	1.61	10	187355
CMP 219/40	219	M12/M16/1/2"	100	382.0	1.96	10	187364
CMP 273/40	273	M16	100	471.0	2.94	10	187373
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# **Chilled Water Clamp AKS**

Group: 1258

### Application

Suitable for secure prevention of condensation at the pipe support location of chilled-water and cold-water pipelines as well as insulation clamp for heating systems.

Suitable for soundproof installation according to DIN 4109.

### Scope of delivery

Consisting of pipe clamp and insulation insert.

### Installation

Enclose the insulation insert around the pipe, remove the protective paper strip on both sides of the insert and merge the longitudinal seam. Fix the pipe clamp in the centre of the plastic spacers. Lag the pipe insulation to each end of the insulation insert.

For horizontal installations to a wall-face, the plastic spacers on the insulation insert have to coincide with the pipe clamp flanges positioned over and under the pipe. Support distances see Installation Guidelines, chapter "Pipe support".

### **Technical Data**

Material: Pipe clamp: Insulation:

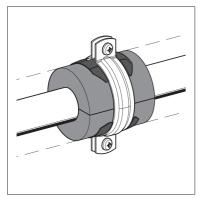
### Elastomer foam:

Length b: Thermal conductivity: Steam diffusion resistance factor: Material class:

Temperature range: Storage conditions:

Steel, electro-galvanised Elastomer foam

80 mm  $\lambda \le 0,038$  W/(mK) at 0°C  $\mu \ge 7.000$ B<sub>L</sub> -s3, d0 (in overall system of identical Elastomer foam) 0°C up to +110°C In dry, clean rooms with humidity 50 -70% and room temperature 0 - 35°C

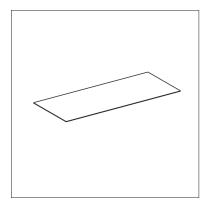


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Type Pipe Ø D [mm]	B [mm]	Insulation thickness S [mm]	Thread connection	W [kg]	Quantity [pack]	Part number
AKS 13-10 10.0	69	13	M8/M10	0.07	50	113429
AKS 13-12 12.0	76	13	M8/M10	0.08	50	113430
AKS 13-15 15.0	76	13	M8/M10	0.08	50	113431
AKS 13-18 18.0	76	13	M8/M10	0.08	50	113432
AKS 13-22 22.0	92	13	M8/M10	0.09	50	113433
AKS 13-25 25.0	92	13	M8/M10	0.09	50	113434
AKS 13-28 28.0	99	13	M8/M10	0.10	50	113435
AKS 13-30 30.0	99	13	M8/M10	0.10	50	113436
AKS 13-35 35.0	105	13	M8/M10	0.11	50	113437
AKS 13-42 42.0	112	13	M8/M10	0.12	30	113438
AKS 13-48 48.3	125	13	M8/M10	0.18	30	113439
AKS 13-54 54.0	125	13	M8/M10	0.18	30	113440
AKS 13-60 60.3	134	13	M8/M10	0.20	30	113441
AKS 19-10 10.0	92	19	M8/M10	0.09	50	113446
AKS 19-12 12.0	92	19	M8/M10	0.10	50	113447
AKS 19-15 15.0	99	19	M8/M10	0.11	50	113448
AKS 19-18 18.0	99	19	M8/M10	0.10	50	113449
AKS 19-22 22.0	105	19	M8/M10	0.11	50	113450
AKS 19-25 25.0	105	19	M8/M10	0.12	50	113451
AKS 19-28 28.0	112	19	M8/M10	0.12	50	113452
AKS 19-30 30.0	112	19	M8/M10	0.12	50	113453
AKS 19-35 35.0	125	19	M8/M10	0.18	40	113454
AKS 19-42 42.0	125	19	M8/M10	0.20	30	113455
AKS 19-48 48.3	134	19	M8/M10	0.21	30	113456
AKS 19-54 54.0	141	19	M8/M10	0.22	30	113457
AKS 19-60 60.3	147	19	M8/M10	0.24	20	113458
AKS 25-10 10.0	105	25	M8/M10	0.12	25	113463
AKS 25-12 12.0	105	25	M8/M10	0.13	25	113464
AKS 25-15 15.0	105	25	M8/M10	0.13	25	113465
AKS 25-18 18.0	112	25	M8/M10	0.13	25	113466
AKS 25-22 22.0	112	25	M8/M10	0.14	25	113467
AKS 25-25 25.0	125	25	M8/M10	0.20	30	113468
AKS 25-28 28.0	125	25	M8/M10	0.20	30	113469
AKS 25-30 30.0	125	25	M8/M10	0.20	30	113470
AKS 25-35 35.0	134	25	M8/M10	0.21	30	113471
AKS 25-42 42.0	141	25	M8/M10	0.25	20	113472
AKS 25-48 48.3	147	25	M8/M10	0.26	20	113473
AKS 25-54 54.0	151	25	M8/M10	0.27	20	113474
AKS 25-60 60.3	173	25	M8/M10	0.30	20	113475





# Load Plate

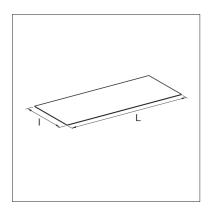
Group: 1256

Scope of delivery Load Plate delivered flat.

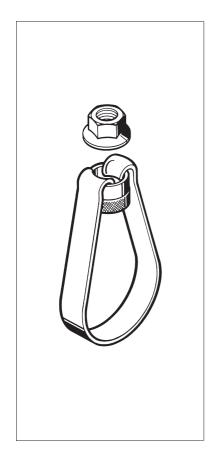
### **Technical Data**

Material: Steel plate, electro galvanised

Туре	Pipe Ø D [mm]	Dimension L x W x Th [mm]	Quantity [pack]	Part number
CMP/PR 240	114 - 140	240x100x0.5	1	187382
CMP/PR 340	159 - 219	340x100x0.5	1	187391
CMP/PR 400	273	400x100x0.5	1	187400









### Application

For pipeline installations of fixed fire entinguishing systems, mainly used for Sprinkler systems.

### Scope of delivery

Pipe Loop with rounded edges. Flange nuts and cup nuts are included in loose form.

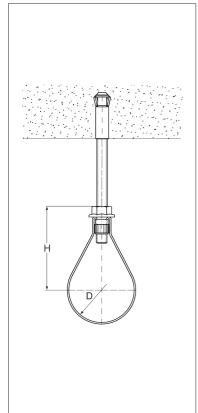
### **Technical Data**

Material: Steel, galvanised as per DIN EN 10346

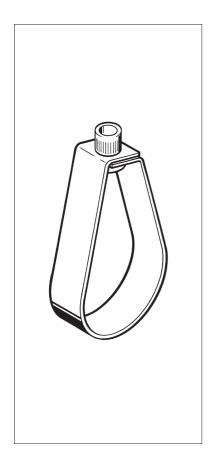
### Approvals

FM and VdS (No. G4850025) approved

Туре	NB	Connection	D [mm]	H [mm]	W [kg]	Quantity [pack]	Part number
26.9	<sup>3</sup> / <sub>4</sub> "	M8 (VdS)	27	65	0.05	100	113336
33.7	1"	M8 (VdS)	34	65	0.05	100	102287
42.4	<b>1</b> <sup>1</sup> / <sub>4</sub> "	M8 (VdS)	43	65	0.05	50	102296
48.3	<b>1</b> <sup>1</sup> / <sub>2</sub> "	M8 (VdS)	49	70	0.06	50	102302
60.3	2"	M8 (VdS)	61	79	0.06	50	102311
26.9	<sup>3</sup> / <sub>4</sub> "	M10 (FM)	27	65	0.05	100	113414
33.7	1"	M10 (FM)	34	65	0.06	100	102126
42.4	<b>1</b> <sup>1</sup> / <sub>4</sub> "	M10 (FM)	43	65	0.06	50	102135
48.3	<b>1</b> <sup>1</sup> / <sub>2</sub> "	M10 (FM)	49	70	0.06	50	102144
60.3	2"	M10 (FM)	61	79	0.07	50	102153
76.1	2 <sup>1</sup> / <sub>2</sub> "	M10	77	98	0.14	25	102320
88.9	3"	M10	90	113	0.16	25	102339
108		M10	110	142	0.19	25	102348
114.3	4"	M10	115	142	0.19	25	102357
133		M12	135	155	0.22	25	102366
139.7	5"	M12	142	155	0.22	25	102375
159		M12	161	185	0.25	25	102384
168.3	6"	M12	170	185	0.26	25	102393
219.1	8"	M16	221	239	0.56	10	102409







# Pipe Loop RSL Praktica S

Group: 1118

### Application

For pipeline installations of fixed fire extinguishing systems, mainly used for Sprinkler systems.

### Scope of delivery

Cup nut included in loose form.

### Installation

Advice for VdS-installation: when assembling size DN 10", the cup nut M16 is replaced by two washers and two hexagon nuts M20!

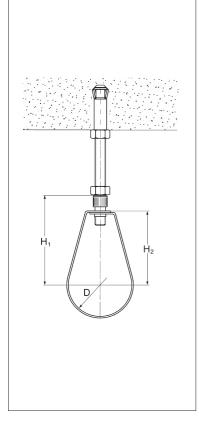
### **Technical Data**

Material: Steel, galvanised as per DIN EN 10346

### Approvals

FM < 10" and VdS (No. G4780120) approved

	· · · · 1		_			1		
Туре	NB	Connection	D	H <sub>2</sub>	H <sub>1</sub>	W	Quantity	Part
	3 ( 11		[mm]	[mm]	[mm]	[kg]	[pack]	number
26.9	<sup>3</sup> / <sub>4</sub> "	M8 (VdS)	27	55	66	0.07	100	141109
33.7	1"	M8 (VdS)	34	59	70	0.08	100	141118
42.4	<b>1</b> <sup>1</sup> / <sub>4</sub> "	M8 (VdS)	43	63	78	0.08	50	141127
48.3	<b>1</b> <sup>1</sup> / <sub>2</sub> "	M8 (VdS)	49	66	81	0.09	50	141136
60.3	2"	M8 (VdS)	61	72	87	0.10	50	141145
33.7	1"	M10 (FM)	34	59	70	0.07	100	140861
42.4	<b>1</b> <sup>1</sup> / <sub>4</sub> "	M10 (FM)	43	63	78	0.08	50	140870
48.3	<b>1</b> <sup>1</sup> / <sub>2</sub> "	M10 (FM)	49	66	81	0.08	50	140889
60.3	2"	M10 (FM)	61	72	87	0.08	50	140898
76.1	2 <sup>1</sup> / <sub>2</sub> "	M10	77	93	108	0.20	25	140904
88.9	3"	M10	90	100	115	0.22	25	140913
114	4"	M10	115	121	146	0.27	25	140834
139	5"	M12	142	150	162	0.52	25	140843
168	6"	M12	170	175	187	0.60	25	140852
219	8"	M16	221	225	240	0.78	10	140968
274	10"	M16	276	285	300	1.74	10	140977







# Pipe Loop RSL N Silicone

Group: 1115

### Application

For pipeline installations of fixed fire extinguishing systems, mainly used for Sprinkler systems for soundproof installations also according to DIN 4109.

### Scope of delivery

Flange nut and Cup nut included in loose form.

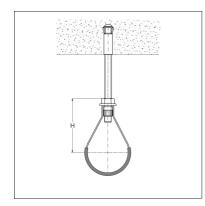
### **Technical Data**

Material: Sound absorption lining: Steel, galvanised as per DIN EN 10346 Silicone, red (see chapter "Sound Absorption Products")

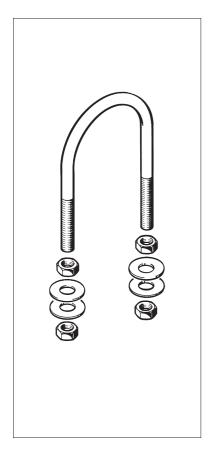
### Approvals

VdS (No. G4850035) approved.

Туре	NB	Connection	H [mm]	W [kg]	Quantity [pack]	Part number
26.9	<sup>3</sup> / <sub>4</sub> "	M8	65	0.06	100	113307
33.7	1"	M8	65	0.07	100	113308
42.4	<b>1</b> <sup>1</sup> / <sub>4</sub> "	M8	70	0.08	50	113309
48.3	<b>1</b> <sup>1</sup> / <sub>2</sub> "	M8	79	0.09	50	113310
60.3	2"	M10	98	0.17	25	113311
76.1	2 <sup>1</sup> / <sub>2</sub> "	M10	113	0.23	25	113312
88.9	3"	M10	142	0.25	25	113313
114.3	4"	M12	153	0.28	25	113314
139.7	5"	M12	184	0.31	25	113315
168.3	6"	M12	184	0.31	25	113316
219.1	8"	M16	236	0.65	10	113317







# U Bolt RUB

Group: 1211

### Application

For pipeline systems in industrial and residential buildings and sprinkler installations meeting the VdS and FM standards. For horizontal and vertical pipelines, the U-Bolts are applied as Fixed Points and as Guiding Supports.

### Scope of delivery

Similar to the DIN 3570 standard. Four hexagon nuts and four washers included in loose form.

### Installation

When used as Guided Support, nuts have to be arranged and fixed on both sides, at the top and at the bottom of the profile. Thereby the pipe should remain flexible. When used as Fixed Point the admissible loads of the connecting elements shouldn't exceed the bending loads of the U-bolt.

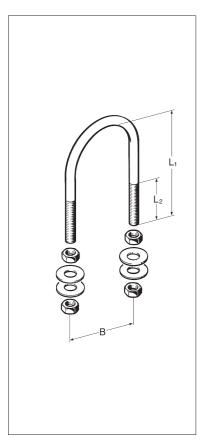
### **Technical Data**

Material: Steel, electro-galvanised

### Approvals

The U Bolt NB 8" with M12 thread obtained a separate VdS Approval (No. G4810047).

Туре	NB	В	L1	L <sub>2</sub>	Thread	W	Quantity	Part
		[mm]	[mm]	[mm]		[kg]	[pack]	number
21.3	<sup>1</sup> / <sub>2</sub> "	30	45	30	M8	0.08	50	102162
26.9	<sup>3</sup> / <sub>4</sub> "	35	60	40	M8	0.09	50	102773
33.7	1"	42	67	40	M8	0.09	50	102782
42.4	<b>1</b> <sup>1</sup> / <sub>4</sub> "	51	76	40	M8	0.10	50	102791
48.3	<b>1</b> <sup>1</sup> / <sub>2</sub> "	57	82	40	M8	0.11	50	102807
60.3	2"	71	95	45	M10	0.21	50	102816
76.1	2 <sup>1</sup> / <sub>2</sub> "	87	111	45	M10	0.23	50	102825
88.9	3"	100	123	45	M10	0.24	50	102834
114.3	4"	126	157	55	M12	0.39	25	102171
108		121	151	55	M12	0.38	50	102843
139.7	5"	152	180	55	M12	0.43	25	102180
133		146	172	55	M12	0.42	25	102852
159		172	197	55	M12	0.46	25	102861
168.3	6"	180	207	55	M12	0.46	10	102199
219.1	8"	233	267	55	M12	0.56	10	102870







# **U Clamp RUC**

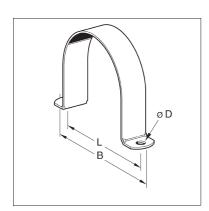
Group: 1203

### Application

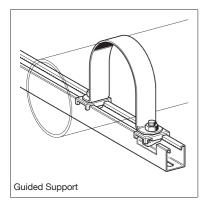
For mounting pipes directly on a support, especially suitable as a replacement for U Bolts in connection with channels or cantilever brackets. When using T Bolts, their washer can be used in between the channel and the U Clamp. Dimensions and cross-sections are in keeping with the VdS standard.

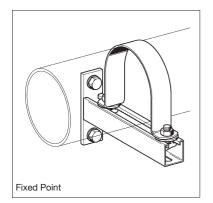
### **Technical Data**

Material: Steel, pre-galvanised as per DIN EN 10346

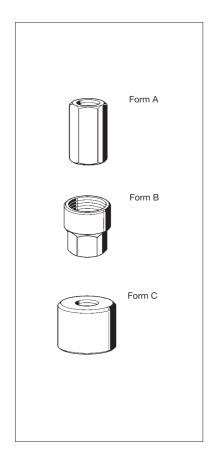


Туре	For pipe	Material [mm]	B [mm]	L [mm]	Ø D [mm]	W [kg]	Quantity [pack]	Part number
18	<sup>3</sup> / <sub>8</sub> "	30 x 2.5	69	49	9	0.09	50	159012
22	<sup>1</sup> / <sub>2</sub> "	30 x 2.5	73	53	9	0.05	50	159021
28	<sup>3</sup> / <sub>4</sub> "	30 x 2.5	79	59	9	0.06	50	159030
34	1"	30 x 2.5	85	65	9	0.07	25	159049
43	<b>1</b> <sup>1</sup> / <sub>4</sub> "	30 x 2.5	94	74	9	0.08	25	159058
49	<b>1</b> <sup>1</sup> / <sub>2</sub> "	30 x 2.5	100	80	9	0.11	25	159067
61	2"	30 x 2.5	112	92	9	0.13	25	159076
77	2 <sup>1</sup> / <sub>2</sub> "	30 x 2.5	128	108	9	0.16	25	159085
90	3"	30 x 2.5	141	121	9	0.16	25	159094
115	4"	40 x 3.0	183	155	13	0.31	25	159100
141	5"	40 x 3.0	209	181	13	0.37	10	159119
169	6"	40 x 3.0	236	207	13	0.44	1	159128
221	8"	40 x 3.0	289	261	13	0.55	1	159137
275	10"	50 x 5.0	375	325	17	1.43	1	159146
326	12"	50 x 5.0	426	373	17	1.69	1	159155









# Adapter AD f/f Group: 1333

### Application

Additional connection options for all Sikla Pipe Clamps equipped with 3G triple thread nut, fixed points and threaded tubes.

### **Technical Data**

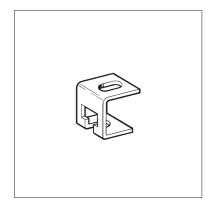
Material:

Form A: Steel, electro-galvanised

Form B: Malleable cast iron, electro-galvanised

Туре	Form	Length [mm]	A/F [mm]	W [kg]	Quantity [pack]	Part number
M16/M10	Α	35	19	0.05	50	106740
M16/M12	Α	35	19	0.04	50	124665
M16/M16	Α	30	19	0.03	50	106290
<sup>3</sup> / <sub>8</sub> "/M16	Α	40	19	0.03	25	146335
<sup>1</sup> / <sub>2</sub> "/M10	Α	35	24	0.07	10	146371
<sup>1</sup> / <sub>2</sub> "/M12	Α	35	24	0.06	25	156639
<sup>1</sup> / <sub>2</sub> "/M16	Α	40	24	0.07	25	124656
<sup>1</sup> / <sub>2</sub> "/ <sup>3</sup> / <sub>8</sub> "	Α	40	24	0.06	25	146344
<sup>1</sup> / <sub>2</sub> "/ <sup>1</sup> / <sub>2</sub> "	Α	35	24	0.11	10	146380
<sup>3</sup> / <sub>4</sub> "/M10	Α	35	32	0.15	10	105651
<sup>3</sup> / <sub>4</sub> "/M12	Α	35	32	0.08	10	105749
<sup>3</sup> / <sub>4</sub> "/M16	Α	35	32	0.14	10	105660
3/4"/3/8"	A	35	32	0.14	25	146353
<sup>3</sup> / <sub>4</sub> "/ <sup>1</sup> / <sub>2</sub> "	Α	35	32	0.08	10	146399
1"/M10	В	40	22	0.13	10	105679
1"/M12	В	40	22	0.13	10	105758
1"/M16	В	40	22	0.12	10	105688
1"/ <sup>3</sup> / <sub>8</sub> "	В	40	22	0.12	25	146362
<b>1</b> "/ <sup>1</sup> / <sub>2</sub> "	В	40	27	0.12	10	146405
M16/ <sup>1</sup> / <sub>2</sub> "	С	25	-	0.06	25	157922
M16/ <sup>3</sup> / <sub>4</sub> "	С	28	-	0.09	25	157931
<sup>3</sup> / <sub>8</sub> "/M16	С	100	-	0.11	20	111715
<sup>3</sup> / <sub>8</sub> "/ <sup>1</sup> / <sub>2</sub> "	С	100	-	0.19	20	113349





## Height Adjuster HRS 0

Group: 1339

#### Application

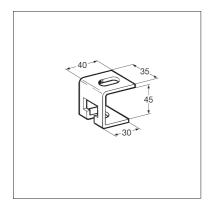
Height adjustment unit for suspended pipelines and components, providing for accurate pipe laying and compensation of constructional building tolerances. Facilitates mounting and improves mounting efficiency on site.

#### **Technical Data**

Material:SConnection to building structure:IConnection to system:IMax. perm. working load:IAdjustment range:I

Steel, electro-galvanised M12 M10 and M12 1.5 kN 25 mm

Туре	W	Quantity	Part
	[kg]	[pack]	number
HRS 0	0.09	50	125958



## Height Adjuster HRS P

Group: 1339

#### Application

Suitable for all M&E services. May be fixed directly to the ceiling (anchor) or in a suitable channel. Especially advantageous due to the suspension unit in the upper section of the height adjuster, since it enables the pipes to move in all directions.

#### Scope of delivery

Pre-assembled component, no loose parts.

#### Installation

The upper part of the base component can be used as a tool for screwing in the suspending bolt. Then the bolt only has to be tightened with an open-ended spanner. After mounting, the base component rests freely mobile and rotatable on the rounded bolt head. Fixing a locking nut against the cup nut secures the height adjusted.

#### Technical Data Material:

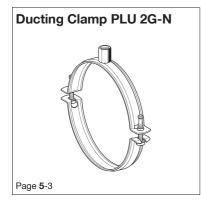
indicondi.	Buse componen
	galvanised
Max. perm. working load:	4.0 kN
Max, swinging angle:	7°

Base component cast iron, all components	
galvanised	
4.0 kN	
7°	

and the second second second second second second

Туре	Connection to system	Connection to building structure	Adjustment height	W [kg]	Quantity [pack]	Part number
P M8	M8	M8 x 22	25 mm	0.06	25	151519
P M10	M10	M10 x 22	25 mm	0.08	25	151528

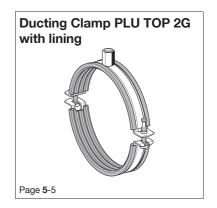


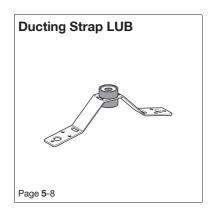


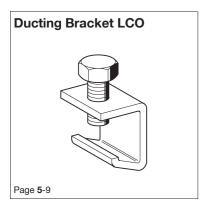


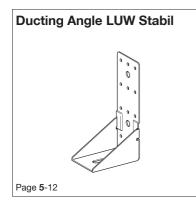


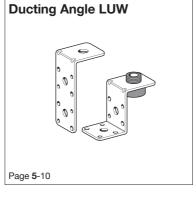


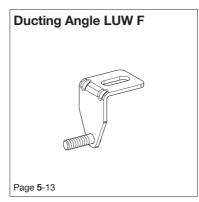


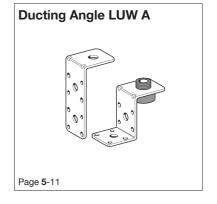












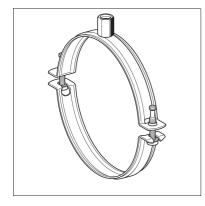












## **Ducting Clamp PLU 2G-N**

Group: 1622

#### Application

Two-piece pipe clamp for simple installation of spiral-seam ducts.

## Scope of delivery

Clamping bolts are pre-mounted and retained. Pivot screw for safe and simple assembly with quick-set clip, suitable for "single-hand" mounting. Easier handling and better storage possibilities due to optimized packaging.

#### Installation

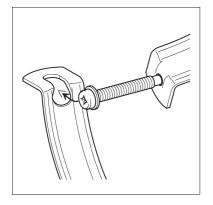
Tighten upper part of the pipe clamp without the interfering lower part. Hook the lower part, provided with a keyhole, into the fixed clamping bolt (see picture). After mounting of the pipe and locating into the pivot screw, the clamping bolt is fixed behind the bending; then tighten clamping bolt with max. 2 Nm.

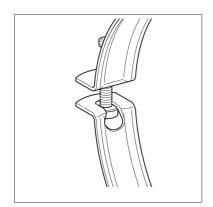
## **Technical Data**

Туре	Material [mm]	Perm. load capacity [kN]	Thread connection
71 - 200	20 x 1.5	0.8	M8/M10
224 - 500	25 x 1.5	1.0	M8/M10

#### Material: Steel, galvanised

	1		
Туре	W	Quantity	Part
	[kg]	[pack]	number
71	0.09	50	199626
80	0.10	50	199633
90	0.10	50	199640
100	0.11	100	199657
112	0.12	100	199664
125	0.13	100	199671
140	0.14	80	199688
150	0.15	80	199695
160	0.16	80	199701
180	0.17	50	199718
200	0.18	50	199725
224	0.34	50	199732
250	0.37	40	199749
280	0.38	40	199756
300	0.41	40	199763
315	0.45	40	199770
355	0.47	40	199787
400	0.56	30	199794
450	0.58	20	199800
500	0.67	20	199817

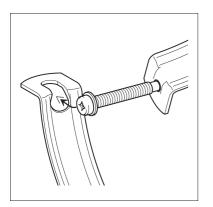


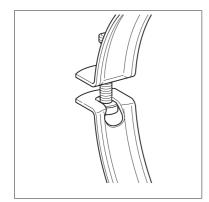












## **Ducting Clamp PLU 2G-N with lining**

Group: 1622

#### Application

Two-piece pipe clamp for simple installation of spiral-seam ducts.

Suitable for soundproof installation according to DIN 4109.

#### Scope of delivery

Clamping bolts are pre-mounted and retained. Pivot screw for safe and simple assembly with quick-set clip, suitable for "single-hand" mounting. Easier handling and better storage possibilities due to optimized packaging.

#### Installation

Tighten upper part of the pipe clamp without the interfering lower part. Hook lower part, provided with a keyhole, into the fixed clamping bolt (see picture).

After inserting the pipe and locating into the pivot screw, the clamping bolt head is located behind the angled profiles; then tighten clamping bolt with max. 2 Nm.

### **Technical Data**

Туре	Material [mm]	Perm. load capacity [kN]	Thread connection
71 - 200	20 x 1.5	0.8	M8/M10
224 - 500	25 x 1.5	1.0	M8/M10

#### Material: Insulation insert:

Steel, galvanised SBR/EPDM black (rubber Profile - see chapter Sound Absorption Products)

Temperature range:

-50°C up to +110°C

Туре	W [kg]	Quantity [pack]	Part number
71	0.11	50	199824
80	0.12	50	199831
90	0.13	50	199848
100	0.15	100	199855
112	0.16	100	199862
125	0.17	100	199879
140	0.19	70	199886
150	0.20	70	199893
160	0.21	70	199909
180	0.23	50	199916
200	0.25	50	199923
224	0.46	50	199930
250	0.51	40	199947
280	0.56	40	199954
300	0.59	40	199961
315	0.62	40	199978
355	0.70	40	199985
400	0.86	30	199992
450	0.87	20	199993
500	0.96	20	199994





## **Ducting Clamp PLU TOP 2G with lining**

Group: 1623

#### Application

Two-piece pipe clamp for simple installation of spiral-seam ducts. Suitable for soundproof installation according to DIN 4109.

#### Scope of delivery

With glued-in rubber profile. Clamping bolts are pre-mounted and retained. Pivot screw for safe and simple assembly with quick-set clip, suitable for "single-hand" mounting. Easier handling and better storage possibilities due to optimized packaging

#### Installation

Tighten upper part of the pipe clamp without the interfering lower part. Hook lower part, provided with a keyhole, into the fixed clamping bolt (see picture). After inserting the pipe and locating into the pivot screw, the clamping bolt head is located behind the angled profiles; then tighten clamping bolt with max. 2 Nm.

#### **Technical Data**

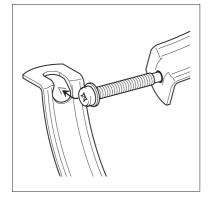
Туре	Material [mm]	adm. load [kN]	Thread connection
71 - 200	20 x 1.5	0.8	M8/M10
224 - 500	25 x 1.5	1.0	M8/M10

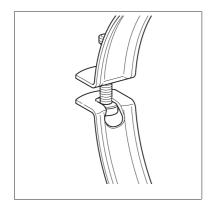
Material: Insulation insert: Steel, galvanised SBR/EPDM black (rubber profile - see chapter "Sound

Temperature range:

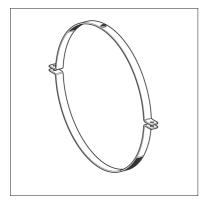
Absorption Products") -50°C up to +110°C

Туре	W [kg]	Quantity [pack]	Part number
71	0.11	50	111783
80	0.12	50	111785
90	0.13	50	111786
100	0.15	100	111787
112	0.16	100	111788
125	0.17	100	111789
140	0.19	70	111790
150	0.20	70	111791
160	0.21	70	111792
180	0.23	50	111794
200	0.25	50	111795
224	0.46	50	111796
250	0.51	40	111797
280	0.56	40	111798
300	0.59	40	111799
315	0.62	40	111800
355	0.70	40	111801
400	0.86	30	111802
450	0.87	20	111803
500	0.96	20	111804









## Ducting Clamp PLU > DN 560

Group: 1602

#### Application

Ducting Clamp designed for installing spiral-seam ducts according to DIN 24145 for industrial ventilation systems.

#### Scope of delivery

Without bolts and nuts. Without connection nut.

#### Installation

Basically, two-sided fixing to threaded rods is recommended.

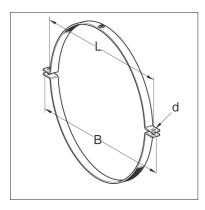
NB 560 - NB 900 : M12 From NB 1000 on: M16

## **Technical Data**

Material: Steel, pre-galvanised according to DIN EN 10346

Туре	perm. Working load
560 - 900	1,5 kN
1000 - 1250	2,5 kN

Type / NB	Material [mm]	B [mm]	L [mm]	d [mm]	W [kg]	Quantity [pack]	Part number
560	30 x 2.5	630	604	12.5	1.10	1	121848
600	30 x 2.5	672	646	12.5	1.18	1	149116
630	30 x 2.5	702	676	12.5	1.23	1	121857
710	30 x 2.5	782	756	12.5	1.38	1	121866
800	30 x 2.5	872	846	12.5	1.55	1	121875
900	30 x 2.5	972	946	12.5	1.73	1	121884
1000	40 x 3.0	1076	1050	12.5	3.08	1	121893
1120	40 x 3.0	1196	1170	12.5	3.43	1	121909
1250	40 x 3.0	1325	1299	12.5	3.82	1	121918







## Ducting Clamp PLU > DN 560 with Lining

Group: 1602

#### Application

Designed for installing spiral-seam ducts for industrial ventilation systems (according to DIN 24145). For soundproof installation of pipes (according to DIN 4109).

### Scope of delivery

Without bolts and nuts. Without connection nut.

#### Installation

NB 560 - NB 900: From NB 1000 on: Two-sided fixing to M12 threaded rods Two-sided fixing to M16 threaded rods

### **Technical Data**

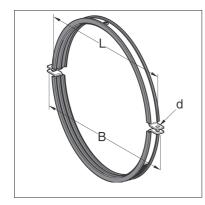
Material: St Sound absorption lining: St At

Temperature range:

Steel, pre-galvanised as per DIN EN 10346 SBR/EPDM, black (see chapter "Sound Absorption Products") -50°C up to +110°C

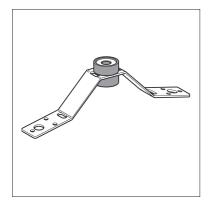
Туре	perm. Working load
560 - 900	1,5 kN
1000 - 1250	2,5 kN

Type / NB	Material [mm]	B [mm]	L [mm]	d [mm]	W [kg]	Quantity [pack]	Part number
560	30 x 2.5	630	604	12.5	1.30	1	190181
600	30 x 2.5	672	646	12.5	1.40	1	190199
630	30 x 2.5	702	676	12.5	1.46	1	190208
710	30 x 2.5	782	756	12.5	1.64	1	190217
800	30 x 2.5	872	846	12.5	1.84	1	190226
900	30 x 2.5	972	946	12.5	2.06	1	190235
1000	40 x 3.0	1076	1050	12.5	3.51	1	190244
1120	40 x 3.0	1196	1170	12.5	3.92	1	190253
1250	40 x 3.0	1325	1299	12.5	4.36	1	190262



## **Ducting Supports**





## **Ducting Strap LUB**

Group: 1603

#### Application

For quick and safe soundproof mounting of ducts either close to a ceiling, or for suspended installation when using a threaded rod. The bending points are punched, ensuring easy and exact adjustment to the pipe diameter.

Suitable if soundproof installation according to DIN 4109 is demanded.

#### Scope of delivery

Sound absorption component with carrying bracket and distance bush preassembled.

#### Installation

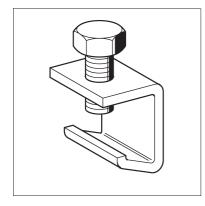
The use of 2 x 3 blind steel rivets of 4 mm is recommended.

#### **Technical Data**

Max. Working Load: Material: 0.3 kN Steel strap (25 x 2.5 mm) cold-worked, pregalvanised according to DIN EN 10346

Туре	Connection bush	Thread connection	W [kg]	Quantity [pack]	Part number
Ducting Strap	Ø 10.5	M8 oder M10	0.10	100	151582





## **Ducting Bracket LCO**

Group: 1604

#### Application

For connecting formed duct parts. When tightening the Bracket, the flanges of the duct parts are pressed against each other.

#### Scope of delivery

Pre-assembled with M8 x 20 hexagon bolt.

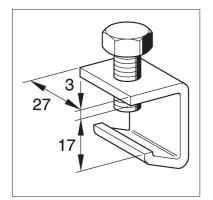
#### Installation

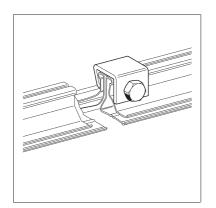
The distance between two Ducting Brackets should not exceed 200 mm. Tighten the bolt with a torque of approx. 7 Nm.

#### **Technical Data**

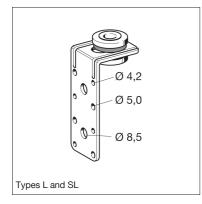
Material: Steel (27 x 3 mm), electro-galvanised

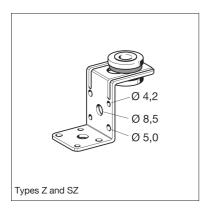
Туре	W	Quantity	Part
	[kg]	[pack]	number
Ducting Bracket 20	0.05	200	170222

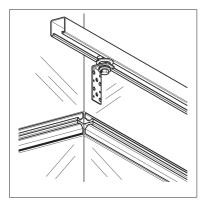












## **Ducting Angle LUW**

Group: 1601

#### Application

Mounting element for rectangular ducts installed directly under the ceiling, or for suspended installation when using a threaded rod.

Types SL and SZ allow for soundproof installation, also according to DIN 4109.

The adjustability in the oblong hole qualifies the adjustment of bore variations and building tolerances. For assembly on ducts with channels and T-head Bolts it guarantees the adequate distance in order to avoid structure borne sound when using versions SL and SZ.

#### Scope of delivery

Types SL and SZ are equipped with a pre-assembled sound absorption head including a (dia. 10.5 mm) metal bush.

#### Installation

Fixing to duct with rivets (4 mm), sheet metal screws (4 mm) or M8 bolts. For vertical adjustment of the angle (pressure load), the holes nearest to the bending  $90^{\circ}$  are to be used. For fixation with a screw M8, an additional washer 8/40 is to be used.

0.8 kN

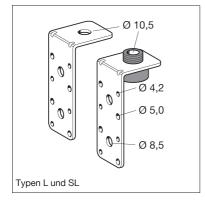
#### **Technical Data**

Working Load: Material (metal component): Types SL and SZ Inserted insulation: Sound absorption unit: Hardness: Temperature range:

Steel, pre-galvanised Up to 8,7 dB(A) EPDM, black 45+ / -5° Shore -50°C up to +110°C

Туре	Connection to building structure	Adjustable range [mm]	Material [mm]	Length of legs [mm]	W [kg]	Quantity [pack]	Part number
SL	M8/M10	13	35 x 2.5	41/85	0.09	100	189893
SZ	M8/M10	13	35 x 2.5	41/53/34	0.09	100	189902





## **Ducting Angle LUW A**

Group: 1621

#### Application

Mounting Angle for rectangular ducts installed directly under the ceiling, or for suspended installation when using a threaded rod.

Types A-SL and A-SZ allow for soundproof installation also according to DIN 4109.

#### Scope of delivery

Types A-SL and A-SZ are equipped with pre-assembled sound absorption head.

#### Installation

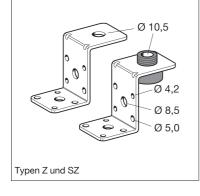
Fixing to the duct with rivets (Ø 4 - 5 mm), sheet metal screws (Ø 4 - 5 mm) or M8 bolts.

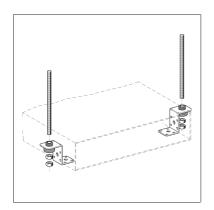
## Technical Data

Working load: Material (metal component): Types A-SL and A-SZ: Inserted insulation: Sound absorption unit: Hardness: Temperature range: 0.5 kN for A-L and A-Z 0.3 kN for A-SL and A-SZ Steel, pre-galvanised Up to 8.7 dB(A)

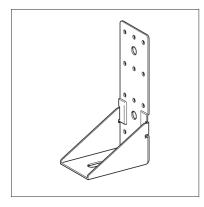
EPDM, black 50+ / -5° Shore -50°C up to +100°C

Туре	Connection to building structure	Material [mm]	Length of legs [mm]	W [kg]	Quantity [pack]	Part number
A-L	M8/M10	35 x 2	35/85	0.05	100	110496
A-Z	M8/M10	35 x 2	35/46/38	0.05	100	110498
A-SL	M8/M10	35 x 2	35/85	0.06	100	110497
A-SZ	M8/M10	35 x 2	35/46/38	0.06	100	110499









## **Ducting Angle LUW Stabil**

Group: 1601

#### Application

Mounting element for rectangular, particularly for vertically running ducts. In combination with Sound Absorber SDE 1 suitable for soundproof fixing of ducts according to DIN 4109.

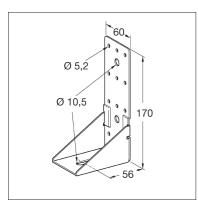
#### Installation

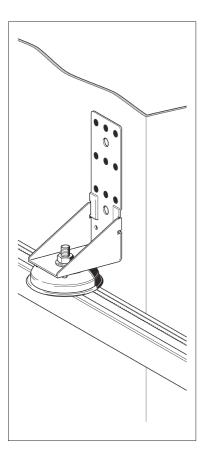
Fixation to duct with rivets (5 mm) or M10 bolts.

#### **Technical Data**

Max. Working Load: Material: 2 kN, when bolted at fixing points A and B Steel (60 x 2 mm), pre-galvanised according to DIN EN 10346

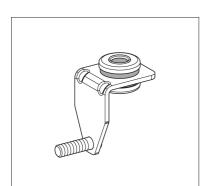
Туре	W	Quantity	Part
	[kg]	[pack]	number
170/90	0.30	10	158534

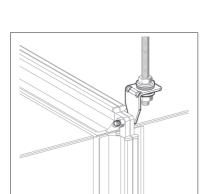












## **Ducting Angle LUW F**

Group: 1605

#### Application

Ducting Angle for a direct installation to the flange of rectangular ventilation ducts. Due to this external connection it's not necessary to penetrate the duct, therefore flow losses do not occur. In addition there are no leakages and flow noises. No disturbing screw tips interfere with cleaning operations. The Ductings Angles LUW F exceed the demands of VDI Standard 6022 (Hygiene requriements for ductings)

Type LUW SF is suitable for soundproof duct installations according to DIN 4109.

The slot allows adjustment facilities to compensate drill hole differences and construction tolerances.

#### Scope of delivery

With a pre-assembled sound absorption head

#### Installation

The ventilation duct could be connected directly to the pre-assembled grub screw.

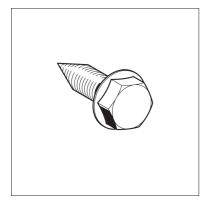
#### **Technical Data**

Working load:0,8 kNMaterial (Metal component):Steel, pTypes SF:Inserted insulation:Up to 8Sound absorption unit:EPDM,Hardness:45+ / -Temperature range:-50 up

Steel, pre-galvanised Up to 8,7 dB (A) EPDM, black 45+ / -5° Shore -50 up to +110°C

Туре	Thread connection	Connection to building structure	Material [mm]	W [kg]	Quantity [pack]	Part number
F M8	M8	M8/M10	35 x 3.0	0.08	100	113331
SF M8	M8	M8/M10	35 x 3.0	0.08	100	113329
SF M10	M10	M8/M10	35 x 3.0	0.08	100	113330





## Self Forming Screw SCR L

Group: 1370

#### Application

Non-cutting quick fastening for ventilation installations. The special cone of the screw turns very quickly into the metal sheet, creates a collar and under the same process forms the tight, metric screw thread.

For fixation of ducting angles / ducting brackets to ventilation ducts and pipes up to 1.0 mm sheet thickness. Also suitable for requirements according to airtightness class D - DIN EN 12237.

#### Scope of delivery

1 magnetic nut per packing unit

#### Installation

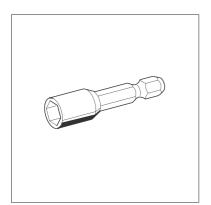
Screw with a high speed (ca. 2000 RPM) with high pressure at first. As soon as the screw displaces the material, reduce pressure and speed. A screwdriver with adjustable torque control is recommended.

## **Technical Data**

4.0 x L mm Recommended through hole of connecting component: Material:

4.2 - 5.0 mm Steel, electro-galvanised

Туре	Length L [mm]	A/F [mm]	W [kg]	Quantity [pack]	Part number
SCR L-14	14	6	0.01	1000	110577
SCR L-18	18	6	0.01	1000	110877



SW





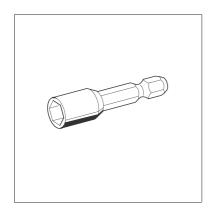
# Hexagon Drilling Screw SKB Group: 1370

#### **Technical Data**

Туре	for metal sheet thickness
4.2 x 13	up to 3 mm max.
4.2 x 19	up to 3 mm max.
4.2 x 25	up to 3 mm max.

Material: Self-cutting according to DIN 7504, electro-galvanised

Туре	Ø [mm]	Length [mm]	A/F	W [kg]	Quantity [pack]	Part number
4.2 x 13	4.2	13	7	0.01	1000	413140
4.2 x 19	4.2	19	7	0.01	1000	413158
4.2 x 25	4.2	25	7	0.02	1000	413159



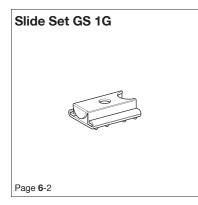
# Magnetic Holder MN Group: 8101

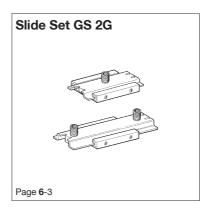
#### **Technical Data**

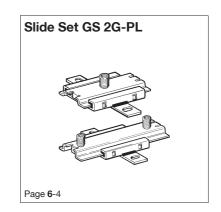
Tool steel, hardness HRC 60 - 63 Material:

Туре	A/F	W [kg]	Quantity [pack]	Part number
SW 7	7.0	0.02	1	412960

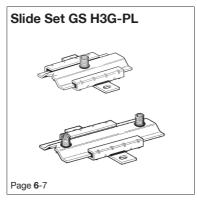


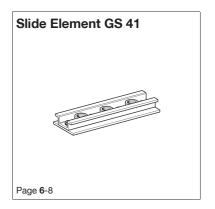


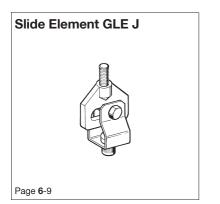






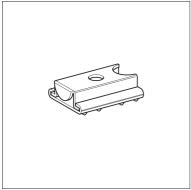












## Slide Set GS 1G

Group: 1336

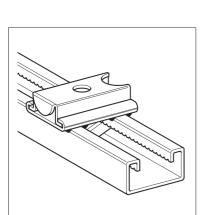
#### Application

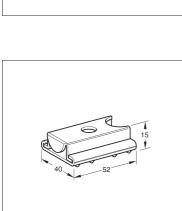
Slide Set for mounting of small pipe lines with possible elongation of length. Space-saving and thus also to be used for smaller centre distances, especially in combination with pipe clamps Ratio S and LS. The stop at the skid avoids the pipe line from sliding and at the same time is a comfortable guide for rising pipes. Guiding corrugations guarantee the exact 90° arrangement and avoid the screwing up of the slide set.

#### Installation

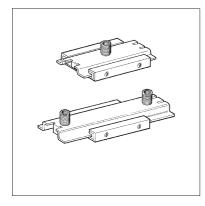
Connection to Channel System 41, ideally use flange screw M10 x 25. For drive plugs use flange screw M10 x 15. Fixation with hexagon bolt M8 or M10 is also possible.

Technical Data				
Permissible load for ceiling more	unting:	0.6 kN		
Permissible load for floor moun	1.2 kN			
Lever arm L <sub>max</sub> :	-	150 mm		
Permissible bending moment for	or wall mount	ting: 20 Nm		
Maximum sliding distance:		45 mm		
Static friction coefficient µ0:		0.15	0.15	
Sliding frition coefficient µ:		0.13		
Material:		Steel, el	ectro-galvanised	
Type Thread connection	W [kg]	Quantity [pack]	Part number	
1G M10	0.08	25	198834	









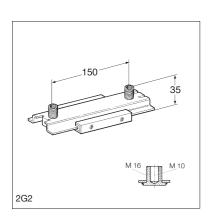
## Slide Set GS 2G

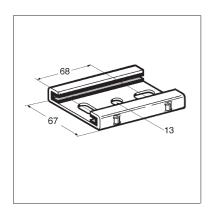
Group: 1336

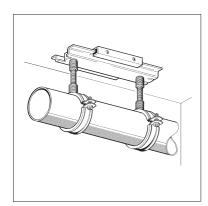
#### Application

Slide Set for single and double mounting of mechanical equipment. To be used preferably in combination with Sikla Pipe Clamps Ratio S and Stabil D-3G. Various connection options with these pipe clamps ranging between M10 and R1". For adapters for these connection options (see Adapter AD f/f). Sound absorption by means of glass fibre reinforced PA slide rails. When using the version **ULTRAglide** the resultant shear force is halved. By this the realisation of optimized supporting structures is possible.

#### **Technical Data**







Permissible load for ceiling mounting: Permissible load for floor mounting: Lever arm L <sub>max</sub> : Max. sliding distance Type 2G: Max. sliding distance Type 2G2: Temperature range (permanent exposure):	0.6 kN 1.2 kN 300 mm 85 mm 140 mm 130°C
Version GS: Static friction coefficient µ <sub>0</sub> : Sliding friction coefficient µ:	0.18 0.14
Version GS ULTRAglide: Static friction coefficient $\mu_0$ : Sliding friction coefficient $\mu$ :	0.07 0.07
Material: Metal components: Slide bar: Version ULTRAglide:	Steel, electro-galvanised Polyamide, glass fibre reinforced With additional Nano coating

Adm. load FZ \* under stress of fire

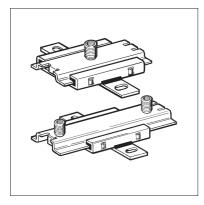
FWD 30	FWD 60	FWD 90	FWD 120	
[N]	[N]	[N]	[N]	
≤ 600	≤ 430	≤ 280	≤ 200	

FZ = max. adm. tensile load

\* The load capacity of connecting elements used is to be respected, this applies in particular under stress of fire.

Туре	W [kg]	Quantity [pack]	Part number
2G	0.38	25	126755
2G2	0.49	25	126764
2G ULTRAglide	0.38	25	110582
2G2 ULTRAglide	0.49	25	110584





## Slide Set GS 2G-PL

Group: 1336

#### Application

Slide Set for single and double mounting of mechanical equipment, to be used on Sikla Channels, brick or concrete walls and on bearers.

To be used preferably in combination with Sikla Pipe Clamps Ratio S and Stabil D-3G.

Various connection options with these pipe clamps ranging between M10 and R1". For adapters for these connection options (see Adapter AD f/f).

Sound absorption by means glass fibre reinforced PA slide rails.

When using the version **ULTRAglide** the resultant shear force is halved. By this the realisation of optimized supporting structures is possible.

#### **Technical Data**

Permissible load for ceiling mounting: Permissible load for floor mounting: Lever arm L <sub>max</sub> : Max. sliding distance Type 2G-PL: Max. sliding distance Type 2G2-PL: Temperature range (permanent exposure):	0.6 kN 1.2 kN 300 mm 85 mm 140 mm 130°C
Version GS: Static friction coefficient $\mu_0$ : Sliding friction coefficient $\mu$ :	0.18 0.14
Version GS ULTRAglide: Static friction coefficient $\mu_0$ : Sliding friction coefficient $\mu$ :	0.07 0.07
Material: Metal components: Slide bar: Version ULTRAglide:	Steel, electro-galvanised Polyamide, glass fibre reinforced With additional Nano coating

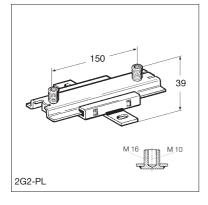
Adm. load FZ \* under stress of fire

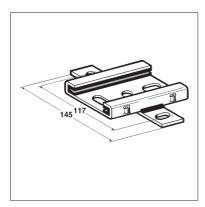
FWD 30	FWD 60	FWD 90	FWD 120	
[N]			[N]	
≤ 600	≤ 430	≤ 280	≤ 200	

#### FZ = max. adm. load

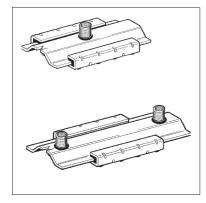
\* The load capacity of the connecting elements used is to be respected, this applies in particular under stress of fire.

Туре	W [kg]	Quantity [pack]	Part number
2G-PL	0.54	25	127127
2G2-PL	0.65	25	127136
2G-PL ULTRAglide	0.54	25	110583
2G2-PL ULTRAglide	0.65	25	110585









## Slide Set GS H3G

Group: 1336

#### Application

Heavy-duty Slide Set for plant construction. To be used preferably in combination with Sikla Pipe Clamp Stabil D-3G and Chilled Water Clamp SKS Top-2C.

Various connection options of the pipe clamps depending on the respective load: M12, M16 or with  $1/2^{"}$  adapters using the external thread (see Adapter AD f/f). Sound absorption by means of glass fibre reinforced polyamide slide rails. Especially suitable for ceiling and floor mounting solutions and as a guide for rising pipes.

When using the version **ULTRAglide** the resultant shear force is halved. By this the realisation of optimized supporting structures is possible. For wall mounting, we recommend the use of the Slide Set H3G on Sikla Support Bracket.

#### Installation

For pipes of NB 100 or larger having to be spaced at a distance from the Slide Set, or under conditions of reversed bending stress, the 3G triple thread nuts are to be secured by screwing on a  $\frac{1}{2}$ " Locking Nut.

#### **Technical Data**

Permissible load for ceiling mounting: Permissible load for floor mounting: Permissible bending moment for wall mounting* for H3G2:	5.0 kN 9.0 kN 350 Nm
Lever arm L <sub>max</sub> : Maximum sliding distance	400 mm
H3G:	100 mm
H3G2:	135 mm
Temperature range (permanent exposure):	130°C
Version GS:	
Static friction coefficient µ0:	0.18
Sliding friction coefficient µ:	0.14
Version GS ULTRAglide:	
Static friction coefficient $\mu_0$ :	0.07
Sliding friction coefficient µ:	0.07
Material: Metal components: Slide bar: Version ULTRAglide:	Steel, electro-galvanised Polyamide, glass fibre reinforced With additional Nano coating

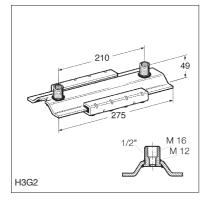
\* The permissible bending moment of the connecting element (threaded rod or threaded tube) may restrict the application!

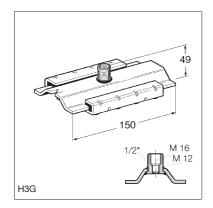
Adm. load FZ \* under stress of fire

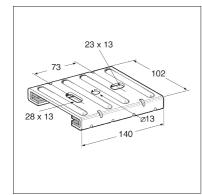
FWD 30	FWD 60	FWD 90	FWD 120
[N]	[N]	[N]	[N]
≤ 1.000	≤ 540	≤ 360	≤ 260

FZ = max. adm. tensile load

\* The load capacity of the connecting elemente used is to be respected, this applies in particular under stress of fire.



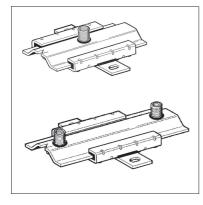






Туре	W [kg]	Quantity [pack]	Part number
H3G2	1.55	10	126700
H3G	1.12	10	149295
H3G ULTRAglide	1.12	10	110586
H3G2 ULTRAglide	1.55	10	110588





## Slide Set GS H3G-PL

Group: 1336

#### Application

Heavy-duty Slide Set for plant construction, to be used on Sikla Channels, brick or concrete walls and on bearers. This Slide Set version is especially suitable for bolted mounting to the building structure.

To be used preferably in combination with Sikla Pipe Clamp Stabil D-3G and Chilled Water Clamp SKS Top-2C.

Various connection options of the pipe clamps depending on the respective load: M12, M16 or with  $1/2^{"}$  adapters using the external thread (see Adapter AD f/f).

Sound absorption by means of glass fibre reinforced polyamide slide rails. When using the version **ULTRAglide** the resultant shear force is halved. By this the realisation of optimized supporting structures is possible.

Especially suitable for ceiling and floor mounting solutions and as a guide for rising pipes.

#### Installation

For pipes of NB 100 or larger having to be spaced at a distance from the Slide Set, or under conditions of reversed bending stress, the 3G triple thread nuts are to be secured by screwing on a  $1/2^{"}$  Locking Nut.

#### **Technical Data**

Permissible load for ceiling mounting: Permissible load for floor mounting: Lever arm L <sub>max</sub> : Maximum sliding distance: H3G-PL:	5.0 kN 9.0 kN 400 mm
H3G2-PL:	135 mm
Temperature range (permanent exposure):	130°C
Version GS: Static friction coefficient $\mu_0$ : Sliding friction coefficient $\mu$ :	0.18 0.14
Version GS ULTRAglide: Static friction coefficient μ <sub>0</sub> : Sliding friction coefficient μ:	0.07 0.07
Material: Metal components: Slide bar: Version ULTRAglide:	Steel, electro-galvanised Polyamide, glass fibre reinforced With additional Nano coating

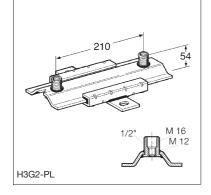
Adm. load FZ \* under stress of fire

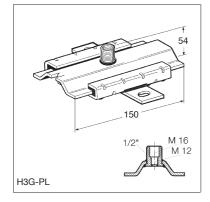
FWD 30	FWD 60	FWD 90	FWD 120
[N]		[N]	
≤ 1.000	≤ 540	≤ 360	≤ 260

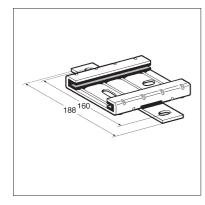
#### FZ = max. adm. tensile load

\* The load capacity of the connecting elements used is to be respected, this applies in particular under stress of fire.

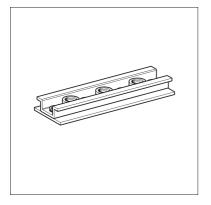
Туре	W [kg]	Quantity [pack]	Part number
H3G2-PL	1.84	10	126658
H3G-PL	1.42	10	149301
H3G-PL ULTRAglide	1.42	10	110587
H3G2-PL ULTRAglide	1.84	10	110589

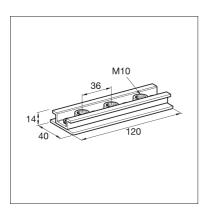












## Slide Element GS 41

Group: 1336

#### Application

Slide element for use in Sikla Channels MS 41. For single and, using a Tandem Connector, double mounting options.

The sliding distance is determined by the length of the rail. Holding Brackets are to be used for securing the slide element. Alternatively, the Sikla Channel Holder SH may be used.

Any option in combination with Sikla Pipe Clamps Ratio S and Stabil D-3G may be realised.

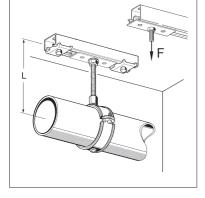
Various connection options with pipe clamps in the range between M12 and R1". For these connection options, the corresponding Mounting Plate could be screwed directly with the slide element by means of bolts M10 x 20. Suitable for ceiling and floor mounting solutions and as a guide for rising pipes.

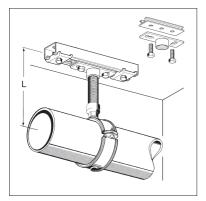
Technical Data	
Permissible load overhead mounting:	
Single mounting:	6 kN
Double mounting:	8 kN
The permissible load capacity of the channel has to	
be respected.	
Permissible load floor mounting: Single mounting/Double mounting: Single mounting with mounting plate:	4 kN 8 kN

Lever arm L <sub>max</sub> for single mounting:	350 mm
Static friction coefficient $\mu_0$ :	0.16
Sliding friction coefficient µ:	0.14
Material:	Steel, electro-galvanised

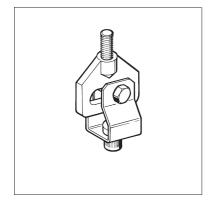
The permissible bending moment of the connection elements (threaded rod or threaded tube) may restrict the application!

Туре	Thread connection	W [kg]	Quantity [pack]	Part number
41 - M10	M10	0.18	10	190658









## Slide Element GLE J

Group: 1343

#### Application

Height-adjustable suspension slide element for all mechanical services. Can be fixed as a single mounting element directly to the ceiling or, in case of parallel pipe runs, to Sikla Channels.

The slide roller located in the suspended section provides for smooth, jerk-free and silent sliding.

#### Scope of delivery

Completely pre-assembled.

#### Installation

The selected height is to be secured by means of a locking nut.

#### **Technical Data**

Туре	FZ * [kN]
J 8	3.5 kN
J 10	3.5 kN
J 12	6.0 kN
J 16	6.0 kN

Adm. load FZ \* under stress of fire

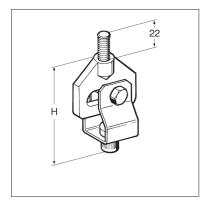
Туре	FWD 30			
	[N]	[N]	[N]	[N]
J10	≤ 1.100	≤ 600	≤ 400	≤ 300

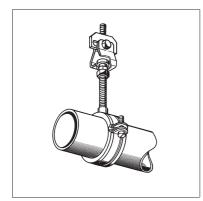
FZ = max. adm. tensile load

\* The load capacity of the connecting elements used is to be respected, this applies in particular under stress of fire.

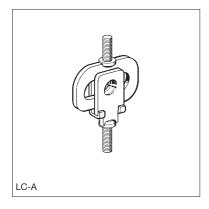
Maximum lateral deviation angle: Length of drop rod of threaded rod: Maximum sliding distance: Maximum height adjustment: Static friction coefficient  $\mu_0$ : Sliding friction coefficient  $\mu$ : Material: 10° No limitation 25 mm 15 mm 0,23 0,15 Steel/ cast iron, electro-galvanised

Туре	Thread connection	Anchor size	Height H [mm]	W [kg]	Quantity [pack]	Part number
J 8	M8	M8	85	0.19	25	126852
J 10	M10	M10	85	0.19	25	126861
J 12	M12	M12	95	0.29	25	126870
J 16	M16	M12	95	0.27	25	126889









## Slide Element GLE LC

Group: 1343

#### Application

Suspension slide element which can be fixed as a single mounting element directly to the ceiling or, in case of parallel pipe runs, to Sikla Channels.

- Pendular function allows for slight lateral movements.
- The slide roller located in the suspending section provides for smooth, jerkfree and silent sliding.
- For Type LC-A an additional extension is not needed, if a directed preselection of the thread length is done; especially suitable for different isolation.

#### Scope of delivery

Completely pre-assembled.

#### Installation

Type LC-I allows for height adjustment by offering a screw depth of up to 15 mm.

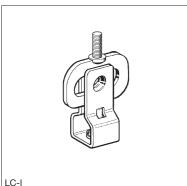
For fixing the position of the Slide Element, a locking nut has to be used.

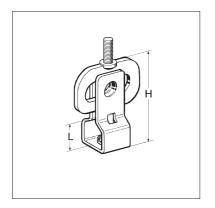
### **Technical Data**

1 kN
Max. 25 mm
2°
Steel, electro-galvanised

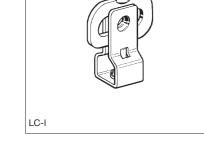
Туре	Thread connection to building structure	Thread connection to system x L	Height H [mm]
LC-A 22	M8 x 22	M8 x 22	76
LC-I	M8 x 22	M8 /15*	68

	1	1	
Туре	W	Quantity	Part
	[kg]	[pack]	number
LC-A 22	0.09	100	151069
LC-I	0.09	100	151078

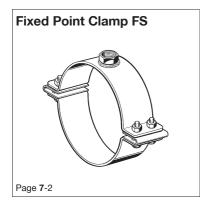




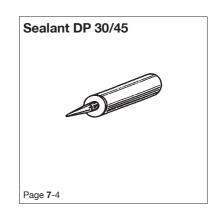
Туре	Thread connection to building structure	Thread connection to system x L	Height [mm
LC-A 22	M8 x 22	M8 x 22	76
LC-I	M8 x 22	M8 /15*	68
* range for height adjustment			



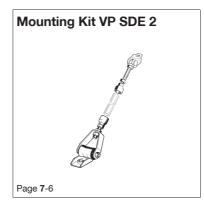




Chilled Water Fixed Point Clamp FKS

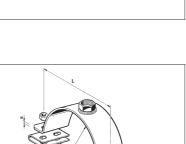


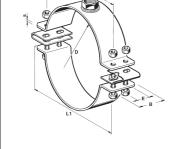


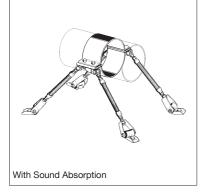


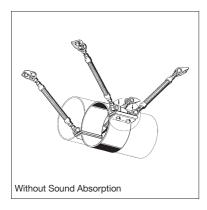












## **Fixed Point Clamp FS**

Group: 1380

#### Application

To be used for Fixed Point installations in combination with Mounting Kits. For completion a Mounting Kit (with or without sound absorption) and 4 braces (Sikla threaded tubes or rods) are needed.

For professional dimensioning of these components according to fixed point loads (up to 25 kN with sound absorption or up to 35 kN without sound absorption) our staff members give advice.

The symetric construction enables absorption of axial loads in both directions. The centrically welded M16 nut offers further connection possibilities.

#### Scope of delivery

Complete with 4 clamping bolts and 4 nuts M16, from size 108 mm onwards with spring inserts.

Clamping bolts and spring inserts are fixed and retained to the lower part of the clamp; nuts are supplied loose.

#### Installation

Tighten clamping bolts equally with the torque M as mentioned in the table.

Туре	Tightening torque <b>M</b> (Nm) <sup>1)</sup>
<sup>1</sup> / <sub>2</sub> " 1 <sup>1</sup> / <sub>2</sub> "	50
57 mm 3"	80
108 mm 521 mm	100

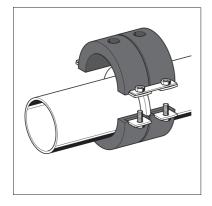
<sup>1)</sup> Tightening torque for combination FP clamp with steel pipe DIN EN 10220 / normal wall thickness. For pipes with smaller wall thickness or other material, the values have to be reduced.

#### **Technical Data**

Material:	Stool	all	narte	galvanised
viateriai.	Sleel,	all	parts	gaivanised

Material:	Material: Steel, all parts galvanised							
Type d [mm]	NB	B [mm]	s [mm]	L [mm]	L₁ [mm]	E [mm]	W [kg]	Part number
21.3	1/2"	80	5	74	106	45	1.05	159979
26.9	<sup>3</sup> / <sub>4</sub> "	80	5	79	111	45	1.09	159988
33.7	1"	80	5	86	118	45	1.15	159997
42.4	<b>1</b> <sup>1</sup> / <sub>4</sub> "	80	5	95	127	45	1.25	160007
45		80	5	97	129	45	1.29	160016
48.3	<b>1</b> <sup>1</sup> / <sub>2</sub> "	80	5	101	133	45	1.31	160025
57		80	6	109	141	45	1.67	160034
60.3	2"	80	6	113	145	45	1.69	160043
76.1	2 <sup>1</sup> / <sub>2</sub> "	80	6	129	161	45	1.87	160052
88.9	3"	80	6	141	173	45	2.09	160061
108		100	6	166	214	50	3.31	160070
114	4"	100	6	172	220	50	3.35	160089
133		100	6	191	239	50	3.67	160098
139	5"	100	6	198	246	50	3.78	160104
159		100	6	207	255	50	4.05	160113
168	6"	100	6	217	265	50	4.07	160122
219	8"	100	6	278	326	50	4.91	160131
274	10"	100	6	331	379	50	5.57	160140
324		100	8	390	438	50	8.22	160159
356		100	8	422	470	50	8.94	160168
368		100	8	434	482	50	9.17	160177
419		100	8	485	533	50	9.99	160195
508		100	8	574	622	50	11.68	160201
521		100	8	587	635	50	13.20	160210





## **Chilled Water Fixed Point Clamp FKS**

Group: 1382

#### Application

Chilled Water clamp for the absorption of axial forces.

Especially used for risers or as fixed point clamp. The contraction forces are transferred to the pipe clamp by a pressure ring welded to the perimeter of the pipe. The clamp is anchored to the building structure via an installed anchor bracket.

### Scope of delivery

4 half shells, 2 splice plates, 1 pressure ring as well as bolts and nuts. Delivery time: 10 working days

#### Installation

- 1. Weld pressure ring to pipe at location of required anchor point and conserve subsequently.
- 2. Apply a thin bead of sealant to the inside adjacent shell faces of the clamp.
- 3. Position clamp shells on either side of the pressure ring and connect via splice plate.
- 4. Check if joint between the clamps is closed tightely by the sealant.
- 5. Install refrigeration clamp by means of Mounting Kit.

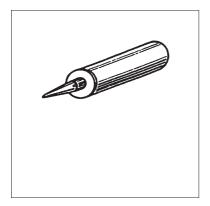
#### **Technical Data**

|--|

DN

Type [NB]	Insulation thickness S [mm]	Max. Load of Fixed Point shear [kN]	L [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
76.1	30	2.0	171	202	2.02	1	190271
88.9	30	2.0	179	206	2.28	1	190289
108	30	2.5	200	220	3.48	1	190298
114.3	40	3.0	230	274	4.24	1	190307
133	40	3.5	264	300	4.52	1	190316
139.7	40	5.0	264	300	4.82	1	190325
168.3	40	5.5	288	328	5.62	1	190343
219.1	60	9.5	399	439	16.14	1	190352
273	60	13.0	453	493	17.54	1	190379
323.9	60	14.5	504	544	23.34	1	190388





## Sealant DP 30/45

Group: 1252

#### Application

For diffusion-proof installation of Sikla Chilled Water Fixed Point Clamp.

Scope of delivery In cartridges of 310 ml.

#### Installation

Prior to fitting a Chilled Water Fixed Point Clamp, a thin ring-shaped Sealant 30/45 is to be applied to the enhanced ring. After mounting of the clamp, check if the cant of the PUR-clamp fits exactly. The most favourable processing temperature is 20°C up to 25°C.

#### **Technical Data**

Steam diffusion resistance: µ ≈ 10 000 Temperature range: -80°C up to +90°C Silicone-free

Туре	W	Quantity	Part
	[kg]	[pack]	number
30/45	0.49	1	146283







## Mounting Kit VP A/B

Group: 1380

#### Application

Assembly of sloped supports for Fixed Points. With the beveled Universal Joint UG FP, the sloped supports could be mounted directly to the Fixed Point Clamp.

#### Scope of delivery

The Universal Joints UG and UG FP are already pre-assembled as Mounting Kits, containing Threaded Stud, Hexagon Nut and Rod Coupling. By this, mistakes during assembly are almost impossible. Needed anchors have to be ordered separately.

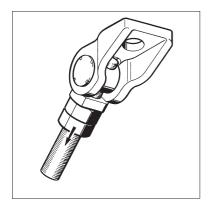
#### Installation

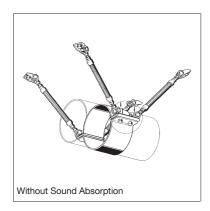
With the optionally cutted Threaded Tubes and Threaded Studs the Universal Joints UG and UG FP each are connected to a sloped support each. Afterwards the four sloped supports are directly assembled with the UG FP and the Fixed Point Clamp.

#### **Technical Data**

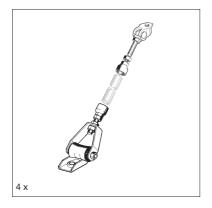
Material: Steel, all parts galvanised

Туре	W [kg]	Quantity [pack]	Part number
A/B-M12	3.85	1	160663
A/B-M16	4.65	1	160672
A/B- <sup>1</sup> / <sub>2</sub> "	4.05	1	160681
A/B- <sup>3</sup> / <sub>4</sub> "	4.80	1	160690
A/B-1"	5.39	1	160706









## Mounting Kit VP SDE 2

Group: 1380

#### Application

Pre-assembled supports kits for Fixed Points. With the beveled Universal Joint UG FP, the sloped supports can be mounted directly to the Fixed Point Clamp.

#### Scope of delivery

The Universal Joint UG FP and Sound Absorber SDE 2-UG 16 are already preassembled as Mounting Kits, containing Threaded Stud, Hexagon Nut and Rod Coupling. By this, mistakes during assembly are being eliminated. Anchors to be ordered separately.

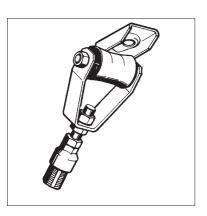
#### Installation

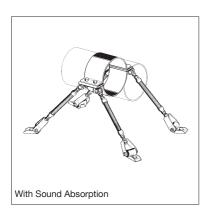
By either using Threaded Tubes or Threaded Studs the Universal Joint UG FP and Sound Absorber SDE 2-UG 16 are then connected to make up a support . The four supports can then be directly mounted with the UG FP to the Fixed Point Clamp.

#### **Technical Data**

Material: Steel, all parts galvanised

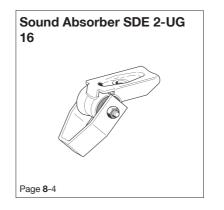
Туре	W [kg]	Quantity [pack]	Part number
SDE 2 A/B-M16	7.55	1	178166
SDE 2 A/B-1/2"	6.62	1	178175
SDE 2 A/B- <sup>3</sup> / <sub>4</sub> "	7.38	1	178184
SDE 2 A/B-1"	9.98	1	178193



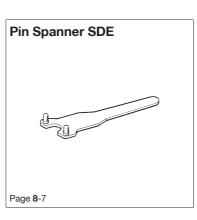


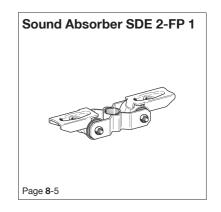


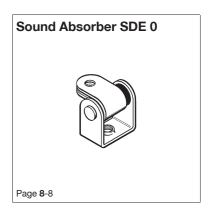












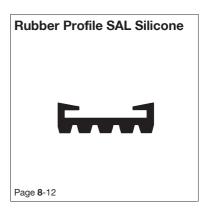












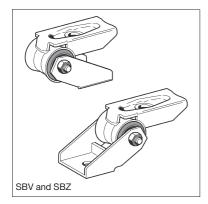


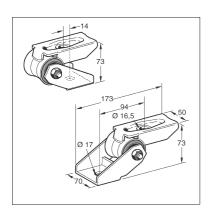


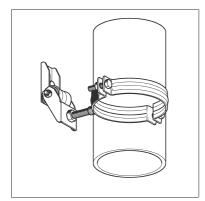
Sponge	Rubber Lining MSK
age <b>8</b> -14	

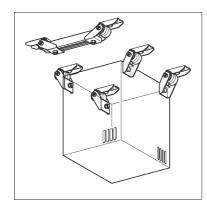












## Sound Absorber SDE 2-SBV/SBZ

Group: 1612

#### Application

Universal sound absorption element for heavy loads. Particularly suitable for soundproof installation

of sound-insulated fixed points

• of devices in the fields of ventilation and air conditioning.

Can be fixed either directly to building components by means of an M16 heavy duty anchor or to steel structures. It is also possible to mount the Sound Absorber onto Sikla Channels (recommended from size 41/41 onwards), or to insulate complete channel structures from the building structure. The element is also suitable as joint fixing for channels on angular ceilings, walls and floors.

#### Scope of delivery

Both types (SBV or SBZ) consist of identical components; the joint bracket, which is to be connected with the support system is pre-assembled by means of an M10 hexagon bolt and safety nut; the position of this bracket determines the type.

#### Installation

For soundproof fixed points, the use of Sikla Stabil Pipe Clamps is recommended. Installation can be made either as a) single point connection (centric on the 3G nut of a Stabil D-3G) or as b) two point connection (on both sides of a Stabil D)

#### **Technical Data**

Working load (under tension Max. 10 kN or pressure for all directions in the plane of rotation): Sound absorption value: Up to 15 dB(A)

#### Note:

Lateral forces require additional support. Dimensioning of the anchor and of further joining elements may restrict the application.

Туре	Connection to building	Connection to	Spring constant
	structure	system	С
	[mm]	[mm]	[kN/mm]
SDE 2 - SBV	Ø 16.5	Ø 17.0	3.5
SDE 2 - SBZ	Ø 16.5	Ø 17.0	3.5

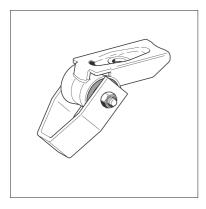
Material:

Metal Body: Sound absorption insert: Temperature range:

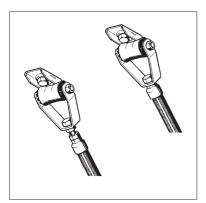
Welded steel, electro-galvanised PUR (foamed), RG 650 kg/m<sup>3</sup> -30 up to +100°C

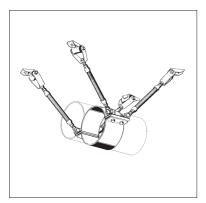
Туре	W [kg]	Quantity [pack]	Part number
SDE 2 - SBV	1.00	10	161406
SDE 2 - SBZ	0.99	10	161062





## 120 Ø 16,5 50 0 17 80 Ø 17





## Sound Absorber SDE 2-UG 16

Group: 1612

#### Application

Universal sound absorption element for heavy loads. Particularly suitable for soundproof Installation according to DIN 4109

- of single connections to M16 Threaded rods, also on girders or roof structures of any gradient
- ◆ of soundproof Fixed Points in trestle arrangement using 4 SDE 2-UG 16. Suitable for installation of soundproof inclined supports, or onto Sikla Channels (recommended from size 41/41).

#### Scope of delivery

The joint bracket, which is to be connected with the support system, is preassembled using an M10 hexagon bolt and safety nut.

#### Installation

For soundproof single point installation we recommend to connect the SDE 2-UG 16 to the centric thread connection of the Stabil D-3G.

For soundproof Fixed Points in trestle arrangement (see picture below), please see the notes in the Fixed Point section.

Instead of the normally used 4 Universal Joints, 4 Sound Absorber SDE 2-UG 16 are used to fix on the building structure.

#### **Technical Data**

Working load (tension or pressure	Max. 10 kN
for all directions in the plane of rotation):	
Fixed Point force in pipe axis	Max. 25 kN
direction for trestle arrangement as per	
picture below:	
Sound absorption value:	Up to 15 dB(A)

#### Note:

Lateral forces require additional support.

Dimensioning of the anchor of further joining elements may restrict the application.

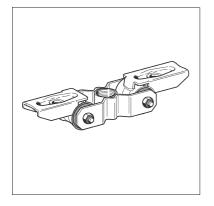
Туре	Connection to	Connection to	Spring constant
	building structure		c
	[mm]	[mm]	[kN/mm]
SDE 2 - UG 16	Ø 16.5	Ø 17.0	3.5

#### Material:

Metal Body: Sound absorption insert: Temperature range: Welded steel, electro-galvanised PUR (foamed), RG 650 kg/m<sup>3</sup> -30 up to +100°C

Туре	W	Quantity	Part
	[kg]	[pack]	number
SDE 2 - UG 16	0.98	10	161053





### Sound Absorber SDE 2-FP 1

Group: 1612

### Application

Universal sound absorption element for heavy loads. Particularly suitable for soundproof installation according to DIN 4109

• of single point connections to threaded tubes up to 1"

as a base for soundproof fixed points

Can be fixed either directly to building components by means of two M16 heavy duty anchors or to steel structures, or onto Sikla Channels (recommended from size 41/45).

### Scope of delivery

The joint bracket, which is to be connected with the support system, is preassembled with two identical base components using two M10 hexagon bolts and safety nuts.

#### Installation

For soundproof single point installations and for fixed points we recommend to connect the SDE 2-FP 1 to the centric thread connection of the Stabil D-3G. When using the 1" thread of the clamp, a 1" Locking Nut (part No. 157117) has to be used.

### **Technical Data**

Sound absorption value: Up to 15 dB(A)

Туре	Connection to building	Connection to
	structure	system
	[mm]	[female thread]
SDE 2 - FP 1	Ø 16.5	1"

Working load (tension or pressure):

Туре	+/- Fx [kN]	Fy [kN]	+/- Fz [kN]
SDE 2 - FP 1	20.0	-	20.0

### Note:

Lateral forces require additional support

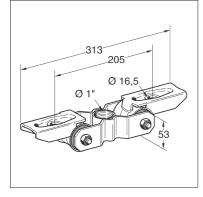
Dimensioning of the anchor and of further joining elements has to be taken into consideration.

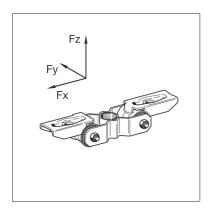
In fixed point constructions as shown in the picture below, the fixed point force is limited by the permissible bending moment of the threaded tube. (For load chart see "Installation Guideline").

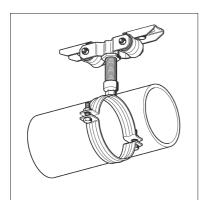
### Material:

Metal Body: Sound absorption insert: Temperature range: Welded steel, electro-galvanised finish PUR (foamed), RG 650 kg/m<sup>3</sup> -30 up to +100°C

Туре	W	Quantity	Part
	[kg]	[pack]	number
SDE 2 - FP 1	2.02	10	161071











Ø 90

10



Group: 1612

### Application

Various applicable sound absorption element with M10, M12 or triple thread connection options (also according to DIN 4109). Suitable for overhead, floor and wall mounting purposes in the plant construction.

### Scope of delivery

With M10 x 25 grub screw (supplied loose).

### Installation

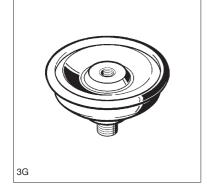
The grub screw has to be screwed as much as possible into the thread for connection to the building structure using an anchor with an internal thread. Tighten the Sound Absorber with Pin Spanner SDE.

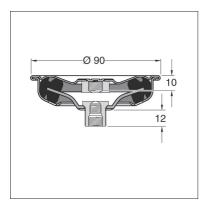
### Note:

When implementing wall mounting solutions, high bending moments should be avoided, e.g. by arranging a Channel section or a Support Bracket onto several Sound Absorbers.

### **Technical Data**

Permissible static loads (permanent exposure):	
Tensile force:	2.5 kN
Pressure:	3.0 kN
Shear:	0.5 kN
Spring constant cd, depending on static load:	
at 0.12 kN:	13.7 kN/cm
at 0.40 kN:	16.9 kN/cm
at 0.80 kN:	30.5 kN/cm
Sound absorption value:	Up to 18.9 dB(A)
Temperature range:	-50°C up to +110°C





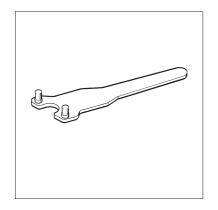
TypeConnection to building structureConnection to systemSDE 1 - M10M10M10SDE 1 - 3GM103G-thread M8/M10/M16

Material: Metal parts: Sound absorption insert:

Steel, electro-galvanised EPDM, hardness 45+/-5° Shore

Туре	W [kg]	Quantity [pack]	Part number
SDE 1 - M10	0.27	25	162735
SDE 1 - 3G	0.27	25	136989



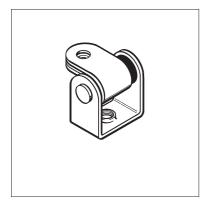


# Pin Spanner SDE Group: 8108

Application Tool for safely tightening the Sound Absorber SDE.

Туре	W	Quantity	Part
	[kg]	[pack]	number
Pin Spanner SDE	0.21	1	146609





### Sound Absorber SDE 0

Group: 1610

#### Application

May be used for ventilation systems and other M&E services, mainly for direct ceiling attachment.

Can be combined with other support components such as Ducting Angles, Pipe Clamps, Channels or special structures. May also function as an efficient band hanger when turned by 180°.

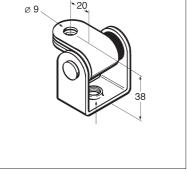
### **Technical Data**

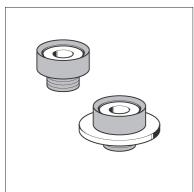
Working load:	1.0 kN
Sound absorption insert:	SBR/EPDM (black)
Hardness:	45+/-5° Shore
Temperature range:	-50°C up to +110°C
Class:	B2 according to DIN 4102
Sound absorption value:	Up to 15 dB(A)
Martin 2 all	Other the start and see the start

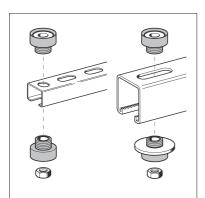
Material:

Steel, electro-galvanised

Туре	Connection to building structure	System connection	W [kg]	Quantity [pack]	Part number
SDE 0 - M8	Ø 9 für M8	M8	0.07	100	105068
SDE 0 - M10	Ø 9 für M8	M10	0.07	100	105077







## Sound Absorption Unit SDE

Group: 2712 / 1610

#### Application

Sound Absorption Element for use in combination with Sikla Channels in ducting systems (suitable also for sound proof requirements according to DIN 4109).

### Scope of delivery

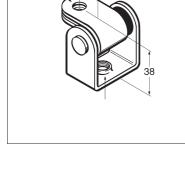
With inserted and retained washer.

### **Technical Data**

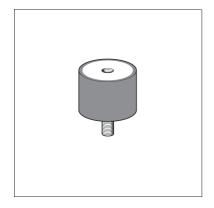
Material:	
Temperature range:	
Fire resistance:	
Hardness:	
Washer:	

TPE, black -50°C up to +110°C B2 according to DIN 4102, non-dripping 50°+/-5° Shore Steel, galvanised

Туре	For channel	Thread connection	Total- Height [mm]	Height of collar [mm]	W [kg]	Quantity [pack]	Part number
27		M8	15	7	0.01	100	197973
41	41	M8/M10	18	10	0.01	100	107802







### Acoustic Absorption Element AKE

Group: 1399

### Application

Universally applicable sound absorption element for higher loads. Suitable for soundproof installation according to DIN 4109. Especially suitable for sound isolation of constructions made of Channels 41 or electrical equipment, e.g. pumps or ventilators.

### Installation

Assembly in Channel 41 by means of Washer 8/40 and Speed Nut M8. The Acoustics Element is designed for pressure loads. Installation with dominant tensile loading or shear stress has to be avoided. For these exceptional cases the load pressure has to be reduced to 1/3.

### **Technical Data**

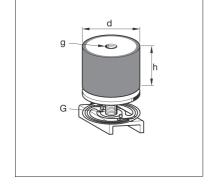
Туре	d	h	Female thread	Male thread
	[mm]	[mm]	g	G
41	40	30	M8 x 10	M8 x 23

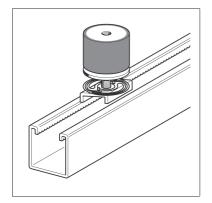
Perm. pressure load: 0.15 - 0.70 kN Spring deflection: 0.50 - 2.60 mm

Material Metal part: Insulation part:

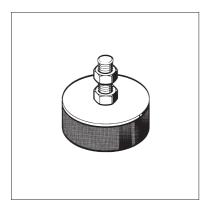
Steel, galvanised NR natural rubber, density 45 +/-5° Shore

Туре	W	Quantity	Part
	[kg]	[pack]	number
AKE 41	0.09	20	193983









### **Rubber-Metal-Combination Element GMT**

Group: 1399

### Application

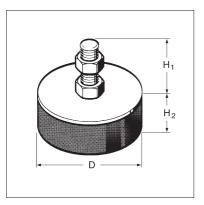
The Rubber-Metal Combination Element GMT suppresses vibrations originating from various systems. Such vibrations generated by the system (such as motors, boilers..) are normally transmitted as sound to the environment via rigid building structures. The mounting situation does not affect the efficiency of the Sikla Rubber-Metal Combination Element GMT, this element may also be applied as a horizontal stop buffer.

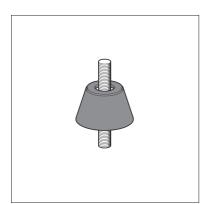
### Scope of delivery

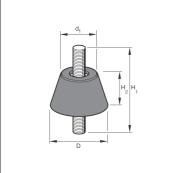
1 Set = 4 elements Each element is accompanied by two hexagon nuts.

### **Technical Data**

Туре	Maximum lo F <sub>max</sub> [kN]		ng constant I/mm]	tc				
M12	5.0	2	2.2					
Temperature range: -30°C up to +70°C Material:								
Sound absorption insert: Metal parts:			Natural rubber, 57+/-5° Shore Steel, electro-galvanised					
Туре		Connection	D [mm]	H1 [mm]	H2 [mm]	W [kg]	Pack. [Set]	







### Sound Absorption Element GMT M8

Group: 1610

GMT M12

### Application

The rubber element suppresses vibrations generated by the system (such as motors, boilers, pumps, air conditioners, etc.) are normally transmitted as sound to the environment via rigid building structures.

M12 75 37 25 1.14 1

#### Scope of delivery

1 box = 400 pieces

### **Technical Data**

Тур	Max. permissible load (tension)
M8	0.2

Туре	Thread	D	de₁	H <sub>1</sub>	$H_2$	W	Quantity	Part
	[mm]	[mm]	[mm]	[mm]	[mm]	[kg]	[pack]	number
GMT M8	M8	40	26	63	24	0.05	400	192584

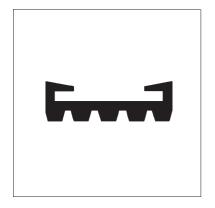


Part

number

117090





### Rubber Profile SAL SBR/EPDM

Group: 1294

#### Application

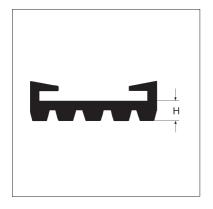
Sound absorption lining for steel straps and pipe clamps (also according to DIN 4109).

Application up to +110°C.

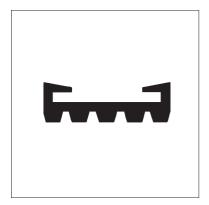
### **Technical Data**

rechincal Data	
Material:	SBR/EPDM, black
Hardness:	45+/-5° Shore
Temperature range:	-50°C up to +110°C
Breaking elongation:	560 %
Tear strength:	500 N/cm <sup>2</sup>
Impact absorption:	39 %
Fire resistance:	Material category B2 (DIN 4102),
	non-dripping
Sound absorption:	Up to18 dB(A) (from height 4.5 mm on)
Surface resistance:	2 x 10 <sup>13</sup> Ohm
Volume resistance:	2 x 10 <sup>13</sup> Ohm
Fully resistant to:	Diluted acids, lyes, alkaline solutions, water,
	aqueous solutions up to 70°C;
	No absorption of moisture
Partially resistant to:	Grease, mineral oil, animal or vegetable fats, ester and ketones
Not resistant to:	Hot oils, fuels, aliphatic and aromatic hydrocarbons and chloric gas
Durability:	Weatherproof, ageing and ozone-resistant, DIN 53508 and 53509 tested

Туре	Steel strap [mm]	H [mm]	Number of ribs	Weight [kg/m]	Quantity roll [m]	Part number
STD 1	25 x 3.0	4.5	4	0.22	30	146502
STD 2	30 x 3.0	4.0	4	0.23	30	146511
STD 3	40 x 4.0	6.0	5	0.37	30	146520
STD 4	50 x 5.0	7.0	5	0.54	30	146539
STD 5	70 x 6.0	7.0	7	0.65	30	146548







### **Rubber Profile SAL Silicone**

Group: 1292

### Application

Sound absorption lining for steel straps and pipe clamps, also according to DIN 4109.

Application up to +200°C (temporarily up to +300°C, see technical data).

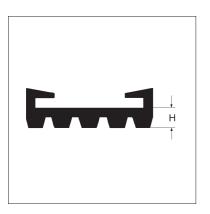
#### **Technical Data**

recinical Data	
Material:	Silicone, red
Hardness:	45+/-5° Shore
Temperature range:	-60°C up to +200°C, permanent exposure
	approx. 2,000 h up to +250°C
	approx. 100 h up to +300°C
Breaking elongation:	350 %
Tear strength:	800 N/cm <sup>2</sup>
Impact absorption:	30 %
Fire resistance:	Material class B2 (DIN 4102),
	non-dripping
Sound absorption:	Up to 16 dB(A)
Surface resistance:	1 x 10 <sup>11</sup> Ohm
Volume resistance:	1 x 10 <sup>15</sup> Ohm
Resistant to:	Animal and vegetable fats, glycerine and ethyl alcohol
Partially resistant to:	Diluted acids and lyes, chlorinated and aromatic
randany roolotant to.	solvents, and to lubricating oils
Not resistant to:	Chlorinated, aliphatic hydrocarbons, aromatic
	hydrocarbons, strong acids and strong lyes
Durability:	Weather-proof and ozone-resistant according to
	DIN 53509 and ageing-resistant according to DIN
	53508
Sprinkler installations:	Approved and accepted by the VdS for use in
	sprinkler installations.

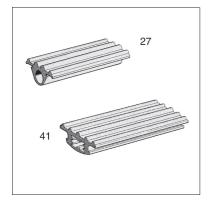
#### Approvals

In combination with Stabil Pipe Clamps or Pipe Loop Praktica S approved and accepted by VdS for use as sound absorption lining in sprinkler installations.

Туре	Steel strap [mm]	H [mm]	Number of ribs	Weight [kg/m]	Qty. [m]	Part number
STD 1 SIL	25 x 3.0	4.5	4	0.17	30	145644
STD 2 SIL	30 x 3.0	4.0	4	0.17	30	145653
STD 3 SIL	40 x 4.0	6.0	5	0.33	30	145662
STD 4 SIL	50 x 5.0	7.0	5	0.43	30	146557







### **Channel Lining SAL**

Group: 1611

### Application

Sound Absorption Lining for inserting into Sikla Channels or fitting around threaded rods; mainly for use in ducting systems, also for sound proof installations as per DIN 4109.

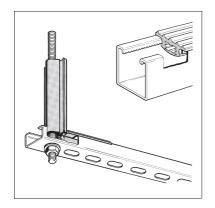
### Scope of delivery

Rolls of 30 m or pieces of 50 mm each.

### **Technical Data**

Material: Temperature range: Fire resistance: Hardness:

SBR/EPDM, black -50°C up to +110°C B2 according to DIN 4102, non-dripping 50°+/-5° Shore



Туре	Thread connection	Length of piece [mm]	Roll [m]	W [kg]	Quantity [pack]	Part number
27	M8/M10	-	30	6.00	1 Rolle	195963
27/L100	M8/M10	100	-	0.01	100	195970
41	M8/M10	-	30	14.27	1 Rolle	101189
41/L50	M8/M10	50	-	0.02	100	101204





### Sponge Rubber Lining MSK

Group: 1293

#### Application

Sound absorption lining for steel straps and pipe clamps.

### Scope of delivery

In rolls, self-adhesive on one side, coated with peel-off foil on the adhesive side.

#### **Technical Data**

Sound absorption value: Hardness:	12 dB(A) 20° Shore				
Temperature range:	-25°C up to +95°C				
Resistent to:	Diluted acids, lyes, alkaline solutions, water,				
Not resistant to:	aqueous solutions up to 70°C, No absorption of moisture Hot oils, fuels, aliphatic and aromatic hydrocarbons and chloric gas				
	and chione gas				
Type Width	Thickness Boll Oty Part				

Туре	Width [mm]	Thickness [mm]	Roll [m]	Qty. [m]	Part number
20 x 3.0	20	3.0	10	150	137616
20 x 4.0	20	4.0	10	150	137412
20 x 6.0	20	6.0	10	150	143590
25 x 3.0	25	3.0	10	120	137722
30 x 3.0	30	3.0	10	100	137607



### **Glass Fibre Tape GSK**

Group: 1291

#### Application

Insulation insert for pipe clamps to prevent from contact corrosion and to ensure thermic separation.

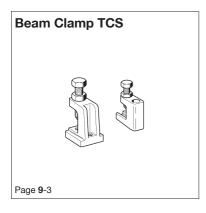
### Scope of delivery

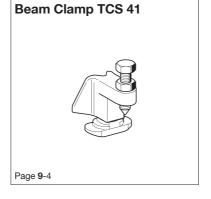
In rolls, self-adhesive on one side, coated with PE peel-off foil on the adhesive side. Adhesive: epoxy resin.

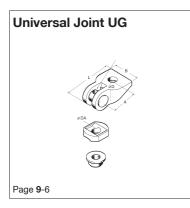
### **Technical Data**

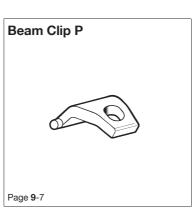
Temperature range: Thermal conductivity: Specific gravity: Chemical behaviour:		ctivity: λ λ λ λ ι: 1	Jp to +1100°C pe = 0,07 W/(mK) be = 0,10 W/(mK) be = 0,15 W/(mK) be = 0,22 W/(mK) be 80 - 240 kg/m <sup>3</sup> leutral	ei 200°C ei 400°C ei 600°C	·	
	Туре	Width [mm]	Thickness [mm]	Roll [m]	Qty. [m]	
	25 x 2	25	2.0	10	120	
	30 x 2	30	2.0	10	100	



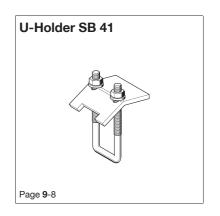


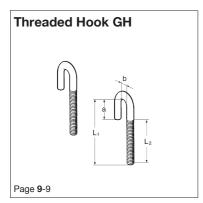










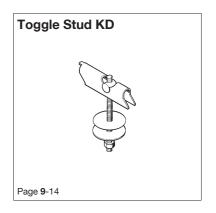








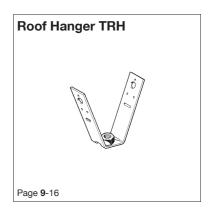


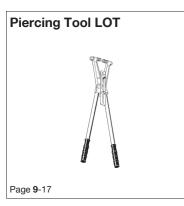




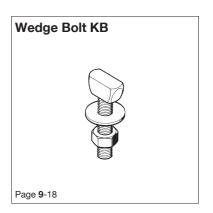


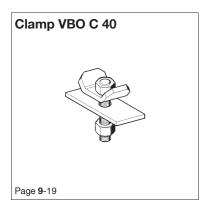




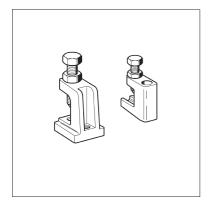


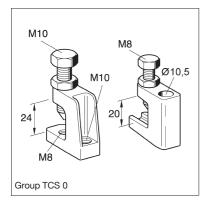


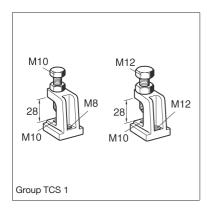


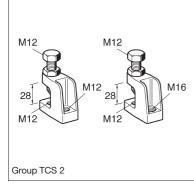












### Beam Clamp TCS

Group: 1337

### Application

Heavy-duty connection element which, in combination with grub screws (M8 up to M16), are suitable for mounting pipes, ducts and equipments to steel beams (I-, T-, U-and angle steel beams).

- The combination with a Universal Joint provides for vertically aligned attachment to inclined beams.
- Can serve as single mounting element for installing crossbars and for fixing cantilever structures.
- Due to their special base profile, Beam Clamps TCS 1 can also be slid along and retained in the opening of Sikla Channels of the 41 series.

#### Scope of delivery

Pre-assembled with clamping bolt and locking nut.

### Installation

Tighten the clamping bolt of the Beam Clamp first by hand, then tighten down with a spanner according to the mounting structures. The hardened point of the clamping bolt will penetrate the comparatively soft material of the beam, ensuring a solid and highly secure connection. Tighten the locking nut for securing the installation.

For installation near a cutting edge of a channel, an additional Holding Bracket HK 41 has to be mounted.

Note: Respect relevant mounting instructions! For FM-construction use thread  $\geq$  M10 only!

### **Technical Data**

The nominal loads indicated apply to new Beam Clamps fixed to undamaged beam flanges only.

Working load:	Type TCS 0: 3.5 kN
	Type TCS 1: 5.0 kN
	Type TCS 2: 8.5 kN
Material:	Body in cast-iron, electro-galvanised and clamping bolts in
	steel, class 8.8., electro-galvanised

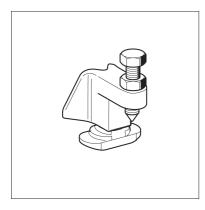
### Approvals

Approved and accepted by VdS and FM for use with stationary fire extinguishing systems.

TCS O LC Approval: G4950065 and G4950066 (erected mounting with M10 up to a maximum height  $h_{max} = 150$  mm and up DN 50 only). For further types and different application fields: G4820023; G4830054; G4800039/...45; G4990027.

Туре	Connection [fore/aft]	Clamping range on parallel flange [mm]	W [kg]	Quantity [pack]	Part number
TCS 0 LC	Ø 10.5	18	0.10	50	156648
TCS 0 M8/M8	M8/ M8	22	0.14	50	178283
TCS 0 M8/M10	M8/M10	22	0.14	50	174206
TCS 1 M10/M8	M10/M 8	26	0.21	50	116770
TCS 1 M10/M10	M10/M10	26	0.21	50	116150
TCS 1 M10/M12	M10/M12	26	0.22	50	167332
TCS 2 M12/M12	M12/M12	26	0.28	25	174224
TCS 2 M12/M16	M12/M16	26	0.27	25	174215





### Beam Clamp TCS 41

Group: 1337

### Application

The Beam Clamp 41 allows for a direct connection of Sikla 41mm slotted strut channel to beam without having this obstruction. In order to achieve this, the foot of the Beam Clamp must be inserted into the slot on the back of the channel.

### Scope of delivery

Cast iron part, completely pre-assembled with clamping bolt and locking nut.

### Installation

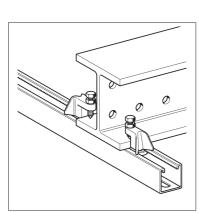
Insert the foot of the Beam Clamp into the slot on the back of the channel, twist by 90° and push it against the beam's flange. First tighten bolt of Beam Clamp (hand-tight), then tighten further with 1 1/2 turns. The sharpened tip of the bolt will dent the beam thus providing a high level of safety. At last tighten locking nut. Every channel (statically determined) has to be fixed at least twice.

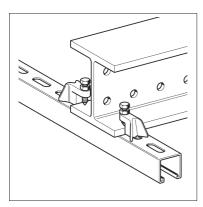
### **Technical Data**

The following nominal load applies for a new Beam Clamp fixed to an undamaged beam flange.

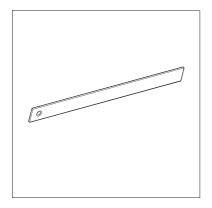
Nominal load:	4.0 kN
Material:	Cast iron, clamping bolt 8.8, electro galvanised

Туре	Clamping range on parallel flange [mm]	W [kg]	Quantity [pack]	Part number
TCS 41	20	0.12	50	110004









### Safety Strap SL VdS

Group: 1338

### Application

Additional safety feature for Beam Clamps supporting tubes of nominal diameter NB 80 and larger, required for installations meeting the Vds standard. Dimensions and material meet the VdS CEA-guideline for Sprinkler systems.

### Installation

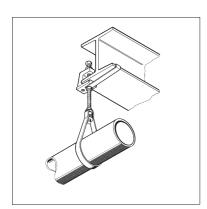
The safety strap is bent on the construction site to the form of the beam, so that it securely encompasses the edge of the beam flange.

### **Technical Data**

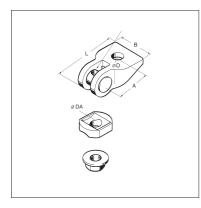
Applicatio	n
Type I:	NB 80 - NB 100
Type II:	NB 125 - NB 150
Type III:	NB 200

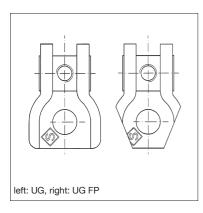
Material: Steel strip, pre-galvanised

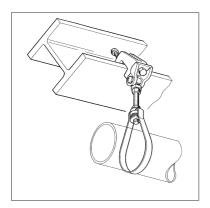
Туре	Length [mm]	Bore [mm]	Dimensions w x th [mm]	W [kg]	Quantity [pack]	Part number
SL 1	400	11	20 x 2.5	0.16	50	116798
SL 2	400	13	30 x 2.5	0.23	50	116804
SL 3	400	17	40 x 3.0	0.36	50	116813

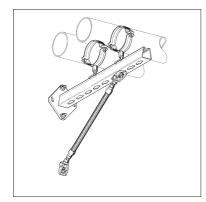












### **Universal Joint UG**

Group: 1342

#### Application

Universal connection for attachment to non-horizontal components. May be fixed directly to building surfaces, Beam Clamps, channels, etc. Typical uses would include easy on-site manufacture of various tie rod assemblies to support brackets, or reinforcement struts for sliding and fixed point applications (UG FP types are specifically designed for assembly for pipe clamp wings for fixed point constructions).

- Infinitely variable angle adjustment
- Length and height adjustment via rotation of the grub screw in the threaded pivot head
- Securely retained threaded pivot head
- Secure attachment of nut on the adapter plate.

### Scope of delivery

With adapter plate and locking nut.

#### Installation

Screw the grub screw completely into the pivot head (visual control). Fix the adjusted angle by tightening the supplied nut against the adapter plate.

### **Technical Data**

Туре	Working load [kN]	Adapter plate Ø DA [mm]	Nut
UG M8	5.8	10.5	Flange nut
UG M10	8.0	10.5	Flange nut
UG M12	13.0	16.5	Flange nut
UG M16	13.0	16.5	Hexagon nut
UG FP M12	13.0	16.5	Hexagon nut
UG FP M16	13.0	16.5	Hexagon nut

Material: Steel, electro-galvanised (versions M8 and M10) Malleable cast iron, electro-galvanised (versions M12 and M16)

#### Approvals

VdS Approval G4980055 for types UG M8 to UG M16.

Туре	Pivot head	A [mm]	B [mm]	Ø D [mm]	L [mm]	W [kg]	Quantity [pack]	Part number
UG M8	M 8	26	40	10.5	51	0.18	50	198636
UG M10	M10	26	40	10.5	51	0.12	50	198643
UG M12	M12	33	50	17.0	71	0.37	25	158075
UG M16	M16	33	50	17.0	71	0.36	25	158084
UG FP M12	M12	33	50	17.0	71	0.32	25	158093
UG FP M16	M16	33	50	17.0	71	0.31	25	158109





### Beam Clip P

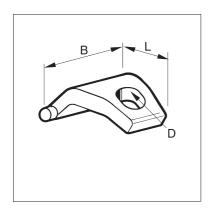
Group: 1331

### Application

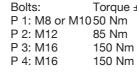
Universal clamping element for bi-lateral attachment of crossbars for pipe runs, ducts, cable lines and equipment to steel beams. The maximum clamping range may be extended by up to 10 mm by using spacers. Any thicker spacers should be welded to the crossbar.

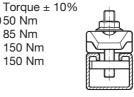
### Installation

Determination of the required bolt length Lmin:





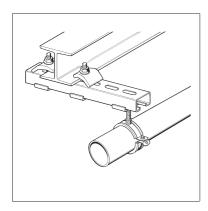


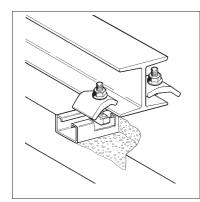


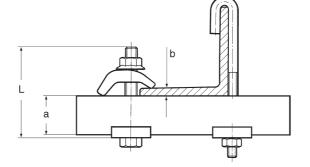
Arrangement A	Arrangement B
Pass-through bolt	Channel nut HZ
with holding bracket	
P 1: L <sub>min</sub> = a + b + 37 [mm]	P 1: $L_{min} = b + 4$
P 2: $L_{min} = a + b + 43$ [mm]	P 2: $L_{min} = b + 4$
P 3: $L_{min} = a + b + 48$ [mm]	P 3: L <sub>min</sub> = b + 5
P 4: L <sub>min</sub> = a + b + 55 [mm]	P 4: $L_{min} = b + 6$

ut HZ b + 40 [mm]

P 2: L <sub>min</sub> = b + 45	[mm]
P 3: L <sub>min</sub> = b + 50	[mm]
P 4: $L_{min} = b + 60$	[mm]







### **Technical Data**

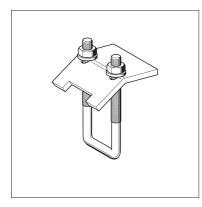
Туре	Working load
P 1	4.0 kN
P 2	5.0 kN
P 3	7.0 kN
Ρ4	8.0 kN

Note: For vertical installation please contact Sikla Technical Department

Material: Cast iron or steel, electro-galvanised

Туре	Size range [mm]	Ø D [mm]	L [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
P 1	1 - 23	11	50	36	0.10	50	116196
P 2	1 - 33	13	62	50	0.24	25	116202
P 3	1 - 33	17	69	50	0.26	25	116248
P 4	4 - 40	17	75	54	0.30	25	116257





### **U-Holder SB 41**

Group: 1331

### Application

Clamping element for bi-lateral attachment of crossbars to steel beams, independent from the channel's opening.

### Installation

To be used in pairs. Length calculation = Beam/Girder flange thickness + min. 2 x 50 mm overhang

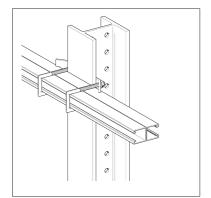
### **Technical Data**

TypeMax. perm. load tensionTightening torqueM83.5 kN per U-Holder20 NmM105.0 kN per U-Holder30 Nm

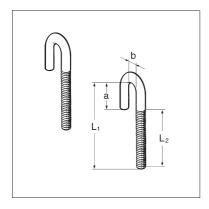
A a a a

Material:	Steel	electro-galvanised
matoria.	0.000,	guivanioou

Туре	For channel height [mm]	Max. flange thickness [mm]	Thread	W [kg]	Quantity [pack]	Part number
41 - M8	20 - 62	16	M8	0.31	20	192566
41 - M10	20 - 62	16	M10	0.41	20	183620
41 D - M10	80 - 124	16	M10	0.48	20	191657







### **Threaded Hook GH**

Group: 1367

### Application

Used in combination with profiled beams as a holder for mounting crossbars composed of Sikla Channels or other standard profiles.

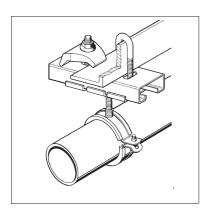
### **Technical Data**

Load values:

Туре	Working load
M8	2.5 kN
M10	4.0 kN

Material: Steel, electro-galvanised

Туре	L <sub>1</sub>	L2	а	b	W	Quantity	Part
	[mm]	[mm]	[mm]	[mm]	[kg]	[pack]	number
M8 x 75	75	50	15	12	0.03	100	101587
M8 x 115	115	70	25	12	0.05	100	101596
M10 x 150	150	90	30	15	0.10	50	101602







### **Hook Sleeve SP**

Group: 1331

### Application

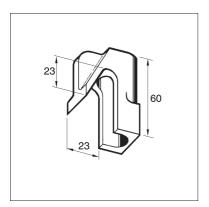
Used in combination with profiled beams as a holder for single-point mountings or for mounting crossbars.

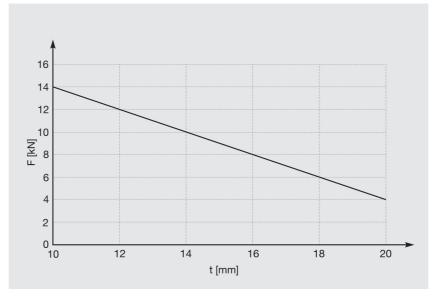
#### Installation

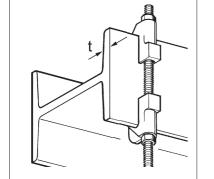
Equipped with a (Ø 13 mm) boring for use with M8 to M12 grub screws. When using an M8 grub screw, we recommend the use of a flange nut. First tighten sturdy, after that tighten up with max 1 1/2 turns.

### **Technical Data**





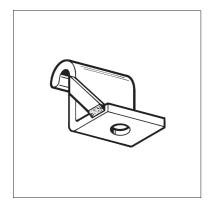




Material: Malleable cast iron, electro-galvanised

Туре	W	Quantity	Part
	[kg]	[pack]	number
Hook Sleeve	0.12	50	106777





### **Hook Bracket SPK**

Group: 1366

### Application

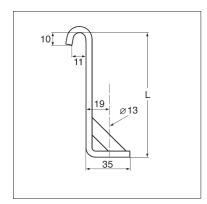
In combination with U bolts up to size M12, the Hook Bracket may be used for directly installing horizontal or vertical pipe strands to U or angle beams.

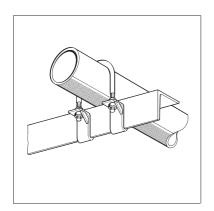
### **Technical Data**

Туре	Working load
Hook Bracket	6.0 kN
with M8	3.0 kN
with M10	5.0 kN
with M12	6.0 kN

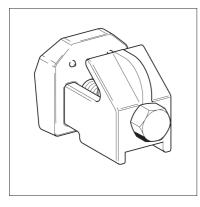
Material:	Steel,	electro-galvanised
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Туре	L	b x s	W	Quantity	Part
	[mm]	[mm]	[kg]	[pack]	number
SPK 150	150	35 x 5	0.29	10	116017









### **Bulb Flat Steel Beam Clamp**

Group: 1337

### Application

Solid connection element to fix pipework, electrical containment services to flatsteel bulk profiles.

May also be used for assemblies after the welding process or repair works to the steel profile. Possible to use as a single fixing or to assemble cross beams for multiple connections. No damage of the coating during installation.

### Scope of delivery

Pre-assembled unit with hexagon bolt.

### Installation

Tighten the bolt with max. 40 Nm torque. Connections made to M10 female thread.

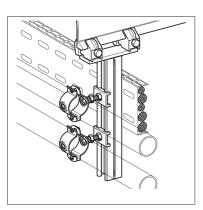
### **Technical Data**

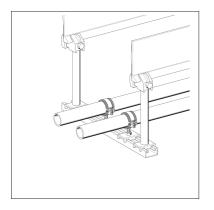
For bulb profiles from 80 to 120 mm  $F_z$  adm. = 4.0 kN  $F_{\star}$  adm. = 2.0 kN

### Material:

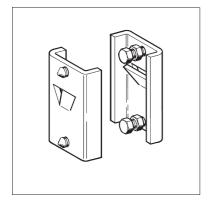
Main material: Malleable iron Bolt: 8.8, galvanised

Туре	Connection	W [kg]	Quantity [pack]	Part number
WFK	M10	0.41	20	198056









### **Clamping End SKL**

Group: 1350

### Application

Nounting element to be fixed within the flanges of I- and U-shaped beams. The systems (such as pipes, etc.) supported this way may run parallel or at right angles to the direction of the I or U beam.

Also suitable as support for crossbars between two vertically adverse arranged profiles.

### Scope of delivery

Pre-assembled

### Installation

The tightening moment of the clamping bolts must be between 1 (minimum) and 1 1/2 (maximum) turns; then tighten locking nuts.

### Note:

The length of the channel to be cut : inside diameter of beam less 25 mm

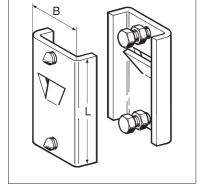
### **Technical Data**

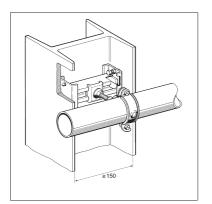
Permissible load per set:	Crossbar support: (2 sets) 5.0 kN/crossbar
	Single attachment: (1 set) 2.5 kN

The maximal torsional moment of the channel is to be taken into consideration.

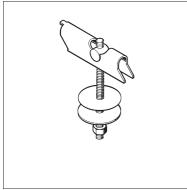
Material: Cold-worked steel, electro-galvanised

Туре	For Channel size	Minimum beam					Part
		type [mm]	[mm]	[mm]	[kg]	[Set]	number
SKL	41/41/2.5 u. 41/45/2.5	IP 140. U 200	100	62	0.93	5	145671









### **Toggle Stud KD**

Group: 1427

### Application

For fixing pipes up to a nominal diameter of NB50 directly to ceilings made of trapezoidal corrugated sheet according to VdS/FM standards or as single point mounting solution.

In cases where VdS or FM regulations are not applicable or in cases of ventilation systems, larger loads may be fixed via crossbars and by an appropriate number of toggle studs.

By turning the threaded rod, it is possible to make height adjustments. This threaded rod is secured and cannot be unscrewed completely. The Hypalon washer is weather-resistant and thus a crucial safety factor when sealing the mounting bore.

### Installation

For the installation hole in the trapezoidal sheet the Hole Saw LS is to be used: Type M8 = LS 22, type TD10 = LS 25.

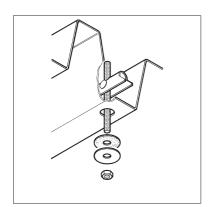
### **Technical Data**

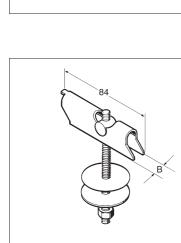
Nominal load:	0.8 kN for each fixing point
Note:	Permissible carrying capacity of the trapezoidal sheet has
	to be considered.
Material:	Steel, electro-galvanised, gasket elastomer

### Approvals

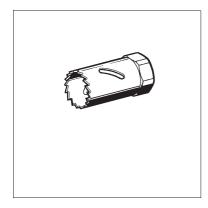
Types M8 for Sprinkler Systems according to Vds Standards. VdS: G4780118 Types TD 10 are approved for Sprinkler Systems by FM

Туре	Sprinkler application	Length of grub screw [mm]	Fitting bore [Ø mm]	B [mm]	W [kg]	Quantity [pack]	Part number
M8 x 100	VdS	100	22	14	0.11	100	113810
M8 x 200	VdS	200	22	14	0.14	50	125569
TD10 x 100	FM	100	25	16	0.13	100	126065
TD10 x 200	FM	200	25	16	0.18	50	125578









Hole Saw Group: 8139

- - -

### Application

Instrument for making holes for Sikla Toggle Studs.

### Scope of delivery

Without Holder and Centre Drill.

### Installation

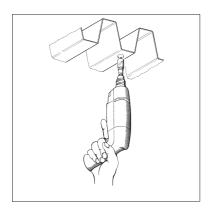
For boring purposes, screw the Hole Saw to a holder with centre drill (to be ordered separately).

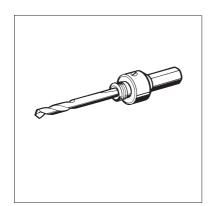
### **Technical Data**

Maximum service life may be achieved by using the Hole Saw at a speed of approx. 350 rpm.

Material: The bimetal Hole Saw has a drill bit of highly alloyed tool steel.

Туре	Bore Ø [mm]	Toggle Stud application	W [kg]	Quantity [pack]	Part number
LS 22	22	M8	0.04	1	133144
LS 25	25	TD 10	0.05	1	133135





### Holder with Centre Drill ZBT

Group: 8139

### Application

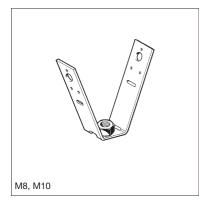
Suitable for Hole Saws LS 22 and LS 25. Can be fitted into all standard drills via hexagon holder.

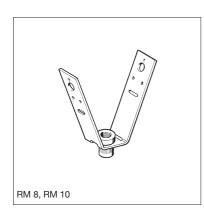
### **Technical Data**

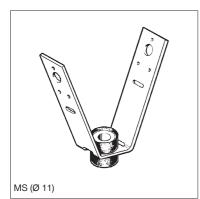
Material: Tool Steel

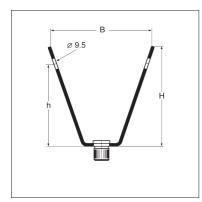
Туре	W	Quantity	Part
	[kg]	[pack]	number
AS-ZB 1	0.08	1	133126











### **Roof Hanger TRH**

Group: 1428

#### Application

Pipes up to NB 50 may be attached to trapezoidal metal sheet roofings. For devices or ducts, a load comparable to a NB 50 pipe is used for each holder for proving permissibility. Should it be necessary to fix larger loads, the respective load is to be distributed uniformly between several hangers, e.g. by way of a crossbar. The individual load for each hanger may not exceed the load exerted on a pipe of NB 50. Fixing several pipes to a crossbar is not permissible in such circumstances.

Types RM8 and RM10 provide subsequent height adjustment; their revolving knurled nut is safely retained, thus preventing any accidental unscrewing. Type MS is equipped with a sound absorption unit with integrated and secured distance sleeve for soundproof installation according to DIN 4109.

#### Scope of delivery

Completely pre-assembled (see drawings). Types M8, M10 with riveted nuts.

### Installation

For drilling trapezoidal corrugated sheets, we recommend to use the Piercing Tool LOT 3; for fixing, we recommend and M8x100 (Part No. 138608) cross bolt.

#### Note:

Each through bolt is to be secured by means of a locking nut; the same applies to dynamic loads.

Blind steel rivets or sheet metal screws may not be used in Sprinkler Systems.

#### **Technical Data**

Working load:	0.8 kN for each fixing point (0.3 kN for Typ MS)
Note:	The carrying capacity of the trapezoidal corrugated sheet
	may restrict the application.
Material:	Steel strip 25 x 2.5 mm, pre-galvanised
Type M8, M10:	Riveted nut

#### **Approvals**

Type M8 for Sprinkler Systems according to VdS Standards: G4820032. Type M10 for Sprinkler Systems according to FM  $\leq$  3.

Туре	H [mm]	B [mm]		Connection to system	W [kg]	Quantity [pack]	Part number
M8	90	90	75	M8	0.10	100	125693
M10	90	90	75	M10	0.10	100	125806
RM 8	90	90	75	M8	0.11	100	125675
RM 10	90	90	75	M10	0.11	100	125684
MS	90	90	75	Ø 11	0.10	100	151564





### **Piercing Tool LOT**

Group: 8140

### Application

For simultaneously punching two holes of DØ 10.5 mm into trapezoidal corrugated roofing of a maximum thickness of 1.2 mm, providing for the subsequent mounting of a Sikla Roof Hanger.

The optimised transformation allows already with very less strength a high cutting force at the hole punches. Thus several successively piercings or piercings in thicker sheets are possible without problems. Further advantages are:

- Continous adjustment of the cutting width for application of various profiles from 40 - 100 mm
- Continous adjustment of the height position for an exact and uniform alignment of the hole positions taken from the lower edge of the trapezoidal corrugated sheet.
- After piercing, ejector springs ensure a safe return stroke of the hole punches.

#### Scope of delivery

Completely with hole punches. Hole Punches could be re-ordered or exchanged if required.

### Technical Data

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Total length: Material:	710 mm
Holders:	Steel tube, lacquered with plastic grip
Joint parts:	Steel
Hole Punch:	Steel, tempered, Ø 10,5 mm
Ejector springs:	Stainless steel

Туре	W	Quantity	Part
	[kg]	[pack]	number
LOT 3	2.47	1	171296



### **Hole Punch LOT**

Group: 8144

### Application

Spare part for Piercing Tool LOT 3.

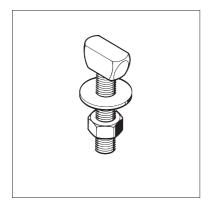
#### **Technical Data**

Material: Punching die:

Hardened steel, Ø 10.5 mm Ejector springs: Stainless steel

Туре	W	Pack.	Part
	[kg]	[Set]	number
LS LOT 3	0.06	1	159252





10

25

### Wedge Bolt KB

Group: 1312

### Application

Developed for HOLORIB composite ceilings. May be used for single or multi-point mounting solutions for crossbars or mounting plates.

### Scope of delivery

Pre-assembled with washer and nut.

### **Technical Data**

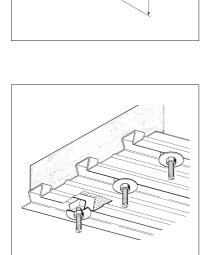
Load values of the wedge bolt M8 respectively M10:

Type of ceiling	Working load
51/150	2.20 kN

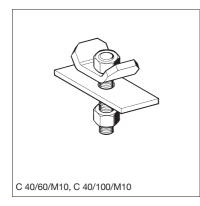
When using crossbars or mounting plates, the individual load values as indicated in the table may be multiplied on the basis of the number of wedge bolts applied. The carrying capacity of the other elements (crossbars, etc.) may restrict the application. Distance of profile beads: 150 mm

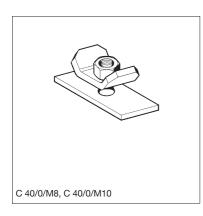
Material: Cold-worked steel, electro-galvanised

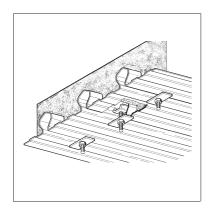
Туре	L [mm]	W [kg]	Quantity [pack]	Part number
M8 x 42	46	0.06	100	138042
M10 x 57	65	0.09	100	138051











### Clamp VBO C 40

Group: 1312

### Application

Developed for COFRASTA 40 composite ceilings. May be used for single or crossbar mounting solutions.

Type C40/0 is mainly used in ventilation systems. In such case, the threaded rods are to be fixed to the system on site. When mounting, make sure that the threaded rods are screwed in sufficiently and retained well, thus preventing any accidental unscrewing.

#### Scope of delivery

Types C 40/60/M10 and C 40/100/M10 are completely pre-assembled, the grub screw is retained and cannot fall out.

Types C 40/0/M8 and C 40/0/M10: Special washer (rectangular) is included in loose form; without grub screw. With riveted hexagon nut.

### **Technical Data**

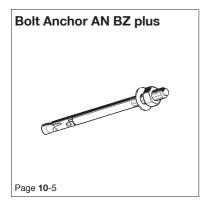
Max. working load: 2 kN

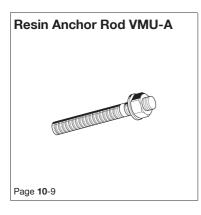
When using crossbars or mounting plates, the working load may be increased on the basis of the number of clamps used for the overall structure. The carrying capacity of the ceiling may restrict the application. Distance of profile beads: 150 mm

Material: Steel, electro-galvanised

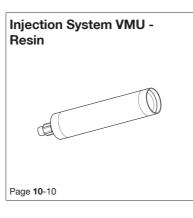
Туре	Available length of thread [mm]	Thread connection	W [kg]	Quantity [pack]	Part number
C 40/0/M8	variabel	M8	0.13	100	146575
C 40/0/M10	variabel	M10	0.14	100	146478
C 40/60/M10	30	M10	0.17	100	146487
C 40/100/M10	70	M10	0.18	100	146496

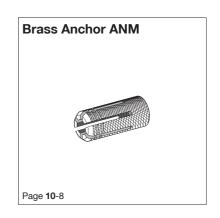


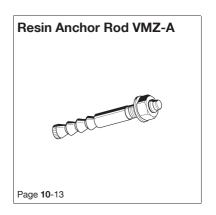




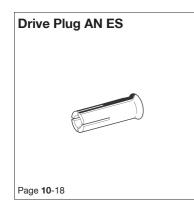








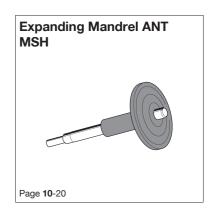




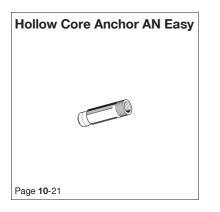








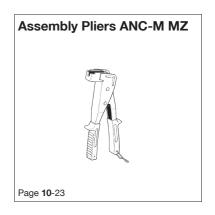


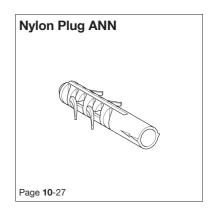


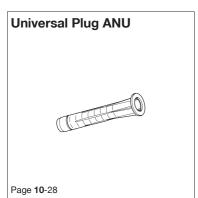
Hollow Space Anchor Metal ANC-M



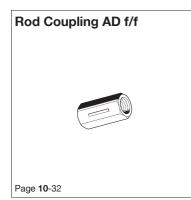










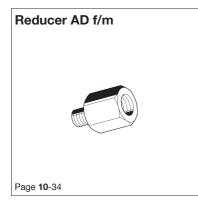


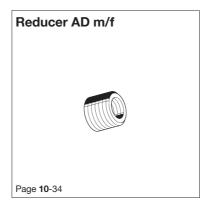


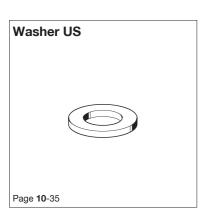
Threaded Rod GST





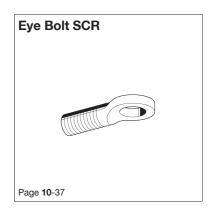






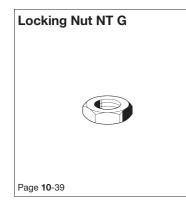


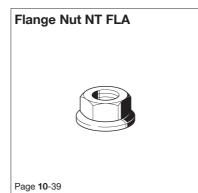




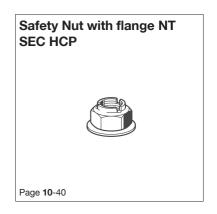








Threaded Tube GR Page 10-38







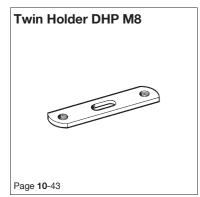




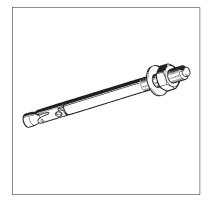












### Bolt Anchor AN BZ plus

Group: 1408

### Application

Anchor for push-through mounting in M&E services and plant construction in concrete tensile zones.

This anchor combines high permissible loads with close edge and centre distances.

Suitable for anchoring in cracked and non-cracked concrete - fixation of pipelines, channels, brackets, etc. in closed rooms - except for damp locations.

- No special drill required. Bore dia = thread size
- Simple and quick mounting due to its push-through concept
- Drive-in hammer zone for preventing any thread damage

### Scope of delivery

Supplied with washer and hexagon nut.

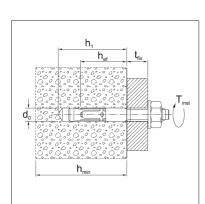
### Installation

- 1. Drill bore hole according to the minimum bore hole depth perpendicularly to the surface.
- 2. Remove dirt from hole.
- 3. Drive the anchor into concrete up to its embedment mark.
- 4. After tightening the anchor with a torque wrench T<sub>inst</sub> (see torque indicated in the following tab), it may immediately be submitted to loading.

Note the instructions in the mounting manual!

### **Technical Data**

Туре	M8	M10	M12	M16
Perm. load <sup>1)</sup> tension C20/25 <sup>2)</sup> [kN]	2.4	4.3	7.6	11.9
C25/30 <sup>2)</sup> [kN]	2.6	4.7	8.3	13.1
C30/37 <sup>2)</sup> [kN]	2.9	5.2	9.3	14.5
C40/50 <sup>2)</sup> [kN]	3.4	6.0	10.8	16.8
C50/60 <sup>2)</sup> [kN]	3.7	6.6	11.8	18.5
Perm. load <sup>1)</sup> oblique $\geq$ C20/25 <sup>2)</sup> [kN]	8.6	12.6	17.1	26.9
	(5.0) <sup>3)</sup>	(6.5) <sup>3)</sup>	(8.5) <sup>3)</sup>	(23.6) <sup>3)</sup>
Perm. bending moment <sup>1)</sup> [Nm]	13.1	26.9	46.9	119.4
		(25.7) <sup>3)</sup>	(44.6) <sup>3)</sup>	(99.,9) <sup>3)</sup>
Min. thickness of component $h_{min} \ge [mm]$	100	120	140	170
( 3 $h_{ef}$ ) Charact. centre distance $s_{cr}$ [mm]	138	180	210	255
( 1.5 $h_{ef}$ ) Charact. edge distance $c_{cr}$ [mm]	69	90	105	127.5
Min. centre distance s at/edge distance c ≥	40/70	45/70	60/100	60/100
[mm]				
Min. edge distance c at/centre distance s ≥	40/80	45/90	60/140	60/180
[mm]				
Effective anchoring depth h <sub>ef</sub> [mm]	46	60	70	85
	(35) <sup>3)</sup>	(42) <sup>3)</sup>	(50) <sup>3)</sup>	(64) <sup>3)</sup>
Nominal diameter of drill d <sub>0</sub> [mm]	8	10	12	16
Depth of bore hole $h_1 \ge [mm]$	60	75	90	110
	(55) <sup>3)</sup>	(65) <sup>3)</sup>	(75) <sup>3)</sup>	(95) <sup>3)</sup>
Anchoring torque T <sub>inst</sub> [Nm]	20	25	45	90
	(15) <sup>3)</sup>	(30) <sup>3)</sup>	(50) <sup>4)</sup>	(100) <sup>3)</sup>
Perm. load <sup>4)</sup> for fire exposure				
Perm. load R30 perm. F [kN]	1.3	2.2	3.2	6.0
Perm. load R60 perm. F [kN]	1.1	1.8	2.8	5.2
Perm. load R90 perm. F [kN]	0.8	1.4	2.4	4.4
Perm. load R120 perm. F [kN]	0.7	1.2	2.2	4.0





- <sup>1)</sup> Loads for single anchors without influence of edge distances
- <sup>2)</sup> Cracked concrete (option 1)
- <sup>3)</sup> Value in brackets applies for the types marked \*
- <sup>4)</sup> Edge/Centre distances in case of fire respective approval is to be respected

The safety factor according to ETAG is included already. Valid are the values of the mentioned approval which could be seen under www.sikla.de/service/downloads.

Material: Steel, galvanised

### Approvals

Sikla approval ETA-10/0259 FM-approval for M10, M12, M16 VdS-conform for all sizes Shock approval of the Federal Office for Civil Defence, Bern (Switzerland)



The types marked \* are not part of the approvals.

Туре	Thread connection	t <sub>fix</sub> = Max. effective length [mm]	Total length [mm]	W [kg]	Quantity [pack]	Part number
8/5/50 *	M8	5	50	0.02	100	110542
8/10/75	M8	10	75	0.03	100	166526
8/30/95	M8	30	95	0.04	100	166535
8/50/115	M8	50	115	0.04	100	110453
8/100/165	M8	100	165	0.06	50	110543
10/10/60 *	M10	10	60	0.05	50	110544
10/10/90	M10	10	90	0.06	50	166544
10/20/100	M10	20	100	0.06	50	110545
10/30/110	M10	30	110	0.07	50	166553
10/50/130	M10	50	130	0.08	50	166562
10/75/155	M10	75	155	0.09	50	110546
10/100/180	M10	100	180	0.05	50	110454
12/5/75 *	M12	5	75	0.08	25	110547
12/15/110	M12	15	110	0.10	25	166571
12/30/125	M12	30	125	0.11	25	166580
12/50/145	M12	50	145	0.12	25	166599
12/65/160	M12	65	160	0.14	25	110548
12/85/180	M12	85	180	0.15	25	110549
12/105/200	M12	105	200	0.18	25	166605
12/160/255	M12	160	255	0.23	20	166614
16/5/90 *	M16	5	90	0.16	20	110550
16/25/145	M16	25	145	0.23	20	166623
16/50/170	M16	50	170	0.26	20	166632
16/100/220	M16	100	220	0.35	10	166641





### **Nail Anchor AN**

Group: 1406

### Application

Suitable for the quick and easy mounting of components to a concrete soffit or shear wall. The internal dual thread M8/M10 allows for a direct easy connection with the Nail Anchor (e.g. M&E service supports).

The reduced drilling depth of 35 mm and the bore dia. of 6 mm minimise the risk of hitting a rebar during installation and reduces the overall cost of drilling.

### Installation

Fast and simple setting of the Nail Anchor AN N M8/M10:

- 1. Drilling
- 2. Cleaning of bore hole
- 3. Hammer in ready!

### **Technical Data**

adm. load in the tensile zone [kN] for anchorage in concrete accord. to approval $\geq$ C20/25					
Centre distance $s_{cr} \ge [mm]$					
Edge distance c <sub>cr</sub> ≥ [mm]					
min. thickness of concrete slab hmin [mm]					
Drill hole dia. d <sub>o</sub> [mm]					
Depth of drill hole h₁ ≥ [mm]	35				
Effective anchorage depth $h_{ef} \ge [mm]$	25				
Length L [mm]					
Thread					
adm. load for fire exposure					
30 min. N <sub>(30)</sub> [kN]					
60 min. N <sub>(60)</sub> [kN]	0.6				
90 min N <sub>(90)</sub> [kN]	0.6				
120 min. N <sub>(120)</sub> [kN]					
R 30 bis R120					
Centre distance s <sub>cr</sub> ≥ [mm]					
Edge distance c <sub>cr</sub> ≥ [mm]					

Valid are the values of the mentioned approval which can be seen on our website www.sikla.com/service/downloads.

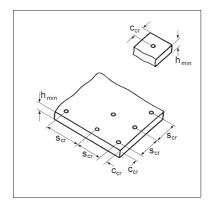
Material: Steel, zinc-plated

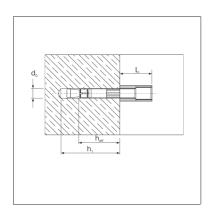
#### Approvals

Sikla approval ETA-13/0048 For the multiple use for non-structural applications in concrete (min. C12/15 and max. C50/60). Fire protection testing, VdS-conform

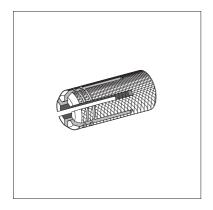


Туре	Length of dowel [mm]	Max. eff. length d <sub>a</sub> [mm]	W [kg]	Quantity [pack]	Part number
AN N M8/M10	58	M8 = 7 / M10 = 10	0.03	100	112152









### **Brass Anchor ANM**

Group: 1403

#### Application

Brass Anchors with metric thread which have a gentle cone and a milled surface. They guarantee high holding forces, are safe against rotation and are anti-skidding. No need of special drills. Suitable for concrete, solid brick, natural stones, clinker brick, sand-lime bricks, solid wood and laminated timber. For fixing of channels, brackets, pipelines etc. Not suitable for humidors.

#### Installation

Put the anchor flush to the anchoring base, i.e. under plaster and insulating layers. After tapping the anchor in, a special surface structure prevents rotation in the drill hole. The brass expansion anchor is suitable for processing with metric bolts, which spread the anchor while tightening.

#### **Technical Data**

Туре	M6	M8	M10	M12	M16
Max. recommended load	0,85	1,50	2,50	3,50	3,90
(tensile load, lateral load, diagonal load) in					
non cracked concrete ≥ B25 [kN]					
Max. recommended load	0,70	1,20	1,60	2,00	3,25
(tensile load, lateral load, diagonal load) in					
solid bricks≥ 15 [kN]					
Anchor depth h <sub>v</sub> ≤ [mm]	22	27	32	38	45
Drill hole dia. do [mm]	8	10	12	15	22

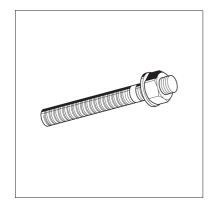
### Approvals

None

These datas have been measured in the test laboratory and are non-binding manufacturer's recommendations.

Туре	Length [mm]	Maxi screw-in depth [mm]	W [kg]	Quantity [pack]	Part number
M8	27.5	18	0.01	100	402420
M10	32	22	0.01	100	402421
M12	38	21	0.02	50	402422
M16	45	25	0.05	25	402423





## **Resin Anchor Rod VMU-A**

Group: 1409

#### Application

Anchor Rod for put-before mounting to be used with Injection System VMU. For anchoring in concrete tensile pressure zones or in brickwork. Suitable for attaching pipelines, channels, brackets, etc. in closed rooms - except for damp locations (stainless steel version available on request).

- No special drill required
- Heavy loads
- Small edge and centre distance

#### Scope of delivery

Pre-assembled with washer and hexagon nut.

#### Installation

- 1. Drill hole according to min. setting depth vertically to the surface
- 2. Careful cleaning of drill hole with Steel brush and Blow-Out Pump
- 3. Screw Mixing Nozzle onto the cartridge; foreshots to be removed and fill 2/3 of drill hole with resin starting from botton of the hole.
- 4. Drive the anchor manually into plastered borehole up to its embedment mark
- 5. When reaching the embedment mark, plaster must be apparent.
- 6. Respect hardening time, when tighten the anchor with instructed torque

#### **Technical Data**

Detailed assembly instruction is attached to the product.

Material: Steel, galvanised

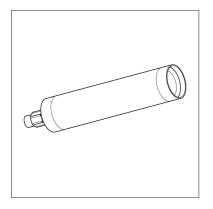
#### Approvals

Sikla Approval ETA-10/0261



Туре	Total length [mm]	t <sub>fix</sub> = Max. effective length [mm]	W [kg]	Quantity [pack]	Part number
VMU-A 8-20/110	110	20	0.05	10	110444
VMU-A 8-55/145	145	55	0.06	10	110445
VMU-A 10-30/130	130	30	0.09	10	110447
VMU-A 10-50/150	150	50	0.10	10	110448
VMU-A 12-15/120	120	15	0.14	10	110449
VMU-A 12-50/155	155	50	0.14	10	110450
VMU-A 16-15/160	160	15	0.27	10	110451





### **Injection System VMU - Resin**

Group: 1409

#### Application

The Sikla Injection System VMU is a chemical fastening system for non-cracked concrete, as well as solid and perforated brick. It consists of styrene-free vinylester resin plus an attached hardening agent. To be used with a Resin Anchor Rod VMU-A. By means of the dispenser gun the components are injected through the mixer nozzle into the drill hole or with perforated brick into the perforated sleeve. The injection adhesive cures and gives a secure fastening to the base material.

#### Scope of delivery

One static mixer ATN VM-X comes with each cartridge.

#### Installation

- Drill hole and clean with steel brush or blow-out pump. For several drills, first prepare the drill holes to avoid interruptions while injecting the mortar.
- 2. Inject the adhesive.
- 3. Immediately insert (screw in with spiral rotation) the Resin Anchor Rod VMU-A

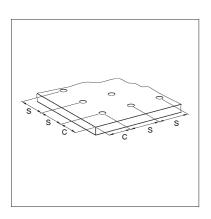
Opened cartridges can be re-used with a new mixer nozzle.

#### **Technical Data**

Assembly data solid/ perforated brick:

Anchor size	M8	M10	M12
Minimum thickness of concrete slab h <sub>min</sub>	110	110	110
≥ [mm]			
Centre distance (anchor group) a $\geq$ [mm]	100 (200) <sup>3)</sup>	100 (200) <sup>3)</sup>	100 (200) <sup>3)</sup>
Min. centre distance min a [mm]	50 <sup>4)</sup>	50 <sup>4)</sup>	50 <sup>4)</sup>
Min. distance (single anchor) [mm]	250	250	250
Edge distance $a_r \ge [mm]$	200 (250) 5)	200 (250) 5)	200 (250) 5)
Edge distance for special conditions ar	50(60) <sup>5)</sup>	50(60) <sup>5)</sup>	50(60) <sup>5)</sup>
[mm]			
Effective anchorage depth hef [mm]	80	90	93
Drill hole diameter $d_0 = [mm]$	10 (14) <sup>6)</sup>	12 (16) <sup>6)</sup>	14
Depth of drill hole $h_0 = [mm]$	85 (105) <sup>6)</sup>	95 (105) <sup>6)</sup>	98
Installation torque $T_{inst} = [Nm]^{7}$	8	8	8

Extract from permissible service conditions of ETA 10/0261 (Resin Anchor Rod VMU-A)  $^{\scriptscriptstyle 1)}$  for non-cracked concrete:





Anchor size	M8	M10	M12	M16
Approved loads, tension C20/25 [kN]	7.6	11.9	16.7	23.8
Approved loads, tension C25/30 [kN]	8.1	12.6	17.7	25.2
Approved loads, tension C30/37 [kN]	8.5	13.3	18.7	26.7
Approved loads, tension C40/50 [kN]	8.6	13.8	20.0	29.3
Approved loads, tension C50/60 [kN]	8.6	13.8	20.0	31.0
Approved loads, shear appr. V C20/25 (steel 5.8) [kN]	5.1	8.6	12.0	22.3
Approved bending moment appr. M (steel 5.8) [Nm]	10.9	21.1	37.1	94.9
Minimum thickness of concrete slab $h_{min} \ge [mm]$	100	130	160	200
Character. spacing S <sub>cr,N</sub> [mm]	160	180	220	250
Character. edge distance C <sub>cr,N</sub> [mm]	80	90	110	125
min. centre distance s at/edge distance $c \ge [mm]$	40	45	55	65
min. edge distance c at/centre distance s ≥ [mm]	40	45	55	65
Effective anchorage depth hef [mm]	80	90	110	125
Drill hole diameter d <sub>0</sub> = [mm]	10	12	14	18
Depth of drill hole h <sub>0</sub> = [mm]	80	90	110	125
Installation torque $T_{inst} = [Nm]$	10	20	40	60
Loads under fire exposure				
Approved load R 30 appr. F [kN]	1.9	4.5	6.0	11.0
Approved load R 60 appr. F [kN]	0.9	2.1	3.0	6.6
Approved load R 90 appr. F [kN]	0.6	1.4	2.0	4.9
Approved load R 120 appr. F [kN]	0.4	1.0	1.5	4.0

Recommended load solid brick for tension, radial load and shear load (Resin Anchor Rod VMU-A)  $^{\mbox{\tiny 1)}}$  :

Anchor size	M8	M10	M12
Solid brick Mz 12 [kN]	1.7	1.7	1.7
Sand-lime brick KS 12 [kN]	1.7	1.7	1.7
Appoved bending moments appr. M (steel 5.8) [Nm]	11	21	37

Recommended loads perforated brick for tension, radial and shear load (Resin Anchor Rod VMU-A with perforated sleeve)  $^{\rm 1)}$  :

	Rotation drilling	Rotating rock drilling
Anchor size	M8 / M10	M8 / M10
Vertically perforated brick HLz 4 [kN]	0.6	0.3
Vertically perforated brick HLz 6 [kN]	0.8	0.4
Vertically perforated brick HLz 12 [kN]	1.0	0.8
Perforated sand-lime brick KSL 4 [kN] <sup>8)</sup>	0.6	0.4
Perforated sand-lime brick KSL 6 [kN] <sup>8)</sup>	0.8	0.6
Perforated sand-lime brick KSL 12 [kN] <sup>8)</sup>	1.4	0.8
Hollow brick made of lightweight concrete Hbl 2 [kN]	0.5	0.3
Hollow brick made of lightweight concrete Hbl 4 [kN]	0.8	0.6
Hollow brick made of concrete Hbn 4 [kN]	0.8	0.6
Approved bending moment appr. M (steel 5.8) [Nm]	11 / 21	11 / 21

max. load/single brick	≤ 3 DF	4 bis 10 DF	≥ 10 DF
without extra load [kN]	1.0	1.4	2.0
with extra load [kN]	1.4	1.7	2.5



Loads under fire exposure	Vertically perforated brick HLZ 12 and perforated sand-lime brick KSL 12	Solid brick Mz 12 and sand-lime brick KS 12
Anchor size	M8 / M10	M8 / M10 / M12
Approved load R 30 appr. F [kN]	0.75 / 0.70	0.75 / 0.70 / 0.75
Approved load R 60 appr. F [kN]	0.25 / 0.25	0.25 / 0.25 / 0.48
Approved load R 90 appr. F [kN]	0.09 / 0.10	0.09 / 0.10 / 0.11

- <sup>1)</sup> Approved loads for single anchor without influence of spacing and edge distance for long term temperature of +50°C/max. short term temperature of +80°C
- <sup>2)</sup> For anchor pairs and pairs of 4, spacings a are allowed to fall below to the minimum value, if the approved load is attenuated. This doesn't apply or Hbl- and Hbn-masonry.
- <sup>3)</sup> Value in brackets applies for Hbl- and Hbn-masonry
- <sup>4)</sup> applies not for Hbl- and Hbn-masonry
- <sup>5)</sup> Value in brackets applies for use of solid brick
- <sup>6)</sup> Value in brackets applies for use with perforated sleeve VMU-SH
- <sup>7)</sup> 2 Nm for anchor plate not being adjacent to the base material
- <sup>8)</sup> Outer bars ≥ 30 mm

The safety coefficient according to ETAG is included. The values of the named current Approval apply - see www.sikla.com/service/downloads.

Material: Vinylester-based, styrene free

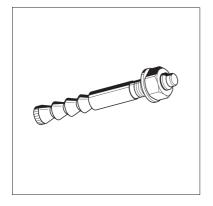
#### Approvals

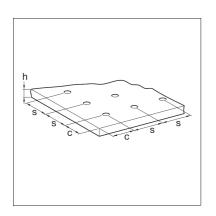
Sikla Approval ETA-10/0261



Туре	Content	W [kg]	Quantity [pack]	Part number
VMU 300	300 ml	0.53	1	110562
Mixing Nozzle ANT VM-X		0.01	1	190829







# 

## **Resin Anchor Rod VMZ-A**

Group: 1409

#### Application

Anchor Rod for push-through and put-before mounting in concrete tensile zones in M&E services and plant construction (for anchoring heavy loads). Suitable for attaching pipelines, channels, brackets, etc. in closed rooms - except for damp locations.

(Stainless steel version available on request).

- No special drill required
- Heavy loads
- Small edge and centre distance

#### Scope of delivery

Pre-assembled with washer and hexagon nut.

#### Installation

- 1. Drill hole according to min. setting depth vertically to the surface.
- 2. Careful cleaning of drill hole with Steel brush and Blow-Out Pump.
- 3. Screw Mixing Nozzle onto the cartridge; foreshots to be removed and fill 2/3 of drill hole with resin starting from botton of the hole.
- 4. Drive the anchor manually into plastered borehole up to its embedment mark.
- 5. When reaching the embedment mark, plaster must be apparent.
- 6. Respect hardening time, when tighten the anchor with instructed torque.

Detailed assembly instruction is attached to the product.

#### **Technical Data**

M8	M10	M12	M16
6.1	8.0	12.3	24.0
6.7	8.8	13.5	26.4
7.4	9.7	15.0	29.2
8.5	11.2	17.3	33.8
8.6	11.9	19.0	37.1
8.0	12.0	19.4	36.0
8.0	12.0	19.4	36.0
17.1	34.3	60	152
80	100	110	170
150	180	240	375
75	90	120	187,5
40/50	50/65	55/80	70/90
40/50	50/65	55/80	70/110
50	60	80	125
10	12	14	18
55	65	85	133
10	20	40	60
	6.1 6.7 7.4 8.5 8.6 8.0 8.0 17.1 80 150 75 40/50 40/50 50 10 55	6.1         8.0           6.7         8.8           7.4         9.7           8.5         11.2           8.6         11.9           8.0         12.0           8.0         12.0           17.1         34.3           80         100           150         180           75         90           40/50         50/65           40/50         50/65           50         60           10         12           55         65	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$

<sup>1)</sup> Loads for single anchors without influence of edge and centre distances, if constant temperature of 50°C and und currently 80°C is not exceeded.

<sup>2)</sup> Cracking concrete 50°C/80°C

The safety factor according to ETAG is not included. For the dimensioning, respect the data of the approval notification.

Material: Steel, galvanised

#### Approvals

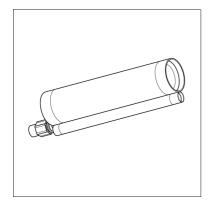


### Sikla Approval ETA 10/0260



Туре	Thread connection	t <sub>fix</sub> = Max. effective length [mm]	Total length [mm]	W [kg]	Quantity [pack]	Part number
VMZ-A M8-15/80	M8	15	80	0.04	10	190712
VMZ-A M8-30/95	M8	30	95	0.04	10	190721
VMZ-A M10-10/85	M10	10	85	0.06	10	190739
VMZ-A M10-30/105	M10	30	105	0.06	10	190748
VMZ-A M10-60/135	M10	60	135	0.09	10	190757
VMZ-A M12-10/110	M12	10	110	0.12	10	190766
VMZ-A M12-25/125	M12	25	125	0.13	10	190775
VMZ-A M12-50/150	M12	50	150	0.15	10	190784
VMZ-A M16-30/180	M16	30	180	0.28	10	190793
VMZ-A M16-60/210	M16	60	210	0.36	10	190802





### **Injection System VMZ - Resin**

Group: 1409

#### Application

Resin for Resin Anchor Rod VMZ-A. Excellent load capacity in broken and unbroken concrete. The resin mixture hardens resulting in strong bond with the concrete and a perfectly formed expansion sleeve around the conical rod. The inner bond between the conical rod and the resin mixture is broken by applying a torque moment after the hardening process.

#### Scope of delivery

Per cartridge one Mixing Nozzle ANT VM-X is attached.

#### Installation

Resin and hardener are separated in the cartridge.

A dispensing tool is used to push both components through a mixing nozzle. In the nozzle the resin and hardener are mixed and filled into the the cleaned drill hole.

After a longer break in work, exchange of the mixing nozzle allows further use of the resin.

Reach of resin:

Туре	Number of drill holes per cartridge
VMZ-A M8	73
VMZ-A M10	49
VMZ-A M12	34
VMZ-A M16	20

#### **Technical Data**

Detailed technical information could be seen in the data sheets of Resin Anchor Rod VMZ, as well as in the Approval ETA-10/0260.

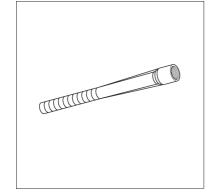
Material: Vinylester basis, styrol-free

#### Approvals

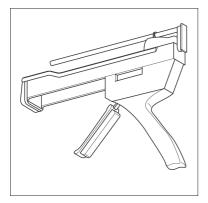
Sikla Approval ETA-10/0260



Туре	Content	W [kg]	Quantity [pack]	Part number
VMZ 345	345 ml	0.69	1	190811
Mixing Nozzle ANT VM-X		0.01	1	190829







#### Injection System VMZ / VMU / VM-K - Accessories Group: 8106

## Application Dispenser:

Professional tool to press the resin out of the cartridge. By means of the nozzle resin and hardener are mixed and pressed out equally. Suitable for silicone cartidges also.

#### Steel brush: To clean the drill hole.

Blow-Out pump:

To clean the drill hole.

Туре	W [kg]	Quantity [pack]	Part number
Dispenser ANT VM-P 345 P	1.20	1	190874
Steel Brush VMZ-STB (RB 10) M8	0.02	1	190838
Steel brush VMZ-STB (RB 12) M10	0.02	1	190847
Steel brush VMZ-STB (RB 14) M12	0.03	1	190856
Steel brush VMZ-STB (RB 18) M16	0.04	1	190865
Blow-Out Pump ANT VM-AP 360	0.27	1	190883









## **Perforated Sleeve SH**

Group: 1410

#### Application

Perforated sleeve to be used in perforated brick in combination with Anchor Rods VMU. The version VMU-SH is equipped with a convenient arrester clack, avoiding a slipping into the drill hole.

For larger anchoring depths, the metal sleeves VM-SH are available.

#### Installation

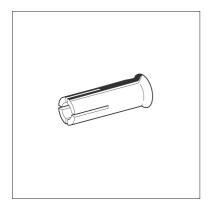
- 1. Drill hole and blow out/brush.
- 2. Flush insert Perforated Sleeve into drill hole. In case of several drill holes, prepare all dowel drills in order to avoid interruptions during injection of the adhesive. The Perforated Sleeve will be filled almost completely with the injection adhesive.
- 3. Insert Anchor Rod with spiral, rotating movement. The adhesive being displaced by the Anchor Rod escapes through the perforation and effectuates an adhesion of the system in the hollow spaces of the wall during hardening process. The hardened injection adhesive gives a secure fastening to the base material.

#### **Technical Data**

Material: VMU-SH: Plastic (polypropylene) VM-SH: Metal (material sold by the metre)

Туре	Drill hole Ø x depth [mm]	Size	W [kg]	Quantity [pack]	Part number
VMU-SH M8	14 x 105	M8	0.03	10	110504
VMU-SH M10	16 x 105	M10	0.04	10	110505
VM-SH 12 x 1000	12 x	M8	0.06	50	110564
VM-SH 16 x 1000	16 x	M10	0.07	50	110565
VM-SH 22 x 1000	22 x	M12 - M16	0.11	25	110566





## **Drive Plug AN ES**

Group: 1401

#### Application

Drive Plug for non-cracked concrete and multiple use in cracked concrete. Suitable for fixing pipelines, channels, etc. meeting the respective approval requirements - for damp locations and outdoor constructions the stainless steel version is required.

- No special drill required
- Setting tool for distance-controlled forced expansion
- Suitable for push-through mounting

#### Installation

As expansion tool use the respective expansion cone for Drive Plug. The "intelligent" expansion cone facilitates the mounting with bore dia. tolerances or varying concrete quality. By the controlled deformation of the cone during installation, the needed edge and centre distances are decreasing considerably.

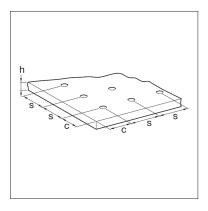
#### **Technical Data**

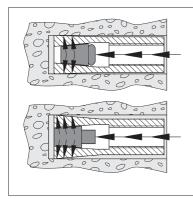
General loads and performance data:

Anchor size	M8x30	M8x40	M10x30	M10x40	M12	M16
Nominal drill hole diameter d <sub>0</sub> = [mm]	10	10	12	12	15	20
Depth of drill hole $h_0 = [mm]$	30	40	30	40	50	65
Installation torque $T_{inst} = [Nm]$	8	8	15	15	35	60
Diameter of clearance hole in the	9	9	12	12	14	18
connecting						
element d <sub>f</sub> ≤ [mm]						
Maximun screwing depth Lth [mm]	13	20	12	15	18	23
Minimum screwing depth L <sub>sdmin</sub> [mm]	9	9	10	11	13	18
Minimum thickness of concrete slab	100	100	120	120	130	160
h <sub>min</sub> [mm]						
Minimum centre distance s <sub>min</sub> [mm]	60	80	100	100	120	150
Minimum edge distance c <sub>min</sub> [mm]	95	95	135	135	165	200

Extract from Permissible Service Conditions of ETA-10/0258 cracked-concrete / Multiple use for nonstructural applications:

Anchor size	M8x30	M8x40	M10x30	M10x40	M12	M16
Approved loads for C20/25-C50/60 [kN]	1.7	2.0	2.0	2.0	2.4	6.3
Approved bending moments (Steel 4.6) M <sub>perm</sub> [Nm]	6.4	6.4	12.8	12.8	22.2	56.9
Approved bending moments (Steel 8.8) M <sub>perm</sub> [Nm]	17.1	17.1	34.3	34.3	60.0	152.0
Characteristic centre distance s <sub>cr</sub> [mm]	180	210	230	170	170	400
Characteristic edge distance c <sub>cr</sub> [mm]	90	105	115	85	85	200
Loads under fire exposure Steel 4.6						
Approved loads R30 perm. F [kN]	0.4	0.4	0.9	0.9	1.5	3.1
Approved loads R60 perm. F [kN]	0.3	0.3	0.8	0.8	1.3	2.4
Approved loads R90 perm. F [kN]	0.3	0.3	0.6	0.6	1.1	2.0
Approved loads R120 perm. F [kN]	0.2	0.2	0.5	0.5	0.8	1.6
Loads under fire exposure Steel ≥ 5.6						
Approved loads R30 perm. F [kN]	0.9	0.9	1.5	1.5	1.5	4.0
Approved loads R60 perm. F [kN]	0.9	0.9	1.5	1.5	1.5	4.0
Approved loads R90 perm. F [kN]	0.9	0.9	1.5	1.5	1.5	3.7
Approved loads R120 perm. F [kN]	0.4	0.4	1.0	1.0	1.2	2.4







Extract from Permissible Service Conditions ETA-10/0257 non-cracked concrete:

Anchor size	M8x30	M8x40	M10x30	M10x40	M12	M16
Approved tensile load C20/25	2.8	3.6	4.0	5.1	7.1	10.5
(Stahl 4.6 to 8.8) [kN]						
Oblique (Steel 4.6) perm. V ≥	3.1	3.1	3.7	4.1	7.2	13.4
C20/25 [kN]						
Oblique (Steel 8.8) perm. V ≥	3.9	3.9	3.7	4.1	12.0	18.0
C20/25 [kN]						
Bending moments (Screw 4.6)	6.4	6.4	12.8	12.8	22.2	56.8
perm. M [Nm]						
Bending moments (Screw 8.8)	17.1	17.1	34.3	34.3	60.0	152.0
perm. M [Nm]						

The values of the mentioned approvals in their latest version are valid - see www.sikla.de/service/downloads.

Material: Steel, electro-galvanised

#### Approvals

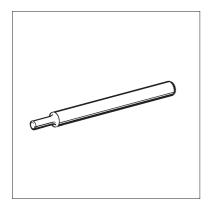
For multiple use for nonstructural applications Sikla Approval ETA-10/0258 (M8 - M12), for anchorage in non-cracked concrete Sikla Approval ETA-10/0257, Fire protection examination, VdS-conform, FM-Approval  $\geq$  M10



Tv	ne
I Y	DC.

Туре	Drill hole Ø x depth [mm]	Thread Ø x length [mm]	W [kg]	Quantity [pack]	Part number
ES M8 x 30	10 x 30	M8 x 13	0.01	100	110467
ES M8 x 40	10 x 40	M8 x 20	0.01	100	110468
ES M10 x 30	12 x 30	M10 x 12	0.02	50	110506
ES M10 x 40	12 x 40	M10 x 15	0.02	50	110469
ES M12 x 50	15 x 50	M12 x 18	0.04	50	110470
ES M16 x 65	20 x 65	M16 x 23	0.10	25	110471





## **Setting Tool for Drive Plug ANT**

Group: 8103

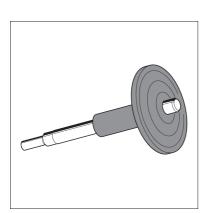
#### Application

Setting Tool for Drive Plug

#### **Technical Data**

Steel, electro-galvanised Material:

Туре	For Drive Plug	W [kg]	Quantity [pack]	Part number
M8 x 30	M8 x 30	0.09	1	132790
M8 x 40	M8 x 40	0.08	1	153308
M10 x 30	M10 x 30	0.15	1	110567
M10 x 40	M10 x 40	0.15	1	132806
M12 x 50	M12 x 50	0.27	1	132815
M16 x 65	M16 x 65	0.41	1	116992



## Expanding Mandrel ANT MSH Group: 8103

#### Application

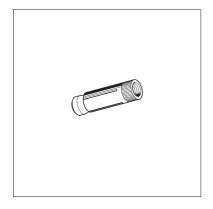
Setting tool for Drive Plug equipped with check mark. The Expanding Mandrel with hand shield is set on top of the anchor sleeve and creates a visible mark, confirming the correct assembly.

#### **Technical Data**

Material: Steel, electrogalvanised

Туре	For Drive Plug	W [kg]	Quantity [pack]	Part number
M8 x 30	M8 x 30	0.38	1	111834
M8 x 40	M8 x 40	0.29	1	111835
M10 x 30	M10 x 30	0.44	1	111836
M10 x 40	M10 x 40	0.51	1	111837
M12 x 50	M12 x 50	0.52	1	111838
M16 x 65	M16 x 65	0.55	1	111839





### Hollow Core Anchor AN Easy

Group: 1412

#### Application

Internal thread anchor to be used in pre-stressed hollow concrete slabs. Suitable for suspension of pipe lines, channels, etc. considering the approval regulations for the use with threaded rods or screw. Only to be used with construction components under dry indoor conditions. The general technical approval allows the anchor to be installed even if the drill hole does not hit the cavity.

#### Installation

Tightening the screw or nut pulls the expansion cone inside the anchor sleeve which keys into the cavity. The anchor spreads Y-shaped inside the hollow space and using the specified torque gives secure form closure.

#### **Technical Data**

General installation parameters:

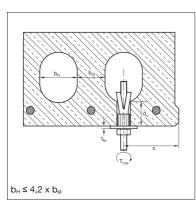
Anchor size	M8	M10	M12
Drill hole dia. $d_0 = [mm]$	12	16	18
Depth of drill hole $h_0 = [mm]$	55	60	70
Clearance hole in the fixture $d_f \leq [mm]$	9	12	14
Minimum length of screw min I <sub>s</sub> <sup>3)</sup> [mm]	47	55	61
Minimum lenght of stud min I <sub>s</sub> <sup>3)</sup> [mm]	53	63	71
Installation torque $T_{inst} = [Nm]$	20	30	40
Minimum strength of screw/stud	5.8	5.8	5.8
Character. centre distance s <sub>cr</sub> [mm]	300	300	300
Character. edge distance c <sub>cr</sub> [mm]	150	150	150
Minimum edge distance c <sub>min</sub> [mm]	100	100	100

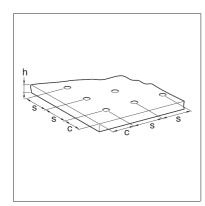
Admission requirement for single anchor used in pre-stressed hollow concrete slabs  $\geq$  C45/55:

Anchor size Web thickness dս ≥ [mm]	M8 25	M8 30	M8 40	M8 50	M10 25	M10 30	M10 40	M10 50
Approved load <sup>1)</sup> bei $c \ge c_{cr}$ [kN]	0.7	0.9	2.0	3.6	0.9	1.2	3.0	3.6
Approved loads <sup>1)</sup> bei c <sub>min</sub> [kN]	0.35	0.8	1.8	3.0	0.8	1.0	2.7	3.0
Loads under fire exposure								
Approved load R 30 amd. F [kN]		0.9	0.9	0.9		1.2	1.5	1.5
Approved load R 60 adm. F [kN]		0.9	0.9	0.9		1.2	1.5	1.5
Approved load R 90 adm. F [kN]		0.7	0.7	0.7		1.2	1.2	1.2
Approved load R 120 adm. F [kN]		0.4	0.4	0.4		1.0	1.0	1.0

Anchor size Web thickness d₁ ≥ [mm]	M12 25	M12 30	M12 40	M12 50
Approved load <sup>1)</sup> bei $c \ge c_{cr}$ [kN]	1.0	1.2	3.0	4.3
Approved load <sup>1)</sup> bei c <sub>min</sub> [kN]	0.8	1.0	2.7	3.6
Loads under fire exposure				
Approved load R 30 adm. F [kN]		1.2	1.5	1.5
Approved load R 60 adm. F [kN]		1.2	1.5	1.5
Approved load R 90 amd. F [kN]		1.2	1.5	1.5
Approved load R 120 adm. F [kN]		1.2	1.2	1.2

Admission requirement pair of anchors  $^{4)}$  pre-stressed hollow concrete slabs  $\geq$  C45/55:







Anchor size Web thickness $d_u \ge [mm]$	M8 25	M8 30	M8 40	M8 50	M10 25	M10 30	M10 40	M10 50
Approved load <sup>1)</sup> at $c \ge c_{cr}$ [kN]	0.7	1.4	2.6	4.8	1.1	2.0	4.8	4.8
Approved load <sup>1)</sup> at c <sub>min</sub> [kN]	0.35	1.25	2.35	4.0	0.9	1.8	4.3	4.3
Minimum centre distance s <sub>min</sub> [mm]	70	80	100	100	70	80	100	100
Approved bending moments (Steel 5.8) <sup>2)</sup> M <sub>adm.</sub> [Nm]	10.7	10.7	10.7	10.7	21.4	21.4	21.4	21.4
Approved bending moments (Steel 8.8) M <sub>adm</sub> [Nm]	17.1	17.1	17.1	17.1	34.2	34.2	34.2	34.2
Loads under fire exposure								
Approved load R 30 adm. F [kN]		1.25	1.25	1.25		1.8	3.0	3.0
Approved load R 60 adm. F [kN]		1.25	1.25	1.25		1.8	3.0	3.0
Approved load R 90 adm. F [kN]		1.25	1.25	1.25		1.8	2.4	2.4
Approved load R 120 adm. F [kN]		0.8	0.8	0.8		1.8	2.0	2.0

Anchor size Web thickness d <sub>u</sub> ≥ [mm]	M12 25	M12 30	M12 40	M12 50
Approved load <sup>1)</sup> at $c \ge c_{cr}$ [kN]	1.2	2.0	4.8	5.7
Approved load <sup>1)</sup> bei c <sub>min</sub> [kN]	1.0	1.8	4.3	4.8
Minimum centre distance s <sub>min</sub> [mm]	70	80	100	100
Approved bending moments (Steel 5.8) <sup>2)</sup> M <sub>adm.</sub> [Nm]	37.4	37.4	37.4	37.4
Approved bending moments (Steel 8.8) M <sub>adm.</sub> [Nm]	59.8	59.8	59.8	59.8
Loads under fire exposure				
Approved load R 30 adm. F [kN]		1.8	3.0	3.0
Approved load R 60 adm. F [kN]		1.8	3.0	3.0
Approved load R 90 adm. F [kN]		1.8	3.0	3.0
Approved load R 120 adm. F [kN]		1.8	2.4	2.4

1) For edge distances  $c_{\text{min}} < c \leq c_{\text{cr}}$  the recommended loads can be determined by linear interpolation.

2) Using lower strength classes, the value is to be reduced accordingly.

- 3) The required screw length is determined by the minimum length of screw +
- the thickness of the fixture  $t_{fix}$  (total length =  $I_s + t_{fix}$ ) Approved load  $F_{max}$  / Anchor  $\leq F_{max}$  single anchor. On double anchorage 4) with spacing  $s_{\text{min}} < s \leq s_{\text{cr}}$  the recommended load may be determined by linear interpolation, assuming the limiting value  $s = s_{cr}$  for the double anchorage exposed to tension is twice the recommended load of a single anchor.

Material: Steel, zinc-plated

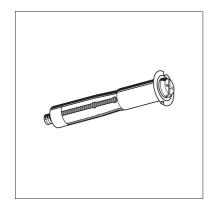
#### Approvals

Approval: Z-21.1-1785, Fire Protection Eximantion, VdS-Approval



Туре	Total length [mm]	Hülsen- länge [mm]	W [kg]	Quantity [pack]	Part number
AN Easy M8	45	35	0.01	50	110463
AN Easy M10	53	40	0.03	50	110465
AN Easy M12	58	45	0.04	25	110466





### Hollow Space Anchor Metal ANC-M

Group: 1416

#### Application

The Hollow Space Anchor Metall ANC-M is used for installations in hollow walls, covered with plasterboards, laminated wood and chip boards, as well as hollow masonry with big cavities. The object can be removed and tightended at any time without changing the position of the anchor. Straps at the anchor cap ensure a perfect torsion protection.

#### Scope of delivery

Multiple splitted anchor body with a metric bolt.

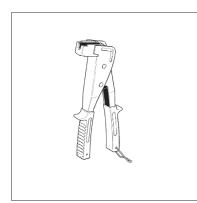
#### Installation

Tightening the anchor with a pair of Assembly Pliers ANC-M MZ, the slats spread completely and ensure a safe grip.

#### **Technical Data**

Material: Anchor and bolt of steel, electrogalvanized.

Туре	Ø [mm]		Panel thickness [mm]		W [kg]	Quantity [pack]	Part number
M4/12	7-8	32	3 - 12	16	0.01	100	402400
M5/16	9-10	52	3 - 16	20	0.02	100	402401
M5/32	9-10	65	11 - 32	16	0.02	100	402402
M6/16	10-12	52	3 - 16	16	0.02	100	402403
M6/32	10-12	65	11 - 32	24	0.03	100	402404
M8/21	13	65	5 - 21	25	0.03	100	402405
M8/34	13	75	16 - 34	25	0.04	100	402406



## Assembly Pliers ANC-M MZ

Group: 8106

#### Application

Installation tool for Hollow Space Anchors Metal ANC-M.

Туре	W	Quantity	Part
	[kg]	[pack]	number
M4 - M8	0.57	1	408578





### Screwbolt MMS-PR

Group: 1405

#### Application

Suitable for quick and safe installing of Channels MS 27 to concrete ceilings or walls and masonry constructions (of calcareous sandstone, solid bricks, clinker bricks, natural stone). To be applied in closed rooms - not suitable for damp locations.

The nail head diameter is adapted exactly to the hole and hole pattern of the Channels MS 27.

- Easy drilling (6 mm only), no special drill required.
- Small distances due to low expansion pressure.
- Excellent transmission of the torque due to Torx connection.

#### Installation

An impact screwdriver is best suitable for mounting, using a T30 Torx bit. For subsequently adjusting the component to be connected, unscrew the Bolt Screw Anchor a few millimetres and tighten it again afterwards.

#### **Technical Data**

Perm. load (centric tension) in the tension zone for install. [kN] solutions in concrete ≥ B25 (max. B55) acc. to approval	0.5
Permissible load in the pressure zone (concrete ≥ B25) [kN]	2.0
Centre distance a ≥ [mm]	160
Edge distance a <sub>r</sub> ≥ [mm]	80
Minimum thickness of component $d \ge t + 50 \text{ mm} \ge [\text{mm}]$	105
Nominal diameter of drill [mm]	6
Cutting diameter ≤ [mm]	6.4
Minimum depth of bore hole t ≥ [mm]	55
Minimum setting depth ≥ [mm]	45
Maximum tigthening torque when mounting [Nm]	20

For brick walls respect a distance between the fixations and the joggle joints of the bricks of min. 30 mm, otherwise halve the load!

Material: Steel, case-hardened, tempered steel, electro-galvanised

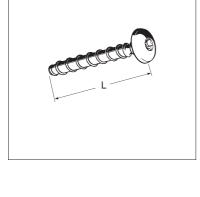
#### Approvals

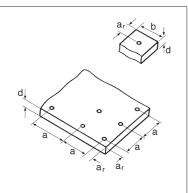
DIBt Approval No.: Z-21.1-1503:

Approved by the DIBt in the concrete tension zone for mounting light overhead facings and sub-ceilings as well as statically comparable installations up to 1  $kN/m^2$  exposed to mainly dead loading.

Fire resistance category: F120 ( $F_{max} = 0.5 \text{ kN}$ )

Туре	L	Screw	W	Quantity	Part
	[mm]	tool	[kg]	[pack]	number
MMS-PR 7.5 x 50	50	T 30	0.02	100	157959









### Screwbolt MMS-ST

Group: 1402

#### Application

Suitable for quickly and safely fixing e.g. channels and pipes to ceilings or walls of concrete and brickwork constructions (of calcareous sandstone, solid bricks, clinker bricks, natural stone). To be applied in closed rooms - not suitable for damp locations.

- Easy drilling (6 or 8 mm only), no special drill rquired.
- Small distances due to low expansion pressure.
- "The Bolt Screw that does not need an anchor".

#### Installation

Screw in the bolt screw in pre-drilled cylindrical hole. The special thread guarantees formlock screw in. Readjustment of depth is possible.

#### **Technical Data**

Туре	7.5x70	7.5x80	10x80	10x100
		7.5x160		10x120
Drive	SW 10	SW 10	SW 13	SW 13
Thread connection	M8x14	M8x14	M10x11	M10x11
Nominal diameter of drill do [mm]	6	6	8	8
Drilling depth h1 [mm]	55	65	65	75
Setting depth h <sub>nom</sub> [mm]	45	55	55	65
max. adm. tensile load in cracked concrete C20/25 [kN]	0.5 1)	2.0 2)	0.8 1)	3.7 <sup>2)</sup>
max. adm. tensile load in non-cracked concrete C20/25 [kN]	2.0 1)	3.1 <sup>2)</sup>	-	4.9 <sup>2)</sup>
perm. bending moment M <sub>perm</sub> [Nm]	9.4	9.4	18.7	18.7
recommended max. torque T <sub>inst</sub> [Nm]	20	20	40	40
recommended max. tension load in chalk sandstone <sup>3)</sup> [kN]	1.4	1.4	2.1	2.1
recommended max. tension load in brick <sup>3)</sup> [kN]	1.4	1.4	2.1	2.1
recommended max. tension load in solid brickwork <sup>৩</sup> [kN]	0.8	0.8	1.0	1.0
tested load in concrete under stress <sup>4</sup>				
F 30	0.5 1)	1.5	0.8 <sup>1)</sup>	2.7
F 60	0.5 1)	1.1	0.8 <sup>1)</sup>	2.0
F 90	0.5 1)	0.8	0.8 <sup>1)</sup>	1.5
F 120	0.5 1)	0.5	0.8 <sup>1)</sup>	1.0
tested load in brickwork under stress 4)				
F 30	1.25	1.25	2.5	2.5
F 60	0.8	0.8	1.4	1.4
F 90	0.5	0.5	1.0	1.0
F 120	0.3	0.3	0.8	0.8

Material: Steel, electro-galvanised

#### Approvals

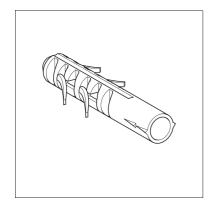
- <sup>1)</sup> according to DIBt-Approval No. Z-21.1-1503
- <sup>2)</sup> according to ETA 05/0010
- <sup>3)</sup> single anchor without influence of strength class KS12/MS12
- <sup>4)</sup> load for single anchor traction-, lateral traction and res. directions of load. Respect values of cold strain.

For calculation the whole approval is to be respected.



Туре	Total length [mm]	Panel thickness [mm]	W [kg]	Quantity [pack]	Part number
7.5 x 70	70	25	0.02	100	157816
7.5 x 80	80	25	0.02	50	157825
7.5 x 100	100	45	0.03	50	157834
7.5 x 120	120	65	0.03	50	157843
7.5 x 140	140	85	0.03	50	157852
7.5 x 160	160	105	0.04	50	157861
10 x 80	80	25	0.03	50	157889
10 x 100	100	35	0.04	100	157898
10 x 120	120	55	0.05	50	157904





## Nylon Plug ANN Group: 1411

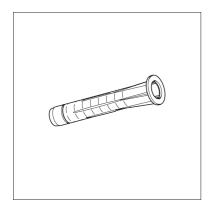
#### **Technical Data**

Recommended loads (max) kN:

Туре	Concrete B25	Solid brick	Lightweight concrete
ANN 6	0.60	0.50	0.06
ANN 8	0.85	0.80	0.09
ANN 10	1.40	1.00	0.20
ANN 12	1.80	1.40	0.40
ANN 14	3.00	1.50	0.50

Туре	Ø [mm]	Length [mm]	Screw-Ø min/max	W [kg]	Quantity [pack]	Part number
ANN 6 x 30	6	30	3.5/5.0	0.01	100	402101
ANN 8 x 40	8	40	4.5/6.0	0.01	100	402102
ANN 10 x 50	10	50	6.0/8.0	0.01	50	402103
ANN 12 x 60	12	60	8.0/10.0	0.01	25	402104
ANN 14 x 75	14	75	10.0/12.0	0.01	20	402105





### **Universal Plug ANU**

Group: 1415

#### Application

The Universal Plug with collar is suitable for all concrete material and masonry, perforated and hollow bricks, boards. The torsion protection prevents rotation in the drill hole. The installation in cavities causes a knot and therefore an interlocking connection. The stiff plug neck prevents damage of tiles and plaster. The collar serves as stop an prevents the plug from slipping deeper into the drill hole.

#### **Technical Data**

Temperature range: -40°C up to +70°C

Recommended loads (max) kN:

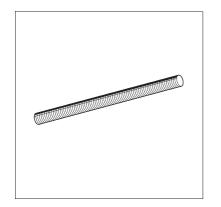
Туре	concrete B25	perforated brick	light concrete	plaster- board	chip board
6 <sup>1)</sup>	0,60	0,45	0,30		
6 <sup>2)</sup>	0,40	0,30	0,15	0,15	0,40
8 <sup>1)</sup>	1,10	0,90	0,50	-	-
8 <sup>2)</sup>	0,80	0,60	0,30	0,18	0,45
10 <sup>1)</sup>	1,80	1,20	0,50	-	-
10 <sup>2)</sup>	1,00	0,60	0,40	0,20	0,60
12 <sup>1)</sup>	3,00	1,80	1,20		-
<b>1</b> 4 <sup>1)</sup>	4,00	2,20	1,30	_	-

<sup>1)</sup> Wood screw with max. diameter

<sup>2)</sup> Chip board screw with max. diameter safety factor 5.0

Туре	Ø [mm]	Length [mm]	Screw-Ø min/max	W [kg]	Quantity [pack]	Part number
ANU 6 x 34	6	33/34	3.5 - 5.0	0.01	100	402200
ANU 8 x 47	8	46/47	4.5 - 6.0	0.01	100	402201
ANU 10 x 57	10	56/57	6.0 - 8.0	0.01	50	402202
ANU 12 x 68	12	67/68	8.0 - 10.0	0.01	25	402203
ANU 14 x 73	14	71/73	10.0 - 12.0	0.01	20	402204





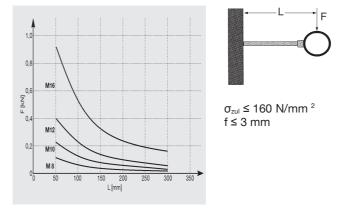
## **Threaded Stud GST**

Group: 1316

#### **Technical Data**

Thread	Working load (tension)
M8	8.0 kN
M10	12.5 kN
M12	18.1 kN
M16	33.8 kN

Permissible cantilever load:







Туре	Length [mm]	W [kg]	Quantity [pack]	Part number
M8/25	25	0.01	100	124513
M8/40	40	0.01	100	126913
M8/70	70	0.02	100	126922
M8/100	100	0.03	100	111580
M8/125	125	0.04	50	111669
M8/150	150	0.05	50	111599
M8/175	175	0.05	50	111678
M8/200	200	0.06	50	111605
M8/225	225	0.07	25	111687
M8/250	250	0.08	25	111614
M8/300	300	0.09	25	174260
M10/25	25	0.01	100	126940
M10/40	40	0.02	100	126959
M10/70	70	0.03	100	126968
M10/100	100	0.05	100	111623
M10/125	125	0.06	50	111696
M10/150	150	0.07	50	111632
M10/175	175	0.08	50	111702
M10/200	200	0.10	50	111641
M10/225	225	0.11	25	111711
M10/250	250	0.12	25	111650
M10/300	300	0.14	25	174269
M12/100	100	0.07	50	111429
M12/125	125	0.09	50	111766
M12/150	150	0.11	50	111438
M12/175	175	0.12	25	111775
M12/200	200	0.14	25	111447
M12/225	225	0.16	25	111784
M12/250	250	0.18	25	111456
M16/100	100	0.13	50	111465
M16/125	125	0.16	50	111793
M16/150	150	0.19	50	111474
M16/200	200	0.26	25	111483
M16/250	250	0.32	25	111492





## **Threaded Rod GST**

Group: 1317

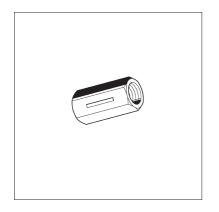
### **Technical Data**

Thread	Working load (tension)
M8	8.0 kN
M10	12.5 kN
M12	18.1 kN
M16	33.8 kN

Material: Steel class 4.8, electro-galvanised

Туре	Length	Weight	Qty.	Part number
		[kg/m]	[m]	
M8 x 1000	1 m	0.31	25	124559
M8 x 2000	2 m	0.31	50	142696
M8 x 3000	3 m	0.31	30	142739
M10 x 1000	1 m	0.49	25	124568
M10 x 2000	2 m	0.49	50	142702
M10 x 3000	3 m	0.49	30	142748
M12 x 1000	1 m	0.70	25	143192
M12 x 2000	2 m	0.70	20	142711
M12 x 3000	3 m	0.70	30	142757
M16 x 1000	1 m	1.30	10	110817
M16 x 2000	2 m	1.30	20	142720
M16 x 3000	3 m	1.30	15	142766





### Rod Coupling AD f/f

Group: 1332

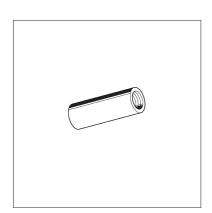
#### Application

Element for joining two threaded rods. With slit for visual control of the screwed-in length of thread.

#### **Technical Data**

Material: Steel, electro-galvanised

Туре	Length [mm]	A/F	W [kg]	Quantity [pack]	Part number
M8 x 25	25	13 mm	0.02	100	124920
M10 x 30	30	17 mm	0.04	100	124939
M12 x 35	35	17 mm	0.04	50	124948
M16 x 40	40	22 mm	0.07	50	124957



## Round Rod Coupling AD RD f/f

Group: 1332

#### Application

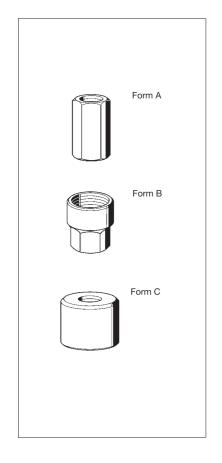
Element for joining two threaded rods, threaded tubes, as well as distance, e.g. in combination with Slide Set and Pipe Clamp. For pipe clamps with thread  $^{3}/_{8}$ " the Adapter AD f/f  $^{3}/_{8}$ "/M16 (part no.111715) is used.

#### **Technical Data**

Material: Steel, electro-galvanised

Туре	Length [mm]	W [kg]	Quantity [pack]	Part number
M8 x 30	30	0.01	100	157232
M10 x 30	30	0.01	100	157250
M12 x 35	35	0.02	50	157278
M16 x 45	45	0.07	50	157296
M16 x 100	100	0.11	20	191108
M16 x 150	150	0.16	20	191117
<sup>1</sup> / <sub>2</sub> " x 45	45	0.06	20	191126
<sup>1</sup> / <sub>2</sub> " x 100	100	0.14	20	191135
<sup>1</sup> / <sub>2</sub> " x 150	150	0.21	20	191144





## Adapter AD f/f Group: 1333

#### Application

Additional connection options for all Sikla Pipe Clamps equipped with 3G triple thread nut, fixed points and threaded tubes.

#### **Technical Data**

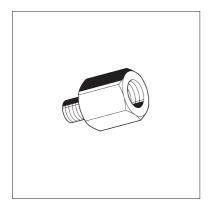
Material:

Form A: Steel, electro-galvanised

Form B: Malleable cast iron, electro-galvanised

Туре	Form	Length [mm]	A/F [mm]	W [kg]	Quantity [pack]	Part number
M16/M10	A	35	19	0.05	50	106740
M16/M12	А	35	19	0.04	50	124665
M16/M16	А	30	19	0.03	50	106290
<sup>3</sup> / <sub>8</sub> "/M16	Α	40	19	0.03	25	146335
<sup>1</sup> / <sub>2</sub> "/M10	A	35	24	0.07	10	146371
<sup>1</sup> / <sub>2</sub> "/M12	Α	35	24	0.06	25	156639
<sup>1</sup> / <sub>2</sub> "/M16	A	40	24	0.07	25	124656
<sup>1</sup> / <sub>2</sub> "/ <sup>3</sup> / <sub>8</sub> "	Α	40	24	0.06	25	146344
<sup>1</sup> / <sub>2</sub> "/ <sup>1</sup> / <sub>2</sub> "	A	35	24	0.11	10	146380
<sup>3</sup> / <sub>4</sub> "/M10	Α	35	32	0.15	10	105651
<sup>3</sup> / <sub>4</sub> "/M12	Α	35	32	0.08	10	105749
<sup>3</sup> / <sub>4</sub> "/M16	Α	35	32	0.14	10	105660
<sup>3</sup> / <sub>4</sub> "/ <sup>3</sup> / <sub>8</sub> "	А	35	32	0.14	25	146353
<sup>3</sup> / <sub>4</sub> "/ <sup>1</sup> / <sub>2</sub> "	Α	35	32	0.08	10	146399
1"/M10	В	40	22	0.13	10	105679
1"/M12	В	40	22	0.13	10	105758
1"/M16	В	40	22	0.12	10	105688
<b>1</b> "/ <sup>3</sup> / <sub>8</sub> "	В	40	22	0.12	25	146362
<b>1</b> "/ <sup>1</sup> / <sub>2</sub> "	В	40	27	0.12	10	146405
M16/ <sup>1</sup> / <sub>2</sub> "	С	25	-	0.06	25	157922
M16/ <sup>3</sup> / <sub>4</sub> "	С	28	-	0.09	25	157931
<sup>3</sup> / <sub>8</sub> "/M16	С	100	-	0.11	20	111715
<sup>3</sup> / <sub>8</sub> "/ <sup>1</sup> / <sub>2</sub> "	С	100	-	0.19	20	113349





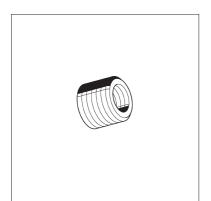
## Reducer AD f/m

Group: 1313

#### **Technical Data**

Material: Steel, electro-galvanised

Туре	Female thread [mm]	Male Thread [mm]	Total length [mm]	A/F	W [kg]	Quantity [pack]	Part number
8/10	M8 x 10	M10 x 8	23.0	13	0.02	50	113670
10/8	M10 x 10	M8 x 11	26.0	13	0.01	50	113689
10/16	M10 x 10	M16 x 12	32.0	17	0.05	50	113698
16/10	M16 x 13	M10 x 8	36.0	22	0.07	50	113704



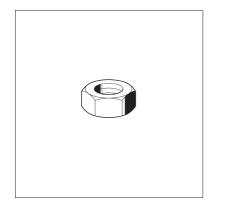
## Reducer AD m/f

Group: 1319

Technical DataMaterial:Steel, electro-galvanised

Туре	Female thread [mm]	Male Thread [mm]	Total length [mm]	W [kg]	Quantity [pack]	Part number
16/10	M10 x 13	M16 x 13	13.0	0.01	25	124230
16/12	M12 x 13	M16 x 13	13.0	0.01	25	124267



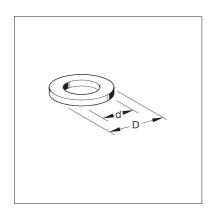


## Hexagon Nut NT Group: 1371

#### **Technical Data**

Satisfies DIN 934 Material: Steel class 8, electro-galvanised

Туре	W [kg]	Quantity [pack]	Part number
M6	0.01	100	125347
M8	0.01	100	125356
M10	0.01	100	137546
M12	0.02	100	114228
M16	0.03	100	114237



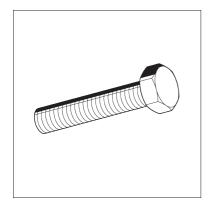
## Washer US Group: 1372

#### **Technical Data**

Material: Steel, electro-galvanised

Туре	DIN	D [mm]	d [mm]	s [mm]	W [kg]	Quantity [pack]	Part number
8/125	125	16.0	8.4	1.6	0.01	100	125329
8/9021	9021	24.0	8.4	2.0	0.01	100	137883
8/40	-	40.0	8.4	3.0	0.03	100	105581
8/45	-	45.0	8.4	4.0	0.04	100	105624
10/125	125	20.0	10.5	2.0	0.01	100	137564
10/9021	9021	30.0	10.5	2.5	0.01	100	125365
10/40	-	40.0	10.5	3.0	0.02	100	105590
10/45	-	45.0	10.5	4.0	0.04	100	105633
12/125	125	24.0	13.0	2.5	0.01	100	114246
12/30	-	30.0	13.0	2.5	0.01	100	156462
12/40	-	40.0	13.0	3.0	0.02	100	105606
12/440	440	44.0	13.5	4.0	0.04	100	125374
16/125	125	30.0	17.0	3.0	0.01	100	114255
16/40	-	40.0	16.5	3.0	0.02	100	105615





# Hexagon Bolt SKT Group: 1370

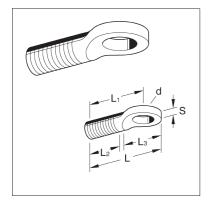
#### **Technical Data**

Thread	Working load (tension)
M8	15.6 kN
M10	24.7 kN
M12	35.9 kN
M16	66.7 kN

Satisfies DIN 933 Steel class 8.8, electro-galvanised Material:

Туре	Length [mm]	W [kg]	Quantity [pack]	Part number
M8/20	20	0.01	100	138459
M8/25	25	0.01	100	138431
M8/30	30	0.02	100	138574
M8/40	40	0.02	100	138440
M8/60	60	0.02	100	114705
M8/80	80	0.03	100	114714
M8/100	100	0.04	100	138608
M8/110	110	0.04	100	124975
M10/20	20	0.02	100	138617
M10/25	25	0.02	100	138468
M10/30	30	0.03	100	138626
M10/40	40	0.03	100	114158
M10/60	60	0.04	100	138635
M10/80	80	0.05	50	114723
M10/100	100	0.06	50	114732
M10/120	120	0.07	50	138644
M12/25	25	0.04	100	138662
M12/30	30	0.04	100	138477
M12/40	40	0.05	50	138671
M12/60	60	0.06	50	138680
M12/80	80	0.07	50	138705
M12/100	100	0.09	50	138714
M12/120	120	0.10	50	114750
M16/25	25	0.07	50	138723
M16/30	30	0.08	50	138732
M16/45	45	0.10	50	138741
M16/60	60	0.12	50	138556
M16/80	80	0.14	25	138750
M16/100	100	0.17	25	138769
M16/120	120	0.19	25	114778



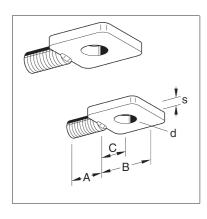


## Eye Bolt SCR Group: 1303

**Technical Data** 

Material: Steel, electro-galvanised

Туре	L [mm]	L₁ [mm]	L₂ [mm]	L₃ [mm]	d [mm]	s [mm]	W [kg]	Quantity [pack]	Part number
M8	45	34	20	21				100	102418
M10	48	36	20	25	12.0	4.2	0.02	100	102427



## Flat Leaf Bolt SCR

Group: 1303

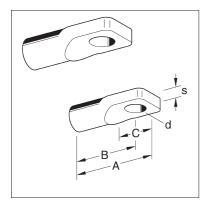
**Technical Data** 

Satifies the VdS standards.

Material: Cold-worked steel, electro-galvanised

Туре	A [mm]	B [mm]	C [mm]	d [mm]	s [mm]	W [kg]	Quantity [pack]	Part number
M8 x 20	20.0	33.0	17.0	10.0	4.5	0.03	100	102436
M8 x 40	40.0	33.0	17.0	10.0	4.5	0.04	100	102445
M10 x 20	20.0	33.0	16.0	12.5	4.8	0.03	100	102454
M10 x 40	40.0	33.0	16.0	12.5	4.8	0.04	50	102463
M12 x 40	40.0	33.0	16.0	12.5	6.0	0.06	50	102764
M16 x 25	22.0	40.0	33.0	17.0	10.0	0.12	25	101824





## Link Eye SCB

Group: 1301

#### **Technical Data**

Satifies the VdS standards.

Material: Cold-worked steel, electro-galvanised

Туре	A [mm]	B [mm]	C [mm]	s [mm]	d [mm]	Thread [mm]	W [kg]	Quantity [pack]	Part number
M8	46.5	35.5	22.0	5.5	11.0	12.0	0.03	100	124221
M10	50.5	39.5	22.0	6.5	12.0	15.0	0.04	100	124203
M12	56.1	43.5	23.0	7.5	13.0	21.0	0.10	100	150916



## **Threaded Tube GR**

Group: 1310

### Application

- To be used as
- ◆ a direct connection element between Mounting Plate and Pipe Clamp or
- a support rod in combination with Socket Angle or Universal Joints as angular support.

#### Scope of delivery

Standard length 2m. Shorter pre-cut parts available on request.

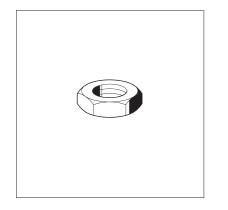
#### **Technical Data**

Screw thread as per DIN EN ISO 228

Material: Steel, electro-galvanised

Туре	Length	Weight [kg/m]	Qty. [m]	Part number
G <sup>1</sup> / <sub>2</sub> "	2 m	1.02	2	151102
G <sup>3</sup> / <sub>4</sub> "	2 m	1.01	2	151111
G 1"	2 m	2.71	2	151120





## Locking Nut NT G Group: 1310

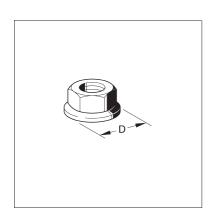
#### Application

Suitable for the Sikla Threaded Tubes and thread connectors (such as mounted in Slide Sets).

#### **Technical Data**

Material: Steel, electro-galvanised

Туре	W [kg]	Quantity [pack]	Part number
G <sup>1</sup> / <sub>2</sub> "	0.04	25	157092
G <sup>3</sup> / <sub>4</sub> "	0.04	25	157108
G 1"	0.08	25	157117



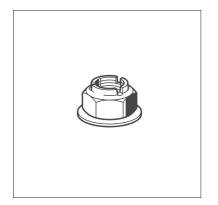
## Flange Nut NT FLA Group: 1374

#### **Technical Data**

Material: Steel class 8, electro-galvanised

Туре	D [mm]	W [kg]	Quantity [pack]	Part number
M8	17.9	0.01	50	158729
M10	21.8	0.01	25	158738
M12	26.0	0.02	25	158747
M16	34.5	0.05	10	160654





## Safety Nut with flange NT SEC HCP

Group: 1876

#### Application

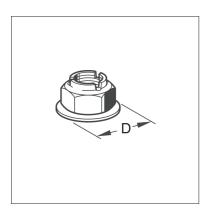
The Safety Nut is equipped with a self-locking head made of steel (3 parts) being arranged in a conical shape. This offers the highest possible safety against unscrewing. The Safety Nut with flange offers the following advantages:

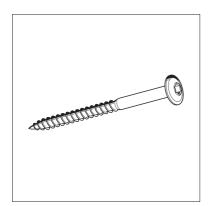
- ◆ Clamping effect directly at the thread resilient, elastic
- applicable for all HCP and electrogalvanised screws and threaded rods
- improved thread moving due to the separated securing segments
- reusability after disassembling
- high temperature resistance

#### **Technical Data**

Material: Steel, Quality class 10, HCP

Туре	D [mm]	W [kg]	Quantity [pack]	Part number
M8	17	0.01	50	113062
M10	21	0.01	50	113063





## **Torx Flat Head Coach Screw FLAH**

Group: 1369

#### Application

Flange screw with perfectly aligned properties for the constructional timber work, available in diameters 8 and 10 mm.

- Simple handling is secured due to ideal load transmission.
- The head dia. is aligned to the slots of Channel 41. Thus for direct assembly through the elongated hole of the channel, a good load bearing capacity is secured.
- The cutting notch allows direct screwing in without pre-drilling and allows a pinpoint locating.
- In addition, the tip avoids reliably the splitting of the battens behind.
- The high bearing of loads given by the flat head reduces the necessary fixing points. Especially for the fixing of roof hooks, an economical handling is assured.

#### **Technical Data**

Material: Steel, galvanised

Туре	Ø [mm]	Length [mm]	Screw tool	W [kg]	Quantity [pack]	Part number
8/40	8	40	T 40	0.01	50	110804
8/60	8	60	T 40	0.02	50	110805
8/80	8	80	T 40	0.02	50	110806
10/70	10	70	T 40	0.03	50	110807
10/100	10	100	T 40	0.04	50	110809





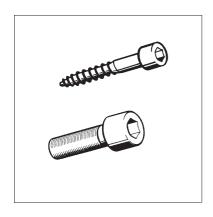
## Hexagon Wood Screw SKH

Group: 1370

#### **Technical Data**

Material: Steel, electro-galvanised

Туре	Ø [mm]	Length [mm]	W [kg]	Quantity [pack]	Part number
8/40	8	40	0.02	100	156587
8/50	8	50	0.02	100	156596
8/60	8	60	0.02	100	156602
8/80	8	80	0.03	100	156611
10/70	10	70	0.04	100	156620
10/100	10	100	0.05	100	153663



## Hexagon Socket Screw SCR

Group: 1373

#### Installation

Type M8 x 16 may be also used as connecting element for Channels with slot pattern II. Maximum distance between two clamping units: 250 mm. At the ends, each one unit has to be mounted.

At the ends, each one unit has to be mount

Tightening torque M = 25 Nm.

#### **Technical Data**

Material: Steel, electro-galvanised, internal hexagon 6 mm

Туре	Length [mm]	W [kg]	Quantity [pack]	Part number
H6 x 45	45	0.01	100	138699
M8 x 16	16	0.01	100	114185





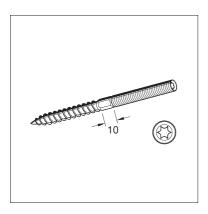
## Bolt Screw BSCR with Collar

Group: 1315

#### **Technical Data**

Material: Steel, electro-galvanised

Туре	Thread connection	Total length [mm]	W [kg]	Quantity [pack]	Part number
M8 - H6/80	M8	80	0.01	100	138565



## Bolt Screw BSCR without Collar

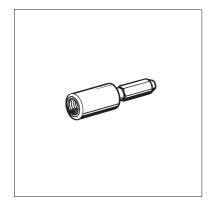
Group: 1315

#### **Technical Data**

Material: Steel, electro-galvanised

Туре	Thread connection	Total length [mm]	A/F	W [kg]	Quantity [pack]	Part number
M8/50 mm	M8 x 15	50	6	0.01	100	124434
M8/80 mm	M8 x 30	80	6	0.02	100	124443
M8/100 mm	M8 x 30	100	6	0.02	100	124610
M8/120 mm	M8 x 50	120	6	0.03	100	124595
M8/140 mm	M8 x 50	140	6	0.03	50	124629
M8/160 mm	M8 x 50	160	6	0.04	50	124601
M10/60 mm	M10 x 15	60	8	0.02	100	153469
M10/80 mm	M10 x 30	80	8	0.03	100	124452
M10/100 mm	M10 x 30	100	8	0.04	100	129554
M10/120 mm	M10 x 50	120	8	0.05	50	124461
M10/140 mm	M10 x 50	140	8	0.06	50	124470
M10/180 mm	M10 x 50	180	8	0.08	50	131522





## **Bolt Screw Adapter ANT BIT**

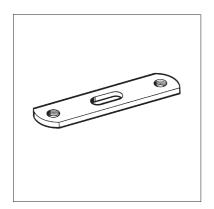
Group: 8101

**Application** For fitting Bolt Screws by means of an electric screwdriver.

### **Technical Data**

Material: Steel

Туре	W [kg]	Quantity [pack]	Part number
M8	0.03	1	121343
M10	0.03	1	121334



## **Twin Holder DHP M8**

Group: 1329

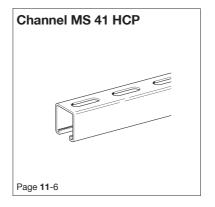
#### **Technical Data**

Material: Steel, electro-galvanised

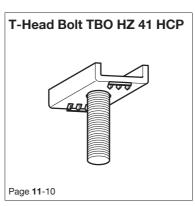
Type and Centre distance	W [kg]	Quantity [pack]	Part number
65 mm	0.05	50	124850
85 mm	0.06	50	124869
105 mm	0.07	50	124878



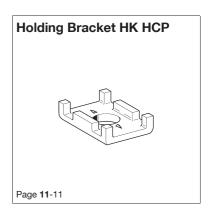




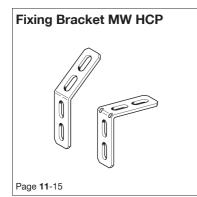




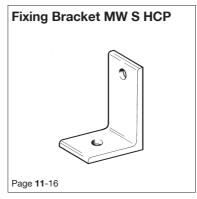


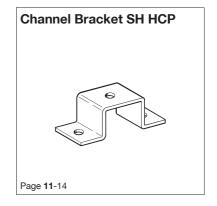


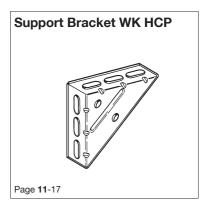




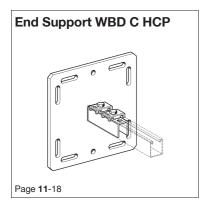
Channel Connector SK-L HCP

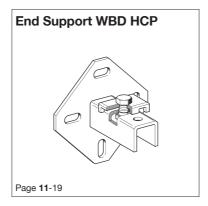


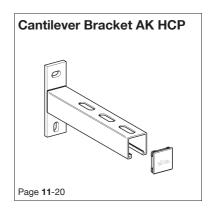


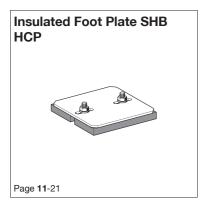


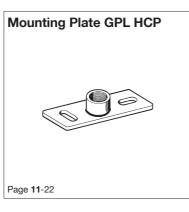


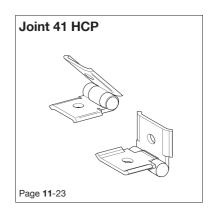


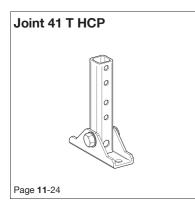


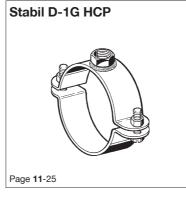


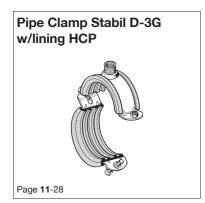


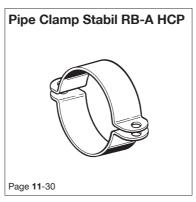


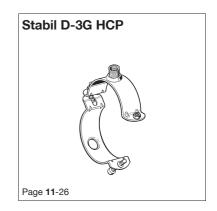


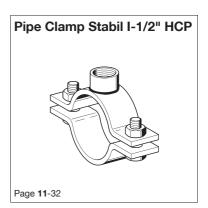




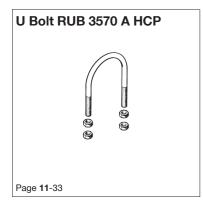


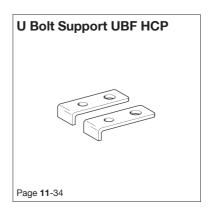


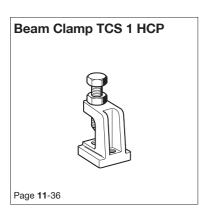




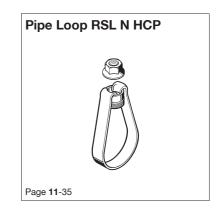


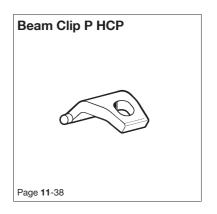


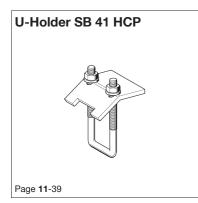


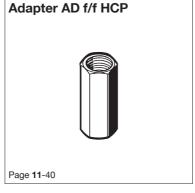


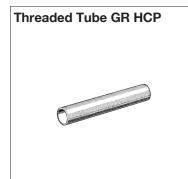












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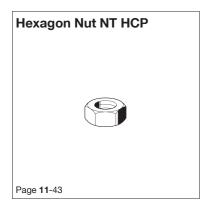
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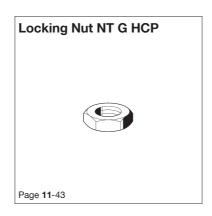


Threaded Stud GST HCP

















# **HCP-High corrosion protection finishes**

The definition "High Corrosion Protection" - stands for optimal corrosion protection for different connecting elements. HCP-finish is a special kind of coating with one result. Sikla is offering you for the applications in corrosive category C1 up to C4 according to DIN EN ISO 12944 the individual adjusted corrosion protection with the following available coating systems:

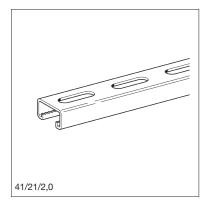
- hot-dipped galvanised according to DIN EN ISO 461 resp. DIN EN ISO 10684
   High Performance corrosion protection consisting of zinc flake coating
- according to DIN EN 13858 resp. DIN EN ISO 10683 Innovative zinc-nickel surface coating

The protective effect of all HCP-coating systems is corresponding at least to the well established hot galvanisation with hot dip metal coating.

To select the optimal surface coating for your demands, we attach great importance to the protective effect, the preservation of the functionality (e.g. mobility of the thread), market requirement and economic feasibility

For projects with special requirements to the corrosion protection our customer service in collaboration with you will find the suitable surface coating.





# Channel MS 41 HCP

Group: 1811

#### Application

Element for easily and efficiently pre-assembling crossbars, wall brackets and supporting structures on construction sites or in workshops.

#### Scope of delivery

Available as single or double channels. Double channels are joined together by clinching.

#### Installation

All Channels MS 41 hcp are serrated inside and provide numerous combination options with other high corrosion protected system components.

#### **Technical Data**

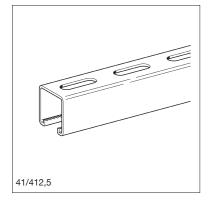
Material: Steel, HCP

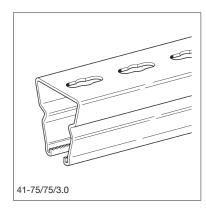
D = Double channel

Type W/H/th [mm]	Section modulus [cm <sup>3</sup> ]	Moment of inertia	Radius of gyration [cm]
41/21/2.0	W <sub>v</sub> : 0.82	I <sub>v</sub> : 0.92	i <sub>v</sub> : 0.76
11/21/2.0	W <sub>7</sub> : 2.12	I <sub>z</sub> : 4.35	i₂ : 1.65
41/31/2.0	W <sub>y</sub> : 1.60	l <sub>y</sub> : 2.77	i <sub>y</sub> : 1.13
	W <sub>z</sub> : 2.88	l <sub>z</sub> : 5.90	i <sub>z</sub> : 1.65
41/41/2.0	W <sub>y</sub> : 2.43	l <sub>y</sub> : 5.16	i <sub>y</sub> : 1.46
	W <sub>z</sub> : 3.65	l <sub>z</sub> : 7.48	i <sub>z</sub> : 1.75
41/41/2.5	W <sub>y</sub> : 2.96	l <sub>y</sub> : 6.19	i <sub>y</sub> : 1.43
	W <sub>z</sub> : 4.41	l <sub>z</sub> : 9.05	i <sub>z</sub> : 1.72
41/62/2.5	W <sub>v</sub> : 5.54	l <sub>v</sub> : 17.70	i <sub>v</sub> : 2.10
	W <sub>z</sub> : 6.27	l <sub>z</sub> : 12.86	i <sub>z</sub> : 1.79
41-75/75/3.0	W <sub>y</sub> : 10.31	l <sub>y</sub> : 44.42	i <sub>y</sub> : 2.53
	W <sub>z</sub> : 11.59	l <sub>z</sub> : 43.48	i <sub>z</sub> : 2.50
41/21/2.0 D	W <sub>v</sub> : 2.35	l <sub>v</sub> : 4.93	i <sub>v</sub> : 1.24
	W <sub>z</sub> : 4.24	l <sub>z</sub> : 8.70	i <sub>z</sub> : 1.65
41/41/2.5 D	W <sub>y</sub> : 9.02	l <sub>y</sub> : 36.99	i <sub>y</sub> : 2.46
	W <sub>z</sub> : 8.82	l <sub>z</sub> : 18.10	i <sub>z</sub> : 1.72
41-75/75/3.0 D	W <sub>y</sub> : 30.72	l <sub>y</sub> : 230.40	i <sub>y</sub> : 4.07
	W <sub>z</sub> : 23.07	l <sub>z</sub> : 86.96	i <sub>z</sub> : 2.50

Type W/H/th [mm]	Cross section A [cm <sup>2</sup> ]	Distance e [cm]	Max. point carrying capacity F <sub>max</sub> [kN]	Max. torsional moment Mq [Nm]
41/21/2.0	1.61	1.12	4.0	44.5
41/31/2.0	2.17	1.73	4.0	44.5
41/41/2.0	2.43	2.12	4.0	44.5
41/41/2.5	3.05	2.09	6.0	44.5
41/62/2.5	4.01	3.20	6.0	44.5
41-75/75/3.0	6.95	4.31	10.0	44.5
41/21/2.0 D	3.21	2.10	4.0	44.5
41/41/2.5 D	6.09	4.10	6.0	44.5
41-75/75/3.0 D	13.90	7.50	10.0	44.5

Notice: All values take into account the perforation of the channels. For load charts, see chapter "Pressix CC 41".







#### Approvals

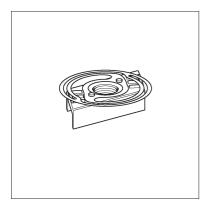


This product is has obtained the "RAL Gütezeichen Rohrbefestigung" and is subject to external surveillance according to RAL GZ-655.

\* = no RAL quality label

Туре	Length [m]	Slot pattern	Weight [kg/m]	Qty. [m]	Part number
41/21/2.0	6	3	1.32	6	193860
41/31/2.0	6	3	1.64	6	198896
41/41/2.0	6	3	1.97	6	196724
41/41/2.5	6	3	2.36	6	161497
41/62/2.5	6	3	3.13	6	199527
41-75/75/3.0	6	4	5.68	6	174008
41/21/2.0 D *	6	3	2.64	6	193884
41/41/2.5 D *	6	3	4.74	6	166748
41-75/75/3.0 D *	6	4	11.24	6	173981





# Speed Nut NT CC 41 HCP

Group: 1814

#### Application

In particular useful for installation in vertical channels or places of difficult access.

Further advantages:

- For all Sikla Channels MS 41, independent of the channel's height.
- No getting stuck on bolt heads when sliding in the channel.
- No appearance of settlement after tightening.

#### Scope of delivery

Channel Nut and Spring are tightely connected.

#### Installation

After inserting the Speed Nut into the channel opening, it is turned to the right as far as it will go by exerting slight pressure on it; deinstallation may be effected by following the instructions on the reverse order. Installation and deinstallation do not require tools and may be repeated several times.

#### **Technical Data**

	M6	M8	M10	M12	
Tightening torque 8.8 <sup>1)</sup> [Nm]	10	25	40	80	

<sup>1)</sup> Using lower steel classes, the value are to be reduced accordingly.

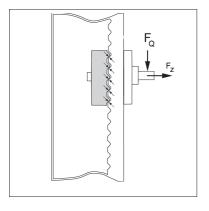
Channel thickness [mm]	M6 FZ ≤ [kN]	M8 FZ ≤ [kN]	M10 FZ ≤ [kN]	M12 FZ ≤ [kN]	M6 FQ ≤ [kN]	M8 FQ ≤ [kN]	M10 FQ ≤ [kN]	M12 FQ ≤ [kN]
1.5	3.2	4.7	4.7	7.5	0.7	1.8	2.9	7.5
2.0	3.2	5.8	5.8	10	0.9	2.1	3.4	9
2.5	3.2	5.8	5.8	11	1.0	2.6	4.1	9
3.0	3.2	5.8	5.8	13	1.1	2.8	4.4	9

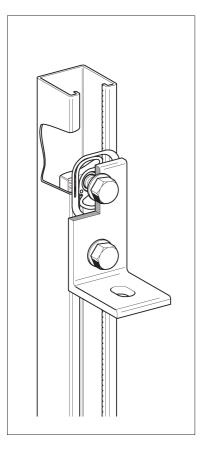
Note: The permissible load capacities of the channels are to be respected.

#### Material:

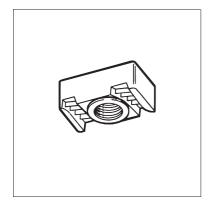
CC-Channel Nut: Steel class, HCP Spring washer: Sheet metal spring steel, rustproof

Туре	W [kg]	Quantity [pack]	Part number
CC 41-M6	0.03	50	198698
CC 41-M8	0.03	50	198650
CC 41-M10	0.03	50	186284
CC-41 M12	0.06	50	110015









# Channel Nut NT HZ 41 HCP

Group: 1814

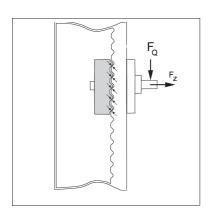
#### Application

Suitable for Channels MS 41 HCP.

#### **Technical Data**

	M10	M12	M16
Tightening torque 8.8 <sup>1)</sup> [Nm]	40	80	80

<sup>1)</sup> Using lower steel classes, the value are to be reduced accordingly.

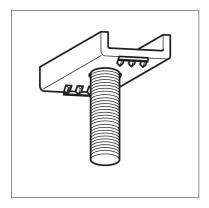


Channel thickness [mm]	M10 FZ ≤ [kN]	M12 FZ ≤ [kN]	M16 FZ ≤ [kN]	M10 FQ ≤ [kN]	M12 FQ ≤ [kN]	M16 FQ ≤ [kN]
1.5	6.0	7.5	7.5	5.5	7.5	6
2.0	7.5	10	10	5.5	9	6
2.5	8.5	11	11	5.5	9	6
3.0	8.5	13	13	5.5	9	6

Note: The permissible load capacities of the channels are to be respected.

Туре	W [kg]	Quantity [pack]	Part number
HZ 41-M10	0.03	50	162115
HZ 41-M12	0.06	50	162133
HZ 41-M16	0.05	50	182279





# T-Head Bolt TBO HZ 41 HCP

Group: 1809

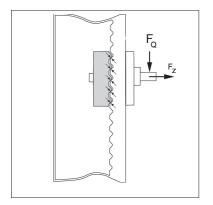
#### Application

To be used with Channels MS 41 HCP.

#### **Technical Data**

Туре	Tightening torque M <sub>dmax</sub> [Nm]	Permissible bending moment <sup>1)</sup> [Nm]
HZ 41 M10	18.0	10.0
HZ 41 M12	32.0	17.5

<sup>1)</sup> The actual bending moment shouldn't exceed the bending moment of the channel acting laterally.



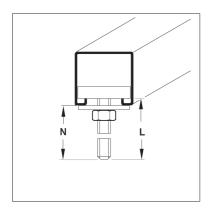
Material thickness channel [mm]	FZ ≤ [kN]	FQ ≤ [kN]
1.5	4.7	2.9
2.0	5.8	3.4
2.5	5.8	4.1
3.0	5.8	4.4

Notice: The permissible bearing capacity of the channels is to be respected.

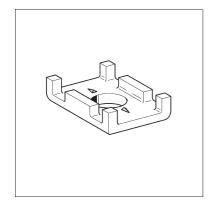
#### Material:

T-Head: Class 5.6, HCP Threaded rod: Class 4.8, HCP

Туре	Length L [mm]	Available length of thread [mm]	W [kg]	Quantity [pack]	Part number
HZ 41 M10 x 35	40	35	0.05	50	111453
HZ 41 M12 x 35	40	35	0.06	50	111454







# Holding Bracket HK HCP

Group: 1828

#### Application

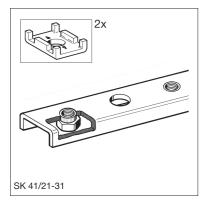
Safety element for Sikla Channels to be used instead of simple washers. The Holding Bracket prevents the edges along the opening of the channels from bending, and ensures optimum load distribution. When loads are imposed along the Channels, Holding Brackets HK 41 provide for additional safety due to embossed teeth, which penetrate the channel. Suitable for single and double channels.

Special blanking guarantee high safety and shear forces after reaching form closure, especially for bolted through connecting elements.

#### **Technical Data**

Туре	Suitable for Sikla channels of width [mm]	Bore [mm]	W [kg]	Quantity [pack]	Part number
41/10	41	11	0.06	50	179606
41/12	41	13	0.07	50	179615
41/16	41	17	0.07	50	179624





## **Channel Connector SK HCP**

Group: 1853

#### Application

Channel Connector for easy and safe extension or joining of Sikla Channels on site or for pre-assembly in workshops. The overall design ensures that there is no static weak point near the Channel Connector when connecting single channels. For single channels, the figures for channels are applicable.

#### Scope of delivery

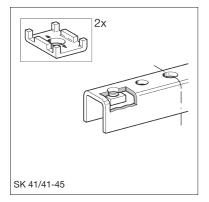
Holding Brackets HK 41 and Hexagon Bolts are supplied in bulk.

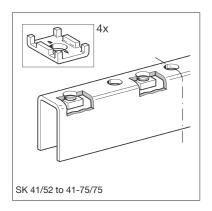
#### Installation

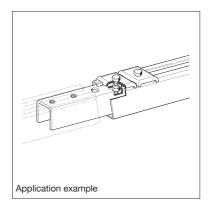
To guarantee the static values, the supplied elements have to be used. For extension of double channels, see advice brochure "Installation Guidelines".

#### **Technical Data**

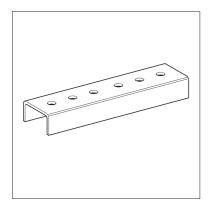
Туре	For channel	Overall length [mm]	n W [kg]	Quantity [pack]	Part number
SK 41/21-3	31 41/21/1.5 - 41/3	1/2.0 160	0.40	10	186680
SK 41/41-4	45 41/41/2.0 - 41/4	5/2.5 160	0.59	10	195642
SK 41/52	41/52/2.5	260	1.10	10	195659
SK 41/62	41/62/2.5	260	1.35	10	195666
SK 41-75/	65 41-75/65/3.0	260	1.41	10	195673
SK 41-75/	75 41-75/75/3.0	260	1.61	10	195680











# **Channel Connector SK-L HCP**

Group: 1853

#### Application

Element for connecting Channels. The multiple bearing of the Channel is to be secured. The Channel Connector should not to be used between the last two bearing points. In combination with Channels > 41/21 the admissible limit has to be respected.

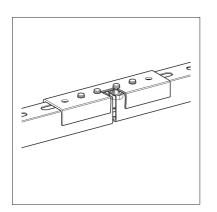
#### Installation

Position the Channel Connector on the back of the channel and bolt together the channel ends (through the channel slots) by means of each two Self Forming Screws FLS F 80.

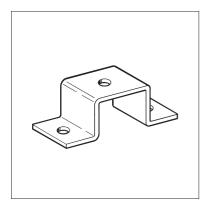
#### **Technical Data**

Max. adm. limit/ flexion: 300 Nm Material: Steel S235 JR, HCP

Туре	For channel	Channel height h <sub>max</sub> [mm]	Overall length [mm]	W [kg]	Quantity [pack]	Part number
SK-L	41	62	180	0.36	10	198971







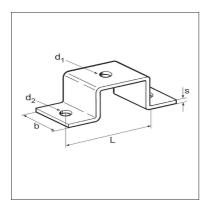
# **Channel Bracket SH HCP**

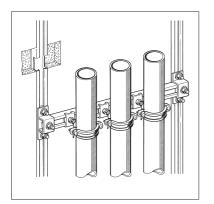
Group: 1812

- Application
  Comprehensive bracing construction of Sikla Channels:
  directly to the building structure or
  onto other channels for frame construction

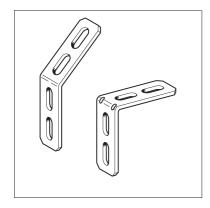
### **Technical Data**

Туре	b x s [mm]	L [mm]	Ø d₁ [mm]	Ø d₂ [mm]	W [kg]	Quantity [pack]	Part number
SH 41/21	40 x 4	80	11	11	0.16	50	189992
SH 41/41	40 x 4	80	11	11	0.21	50	183116
SH 41/41 D	40 x 4	80	13	13	0.32	10	183143
SH 41/45	40 x 4	80	11	11	0.22	50	183125
SH 41/45 D	40 x 4	84	13	13	0.35	10	183152
SH 41-75/75	50 x 5	120	13	13	0.49	25	183134









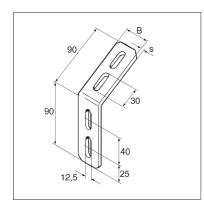
# Fixing Bracket MW HCP Group: 1826

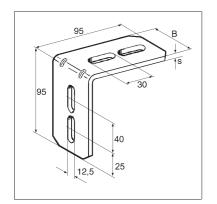
#### Application

Suitable for Sikla Channels MS 41. Useful addition to Support Brackets for integration in crossbars and other structures composed of hot-dipped galvanised channels.

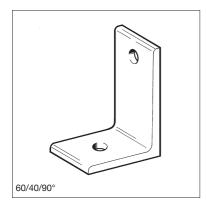
## **Technical Data**

Туре	B [mm]	s [mm]	W [kg]	Quantity [pack]	Part number
90/90/30°	40	4	0.23	25	194041
90/90/45°	40	5	0.23	25	162045
95/95/90°	40	5	0.23	25	162036









# Fixing Bracket MW S HCP

Group: 1826

#### Application

Designed for general mounting purposes as a direct lateral attachment link integrated in binding and bridging beams of concrete or wood, and for similar applications. It may serve as a connecting bracket for framework structures consisting of channels.

#### **Technical Data**

Туре	Working load	Sprinkler System
60/40/90°	5.0 kN	≤ DN 150
90/60/90°	5.0 kN	≤ DN 150

Angle steel

profile DIN 1029

60/40/6

90/60/6

В

[mm]

40

40

b

[mm]

20

15

d

[mm]

13

13

s

[mm]

-

50

W

[kg]

0.18

0.26

Quantity

[pack]

25

25

Part

number

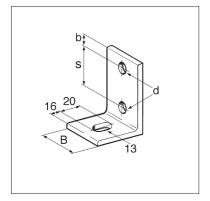
162063

162072

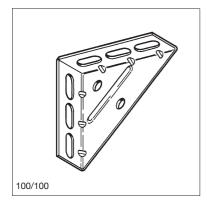
Material: Steel, HCP

	Туре
	60/40/90°
	90/60/90°
90/60/90°	

b d B









Group: 1826

#### Application

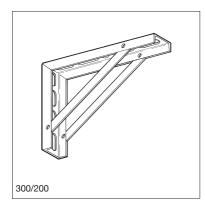
Sikla Support Brackets may be used for wall, floor and overhead pipe installations. Depending on the site, pipes may lie on the support bracket (Ubolt), be arranged in vertical position or be suspended (Grub Screws). In combination with bolted-on channels, the support brackets offer a wide range of possibilities for cantilever arrangements. In addition, the load capacity of crossbars can be increased by fixing them onto Support Brackets.

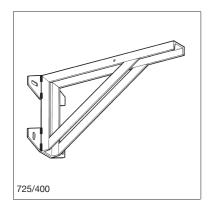
#### **Technical Data**

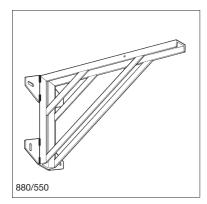
Material: Steel, HCP

For further details regarding dimensions and loads, see chapter "Brackets" (galvanised versions).

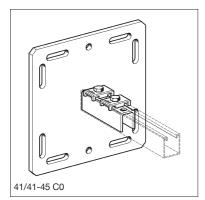
Туре	Channel	W [kg]	Quantity [pack]	Part number
100/100-40	-	0.23	25	163930
150/150	-	0.60	25	181685
300/200	U 50/25	2.28	1	162531
550/350	U 50/25	4.62	1	162610
725/400	U 65/42	12.72	1	151041
880/550	U 65/42	18.43	1	151050



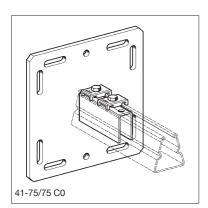


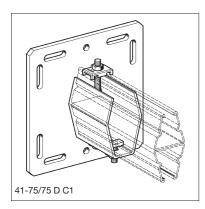






0 41/41-45 D C0





## End Support WBD C HCP

Group: 1856

#### Application

In combination with Sikla Channels MS 41/41 or 41-75/75, End Support WBD is ideal for setting up support structures attached to walls, floors and ceilings and for direct fixing to steel beams. In combination with Joining Plate AP, a fixing to beams with flange width > 120 mm is possible.

Version 41-75/75 D C1 allows a direct fixing to beams with respective flange widths.

#### Scope of delivery

Base plate with welded U-profile

Accessories (pre-assembled):

- 2 Holding Brackets and 2 Hexagon Bolts, 2 welded hexagon nuts (WBD C for single channels)
- 1 Holding Bracket, 1 T-Bolt, nut, bolt and washer (WBD C for double channels)

#### Installation

Depending on the situation, different options are recommended:

- Frictional connection to steel beams using Assembly Set P2 (C0) or P3 a) (C1).
- Fixing to the building structure using at least 2 heavy-duty anchors b) M12 (C0) or M16 (C1). Please observe loads and approvals of anchors.

For ceiling mounting, the bolt connecting channel and end support must pass through both parts.

#### **Technical Data**

Туре	For Sikla Channel	Dimensions of Base Plate [mm]	For beam width [mm]	Holes for
41/41-45 C0	41/41 41/45	220 x 220 x 12	80 - 120	M12
41-75/75 C0	41-75/75	220 x 220 x 12	80 - 120	M12
41/41-45 D C0	41/41 D 41/45 D	220 x 220 x 12	80 - 120	M12
41-75/75 D C1	41-75/75 D	340 x 340 x 12	100 - 200	M16

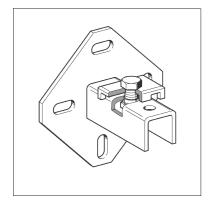
#### Material:

aiteriaite	
End Support WBD:	Steel, HCP
Holding Bracket:	Cast iron, H
Accessories:	Steel, HCP

):	Steel, HCP
	Cast iron, HCP
	Steel, HCP

Туре	W [kg]	Quantity [pack]	Part number
41/41-45 C0	5.09	1	179498
41-75/75 C0	4.74	1	179507
41/41-45 D C0	5.16	1	179561
41-75/75 D C1	12.32	1	179579





# End Support WBD HCP

Group: 1856

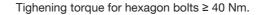
#### Application

- In combination with a Channel, End Support WBD is particularly suitable
- for setting up structures attached to walls, floors and ceilings
- as a base for frame structures made of Sikla Channels.

The generous dimensions and the diamond shape of the mounting plate provide for a high bending moment and safely stabilise lateral loads.

#### Installation

Normally, two anchors grouped opposite to each other and along the load axis are sufficient. Only in exceptional cases (e.g. tall uprights in frameworks) four anchors are required.



For ceiling mounting under high loads (up to 7.0 kN), we recommend the use of at least one fully traversing bolt for connecting the Channel to the End Support WBD (for examples see "Installation Guidelines").

#### **Technical Data**

Туре	Suitable for Sikla Channel	A [mm]	s [mm]	B [mm]	b [mm]	h [mm]	C [mm]
41/21-31	41/21/2.0 - 41/31/2.0	135	6	100	25	11	95
41/41-45	41/41/2.5	135	6	100	25	11	95
41/62	41/62/2,5	170	6	120	25	13	131
41/41-45 D	41/41/2.5 D	210	8	170	25	13	125

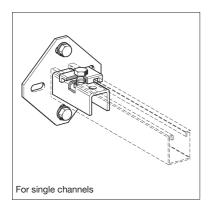
Working load for wall mounting:

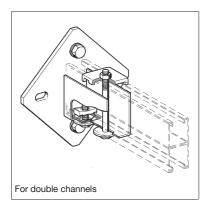
See tables on load charts for End Support WBD in chapter "Brackets". The figures apply on wall applications if two anchors of the load class as stated are used.

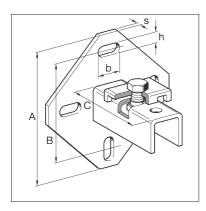
#### Working load for ceiling mounting:

The permissible maximum vertical load for ceiling mounting with Holding Bracket amounts to 2.0 kN. Using at least one traversing bolt (class 8.8) 7.0 kN.

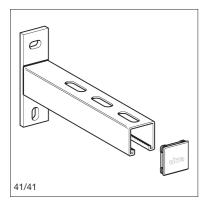
Туре	W [kg]	Quantity [pack]	Part number
41/21-31	0.73	10	198063
41/41-45	0.83	10	198070
41/41-45 D	2.46	5	198100











# **Cantilever Bracket AK HCP**

Group: 1854

#### Application

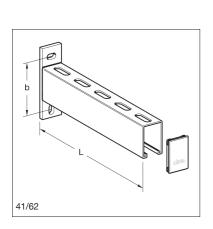
Ready-to-use bracket for mounting pipes to walls or other building structures.

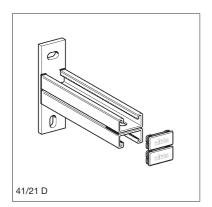
#### Installation

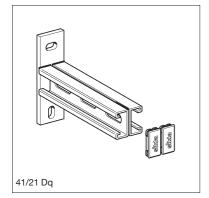
When used in combination with sliding elements, a tied rod is absolutely essential for absorbing the forces running along the centre line of the pipe. For cantilever lengths > 500 mm we recommend the integration of a prop-up.

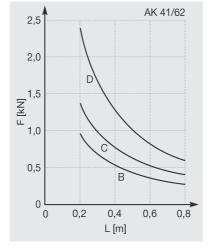
2,5

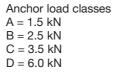
#### **Technical Data**





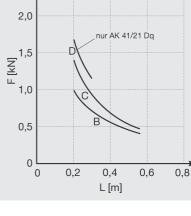






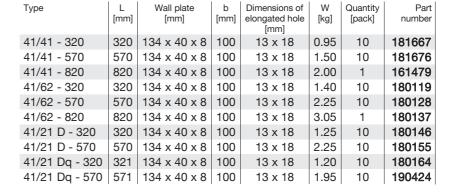
 $\begin{array}{l} \text{Restrictions} \\ \sigma_{\text{zul}} \leq 160 \ \text{N/mm}^2 \\ f_{\text{perm}} \leq L/150 \ \text{for } L > 450 \ \text{mm} \\ f_{\text{perm}} \leq 3 \ \text{mm} \ \text{for } L \leq 450 \ \text{mm} \end{array}$ 

Material: Steel, HCP

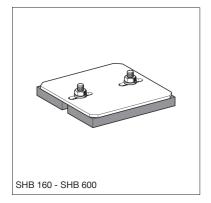


AK 41/21 D und Dq









# **Insulated Foot Plate SHB HCP**

Group: 1856

#### Application

Complete solution incl. protection pad for flat roofs and plastic sheets, as well as supply centres with laminated floor composition in basements. In combination with the Sikla Assembly System, this element allows the realisation of arbitrarily compositions. The water-proof protection pad allows a secure and reliabe support with constant load spreading. Especially suitable for the assembly of aggregations, pipelines, ductings or travel paths.

Following elements could be assembled to the Insulated Foot Plate: Slide Elements, Mounting Plates, Support Brackets 150/150, Joints JOI 41 T, Channels MS 41, Cantilever Brackets, End Supports WBD for single channel.

#### Installation

Unscrew the nuts, position the distance between the screws according to the slot pattern of the element to be connected and tighten screws.

#### **Technical Data**

roomnour Bata		
Statical E-module:	According to DIN 53513	0.8 - 0.9 N/mm <sup>2</sup>
Dynamic E-module:	According to DIN 53513	0.6 - 2.2 N/mm <sup>2</sup>
Compression set:	DIN 53572	approx. 4.5 % measured 30 min. after release at 50 % compression / 23°C after 72 hrs
Tensile strength:	DIN 53571	0.40 N/mm² min.
Ultimate elongation:	DIN 53571	70 % min.
Tear strength:	DIN 53515	3.4 N/mm <sup>2</sup> min.
Fire resistance:	DIN 4102	B2

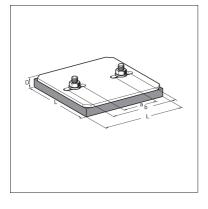
Tests to determine friction values shall be carried out by the customer. Also the statics have to be verified by a qualified engineer. Material: Steel, HCP, caoutchouc compound material

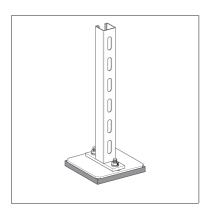
Туре	L [mm]	a [mm]	b [mm]	D [mm]
SHB 160	164 x 164	65	131	20
SHB 300	304 x 304	65	131	20
SHB 450	454 x 454	65	131	21
SHB 600	604 x 604	65	131	23

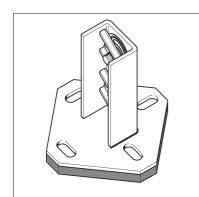
Туре	Channel height h <sub>max</sub> [mm]	Dimensions of the plate [mm]
SHB 41-1	41 - 62	110 x 110
SHB 41-2	41 - 62	160 x 160

For other dimensions, see End Support WBD.

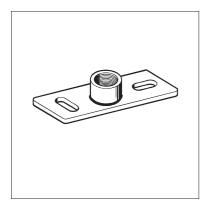
Туре	W [kg]	Quantity [pack]	Part number
SHB 160	1.30	10	113117
SHB 300	4.50	1	113118
SHB 450	11.50	1	113119
SHB 600	26.50	1	113120
SHB 41-1	1.22	10	198902
SHB 41-2	2.30	5	198919











# Mounting Plate GPL HCP Group: 1827

#### Application

Element for fixation to wall, ceiling and floor for installations in M&E services.

#### **Technical Data**

Permissible anchor values may restrict the application.

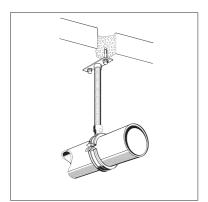
Version / Type	Tension [kN]	Perm. bending moment* [Nm]	Max. lever arm [mm]	Welding method
Stabil M10	3.0	17.2	200	R
Stabil M12	3.0	29.6	300	R
Stabil M16	4.5	70.3	300	М
Stabil R 1/2"	4.5	95.0	350	М

R = resistance welding

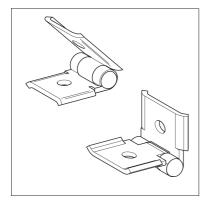
M = fusion welding

Limitation due to the Mounting Plate or the load capacity of the Threaded Stud or the Threaded Tube.  $\sigma_{perm} \le 160 \text{ N/mm}^2 \text{ f}_{perm} < 5 \text{ mm}$ 

Туре	Dimension L x W x Th [mm]	Elongated hole d x a [mm]	Centre distance I [mm]	W [kg]	Quantity [pack]	Part number
Stabil M10	120 x 40 x 4	11 x 25	80	0.15	50	112684
Stabil M12	120 x 40 x 4	11 x 25	80	0.16	50	112685
Stabil M16	120 x 40 x 5	11 x 25	80	0.20	50	112686
Stabil 1/2"	120 x 40 x 5	11 x 25	80	0.21	50	112683







# Joint 41 HCP

Group: 1842

#### Application

For connecting Channels MS 41 allowing for variable angle-adjustment ranging from 0° - 180°. Suitable for direct connection to the building structure and, in combination with channel, can be used as an angular support for bracketry.

#### Installation

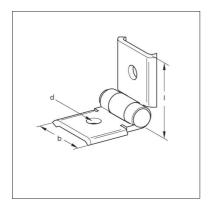
Connecting possibilities: Back of the channel with Channel Nut HZ 41 and screw Opening of the channel with Speed Nut CC 41 and screw

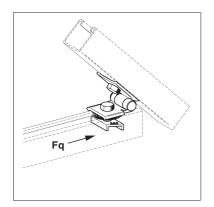
#### **Technical Data**

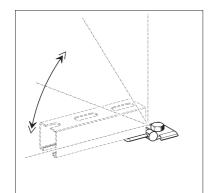
Nominal load: Fq Tightening torque: 50 Material: Ste

Fq = 2.0 kN per juncture que: 50 Nm Steel S235 JR, HCP

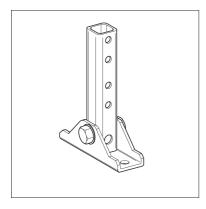
Туре	d [mm]	b [mm]	l [mm]	W [kg]	Quantity [pack]	Part number
JOI 41 V	10.5	48	54	0.18	50	198049
JOI 41 Z	10.5	48	54	0.18	50	199244











# Joint 41 T HCP

Group: 1842

#### Application

To be used for connecting Channels MS 41 to optionally bended structures such as tunnels, bended roof frames etc. under different angles. Especially suitable as brace support. Arrangement of the channel opening to all directions is possible.

#### Scope of delivery

Pre-assembled with captive screw and nut.

#### Installation

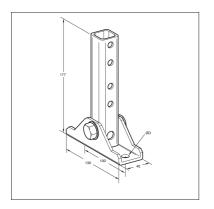
Fixation to walls, ceiling and floors by means of dowels. Adjustment of angle during assembly. Easy, fast and secure assembly of the channel with two Self Forming Screws FLS F 80.

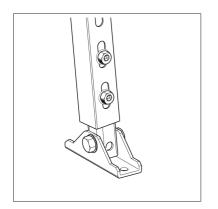
#### **Technical Data**

Max. adm. load (vertical assembly to ceiling): Material:

4.4 kN Steel S235 JR, HCP

Туре	Ø D	W	Quantity	Part
	[mm]	[kg]	[pack]	number
JOI 41 T	10.5	0.81	20	197615









# Stabil D-1G HCP

Group: 1840

#### Application

For the installation of pipes required for all M&E services in industrial, residential and public buildings.

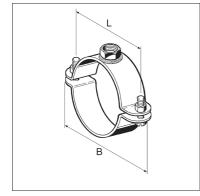
#### Scope of delivery

Two-parts pipe clamp with clamping bolts and nuts (supplied in loose form).

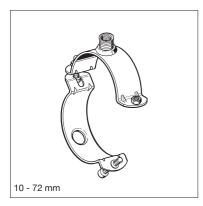
#### **Technical Data**

Size [mm]	Max. working load (tension)
15 - 72	4.0 kN
76 - 129	5.0 kN
133 - 173	8.0 kN
176 - 303	12.5 kN

Size range [mm]	NB	Material [mm]	Thread connection	L [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
15 - 19	<sup>3</sup> / <sub>8</sub> "	25 x 3	M10	42	64	0.12	50	169130
20 - 24	1/2"	25 x 3	M10	47	69	0.13	50	169149
25 - 30	3/4"	25 x 3	M10	53	75	0.13	50	169158
31 - 35	1"	30 x 3	M10	58	80	0.16	50	167208
40 - 45	<b>1</b> <sup>1</sup> / <sub>4</sub> "	30 x 3	M10	68	90	0.19	50	167226
48 - 53	<b>1</b> <sup>1</sup> / <sub>2</sub> "	30 x 3	M10	76	98	0.20	50	167235
54 - 59		30 x 3	M10	82	104	0.22	50	163666
60 - 65	2"	30 x 3	M10	88	110	0.22	50	163675
67 - 72		30 x 3	M10	95	117	0.24	50	163684
76 - 81	2 <sup>1</sup> / <sub>2</sub> "	30 x 3	M10	114	141	0.30	25	163693
82 - 87		30 x 3	M10	120	147	0.33	25	163709
88 - 93	3"	30 x 3	M10	126	153	0.34	25	163718
102 - 108		30 x 3	M10	141	168	0.38	25	163727
110 - 116	4"	30 x 3	M10	149	176	0.38	25	163736
124 - 129		30 x 3	M12	162	189	0.42	25	163745
133 - 140		40 x 4	M12	178	210	0.78	10	163754
140 - 148	5"	40 x 4	M12	186	218	0.82	10	163763
149 - 155		40 x 4	M12	193	225	0.85	10	163772
159 - 165		40 x 4	M12	203	235	0.88	10	163781
167 - 173	6"	40 x 4	M12	211	243	0.92	10	163790
176 - 184		40 x 4	M12	239	271	1.02	10	163806
188 - 194		40 x 4	M12	249	281	1.04	10	163815
199 - 205		40 x 4	M12	260	292	1.08	10	163824
207 - 216		40 x 4	M12	271	303	1.12	10	163833
219 - 225	8"	40 x 4	M12	280	312	1.15	10	163842
244 - 250		40 x 4	M12	305	337	1.26	10	163851
267 - 273	10"	40 x 4	M12	327	359	1.36	10	163860
278 - 284		40 x 4	M12	338	370	1.40	10	163879
297 - 303		40 x 4	M12	357	389	1.49	10	163888







# Stabil D-3G HCP

Group: 1844

#### Application

For the installation of pipes required for all M&E services in industrial, residential and public buildings.

#### Scope of delivery

Sizes 15 to 129 mm are equipped with welded nuts for the clamping bolts. On the joint side, the clamping bolt is pre-assembled; the clamping bolt on the opposite side is mounted into the bore hole and retained by a plastic washer, thus preventing any accidental unscrewing.

For sizes 133 and larger the clamping bolts and the required nuts are supplied in loose form.

With welded in 3G triple thread nut; without sound absorption lining. For further adapter-based connection options via the external thread of the 3G triple thread nut, see product "Adapter AD f/f" (this chapter).

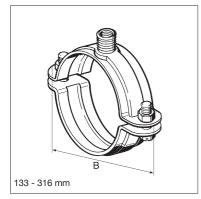
#### **Technical Data**

Size [mm]	Max. working load (tension)
10 - 72	4,0 kN
76 - 129	5,0 kN
133 - 173	8,0 kN
176 - 316	12,5 kN

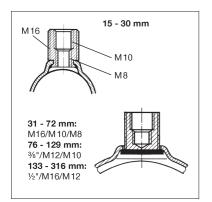
Material: Steel, HCP

#### Approvals

VdS-Approval No. G4920027, \* = FM Approval



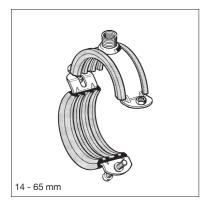
76 - 129 mm



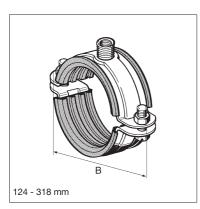


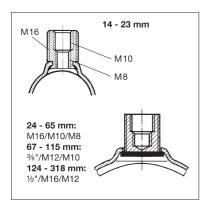
Size range [mm]	NB	Material W x th [mm]	Thread connection	B [mm]	W [kg]	Quantity [pack]	Part number
10 - 14		25 x 2.0	M16/M10/M8	60	0.07	50	113832
15 - 19	<sup>3</sup> / <sub>8</sub> "	25 x 2.0	M16/M10/M8	57	0.07	50	112216
20 - 24	<sup>1</sup> / <sub>2</sub> "	25 x 2.0	M16/M10/M8	62	0.08	50	112217
25 - 30	<sup>3</sup> / <sub>4</sub> "	25 x 2.0	M16/M10/M8	68	0.08	50	112218
31 - 35	1"	30 x 2.5	M16/M10/M8	75	0.12	50	112219
35 - 41		30 x 2.5	M16/M10/M8	81	0.13	50	113833
40 - 45	<b>1</b> <sup>1</sup> / <sub>4</sub> "	30 x 2.5	M16/M10/M8	85	0.13	50	112220
48 - 53	<b>1</b> <sup>1</sup> / <sub>2</sub> "	30 x 2.5	M16/M10/M8	93	0.15	50	112221
54 - 59		30 x 2.5	M16/M10/M8	104	0.16	50	112222
60 - 65	2"	30 x 2.5	M16/M10/M8	110	0.17	50	112223
67 - 72		30 x 2.5	M16/M10/M8	117	0.18	50	112224
76 - 81	2 <sup>1</sup> / <sub>2</sub> "	30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	137	0.28	25	112225
82 - 87		30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	143	0.29	25	112226
88 - 93	3"	30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	149	0.31	25	112227
102 - 108		30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	163	0.34	25	112228
110 - 116	4"	30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	171	0.36	25	112229
124 - 129		30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	184	0.39	25	112230
133 - 140		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	210	0.74	10	112231
140 - 148	5"	40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	218	0.76	10	112232
149 - 155		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	225	0.81	10	112233
159 - 165		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	235	0.82	10	112234
167 - 173	6"	40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	243	0.85	10	112235
176 - 184		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	255	0.95	10	112236
188 - 194		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	265	0.98	10	112237
199 - 205		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	276	1.03	10	112238
207 - 216		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	287	1.07	10	112239
219 - 225	8"	40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	296	1.11	10	112240
244 - 250		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	321	1.23	10	112242
267 - 273	10"	40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	344	1.25	10	112244
278 - 284		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	355	1.35	10	112245
297 - 303		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	374	1.42	10	112246
310 - 316		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	387	1.47	10	112247





67 - 115 mm





## Pipe Clamp Stabil D-3G w/lining HCP

Group: 1843

#### Application

Pipe Clamp for the installation of pipes required for all M&E services in industrial buildings. Pipe clamp with sound absorption lining suitable for sound proof pipe fixation according to DIN 4109.

#### Scope of delivery

Sizes 14 to 115 mm are equipped with articulation and welded-on nuts for the clamping bolts. On the joint side, the clamping bolt is pre-assembled; the clamping bolt on the opposite side is mounted into the bore hole and retained by a plastic washer, thus preventing any accidental unscrewing. For sizes 124 mm and larger the clamping bolts and nuts required are supplied in bulk. For further connecting options with Adapters, see product "Adapter AD f/f" (this chapter).

#### **Technical Data**

Size [mm]	Max. perm. load (tension)	Tightening torque [Nm]
14 - 23	1.8 kN	2
24 - 115	2,0 kN	3
124 - 162	2.9 kN	5
165 - 318	8.0 kN	10

The max. permissible load is calculated using specific statistical methods relating to break loads and is designed to restrict deflection to 1.5 mm or 2 % of the maximum applicable clamping diameter.

#### Perm. load FZ<sub>perm,fi</sub> in case of fire

Size range [mm]	FWD 30 [N]	FWD 60 [N]	FWD 90 [N]	FWD 120 [N]	Deformation δ <sub>max</sub> [mm]	Thread ≥
14 - 23	380	200	140	-	49	M10
24 - 65	500	250	170	120	44	M10
67 - 115	1000	650	500	400	96	M10
124 - 162	2200	1200	850	600	96	M12
165 - 305	2400	1400	1000	850	104	M12

Material:

Pipe Clamp: Sound absorption lining: Steel, HCP SBR/EPDM, black glued-in(for rubber profiles see chapter "Sound Absorption Elements")

#### Approvals



This product has been awared the RAL quality mark "pipe supports" and "fire-tested pipe supports" and is subject to continuous external monitoring according to RAL GZ-655.

\* = no quality mark



Size range [mm]	NB	Material W x th [mm]	Thread connection	B [mm]	W [kg]	Quantity [pack]	Part number
14 - 18	<sup>3</sup> / <sub>8</sub> "	25 x 2.0	M16/M10/M8	62	0.08	50	112249
19 - 23	<sup>1</sup> / <sub>2</sub> "	25 x 2.0	M16/M10/M8	68	0.09	50	112250
24 - 28	<sup>3</sup> / <sub>4</sub> "	30 x 2.5	M16/M10/M8	75	0.12	50	112251
29 - 33	1"	30 x 2.5	M16/M10/M8	81	0.14	50	112252
33 - 37		30 x 2.5	M16/M10/M8	85	0.15	50	112253
40 - 45	<b>1</b> <sup>1</sup> / <sub>4</sub> "	30 x 2.5	M16/M10/M8	93	0.16	50	112254
47 - 52	<b>1</b> <sup>1</sup> / <sub>2</sub> "	30 x 2.5	M16/M10/M8	104	0.18	50	112255
53 - 58		30 x 2.5	M16/M10/M8	110	0.19	50	112256
60 - 65	2"	30 x 2.5	M16/M10/M8	117	0.21	25	112257
67 - 72		30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	144	0.31	25	112258
73 - 78	2 <sup>1</sup> / <sub>2</sub> "	30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	150	0.33	25	112259
79 - 85		30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	156	0.34	25	112260
88 - 93	3"	30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	164	0.37	25	112261
100 - 106		30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	178	0.40	25	112264
108 - 115	4"	30 x 3.0	<sup>3</sup> / <sub>8</sub> "/M12/M10	187	0.43	25	112265
124 - 129		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	210	0.86	10	112266
131 - 137		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	218	0.90	10	112267
138 - 144	5"	40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	225	0.94	10	112268
148 - 154		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	235	0.98	10	112269
156 - 162		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	243	1.02	10	112270
165 - 171	6"	40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	255	1.08	10	112271
177 - 183		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	265	1.18	10	112272
188 - 194		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	276	1.22	10	112273
196 - 203		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	287	1.29	10	112274
205 - 214		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	296	1.32	10	112275
219 - 225	8"	40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	307	1.38	10	112276
244 - 250		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	332	1.52	10	112278
267 - 273	10"	40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	355	1.60	10	112280
278 - 284		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	366	1.67	10	112281
299 - 305		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	387	1.76	10	112282
307 - 318 *		40 x 4.0	<sup>1</sup> / <sub>2</sub> "/M16/M12	400	1.83	10	112283





# Pipe Clamp Stabil RB-A HCP

Group: 1860

#### Application

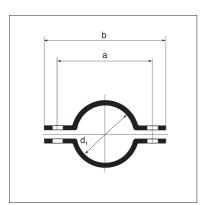
For particularly high static requirements in plant construction. Design similar to DIN 3567. The perforations on both sides allow the application of standardised bolts and threaded nuts out of the Sikla product range.

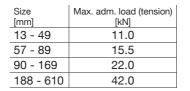
#### Scope of delivery

Two-piece pipe clamp delivered without bolts. For suitable bolts see product "Hexagon Bolt SKT HCP" (this chapter).

#### **Technical Data**

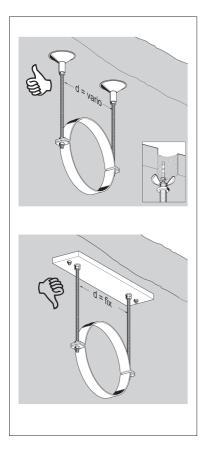
Adm. load valid with fixation on both sides





The max. perm. load capacity of connected parts (e.g. anchors) shall be considered.

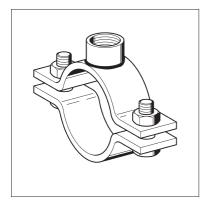
The max. adm. load capacity is determined by the application of statistical methods, resulting from the breaking loads, under oberservance of a max. adm. deformation of 1.5 mm or 2% of the max. stretchable pipe dia.





Size d₁ [mm]	Size range [mm]	Material W x th [mm]	Recommended clamping bolts	a [mm]	b [mm]	W [kg]	Quantity [pack]	Part number
18	13 - 18	30 x 5.0	M10 x 40	54	83	0.17	25	112790
22	17 - 22	30 x 5.0	M10 x 40	56	85	0.18	25	112791
27	23 - 27	30 x 5.0	M10 x 40	63	92	0.20	25	112792
34	30 - 34	30 x 5.0	M10 x 40	71	100	0.22	25	112793
38	34 - 38	30 x 5.0	M10 x 40	76	105	0.24	25	112794
44	40 - 44	30 x 5.0	M10 x 40	83	112	0.26	25	112795
49	45 - 49	30 x 5.0	M10 x 40	88	117	0.28	25	112796
61	57 - 61	40 x 5.0	M12 x 40	106	139	0.42	25	112797
70	66 - 70	40 x 5.0	M12 x 40	116	149	0.46	25	112798
77	73 - 77	40 x 5.0	M12 x 40	123	156	0.53	25	112799
89	85 - 89	40 x 5.0	M12 x 40	135	168	0.52	25	112800
104	90 - 104	50 x 5.0	M12 x 60	146	179	0.75	10	112801
109	103 - 109	50 x 5.0	M12 x 60	155	188	0.83	10	112802
115	109 - 115	50 x 5.0	M12 x 60	161	194	0.87	10	112803
133	119 - 133	50 x 5.0	M12 x 60	176	209	0.92	10	112804
140	134 - 140	50 x 5.0	M12 x 60	187	220	1.01	10	112805
162	156 - 162	50 x 5.0	M12 x 60	209	242	1.15	10	112806
169	163 - 169	50 x 5.0	M12 x 60	216	249	1.18	10	112807
194	188 - 194	50 x 8.0	M12 x 60	252	285	2.17	1	112808
220	214 - 220	50 x 8.0	M12 x 60	279	312	2.39	1	112809
254	248 - 254	50 x 8.0	M16 x 80	320	363	2.81	1	112810
267	261 - 267	50 x 8.0	M16 x 80	333	376	2.94	1	112811
273	265 - 273	60 x 8.0	M16 x 80	339	382	3.56	1	112812
324	316 - 324	60 x 8.0	M16 x 80	390	433	4.12	1	112813
356	350 - 356	60 x 8.0	M16 x 80	422	465	4.36	1	112814
368	360 - 368	60 x 8.0	M16 x 80	434	477	4.67	1	112815
407	402 - 407	70 x 8.0	M16 x 80	473	516	5.94	1	112816
419	412 - 419	70 x 8.0	M16 x 60	485	528	6.32	1	112817
457	450 - 457	70 x 8.0	M16 x 80	523	566	6.87	1	112818
508	501 - 508	70 x 8.0	M16 x 80	575	618	7.32	1	112819
521	512 - 521	70 x 8.0	M16 x 80	588	631	7.86	1	112820
535	529 - 535	70 x 8.0	M16 x 80	602	645	7.93	1	112821
610	603 - 610	70 x 8.0	M16 x 80	677	720	8.79	1	112822





# Pipe Clamp Stabil I-1/2" HCP

Group: A022

#### Application

Heavy pipe clamp for industrial application.

#### Scope of delivery

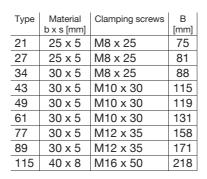
Two-piece pipe clamp with all around welded  $^{1\!/_{2}\text{"}}$  nut with clamping bolts and nuts.

#### Installation

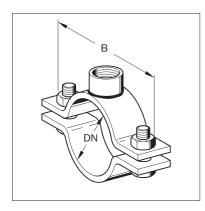
Suitable for single-point fixing directly with  $^{1}\!/_{2}^{"}$  threaded tube or connected by respective adapters up to 1" threaded tube.

#### **Technical Data**

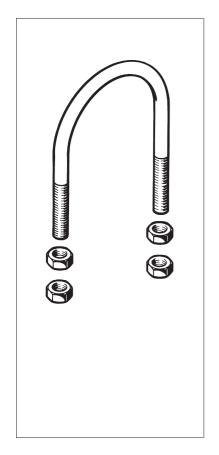
Material:	
Clamp:	Steel, HCP
Bolts:	Steel, class 8.8
Nuts:	Steel, class 8



Туре	For pipe [NB]	W [kg]	Quantity [pack]	Part number
21	15	0.28	25	188147
27	20	0.23	25	188156
34	25	0.32	25	188165
43	32	0.40	25	188174
49	40	0.38	25	188183
61	50	0.60	25	188192
77	65	0.68	25	188201
89	80	0.74	25	188210
115	100	1.03	10	188219







# U Bolt RUB 3570 A HCP

Group: 1810

#### Application

For pipeline systems in industrial and residential buildings and Sprinkler installations according to VdS and FM standards. For horizontal and vertical pipelines, the U-Bolts are applied as Fixed Points and as Guiding Supports.

#### Scope of delivery

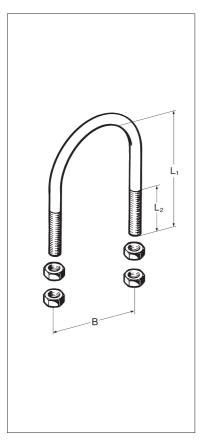
Four hexagon nuts included in loose form.

#### Installation

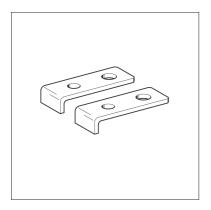
When used as Guided Support, nuts have to be arranged and fixed on both sides, at the top and at the bottom of the profile. Thereby the pipe should remain flexible. When used as Fixed Point the admissible loads of the connecting elements shouldn't exceed the bending loads of the U-bolt.

#### **Technical Data**

Туре	NB	B [mm]	L₁ [mm]	L₂ [mm]	Thread	W [kg]	Quantity [pack]	Part number
26.9	<sup>3</sup> / <sub>4</sub> "	40	60	40	M 10	0.12	50	162179
33.7	1"	48	66	40	M 10	0.12	50	162188
42.4	<b>1</b> <sup>1</sup> / <sub>4</sub> "	56	76	50	M 10	0.14	50	162197
48.3	1 <sup>1</sup> / <sub>2</sub> "	62	82	50	M 10	0.14	50	162203
60.3	2"	76	97	50	M 12	0.23	50	162212
76.1	2 <sup>1</sup> / <sub>2</sub> "	94	113	50	M 12	0.26	50	162221
88.9	3"	106	126	50	M 12	0.29	50	162230
114.3	4"	136	155	60	M 16	0.63	25	162249
139.7	5"	164	175	60	M 16	0.71	25	162258
168.3	6"	192	201	60	M 16	0.80	10	162267
193.7	202	218	233	60	M 16	0.90	10	162276
219.1	8"	248	263	70	M 20	1.61	10	162285
274.0	10"	302	314	70	M 20	1.88	10	162294
323.9	12"	352	365	70	M 20	2.52	1	162300
355.6	378	402	411	70	M 24	3.53	1	162319
406.4	428	452	463	70	M 24	3.90	1	162328
508.0	530	554	565	70	M 24	4.63	1	162337







# U Bolt Support UBF HCP Group: 1810

#### Application

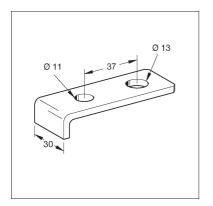
For simple combination of U Bolt and Channel. Suitable for all Sikla Channels MS 41.

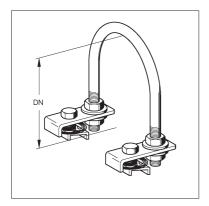
#### Installation

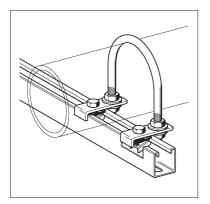
Simple attachment with Channel Nuts M10 and Hexagon Bolts M10x25. For each U bolt each one set has to be used.

#### **Technical Data**

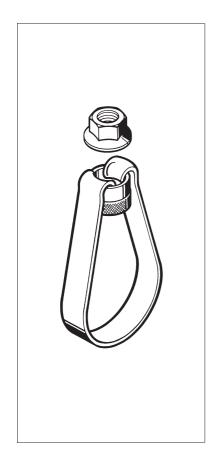
Туре	W	Pack.	Part
	[kg]	[pair]	number
UBF	0.15	25	194188











# Pipe Loop RSL N HCP Group: 1815

#### Application

For pipeline installations of fixed fire entinguishing systems, mainly used for Sprinkler Systems.

#### Scope of delivery

Pipe Loop with round edges. Flange nuts and cup nuts are included in loose form.

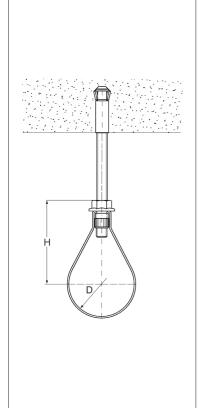
#### **Technical Data**

Material: Steel, HCP

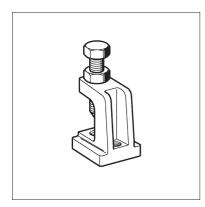
#### Approvals

FM and VdS (No. G4850025) approved

Туре	NB	Connection	D [mm]	H [mm]	W [kg]	Quantity [pack]	Part number
26.9	<sup>3</sup> / <sub>4</sub> "	M8 (VdS)	27	65	0.05	100	113242
33.7	1"	M8 (VdS)	34	65	0.05	100	113243
42.4	<b>1</b> <sup>1</sup> / <sub>4</sub> "	M8 (VdS)	43	65	0.05	50	113244
48.3	<b>1</b> <sup>1</sup> / <sub>2</sub> "	M8 (VdS)	49	70	0.06	50	113245
60.3	2"	M8 (VdS)	61	79	0.06	50	113246
26.9	<sup>3</sup> / <sub>4</sub> "	M10 (FM)	27	65	0.05	100	113415
33.7	1"	M10 (FM)	34	65	0.06	100	113238
42.4	<b>1</b> <sup>1</sup> / <sub>4</sub> "	M10 (FM)	43	65	0.06	50	113239
48.3	<b>1</b> <sup>1</sup> / <sub>2</sub> "	M10 (FM)	49	70	0.06	50	113240
60.3	2"	M10 (FM)	61	79	0.07	50	113241
76.1	2 <sup>1</sup> / <sub>2</sub> "	M10	77	98	0.14	25	113247
88.9	3"	M10	90	113	0.16	25	113248
108		M10	110	142	0.19	25	113249
114.3	4"	M10	115	142	0.19	25	113250
133		M12	135	155	0.22	25	113251
139.7	5"	M12	142	155	0.22	25	113252
159		M12	161	185	0.25	25	113253
168.3	6"	M12	170	185	0.26	25	113254
219.1	8"	M16	221	239	0.56	10	113255







# Beam Clamp TCS 1 HCP

Group: 1837

#### Application

Heavy-duty connection elements which, in combination with Grub Screws (M10), are suitable for mounting pipes, ducts and equipment to steel beams (I-, T-, U- and angle steel beams).

- The combination with a Universal Joint ss provides for vertically aligned attachment to inclined beams.
- Can serve as single mounting elements, for installing crossbars and for fixing cantilever structures.
- Due to their special base profile, Beam Clamps TCS 1 can also be slid along and retained in the opening of Sikla Channels MS 41.

#### Scope of delivery

Pre-assembled with clamping bolt and locking nut.

#### Installation

Tigthen the clamping bolt of the Beam Clamp first by hand, then tighten down with a spanner according to the mounting instructions. The hardened point of the clamping bolt will penetrate the comparatively soft material of the beam, ensuring a solid and highly secure connection. Tigthen the locking nut for securing the installation.

For use in the area of a cutting edge of a channel, an additional Holding Bracket HK 41 must be mounted.

Note: Read relevant mounting instructions before installation!

#### **Technical Data**

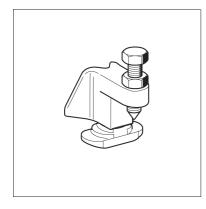
Working load: 5.0 kN

This nominal load applies to new Beam Clamps fixed to undamaged beam flanges only.

#### Material:

Туре	Connection [fore/aft]	Clamping range on parallel flange [mm]	W [kg]	Quantity [pack]	Part number
TCS 1 M10	M10/M10	26	0.21	50	162151





# Beam Clamp TCS 41 HCP

Group: 1837

#### Application

The Beam Clamp TCS 41 allows for a direct connection of Sikla 41mm slotted strut channel without having this obstruction. If the channel opening is supposed to be in beam direction, the Beam Clamp TCS 41 can easily be fixed within the channel's opening as we know it from type TCS 1.

#### Scope of delivery

Cast iron part, completely pre-assembled with clamping bolt and locking nut.

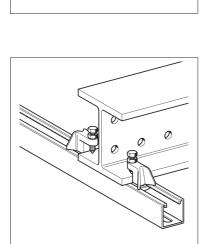
#### Installation

Insert the foot of the Beam Clamp into the slot on the back of the channel, twist by 90° and push it against the beam's flange. First tighten bolt of Beam Clamp (hand-tight), then tighten further with 1 1/2 turns. The sharpened tip of the bolt will dent the beam thus providing a high level of safety. At last tighten locking nut. Every channel (statically determined) has to be fixed at least twice.

#### **Technical Data**

Nominal load: 4.0 kN Material: Cast iron, clamping bolt 8.8, surface HCP

Туре	Clamping range on parallel flange [mm]	W [kg]	Quantity [pack]	Part number
TCS 41	20	0.12	50	110003









# **Beam Clip P HCP**

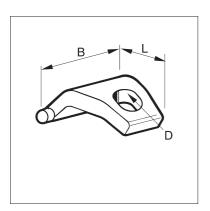
Group: 1831

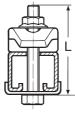
#### Application

Universal clamping element for bi-lateral attachment of products with base plates or of crossbars for pipes, ducts and equipment to steel beams. If the height of the flange is bigger than the maximum clamping range, this can be increased using a spacer of up to 10 mm. If higher spacers are used, these have to be welded to the crossbar.

#### Installation

Determination of the required bolth length  $L_{\mbox{\tiny min:}}$ 



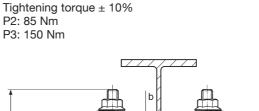


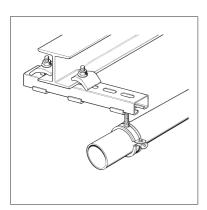
Pass-through bolt P 2:  $L_{min} = a + b + 43$  [mm] P 3:  $L_{min} = a + b + 48$  [mm]

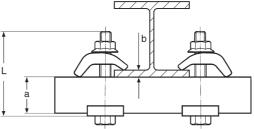


Channel nut P 2:  $L_{min} = b + 45 \text{ [mm]}$ P 3:  $L_{min} = b + 50 \text{ [mm]}$ 

P2: 85 Nm P3: 150 Nm







#### **Technical Data**

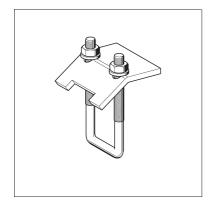
Туре	Working load (tension)
P 2	5.0 kN
Ρ3	7.0 kN

Note: For vertical installation, please contact Sikla Technical Department.

Material: Cast iron, HCP

Туре	Size range [mm]	Ø D [mm]	L [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
P2	1 - 33	13	62	50	0.23	25	165905
P3	1 - 33	17	69	50	0.25	25	165914





# U-Holder SB 41 HCP

Group: 1831

#### Application

Clamping element for bi-lateral attachment of crossbars to steel beams, independent from the channel's opening.

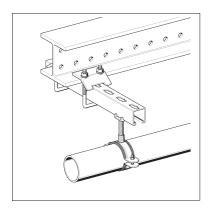
#### Installation

To be used in pairs. Length calculation = Beam/Girder flange thickness + min. 2 x 50 mm overhang

#### **Technical Data**

 Type
 Max. perm. load tension
 Tightening torque

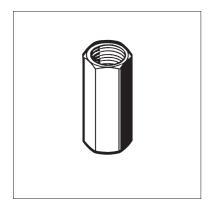
 M10
 5,0 kN per U-Holder
 30 Nm



Motorial	Steel UCD
Material:	Steel, HCP

Туре	For channel height [mm]	Max. flange thickness [mm]	Thread	W [kg]	Quantity [pack]	Part number
41 - M10	20 - 62	16	M10	0.41	20	113879





# Adapter AD f/f HCP Group: 1833

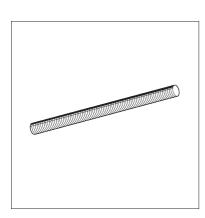
#### Application

Adapter to be seen as expansion of the connection possibilities - to be used for all Sikla Pipe Clamps with 3G-thread, Fixed Points and Threaded Tubes 1/2".

#### **Technical Data**

Material: Steel, HCP

Туре	Length [mm]	A/F [mm]	W [kg]	Quantity [pack]	Part number
<sup>1</sup> / <sub>2</sub> "/M10	35	24	0.08	10	112163
<sup>1</sup> / <sub>2</sub> "/M12	35	24	0.07	10	112164
<sup>1</sup> / <sub>2</sub> "/ <sup>3</sup> / <sub>8</sub> "	40	24	0.06	25	112165
<sup>1</sup> / <sub>2</sub> "/ <sup>1</sup> / <sub>2</sub> "	35	24	0.05	10	112166
<sup>1</sup> / <sub>2</sub> "/M16	40	24	0.07	25	112167



# **Threaded Stud GST HCP**

Group: 1816

#### **Technical Data**

Material: Steel, HCP

Туре	Length [mm]	W [kg]	Quantity [pack]	Part number
M10/40	40	0.02	100	162407
M10/70	70	0.03	100	162416
M10/110	110	0.05	100	162425
M10/1000	1000	0.49	25	167244
M12/70	70	0.05	100	162443
M12/110	110	0.07	100	162452
M12/200	200	0.14	100	162461
M12/250	250	0.18	100	180686
M12/300	300	0.20	100	180695
M12/400	400	0.27	100	180713
M12/500	500	0.35	100	180722
M12/1000	1000	0.70	25	189866
M16/1000	1000	1.30	10	192377





# **Threaded Tube GR HCP**

Group: 1813

### Application

- To be used as
- ◆ a direct connection element between Mounting Plate and Pipe Clamp or
- a suport rod in combination with Socket Angle or Universal Joints as angular support.

#### Scope of delivery

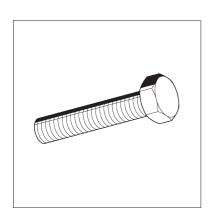
Standard length = 2 m; shorter pre-cut parts available on request.

#### **Technical Data**

Thread according to DIN EN ISO 228

Material: Steel, HCP

Туре	Length	Weight [kg/m]	Qty. [m]	Part number
G <sup>1</sup> / <sub>2</sub> "	2 m	1.02	2	110717



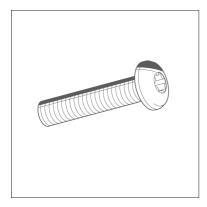
# Hexagon Bolt SKT HCP Group: 1870

#### **Technical Data**

Material: Steel, HCP

Туре	Length [mm]	W [kg]	Quantity [pack]	Part number
M10/25	25	0.02	100	162568
M10/40	40	0.03	100	162577
M12/25	25	0.03	100	162586
M12/30	30	0.04	100	164144
M12/40	40	0.04	50	162595
M12/60	60	0.06	50	164153
M12/80	80	0.07	50	164162
M12/100	100	0.09	50	164171
M16/50	50	0.10	100	162601
M16/80	80	0.14	25	164180
M16/100	100	0.17	25	171866





# Flange Screw SCR FLA HCP

Group: 1875

#### Application

Type M10 x 15 allows fixation of Channels by means of Drive Plug AN, without exceeding the max. permissible screw-in depth or to go under the min. screw-in depth required.

Type M10 x 25 is the ideal connecting part for two Sikla Channels MS 41.

Versions "TT" are self-forming screws. Type M10 x 55 is applicable for fixing components with thickness of max. 41 mm to "Framo 80" system.

#### Installation

The maximum admissible tightening torque strictly has to be observed.

#### **Technical Data**

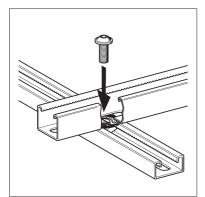
M10 x 15 and M10 x 25 Drive:

Internal hexagon SW 6

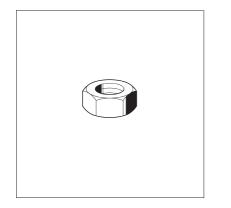
TT M10 x 25 and TT M10 x 55 max. adm. tightening torque: Drive: Material:

20 Nm (max. adm.) Torx-T50 Steel, HCP

Туре	Length [mm]	W [kg]	Quantity [pack]	Part number
M10 x 15	15	0.01	100	199107
M10 x 25	25	0.02	100	198353
TT M10 x 25	25	0.02	600	110503
TT M10 x 55	55	0.04	500	197608





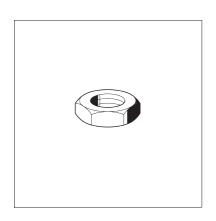


# Hexagon Nut NT HCP Group: 1871

#### **Technical Data**

Material: Steel, HCP

Туре	W	Quantity [pack]	Part number
	[kg]		
M10	0.01	100	162391
M12	0.01	100	162382
M16	0.03	100	163019



# Locking Nut NT G HCP Group: 1813

### Application

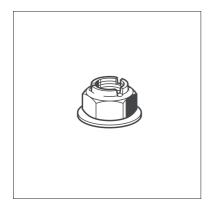
Suitable for Sikla Threaded Tubes and terminal nuts (e.g. with Slide Sets), especially to lock a nut.

## **Technical Data**

Material Steel, HCP

Туре	W	Quantity	Part
	[kg]	[pack]	number
G <sup>1</sup> / <sub>2</sub> "	0.04	25	110755





# Safety Nut with flange NT SEC HCP

Group: 1876

#### Application

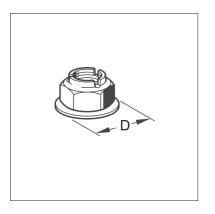
The Safety Nut is equipped with a self-locking head made of steel (3 parts) being arranged in a conical shape. This offers the highest possible safety against unscrewing. The Safety Nut with flange offers the following advantages:

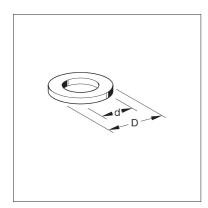
- Clamping effect directly at the thread resilient, elastic
- applicable for all HCP and electrogalvanised screws and threaded rods
  improved thread moving due to the separated securing segments
- reusability after disassembling
- high temperature resistance

#### **Technical Data**

Material: Steel, Quality class 10, HCP

Туре	D [mm]	W [kg]	Quantity [pack]	Part number
M8	17	0.01	50	113062
M10	21	0.01	50	113063





# Washer US HCP

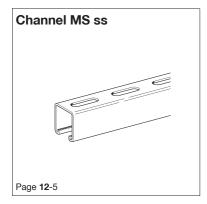
Group: 1872

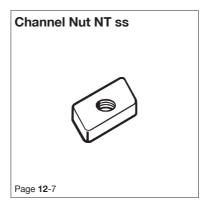
#### **Technical Data**

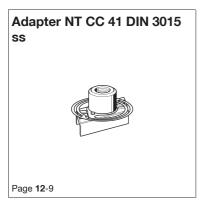
Material: Steel, HCP

Туре	DIN	D [mm]	d [mm]	s [mm]	W [kg]	Quantity [pack]	Part number
10/125	125	20.0	10.5	2.0	0.01	100	162346
12/125	125	24.0	13.0	2.5	0.01	100	162355
16/125	125	30.0	17.0	3.0	0.01	100	179156
10/40		40.0	10.5	3.0	0.03	100	162373
12/40		40.0	13.0	3.0	0.02	100	162364



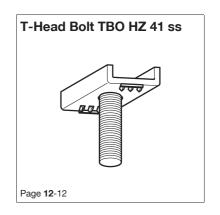


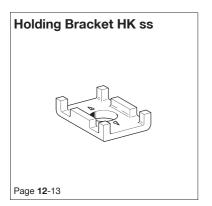


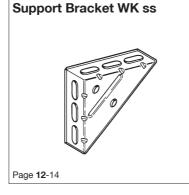


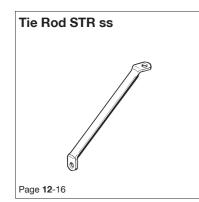


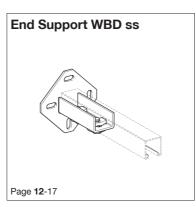


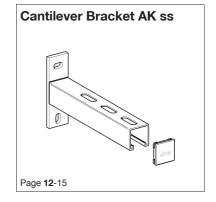


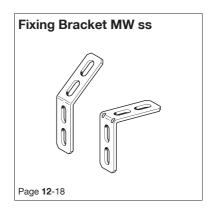






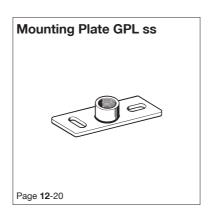


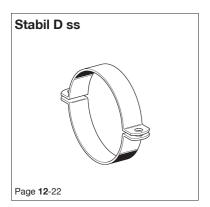




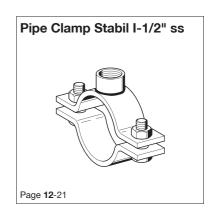






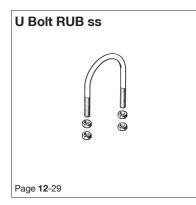


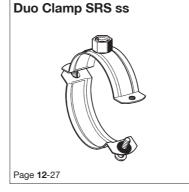




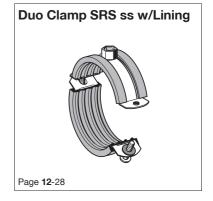








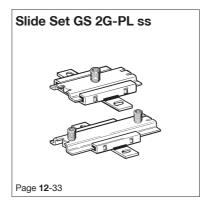


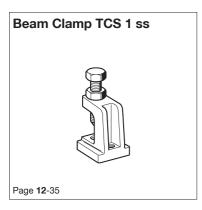


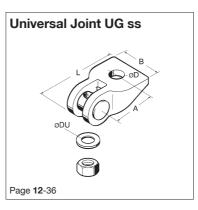


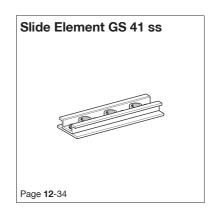




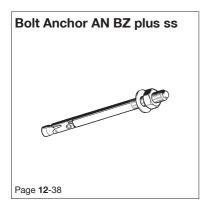










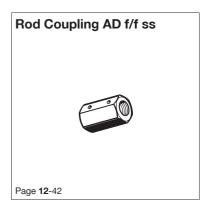






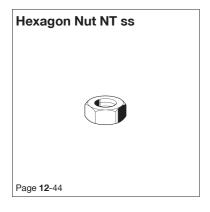


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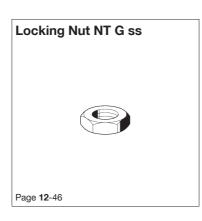




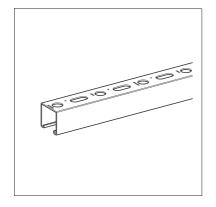












### **Channel MS ss**

Group: 1711

#### Application

Element for easily and efficiently pre-assembling crossbars, wall brackets and supporting structures on construction sites or in workshops.

They can be used as guide and support channels for slide applications by inserting the Slide Element 41 ss inside the channel.

#### Scope of delivery

Available as single or double channels. Double channels are joined together by clinching.

#### Installation

All channels of the 41 series are serrated inside and provide numerous combination options with other stainless steel system components.

#### **Technical Data**

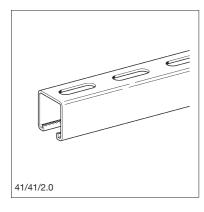
Material: Stainless steel A4 according to approval Z-30.3-6 of the building authorities

#### D = Double channel

Type W/H/Th [mm]	Section modulus [cm <sup>3</sup> ]	Moment of inertia [cm <sup>4</sup> ]	Radius of gyration [cm]
27/15/1.25	W <sub>y</sub> : 0.27	l <sub>y</sub> : 0.22	i <sub>y</sub> : 0.55
	W <sub>z</sub> : 0.65	l <sub>z</sub> : 0.88	i <sub>z</sub> : 1.10
41/21/2.0	W <sub>y</sub> : 0.82	l <sub>y</sub> : 0.92	i <sub>y</sub> : 0.76
	W <sub>z</sub> : 2.12	l <sub>z</sub> : 4.35	i <sub>z</sub> : 1.65
41/41/2.0	W <sub>v</sub> : 2.43	l <sub>v</sub> : 5.16	i <sub>v</sub> : 1.46
	W <sub>z</sub> : 3.65	l <sub>z</sub> : 7.48	i <sub>z</sub> : 1.75
41/62/2.5	W <sub>y</sub> : 5.54	l <sub>y</sub> : 17.70	i <sub>y</sub> : 2.10
	W <sub>z</sub> : 6.27	l <sub>z</sub> : 12.86	i <sub>z</sub> : 1.79
41/41/2.0 D	W <sub>v</sub> : 7.16	l <sub>v</sub> : 29.34	i <sub>v</sub> : 2.45
	W <sub>z</sub> : 7.30	l <sub>z</sub> : 14.96	i <sub>z</sub> : 1.75
41/62/2.5 D	W <sub>v</sub> : 17.38	l <sub>v</sub> : 107.75	i <sub>v</sub> : 3.66
	W <sub>z</sub> : 12.54	l <sub>z</sub> : 25.71	i <sub>z</sub> : 1.79

Type W/H/Th [mm]	Cross section	Distance	Max. point carrying capacity	Max. torsional moment
27/15/1.25	[cm <sup>2</sup> ] 0.73	[cm] 0.84	F <sub>max</sub> [kN] 1.7	Mq [Nm] 15.0
41/21/2.0	1.61	1.12	4.0	44.5
41/41/2.0	2.43	2.12	4.0	44.5
41/62/2.5	4.01	3.20	6.0	44.5
41/41/2.0 D	4.87	4.10	4.0	44.5
41/62/2.5 D	8.03	6.20	6.0	44.5

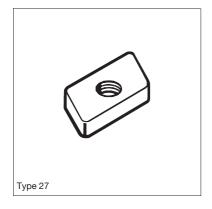
All values in both tables refer to slotted channels. Load tables are to be seen in chapter "Pressix CC 27 resp. CC 41".





Туре	Steel grade	Length [m]	Slot pattern	Weight [kg/m]	Qty. [m]	Part number
27/15/1.25	A4	2	1	0.59	2	112912
41/21/2.0	A4	6	3	1.32	6	110595
41/41/2.0	A4	2	3	1.97	2	195802
41/41/2.0	A4	6	3	1.97	6	195796
41/62/2.5	A4	6	3	3.13	6	173972
41/41/2.0 D	A4	6	3	3.94	6	195819
41/62/2.5 D	A4	6	3	6.27	6	174143





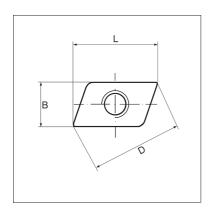
# **Channel Nut NT ss**

Group: 1714

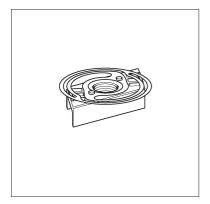
**Application** For channels with a width of 27 mm.

#### **Technical Data**

Туре	Thickness [mm]	L [mm]	B [mm]	D [mm]	W [kg]	Quantity [pack]	Part number
27 - M8	4	24	15	27	0.01	100	174170
27 - M10	4	24	15	27	0.01	100	174179







# Speed Nut NT CC 41 ss

Group: 1714

#### Application

In particular useful when installing in vertical channels or in places of difficult access.

Further advantages:

- For all Sikla Channels of type 41, independent of the height of the channel.
- No getting stuck on bolt heads when sliding in the channel.
- No appearance of settlement after tightening.

#### Scope of delivery

Channel Nut and Spring are tightely connected.

#### Installation

After inserting the Speed Nut into the channel opening, it is - by exerting slight pressure on it - turned to the right as far as it will go; deinstallation may be effected by following the instructions in reverse order.

Installation and deinstallation do not require tools and may be repeated several times.

#### **Technical Data**

	M6	M8	M10
Tightening torque [Nm]	10	25	40

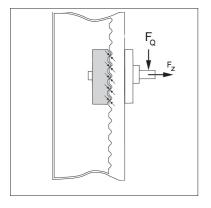
Material thickness channel	M6 FZ ≤	M8 FZ ≤	M10 FZ ≤	M6 FQ ≤	M8 FQ ≤	M10 FQ ≤
[mm]	[kN]	[kN]	[kN]	[kN]	[kN]	[kN]
2.0	3.2	5.8	5.8	0.9	2.1	3.4
2.5	3.2	5.8	5.8	1.0	2.6	4.1

Note: The admissible load capacities of the channels are to be taken into account.

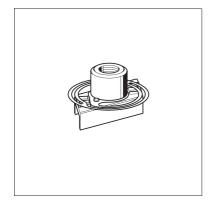
#### Material:

Nut:Stainless steel 316 (A4)Spring:Sheet metal spring steel, rustproof

Туре	W [kg]	Quantity [pack]	Part number
CC 41-M6	0.02	50	199299
CC 41-M8	0.03	50	199305
CC 41-M10	0.03	50	199312







# Adapter NT CC 41 DIN 3015 ss

Group: 1714

#### Application

For efficient assembly of fastening clamps DIN 3015 (light and heavy series) to Channels MS 41. Particularly useable for assembly in vertical channels or positions difficult to access, this piece replaces the "3rd hand" and offers following further advantages:

- Compatible with all Sikla Channels MS 41, regardless of the channel's height.
- No getting stuck of screw heads while moving inside the channel.
- Plane fixation without projecting after tightening.

#### Scope of delivery

Channel nut, spring and thread connection pre-assembled.

#### Installation

After inserting the Adapter NT CC 41 into the channel opening, slightly press on the thread connection. The piece automatically turns into position. Postion the fastening clamp and tighten the screws.

Neither assembly nor removal require a tool and are repeatable as much as is necessary.

#### **Technical Data**

Material: Channel nut, thread connection: Spring washer:

Stainless steel 316 (A4) Spring steel sheet, rustproof

Pipe clamps DIN 3015-1 (series A, light model range)

Clamp size	Pipe outer-dia. [mm]	Connection with	e1
0	6 up to 12	1 x Adapter NT CC 41 ss M6	
1	6 up to 12	2 x Speed Nut NT CC 41 ss M6	20 1)
2	12.7 up to 18	2 x Speed Nut NT CC 41 ss M6	26 <sup>1)</sup>
3	19 up to 25	2 x Speed Nut NT CC 41 ss M6	33 <sup>1)</sup>
4	26.9 up to 30	2 x Adapter NT CC 41 ss M6	40
5	32 up to 42	2 x Adapter NT CC 41 ss M6	52
6	44.5 up to 57	2 x Adapter NT CC 41 ss M6	66
7	57.2 up to 76.1	2 x Adapter NT CC 41 ss M6	94
8	88.9 up to 101.8	2 x Adapter NT CC 41 ss M6	120

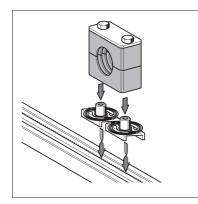
Pipe clamps DIN 3015-2 (series C, heavy-load model range)

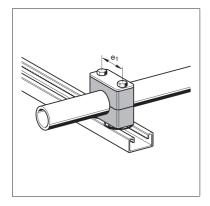
Pipe size	Pipe outer dia. [mm]	Connection with	e1
1	6 up to 18	2 x Speed Nut NT CC 41 ss M10	33 <sup>1)</sup>
2	19 up to 30	2 x Adapter NT CC 41 ss M10	45
3	30 up to 42	2 x Adapter NT CC 41 ss M10	60
4	38 up to 70	2 x Adapter NT CC 41 ss M12	90

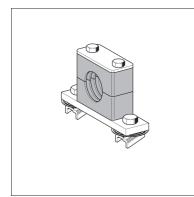
<sup>1)</sup> For these hole distances the screwing plate of the clamp - see image 4 as well as each two Hexagon Bolts and Speed Nuts NT CC 41 are required.

Pipe clamps DIN 3015-3 (series B, double model range)

Pipe size	Pipe outer dia. [mm]	Connection with
1	6 up to 12	1 x Adapter NT CC 41 ss M6
2	12.7 up to 18	1 x Adapter NT CC 41 ss M8
3	19 up to 25	1 x Adapter NT CC 41 ss M8
4	26.9 up to 30	1 x Adapter NT CC 41 ss M8
5	32 up to 42	1 x Adapter NT CC 41 ss M8



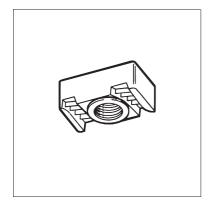






Туре	W [kg]	Quantity [pack]	Part number
M6	0.04	100	110008
M8	0.04	100	110017
M10	0.04	100	110009
M12	0.07	100	110010





# Channel Nut NT HZ 41 ss

Group: 1714

Application Suitable for Channels MS 41 ss.

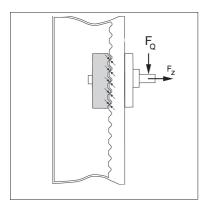
## **Technical Data**

	M12	M16
Tightening torque [Nm]	80	80

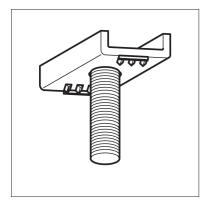
Channel	M12	M16	M12	M16
thickness	FZ ≤	FZ≤	FQ ≤	FQ ≤
[mm]	[kN]	[kN]	[kN]	[kN]
2.0	10	10	9	6
2.5	11	11	9	6

Note: The permissible load capacities of the channels are to be respected..

Туре	W [kg]	Quantity [pack]	Part number
HZ 41-M12	0.06	50	182342
HZ 41-M16	0.05	50	182351







Fo

# T-Head Bolt TBO HZ 41 ss

Group: 1707

**Application** To be used with Channels MS 41 ss.

### **Technical Data**

Туре	Tightening torque M <sub>dmax</sub> [Nm]	perm. bending moment <sup>1)</sup> [Nm]
HZ 41 M8	10.0	5.0
HZ 41 M10	18.0	10.0
HZ 41 M12	32.0	17.5

1) The actual bending moment shouldn't exceed the permissible bending moment of the channel acting laterally.

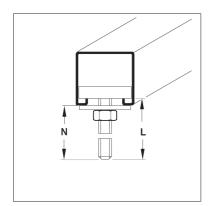
Material thickness channel [mm]	M8 FZ ≤ [kN]	M10 FZ ≤ [kN]	M12 FZ ≤ [kN]	M8 FQ ≤ [kN]	M10 FQ ≤ [kN]	M12 FQ ≤ [kN]
1.5	4.7	4.7	7.5	1.8	2.9	7.5
2.0	5.8	5.8	10	2.1	3.4	9
2.5	5.8	5.8	11	2.6	4.1	9
3.0	5.8	5.8	13	2.8	4.4	9

Notice: The permissible bearing capacity of the channels is to be respected.

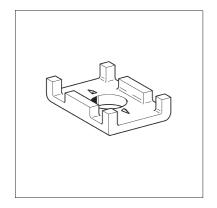
#### Material:

T-Head:	Stainless steel 316
Threaded rod:	Class A4-50

Туре	Length L [mm]	Available length of thread [mm]	W [kg]	Quantity [pack]	Part number
HZ 41 M8 x 35	40	35	0.04	50	111455
HZ 41 M10 x 35	40	35	0.05	50	111457
HZ 41 M12 x 35	40	35	0.06	50	187454







# Holding Bracket HK ss

Group: 1728

#### Application

Safety element for Sikla Channels to be used instead of simple washers. The Holding Bracket prevents the edges along the opening of the channels from bending, and ensures optimum load distribution.

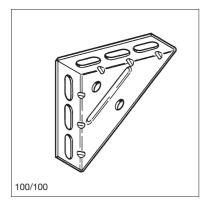
Suitable for single and double channels.

When loads are imposed along the channels, Holding Brackets 41 provide for additional safety due to embossed teeth, which penetrate the channel.

#### **Technical Data**

Туре	Suitable for Sikla channels of width [mm]	Bore [mm]	W [kg]	Quantity [pack]	Part number
41/10	41	11	0.07	50	178634
41/12	41	13	0.08	50	178643
41/16	41	17	0.07	50	178652





# Support Bracket WK ss

Group: 1726

#### Application

May be used for wall, floor and overhead pipe installations. Depending on the site, pipes may lie on the support bracket (U bolt), be arranged in vertical position or be suspended (grub screws).

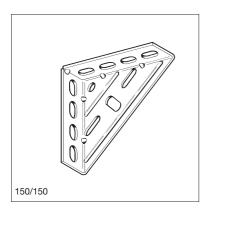
In combination with bolted-on channels, the support brackets offer a wide range of possibilities for cantilever arrangements. In addition, the load capacity of crossbars can be increased by fixing them onto Support Brackets.

#### **Technical Data**

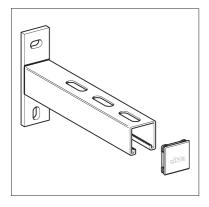
Material: Stainless steel A4

For further technical data or carrying capacities, see chapter "Brackets"

Туре	W [kg]	Quantity [pack]	Part number
100/100	0.16	10	118383
150/150	0.58	25	193655







**Cantilever Bracket AK ss** 

Group: 1754

#### Application

Ready-to-use brackets mainly for mounting pipes to walls.

#### Scope of delivery

Wall plate and channel welded. Supplied with End Cap.

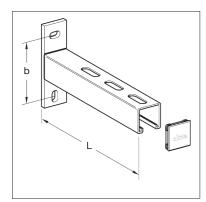
#### Installation

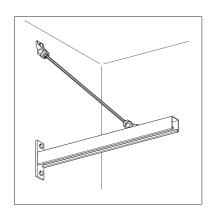
When used in combination with slide elements, a tie rod is absolutely essential for absorbing the forces running along the centre line of the pipe.

#### **Technical Data**

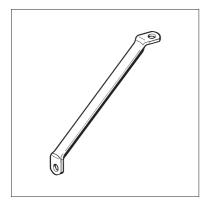
For load capacities, please see the charts of Cantilever Bracket 41/41 (galvanised)

Туре	L [mm]	Wall plate [mm]	b [mm]	Dimensions of elongated hole [mm]	W [kg]	Quantity [pack]	Part number
41/41 - 200	196	132 x 40 x 8	100	13 x 18	0.70	10	115520
41/41 - 260	258	132 x 40 x 8	100	13 x 18	0.79	10	115539
41/41 - 320	321	132 x 40 x 8	100	13 x 18	0.92	10	115548
41/41 - 445	446	132 x 40 x 8	100	13 x 18	1.19	10	115557









# Tie Rod STR ss

Group: 1726

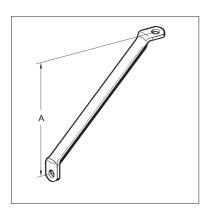
#### Application

Necessary and time-saving element for horizontal or vertical constructions on the site. To be used as support and bracing of cantilever brackets or channel constructions.

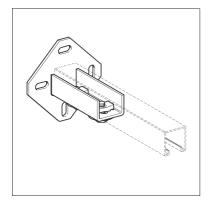
### **Technical Data**

Permissible load (tension and pressure):	7.0 kN
Installation dimension A:	365
Material:	Stainless steel A4

Туре	Pipe	Bore [mm]	W [kg]	Quantity [pack]	Part number
550/350	R <sup>1</sup> / <sub>2</sub> "	11	0.50	10	171920







# **End Support WBD ss**

Group: 1730

#### Application

- In combination with a channel, End Support WBD ss is particularly suitable
- + for setting up support structures attached to walls, floors and ceilings
- as a base for frame structures

#### Installation

Normally, two anchors grouped opposite to each other and along the load axis are sufficient. Only in exceptional cases (e.g. high props in frameworks) four anchors are required.

Tightening torque 40 Nm.

Suitable for stainless steel channels with width 41 mm up to height  $\leq$  62 mm.

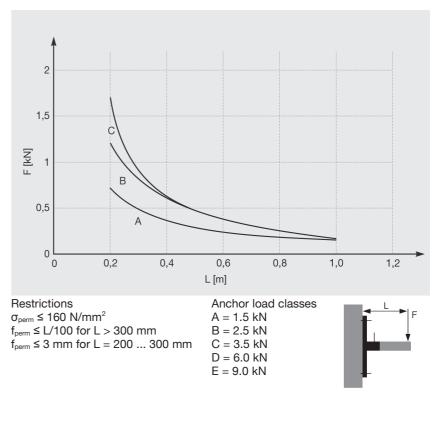
#### **Technical Data**

Туре	Suitable for channel	А	s	В	b	h	С
		[mm]	[mm]	[mm]	[mm]	[mm]	[mm]
41/41-62	41/41 bis 41/62	135	6	100	25	11	125

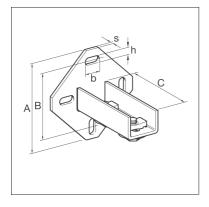
The permissible maximum vertical load for ceiling mounting structures fixed by way of at least one traversing bolt (class 8.8) amounts to 7.0 kN.

Material: Stainless steel A4

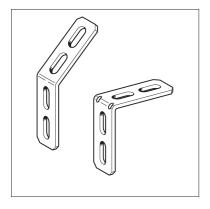
Working load for wall mounting with channel 41/41 and two anchors of the mentioned load class:



Туре	W	Quantity	Part
	[kg]	[pack]	number
41/41-62	1.12	5	193631







# Fixing Bracket MW ss Group: 1726

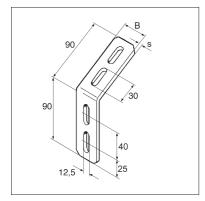
#### Application

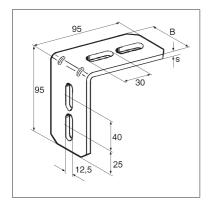
Useful addition to Support Brackets for integration in crossbars and other structures composed of stainless steel channels.

#### **Technical Data**

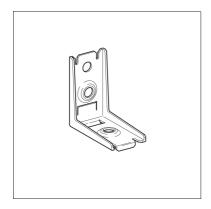
Material: Stainless steel A4, cold-formed

Туре	B [mm]	s [mm]	W [kg]	Quantity [pack]	Part number
90/90/45°	40	4	0.18	25	105721
95/95/90°	40	4	0.18	25	106281









# Fixing Bracket MW 90° W Stabil ss

Group: 1726

#### Application

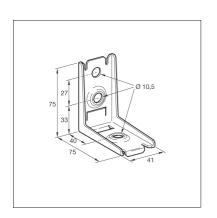
Fixing Bracket suitable for frame construction and cross bars composed of channels, as well as for connection to floor, wall and ceiling. Thanks to the high stiffness resulting from the shape also suitable as Support Bracket for projecting racks. When used as support for cross bars, their load capacity increases.

#### **Technical Data**

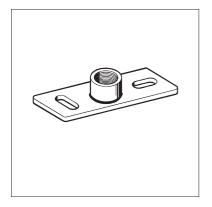
Nominal load:FsTightening torque:40Material:St

F<sub>shear</sub> = 2.5 kN per bracket que: 40 Nm Stainless steel A4

Туре	W	Quantity [pack]	Part
	[kg]	[pack]	number
90° W Stabil	0.12	25	191702







# Mounting Plate GPL ss

Group: 1727

#### Application

For wall, ceiling and floor installation for mounting elements in M&E services.

#### **Technical Data**

The nominal loads mentioned shouldn't be exceeded. Permissible anchor values may restrict the application.

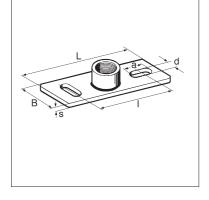
Version / Type	Tension [kN]	Perm. bending moment* [Nm]	Max. lever arm [mm]	Welding method
Stabil M8	3.0	8.8	150	R
Stabil M10	3.0	17.2	200	R
Stabil M12	3.0	29.6	300	R
Stabil M16	4.5	70.3	300	М
Stabil R 1/2"	4.5	95.0	350	М
Stabil R 3/4"	6.2	180.0	450	М

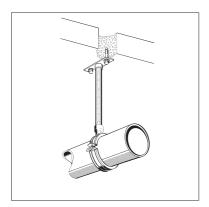
R = resistance welding

M = slot welding

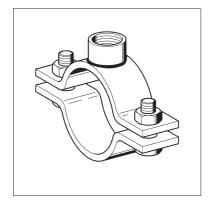
\* Limitation caused by the Mounting Plate or the loading capacity of the grub screw or of the threaded tube.  $\sigma_{perm} \leq 160 \text{ N/mm}^2 \text{ f}_{perm} < 5 \text{ mm}$ 

Туре	Dimension L x W x Th [mm]	Elongated hole d x a [mm]	Centre distance I [mm]	W [kg]	Quantity [pack]	Part number
Stabil M8	120 x 40 x 4	11 x 25	80	0.14	50	107608
Stabil M10	120 x 40 x 4	11 x 25	80	0.14	50	107617
Stabil M12	120 x 40 x 4	11 x 25	80	0.14	50	107626
Stabil M16	120 x 40 x 4	11 x 25	80	0.16	50	107635
Stabil R 1/2"	120 x 40 x 4	11 x 25	80	0.16	50	107644
Stabil R 3/4"	120 x 40 x 4	11 x 25	80	0.17	50	107653









# Pipe Clamp Stabil I-1/2" ss Group: 1719

#### Application

Heavy pipe clamp for industrial application.

#### Scope of delivery

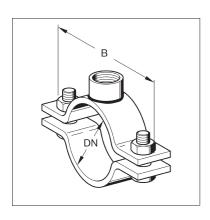
Two-piece pipe clamp with all around welded 1/2" nut with clamping bolts and nuts.

#### Installation

Suitable for single-point fixing directly with 1/2" threaded tube or connected by respective adapters up to 1" threaded tube.

#### **Technical Data**

Stainless steel 1.4404 Material:



Туре	Material b x s [mm]	Clamping bolts	B [mm]
21	25 x 5	M8 x 25	75
27	25 x 5	M8 x 25	81
34	30 x 5	M8 x 25	88
43	30 x 5	M10 x 30	115
49	30 x 5	M10 x 30	119
61	30 x 5	M10 x 30	131
77	30 x 5	M12 x 35	158
89	30 x 5	M12 x 35	171
115	40 x 8	M16 x 50	218

Туре	For pipe [NB]	W [kg]	Quantity [pack]	Part number
21	15	0.30	25	188228
27	20	0.23	25	188237
34	25	0.35	25	188246
43	32	0.40	25	188255
49	40	0.40	25	188264
61	50	0.62	25	188273
77	65	0.67	25	188282
89	80	0.75	25	188291
115	100	1.05	10	188300





### Stabil D ss

Group: 1739

#### Application

For the installation of pipes required for all M&E services in industrial, residential and public buildings.

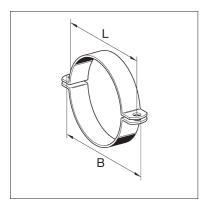
#### Scope of delivery

Two-piece pipe clamp without clamping bolts and nuts.

#### Installation

Particularly suitable for two-point mountings.

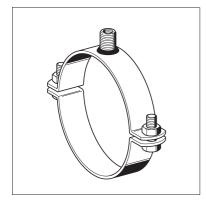
#### **Technical Data**



Size [mm]	Max. perm. working load (tension)
18 - 71	5.0 kN
74 - 231	6.0 kN

Size range [mm]	Material W x th [mm]	Recommended clamping bolts	B [mm]	L [mm]	W [kg]	Quantity [pack]	Part number
18 - 22	25 x 3	M8 x 25	70	50	0.08	50	172433
24 - 28	25 x 3	M8 x 25	77	57	0.09	50	172442
30 - 34	25 x 3	M8 x 25	84	64	0.10	50	172451
35 - 37	25 x 3	M8 x 25	87	67	0.11	50	172460
40 - 44	25 x 3	M8 x 25	95	75	0.12	50	172469
47 - 51	25 x 3	M8 x 25	102	82	0.13	50	172478
54 - 58	25 x 3	M8 x 25	109	89	0.14	50	172487
59 - 63	25 x 3	M8 x 25	115	95	0.15	50	172496
67 - 71	25 x 3	M8 x 25	123	103	0.16	50	173081
74 - 78	30 x 3	M10 x 30	140	116	0.23	25	172505
81 - 85	30 x 3	M10 x 30	147	123	0.25	25	173090
86 - 90	30 x 3	M10 x 30	152	128	0.26	25	172514
94 - 98	30 x 3	M10 x 30	160	136	0.28	25	173099
102 - 108	30 x 3	M10 x 30	170	146	0.30	25	173144
108 - 114	30 x 3	M10 x 30	176	152	0.30	25	172523
116 - 122	30 x 3	M10 x 30	184	160	0.31	25	173108
133 - 140	40 x 4	M12 x 35	217	184	0.68	10	172532
145 - 152	40 x 4	M12 x 35	229	196	0.71	10	173117
159 - 169	40 x 4	M12 x 35	245	212	0.75	10	172541
170 - 180	40 x 4	M12 x 35	257	224	0.83	10	173126
198 - 207	40 x 4	M12 x 35	284	251	0.94	10	172550
210 - 219	40 x 4	M16 x 50	304	269	0.99	10	172559
222 - 231	40 x 4	M16 x 50	316	281	1.04	10	173135





Stabil D-2G/-3G ss

Group: 1740

#### Application

For the installation of pipes required for all M&E services in industrial, residential and public buildings.

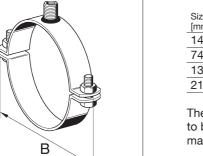
#### Scope of delivery

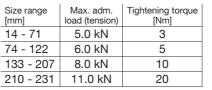
Two-piece pipe clamp with clamping bolts and nuts (supplied loose).

#### Installation

Suitable for single-point mounting either directly by means of a threaded rod or by connecting to a Sikla Threaded Tube up to 1" using an adapter.







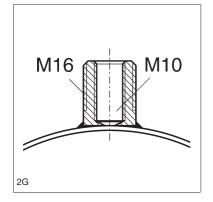
The recommended load is calculated using specific statistical methods relating to break load and is designed to restrict deflection to 1.5 mm or 2 % of the maximum applicable clamping diameter.

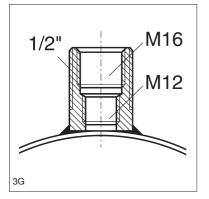
Material: Stainless steel A4

#### Approvals



This product has been awared the RAL quality mark "pipe supports" and is subject to continuous external monitoring according to RAL GZ-655.



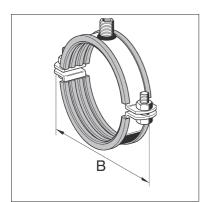


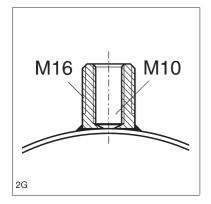


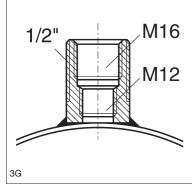
Size range [mm]	Thread connection	Material W x th [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
18 - 22	2G	25 x 3	70	0.14	50	172568
24 - 28	2G	25 x 3	77	0.15	50	172577
30 - 34	2G	25 x 3	84	0.16	50	172586
35 - 37	2G	25 x 3	87	0.17	50	172595
40 - 44	2G	25 x 3	95	0.17	50	172604
47 - 51	2G	25 x 3	102	0.20	50	172613
54 - 58	2G	25 x 3	109	0.21	50	172622
59 - 63	2G	25 x 3	115	0.21	50	172631
67 - 71	2G	25 x 3	123	0.22	50	172856
74 - 78	2G	30 x 3	140	0.33	25	172640
81 - 85	2G	30 x 3	147	0.34	25	172865
86 - 90	3G	30 x 3	152	0.36	25	172649
94 - 98	3G	30 x 3	160	0.40	25	172874
102 - 108	3G	30 x 3	170	0.41	25	173153
108 - 114	3G	30 x 3	176	0.42	25	172658
116 - 122	3G	30 x 3	184	0.43	25	172883
133 - 140	3G	40 x 4	217	0.82	10	172667
145 - 152	3G	40 x 4	229	0.87	10	172892
159 - 169	3G	40 x 4	245	0.90	10	172676
170 - 180	3G	40 x 4	257	0.95	10	172901
198 - 207	3G	40 x 4	284	1.08	10	172685
210 - 219	3G	40 x 4	304	1.26	10	172694
222 - 231	3G	40 x 4	316	1.33	10	172910











# Stabil D-2G/-3G ss w/Lining

Group: 1741

#### Application

For the installation of pipes required for all M&E services in industrial, residential and public buildings.

Particularly suitable for soundproof pipe installation according to DIN 4109.

#### Scope of delivery

Two-piece pipe clamp with clamping bolts and nuts (supplied loose).

#### Installation

Suitable for single-point mounting either directly by means of a threaded rod or by connecting to a Sikla Threaded Tube up to 1" using an adapter.

#### **Technical Data**

Size range [mm]	Max. adm. load (tension)	Tightening torque [Nm]
18 - 63	1,5 kN	3
74 - 114	2,0 kN	5
133 - 168	4,0 kN	10
198 - 219	6,0 kN	20

The recommended load is calculated using specific statistical methods relating to break load and is designed to restrict deflection to 1.5 mm or 2 % of the maximum applicable clamping diameter.

#### Material:

Pipe clamp: Sound absorption lining: Stainless steel A4 SBR/EPDM, black (see chapter "Sound Absorption Products")

#### Approvals

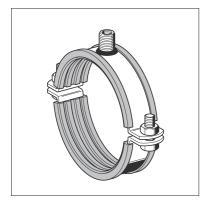


This product has been awared the RAL quality mark "pipe supports" and is subject to continuous external monitoring according to RAL GZ-655.

Size range [mm]	Thread connection	Material W x th [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
18 - 20	2G	25 x 3	77	0.16	50	172703
21 - 24	2G	25 x 3	84	0.18	50	172712
25 - 29	2G	25 x 3	87	0.19	50	172721
31 - 35	2G	25 x 3	95	0.20	50	172730
38 - 42	2G	25 x 3	102	0.22	50	172739
46 - 50	2G	25 x 3	109	0.24	50	172748
51 - 55	2G	25 x 3	115	0.25	50	172757
58 - 63	2G	25 x 3	123	0.27	50	172766
74 - 78	2G	30 x 3	147	0.39	25	172775
86 - 90	3G	30 x 3	160	0.46	25	172784
100 - 106	3G	30 x 3	176	0.49	25	173162
108 - 114	3G	30 x 3	184	0.49	25	172793
133 - 140	3G	40 x 4	229	1.03	10	172802
158 - 168	3G	40 x 4	257	1.14	10	172811
198 - 207	3G	40 x 4	304	1.50	10	172820
210 - 219	3G	40 x 4	316	1.54	10	172829

03/2015





# Stabil D-2G/-3G ss w/Silicone Lining

Group: 1743

#### Application

For the installation of pipes required for all M&E services in industrial, residential and public buildings.

With silicone sound absorption lining. Particularly suitable for soundproof pipe installation according to DIN 4109.

#### Scope of delivery

Two-piece pipe clamp with clamping bolts and nuts (supplied loose).

#### Installation

Suitable for single-point mounting either directly by means of a threaded rod or by connecting to a Sikla Threaded Tube up to 1" using an adapter.

### **Technical Data**

Size range [mm]	Max. adm. load(tension)	Tightening torque [Nm]
18 - 63	1,5 kN	3
74 - 114	2,0 kN	5
133 - 168	4,0 kN	10
198 - 219	6,0 kN	20

The recommended load is calculated using specific statistical methods relating to break load and is designed to restrict deflection to 1.5 mm or 2 % of the maximum applicable clamping diameter.

Material:

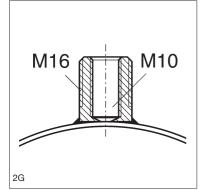
Pipe clamp Sound absorption lining Stainless steel A4 Silicone, red (see chapter "Sound Absorption Products")

#### Approvals

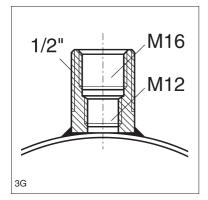


This product has been awared the RAL quality mark "pipe supports" and is subject to continuous external monitoring according to RAL GZ-655.

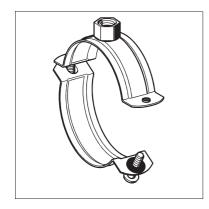
Size range [mm]	Thread connection	Material W x th [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
18 - 20	2G	25 x 3	77	0.18	50	172919
21 - 24	2G	25 x 3	84	0.17	50	172928
25 - 29	2G	25 x 3	87	0.18	50	172937
31 - 35	2G	25 x 3	95	0.19	50	172946
38 - 42	2G	25 x 3	102	0.21	50	172955
46 - 50	2G	25 x 3	109	0.23	50	172964
51 - 55	2G	25 x 3	115	0.24	50	172973
58 - 63	2G	25 x 3	123	0.26	50	172982
74 - 78	2G	30 x 3	147	0.39	25	172991
86 - 90	3G	30 x 3	160	0.45	25	173000
100 - 106	3G	30 x 3	176	0.48	25	173072
108 - 114	3G	30 x 3	184	0.49	25	173009
133 - 140	3G	40 x 4	229	0.99	10	173018
158 - 168	3G	40 x 4	257	1.20	10	173027
198 - 207	3G	40 x 4	304	1.54	10	173036
210 - 219	3G	40 x 4	316	1.54	10	173045



В







# **Duo Clamp SRS ss**

Group: 1722

#### Application

Two-piece clamp with thread connection M8 or M10 for the installation of pipelines.

#### Scope of delivery

Supplied with two bolts particularly pre-screwed on one side and therefore ready for immediate installation. The clamping bolt on the open side is retained by a plastic washer, thus preventing any accidential unscrewing.

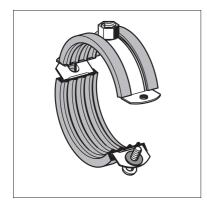
#### **Technical Data**

Туре	Thread connection	Max. perm. working load (tension)	Tightening torque [Nm]
13 - 73	M8	0.6 kN	2
75 - 169	M10	2.5 kN	2

The recommended load is calculated using specific statistical methods relating to break load and is designed to restrict deflection to 1.5 mm or 2 % of the maximum applicable clamping diameter.

Size range [mm]	For pipe [NB]	Material W x th [mm]	W [kg]	Quantity [pack]	Part number
13 - 18	$^{1}/_{4}$ " + $^{3}/_{8}$ "	20 x 1.5	0.04	100	170587
19 - 22	<sup>1</sup> / <sub>2</sub> "	20 x 1.5	0.05	100	170602
27 - 30	3/4"	20 x 1.5	0.05	100	170611
32 - 36	1"	20 x 1.5	0.05	100	170620
40 - 44	<b>1</b> <sup>1</sup> / <sub>4</sub> "	20 x 1.5	0.06	50	170639
48 - 54	1 <sup>1</sup> / <sub>2</sub> "	20 x 1.5	0.07	50	170648
60 - 66	2"	20 x 1.5	0.08	50	170657
68 - 73	-	20 x 1.5	0.09	25	173342
75 - 80	2 <sup>1</sup> / <sub>2</sub> "	25 x 2.0	0.15	25	170666
84 - 89	3"	25 x 2.0	0.16	25	170675
102 - 108	-	25 x 2.0	0.19	25	173351
110 - 115	4"	25 x 2.0	0.20	25	170684
129 - 140	5"	25 x 2.5	0.26	25	110882
159 - 169	6"	25 x 2.5	0.31	25	110883





# Duo Clamp SRS ss w/Lining

Group: 1722

#### Application

Two-piece pipe clamp with thread connection M8 or M10 and sound absorption lining for the installation of pipelines.

#### Scope of delivery

Supplied with two bolts pre-screwed on one side and therefore ready for immediate installation. The clamping bolt on the open side is retained by a plastic washer, thus preventing any accidental unscrewing.

#### **Technical Data**

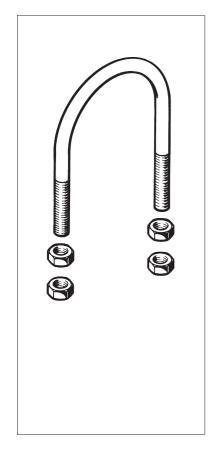
Туре	Thread connection	Max. perm. working load (tension)	Tightening torque [Nm]
12 - 64	M8	0.6 kN	2
67 - 170	M10	2.5 kN	2

#### Material:

Pipe clamp: Sound absorption lining: Stainless steel A4 SBR/EPDM, black (see chapter "Sound Absorption Products")

Size range [mm]	For pipe [NB]	Material W x th [mm]	W [kg]	Quantity [pack]	Part number
12 - 15	<sup>1</sup> / <sub>4</sub> "	20 x 1.5	0.05	100	170693
15 - 19	<sup>3</sup> / <sub>8</sub> "	20 x 1.5	0.05	100	170709
20 - 23	<sup>1</sup> / <sub>2</sub> "	20 x 1.5	0.06	100	170718
25 - 28	<sup>3</sup> / <sub>4</sub> "	20 x 1.5	0.06	100	170727
32 - 35	1"	20 x 1.5	0.07	100	170736
40 - 45	<b>1</b> <sup>1</sup> / <sub>4</sub> "	20 x 1.5	0.08	50	170745
48 - 52	<b>1</b> <sup>1</sup> / <sub>2</sub> "	20 x 1.5	0.09	50	170754
52 - 58	-	20 x 1.5	0.09	50	173360
60 - 64	2"	20 x 1.5	0.10	50	170763
67 - 72	-	25 x 2.0	0.19	25	173369
73 - 80	2 <sup>1</sup> / <sub>2</sub> "	25 x 2.0	0.19	25	170772
86 - 91	3"	25 x 2.0	0.22	25	170781
102 - 108	-	25 x 2.0	0.25	25	173378
110 - 115	4"	25 x 2.5	0.29	25	170790
135 - 143	5"	25 x 2.5	0.36	25	110884
149 - 161	-	25 x 2.5	0.38	25	110885
162 - 170	6"	25 x 2.5	0.41	25	110886





# U Bolt RUB ss

Group: 1710

#### Application

For pipeline systems in industrial and residential buildings and Sprinkler installations meeting the VdS and FM standards. For horizontal and vertical pipelines, the U-Bolts are applied as Fixed Points and as Guiding Supports.

#### Scope of delivery

Four hexagon nuts included in loose form.

#### Installation

When used as Guided Support, nuts have to be arranged and fixed on both sides, at the top and at the bottom of the profile. Thereby the pipe should remain flexible. When used as Fixed Point the admissible loads of the connecting elements shouldn't exceed the bending loads of the U-bolt.

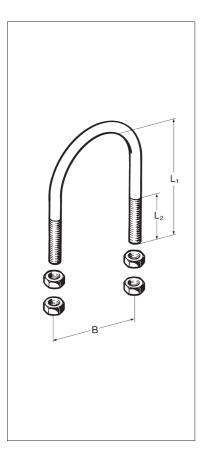
#### **Technical Data**

Material:Stainless steel A4Specification:Similar to DIN 3570 standard

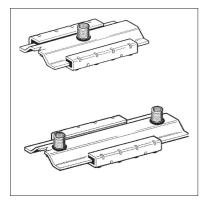
#### Approvals

Size NB 8" with M12 thread obtained a separate VdS Approval: No. G4810047

Туре	NB	B [mm]	L₁ [mm]	L₂ [mm]	Thread	W [kg]	Quantity [pack]	Part number
21.3	<sup>1</sup> / <sub>2</sub> "	30	45	30	M 8	0.05	50	102719
26.9	<sup>3</sup> / <sub>4</sub> "	35	60	40	M 8	0.07	50	102728
33.7	1"	42	67	40	M 8	0.07	50	102737
42.4	<b>1</b> <sup>1</sup> / <sub>4</sub> "	51	76	40	M 8	0.08	50	102746
48.3	<b>1</b> <sup>1</sup> / <sub>2</sub> "	57	82	40	M 8	0.08	50	102889
60.3	2"	71	95	45	M 10	0.16	50	102898
76.1	2 <sup>1</sup> / <sub>2</sub> "	87	111	45	M 10	0.18	50	102904
88.9	3"	100	123	45	M 10	0.20	50	102913
114.3	4"	126	157	55	M 12	0.35	25	102694
108		121	151	55	M 12	0.34	50	102922
139.7	5"	152	180	55	M 12	0.39	25	102931
133		146	172	55	M 12	0.39	25	102685
159		172	197	55	M 12	0.42	25	102940
168.3	6"	180	207	55	M 12	0.44	10	102700
219.1	8"	233	267	55	M 12	0.55	10	102959
274.0	10"	302	314	70	M 20	1.88	10	102968







# Slide Set GS H3G ss

Group: 1736

#### Application

Heavy-duty Slide Set for plant construction.

To be used preferably in combination with Sikla Pipe Clamps Stabil D-3G ss. Various connection options of the pipe clamps depending on the respective load: M12, M16 or with  $1/_2$ " adapters using the external thread (see Adapter AD f/f ss).

Especially suitable for ceiling and floor mounting solutions and as a guide for rising pipes. For wall mounting, we recommend the use of the Slide Set on Sikla Support Brackets. When mounting the Slide Set directly to a wall, the reduced permissible loads of the anchors are to be taken into consideration. Sound absorption by means of slide rails with glass fibre reinforced polyamide.

#### Installation

For pipes of NB 100 or larger having to be spaced at a distance from the Slide Set, or under conditions of reversed bending stress, the 3G triple thread nuts are to be secured by screwing on a  $\frac{1}{2}$ " stainless steel Locking Nut.

#### **Technical Data**

Permissible loads for ceiling mounting:	5.0 kN
Permissible load for floor mounting:	9.0 kN
Permissible bending moment for wall	350 Nm
mounting* for H3G2:	
Lever arm L <sub>max</sub> :	400 mm
Max. sliding distance:	
H3G:	100 mm
H3G2:	135 mm
Temperature range:	130°C (permanent exposure)
Static friction coefficient µ <sub>0</sub> :	0.18
Sliding friction coefficient µ:	0.14
•	

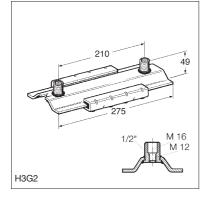
#### Material:

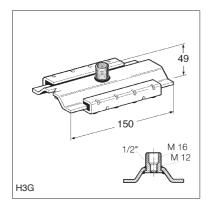
Metal components and slide rails:

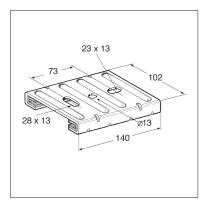
Stainless steel A4

\* Permissible bending moment of the connecting element (threaded rod or threaded tube) may restrict the application!

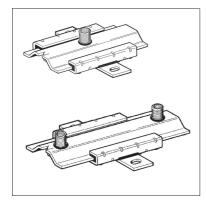
Туре	W [kg]	Quantity [pack]	Part number
H3G2	1.43	10	170125
H3G	1.10	10	170143











# Slide Set GS H3G-PL ss

Group: 1736

#### Application

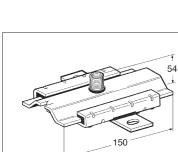
Heavy-duty Slide Set for plant construction, to be used on Sikla Channels, brick or concrete walls and on bearers. This Slide Set is especially suitable for bolted mounting to the building structure.

To be used preferably in combination with Sikla Pipe Clamps Stabil D-3G ss. Various connection options of the pipe clamps depending on the respective load:

M12, M16 or with  $^{1}\!/_{2}"$  adapters ss using the external thread (see Adapter AD f/f ss).

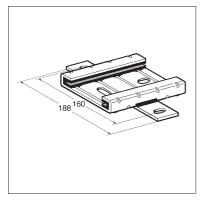
Sound absorption by means of slide rails in glass fibre reinforced polyamide. Especially suitable for ceiling and floor mounting solutions and as a guide for rising pipes.

# 210 54 1/2" M 16 M 12



H3G2-PL

H3G-PL



nsing pipe:

#### Installation

For pipes of NB 100 or larger having to be spaced at a distance from the Slide Set, or under conditions of reversed bending stress, the 3G triple thread nuts are to be secured by screwing on a  $1/2^{"}$  stainless steel Locking Nut.

#### **Technical Data**

Permissible load for ceiling mounting:	5.0 kN
Permissible load for floor mounting:	9.0 kN
Lever arm L <sub>max:</sub>	400 mm
Maximum sliding distance:	
H3G-PL:	100 mm
H3G2-PL:	135 mm
Temperature range:	130°C (perma
Static friction coefficient µ <sub>0</sub> :	0.18
Sliding friction coefficient µ:	0.14

135 mm 130°C (permanent exposure) 0.18 0.14

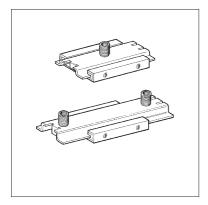
Stainless steel A4

#### Material:

Metal components and slide rails:

Туре	W [kg]	Quantity [pack]	Part number
H3G2-PL	1.77	10	170134
H3G-PL	1.39	10	170152





# Slide Set GS 2G ss

Group: 1736

#### Application

Slide Set for single and double mounting of mechanical equipment. To be used preferably in combination with Sikla Pipe Clamps Stabil D-2G ss. Various connection options with these pipe clamps ranging between M10 and R1" using adapters (see Adapters AD f/f ss) Sound absorption by means of slide rails of glass fibre reinforced PA.

#### **Technical Data**

Permissible load for ceiling mounting:0.4Permissible load for floor mounting:1.3Lever arm  $L_{max}$ :30Max. sliding distance Type 2G:85Max. sliding distance Type 2G2:14Temperature range:13Static friction coefficient  $\mu_0$ :0.Sliding friction coefficient  $\mu$ :0.

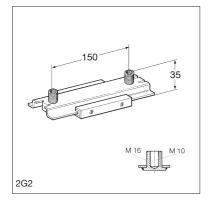
0.6 kN 1.2 kN 300 mm 85 mm 140 mm 130°C (permanent exposure) 0.18 0.14

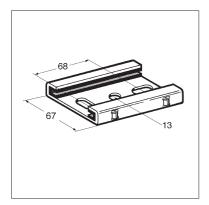
Material:

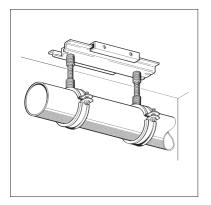
Metal components and Slide rails:

Stainless steel A4

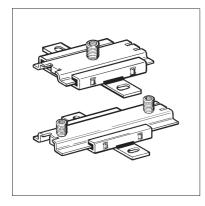
Туре	W [kg]	Quantity [pack]	Part number
2G	0.37	25	170161
2G2	0.49	25	170189











Slide Set GS 2G-PL ss

Group: 1736

#### Application

Slide Set for single and double mounting of mechanical equipment, to be used on Sikla Channels, brick or concrete walls and on bearers. To be used preferably in combination with Sikla Pipe Clamps Stabil D-2G ss. Various connection options with these pipe clamps ranging between M10 and R 1" using adapters (see Adapters AD f/f ss). Sound absorption by means of glass fibre reinforced PA.

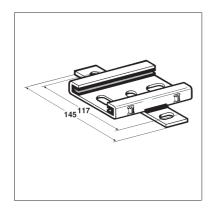
#### **Technical Data**

Permissible load for ceiling mounting:	0.6 kN
Permissible load for floor mounting:	1.2 kN
Lever arm L <sub>max</sub> :	300 mm
Max. sliding distance Type 2G-PL:	85 mm
Max. sliding distance Type 2G2-PL:	140 mm
Temperature range:	130°C (permanent exposure)
Static friction coefficient $\mu_0$ :	0.18
Sliding friction coefficient µ:	0.14
Material:	

Metal components and Slide rails:

Stainless steel A4

150 39 M16 ctt M10	
2G2-PL	

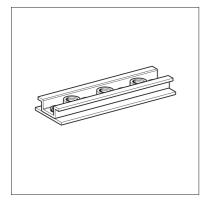


Quantity [pack] Туре W Part number [kg] 2G-PL 0.52 25 170170 2G2-PL 25 170198 0.63



6 kN

8 kN



# Slide Element GS 41 ss

Group: 1736

**Technical Data** 

Single mounting:

Double mounting:

Permissible load Overhead mounting:

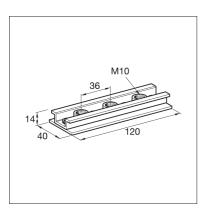
The permissible load capacity of the channel has to be

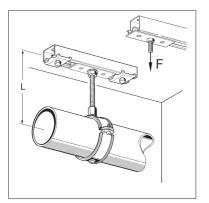
#### Application

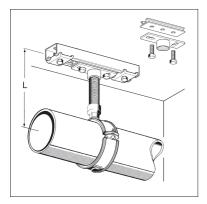
Slide Element for use in Sikla Channels MS 41 ss. For single and double mounting options.

The permissible loads may restrict the arrangement of the Slide Elements.The sliding distance is determined by the length of the rail. Holding Brackets are to be used for securing the Slide Element.

Any option in combination with Duo Clamps and Stabil Clamps ss A4 may be realised. Various connection options with pipe clamps from M12 up to R  $^{3}/_{4}$ " For these connection options, the corresponding Mounting Plate Stabil could be screwed directly to the Slide Element by means of bolts M10x30. Suitable for floor and ceiling mounting as well as guiding support for rising pipes.







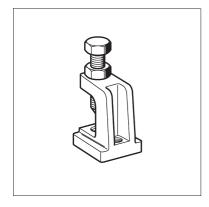
#### respected. Permissible load Floor mounting: Single/ Double mounting: Single mounting with Mounting Plate: Lever arm $L_{max}$ for single mounting: Static friction coefficient $\mu_0$ : Sliding friction coefficient $\mu$ : Material: Stainless steel A4

The permissible bending moment of the connection elements (threaded rod or threaded tube) may restrict the application!

Туре	Thread connection	W [kg]	Quantity [pack]	Part number
41 - M10	M10	0.18	10	190667







# Beam Clamp TCS 1 ss

Group: 1737

#### Application

Heavy-duty connection element, which in combination with grub screws (M8 or M10), are suitable for mounting pipes, ducts and equipment to steel beams (I-, T-, U and angle steel beams).

- The combination with a Universal Joint ss provides for vertically aligned attachment to inclined beams.
- Can serve as single mounting element, for installing crossbars and for fixing cantilever structures.
- Due to their special base profile, Beam Clamps TCS can also be slid along and retained in the opening of Sikla Channels MS 41.

#### Scope of delivery

Pre-assembled with clamping bolt and locking nut.

#### Installation

Tighten the clamping bolt of the Beam Clamp first by hand, then tighten down with a spanner according to the mounting instructions. The hardened point of the clamping bolt will penetrate the comparatively soft material of the beam, ensuring a solid and highly secure connection. Tighten the locking nut for securing the installation.

Use an additional Holding Bracket HK 41 for mounting in the aera of the cutting edge of a channel.

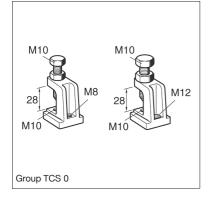
Advice: Read relevant mounting instructions before installation!

#### **Technical Data**

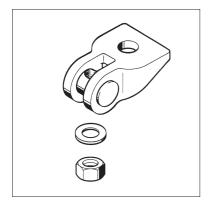
Working load: 5.0 kN This nominal load applies to new Beam Clamps fixed to undamaged beam flanges only.

Material: Stainless steel A4

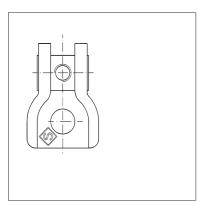
Туре	Connection	Clamping range on parallel flange [mm]	W [kg]	Quantity [pack]	Part number
TCS 1 M10/M8	M10/M8	26	0.23	50	170231
TCS 1 M10/M12	M10/M12	26	0.22	50	110766

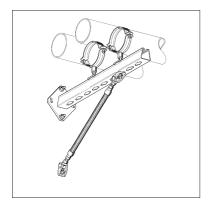






# DU ODU ODU





# **Universal Joint UG ss**

Group: 1742

#### Application

Universal connection for attachment to non-horizontal components, allowing infinitely variable angle adjustment.

May be fixed directly to the building surfaces, Beam Clamps, channels, etc. Typical uses would include easy on-site manufacture of various tie rod assemblies to support brackets, or reinforcement struts for sliding and fixed point applications:

- ♦ Infinitely variable angle adjustment
- Length and height adjustment via rotation of the grub screw in the threaded pivot head.
- Pivot head caulked, prevents from falling out.

#### Scope of delivery

With washer and locking nut.

#### Installation

Screw the grub screw completely into the pivot head (visual control). Fix the adjusted angle by tightening the supplied nut against the washer.

#### **Technical Data**

Туре	Working load [kN]	Washer Ø DU [mm]	Nut
UG M8	5.8	10.5	Hexagon nut
UG M10	8.0	10.5	Hexagon nut
UG M12	13.0	16.5	Hexagon nut
UG M16	13.0	16.5	Hexagon nut

#### Material: Stainless steel A4

Туре	Pivot head	A [mm]	B [mm]	Ø D [mm]	L [mm]	W [kg]	Quantity [pack]	Part number
UG M8	M8	26	40	12.5	51	0.13	50	171686
UG M10	M10	26	40	12.5	51	0.13	50	171695
UG M12	M12	33	50	17.0	71	0.39	25	171704
UG M16	M16	33	50	17.0	71	0.37	25	171713





# Beam Clip P ss

Group: 1731

#### Application

Universal clamping element for bi-lateral attachment of crossbars for pipe runs, ducts, cable lines and equipment to steel beams. The maximum clamping range may be extended by up to 10 mm by using spacers. Any thicker spacers should be welded to the crossbar.

#### Installation

Determination of the required length  $L_{min}$  of the pass-through bolt:

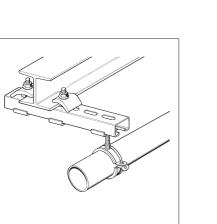


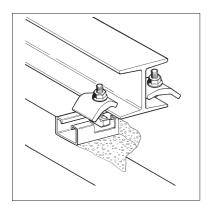
B

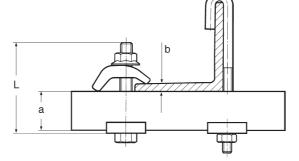


Hexagon Bolt M12 ss

Tightening torque  $\pm 10\%$  P2: 85 Nm





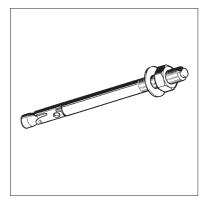


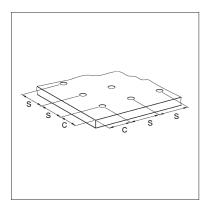
#### **Technical Data**

Working load: 5 kN Material: Stain

Туре	Size range	Ø D	L	B	W	Quantity	Part
	[mm]	[mm]	[mm]	[mm]	[kg]	[pack]	number
P2	1 - 33	13	62	50	0.23	25	163435







# Bolt Anchor AN BZ plus ss

Group: 1704

#### Application

Anchor for push-through and mounting in M&E services and plant construction in concrete tensile zones.

This anchor combines high admissible loads with little edge and centre distances.

Suitable for attaching pipelines, channels, brackets, etc. in closed room and outside section.

- No special drill required. Bore dia. = thread size
- Simple and quick mounting due to its push-through concept
- Drive-in hammer zone for preventing any thread damage

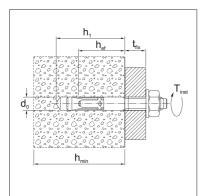
Scope of delivery Supplied with washer and hexagon nut.

#### Installation

- Drill bore hole according to the minimum bore hole depth 1. perpendicularly to the surface.
- Remove dirt from the hole. 2.
- 3. Drive the anchor into concrete up to its embedment mark.
- 4. Immediately resilient after tightening with the torque wrench Tinst indicated in the table below. Advices of the mounting instruction are to be respected!

#### **Technical Data**

Туре	M8	M10	M12	M16
Perm. load <sup>1)</sup> tension C20/25 <sup>2)</sup> [kN]	2.4	4.3	7.6	11.9
C25/30 <sup>2</sup> [kN]	2.6	4.7	8.3	13.1
C30/37 <sup>2)</sup> [kN]	2.9	5.2	9.3	14.5
C40/50 <sup>2</sup> [kN]	3.4	6.0	10.8	16.8
C50/60 <sup>2</sup> [kN]	3.7	6.6	11.8	18.5
Perm. load <sup>1)</sup> oblique C20/25 <sup>2)</sup> [kN]	7.4	11.4	17.1	26.9
	(5.0) <sup>3)</sup>	(6.5) <sup>3)</sup>		
≥ C25/30 <sup>2)</sup> [kN]	7.4	11.4	17.1	29.6
	(5.5) <sup>3)</sup>	(7.2) <sup>3)</sup>		
Perm. bending moment <sup>1)</sup> [Nm]	14.9	29.7	52.6	133.1
	(13.7) <sup>3)</sup>	(28) <sup>3)</sup>		
Min. thickness of component $h_{min} \ge [mm]$	100	120	140	160
(3 h <sub>ef</sub> ) Charact. centre distance s <sub>cr</sub> [mm]	138	180	210	255
(1,5 $h_{ef}$ ) Charact. edge distance $c_{cr}$ [mm]	69	90	105	127.5
Min. centre distance s at/edge distance c ≥ [mm]	40/70	50/75	60/100	60/100
Min. edge distance c at/centre distance s ≥ [mm]	40/80	55/90	60/140	60/180
Effective Anchoring depth h <sub>ef</sub> [mm]	46 (35) <sup>3)</sup>	60 (42) <sup>3)</sup>	70	85
Nominal diameter of drill d <sub>0</sub> [mm]	8	10	12	16
Depth of bore hole $h_1 \ge [mm]$	60 (55) <sup>3)</sup>	75 (65) <sup>3)</sup>	90	110
Anchoring torque T <sub>inst</sub> [Nm]	20 (15) <sup>3)</sup>	35 (30) <sup>3)</sup>	50	110
Perm. load tension <sup>4)</sup> for fire exposure				
Perm. load R30 perm. F [kN]	1.3	2.3	4.0	6.3
Perm. load R60 perm. F [kN]	1.3	2.3	4.0	6.3
Perm. load R90 perm. F [kN]	1.3	2.3	4.0	6.3
Perm. load R120 perm. F [kN]	1.0	1.8	3.2	5.0





- <sup>1)</sup> Loads for single anchors without influence of edge distances
- <sup>2)</sup> Cracked concrete (option 1)
- <sup>3)</sup> Value in brackets is valid for types marked \*.
- <sup>4)</sup> Consider edge and centre distances under fire exposure accord. to approval

The safety factor accord. to ETAG is respected. Values of the mentioned approval are valid and could be seen in the latest issue under www.sikla.com/service/downloads.

Material: Stainless steel A4/316

## Approvals

ETA Approval number: ETA-10/0259 FM Approval for M10, M12, M16 VdS compliant for all sizes Shock approval issued by the Federal Office for Civil Defence, Bern (Switzerland)



The types marked \* are not part of the approvals.

Туре	Thread connection	t <sub>fix</sub> = Max. effective length [mm]	Total length [mm]	W [kg]	Quantity [pack]	Part number
8/5/50 A4*	M8	5	50	0.02	100	110551
8/10/75 A4	M8	10	75	0.03	100	110457
8/30/95 A4	M8	30	95	0.04	100	110552
8/50/115 A4	M8	50	115	0.04	100	110458
10/10/60 A4 *	M10	10	60	0.05	50	110553
10/10/90 A4	M10	10	90	0.06	50	110459
10/15/95 A4	M10	15	95	0.06	50	110554
10/30/110 A4	M10	30	110	0.07	50	110555
10/50/130 A4	M10	50	130	0.08	50	110460
10/100/180 A4	M10	100	180	0.10	50	110461
12/15/110 A4	M12	15	110	0.10	25	110462
12/20/115 A4	M12	20	115	0.10	25	110556
12/30/125 A4	M12	30	125	0.11	25	110557
12/50/145 A4	M12	50	145	0.13	25	110558
12/85/180 A4	M12	85	180	0.15	25	110559
16/25/145 A4	M16	25	145	0.23	20	110560
16/50/170 A4	M16	50	170	0.27	20	110561





# **Drive Plug AN ss**

Group: 1702

#### Application

Hammerset Anchor for multiple attachment in cracked and single attachment in non-cracked concrete.

Suitable for fixing pipelines, channels, etc. meeting the respective approval requirements. To be used in structural parts under dry indoor conditions, as well as outdoor constructions (including industrial ambiance and coastal areas) or damp locations provided no special aggressive conditions are given.

- No special drill is required
- Setting Tool for Drive Plug is to be used as setting tool for distance-controlled forced expansion
- Suitable for put-before assembly

#### Installation

As setting tool the respective expansion cone for Drive plug is to be used. The "intelligent" expansion cone facilitates the assembly with drill hole tolerances in the bore hole diameters or with different concrete. Due to the controlled expansion the needed edge and centre distances are considerably reduced.

#### **Technical Data**

General installation data:

Anchor size	M8x30	M8x40	M10	M12	M16
Nominal dia. of drill d <sub>0</sub> = [mm]	10	10	12	15	20
Depth of drill hole h <sub>0</sub> = [mm]	30	40	40	50	65
Tightening torque when anchoring $T_{inst} = [Nm]$	8	8	15	35	60
Pass-through hole in component to be joined d <sub>f</sub>	9	9	12	14	18
≤ [mm]					
Thread length L <sub>th</sub> [mm]	13	20	15	18	23
Minimum screw-in depth L <sub>sdmin</sub> [mm]	9	9	11	13	18
Minimum thickness of component h <sub>min</sub> [mm]	100	100	130	140	160
Min. centre distance s <sub>min</sub> [mm]	60	80	100	120	150
Min. edge distance c <sub>min</sub> [mm]	95	95	135	165	200

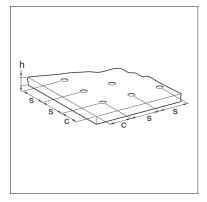
Extract from the approval specifications ETA-05/0117 cracked concrete / multiple fixation of non-bearing systems:

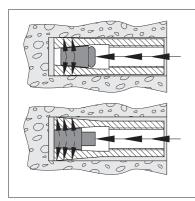
Anchor size	M8x30	M8x40	M10	M12
Perm. load for single anchor C20/25-C50/60 [kN]	1.7	2.0	2.0	2.4
Perm. bending moment (A4-70) M <sub>perm</sub> [Nm]	11.9	11.9	23.8	42.1
Characteristical centre distance s <sub>cr</sub> [mm]	180	210	170	200
Characteristical edge distance c <sub>or</sub> [mm]	90	105	85	100
Loads under fire exposure				
Perm. load R30 perm. F [kN]	0.9	0.9	1.5	1.5
Perm. load R60 perm. F [kN]	0.9	0.9	1.5	1.5
Perm. load R90 perm. F [kN]	0.9	0.9	1.5	1.5
Perm. load R120 perm. F [kN]	0.4	0.4	1.0	1.2

Extract from approval specifications ETA-10/0257 non-cracked concrete:

Anchor size	M8x30	M8x40	M10	M12	M16
Perm. tensile load C20/25 [kN]	3.3	3.6	6.1	8.5	12.6
Lateral tension perm. V ≥ C20/25 [kN]	4.6	4.6	6	11.9	19.2
Bending moments perm. M [Nm]	11.9	11.9	23.8	42.1	106.7

The values of the mentioned approvals are valid and could be seen in their latest issue under www.sikla.com/service/downloads.







Material: Stainless steel A4 (316)

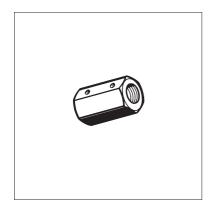
#### Approvals

For the multiple fixation of non-structural systems Sikla Approval ETA-10/0258 (M8-M12), for anchorage in non-cracked concrete Sikla Approval ETA-10/0257 (M8-M16), Fire Protection Certification, VdS-conform, FM-Approval ≥ M10



Туре	Drill hole Ø x depth [mm]	Thread Ø x length [mm]	W [kg]	Quantity [pack]	Part number
M8 x 30	10 x 30	M8 x 13	0.01	100	104906
M8 x 40	10 x 40	M8 x 20	0.01	100	153593
M10 x 40	12 x 40	M10 x 15	0.02	50	104915
M12 x 50	15 x 50	M12 x 18	0.04	50	104924
M16 x 65	20 x 65	M16 x 23	0.10	25	104933





# Rod Coupling AD f/f ss Group: 1732

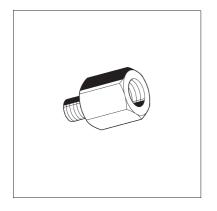
Application Joining element for two threaded rods. With two inspection holes (dia. 5 mm) for examining the screwed-in length of thread.

#### **Technical Data**

Material: Stainless steel A4

Туре	Length [mm]	A/F	W [kg]	Quantity [pack]	Part number
M8	30	13 mm	0.02	100	104818
M10	30	17 mm	0.04	100	104827
M12	35	17 mm	0.04	50	104836
M16	45	22 mm	0.08	50	104845





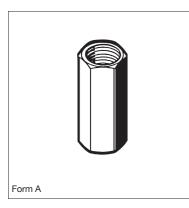
# Reducer AD f/m ss

Group: 1713

#### **Technical Data**

Material: Stainless steel A4

Туре	Female thread [mm]	Male Thread [mm]	Total length [mm]	W [kg]	Quantity [pack]	Part number
12/8	M12 x 13	M8 x 8	30.0	0.03	50	113652
12/10	M12 x 13	M10 x 8	30.0	0.03	50	113661



# Adapter AD f/f ss Group: 1733

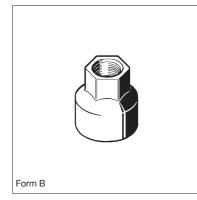
#### Application

Additional connection options for all Sikla stainless steel Pipe Clamps equipped with 3G triple thread nuts.

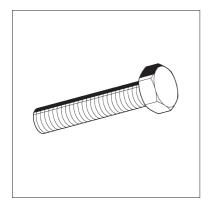
### **Technical Data**

Material: Stainless steel A4

Туре	Form	Length [mm]	A/F [mm]	W [kg]	Quantity [pack]	Part number
M16/M12	Α	35	19	0.04	25	170295
M16/M16	Α	30	19	0.03	50	170286
<sup>1</sup> / <sub>2</sub> "/M16	Α	40	24	0.08	10	178373
<sup>1</sup> / <sub>2</sub> "/ <sup>1</sup> / <sub>2</sub> "	Α	35	24	0.06	25	170301
<sup>3</sup> / <sub>4</sub> "/M16	Α	35	32	0.08	10	178382
<sup>3</sup> / <sub>4</sub> "/ <sup>1</sup> / <sub>2</sub> "	Α	35	32	0.11	10	170310
1"/M16	В	40	22	0.12	10	178364
<b>1</b> "/ <sup>1</sup> / <sub>2</sub> "	В	40	24	0.16	10	170338





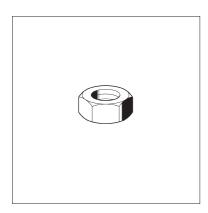


# Hexagon Bolt SKT ss Group: 1775

# **Technical Data**

Type: DIN 933 Material: Stainless steel A4

Туре	Length [mm]	W [kg]	Quantity [pack]	Part number
M6/25	25	0.01	100	104359
M8/25	25	0.01	100	146131
M8/35	35	0.02	100	104669
M10/30	30	0.03	100	104678
M10/45	45	0.03	100	104377
M12/30	30	0.04	100	151397
M12/35	35	0.04	100	146140
M12/50	50	0.05	100	104368
M16/25	25	0.07	100	172280
M16/30	30	0.08	100	172289
M16/50	50	0.10	100	151643



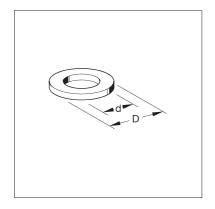
# Hexagon Nut NT ss Group: 1771

## **Technical Data**

Type: DIN 934 Material: Stainless steel A4

Туре	W [kg]	Quantity [pack]	Part number
M6	0.01	100	104696
M8	0.01	100	104702
M10	0.01	100	104711
M12	0.02	100	104720
M16	0.03	100	104748



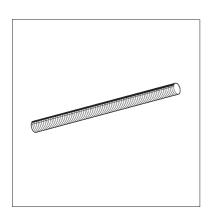


# Washer US ss

Group: 1772

#### **Technical Data** Material: Stainless steel A4

Туре	DIN	D	d	s	W	Quantity	Part
		[mm]	[mm]	[mm]	[kg]	[pack]	number
8/125	125	16.0	8.4	1.6	0.01	100	104766
8/9021	9021	24.0	8.4	2.0	0.01	100	172019
8/40	-	40.0	8.4	3.0	0.01	100	111865
10/125	125	20.0	10.5	2.0	0.01	100	104775
10/9021	9021	30.0	10.5	2.5	0.01	100	171740
10/40	-	40.0	10.5	3.0	0.01	100	111866
12/125	125	24.0	13.0	2.5	0.01	100	104784
12/40	-	40.0	13.0	3.0	0.01	100	111867
16/125	125	30.0	17.0	3.0	0.01	100	104809
16/9021	9021	50.0	17.0	3.0	0.04	100	172028



# Threaded Rod GST ss Group: 1717

## **Technical Data**

Material: Stainless steel A4

Туре	Length	Weight [kg/m]	Qty. [m]	Part number
M8 x 1000	1 m	0.31	1	104854
M8 x 3000	3 m	0.31	3	172253
M10 x 1000	1 m	0.50	1	104863
M12 x 1000	1 m	0.71	1	104872
M16 x 1000	1 m	1.32	1	104881
M16 x 2000	2 m	1.32	2	171947





# **Threaded Tube GR ss**

Group: 1709

#### Application

- To be used as a direct connecting element
- between Mounting Plate ss and stainless steel pipe clamp or
- as a support rod in combination with Universal Joints.

#### Scope of delivery

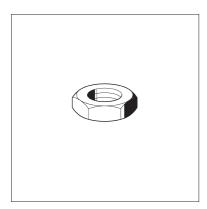
Standard length = 2 m; shorter sections available on request.

#### **Technical Data**

Thread according to DIN EN ISO 228.

Stainless steel A4 Material:

Туре	Length	Weight [kg/m]	Qty. [m]	Part number
G <sup>1</sup> / <sub>2</sub> "	2 m	0.79	2	170347
G <sup>3</sup> / <sub>4</sub> "	2 m	1.03	2	170356
G 1"	2 m	1.59	2	170365



# Locking Nut NT G ss Group: 1709

#### Application

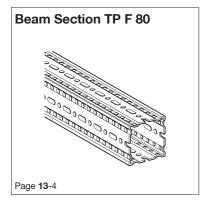
Suitable for the Sikla Threaded Tubes stainless steel and thread connectors (such as mounted on Slide Sets).

#### **Technical Data**

Material: Stainless steel A4

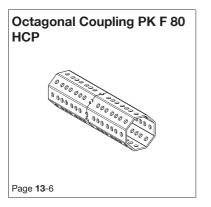
Туре	W [kg]	Quantity [pack]	Part number
G <sup>1</sup> / <sub>2</sub> "	0.03	10	177221
G <sup>3</sup> / <sub>4</sub> "	0.05	10	177230
G 1"	0.08	10	177239

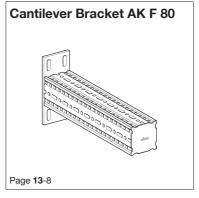


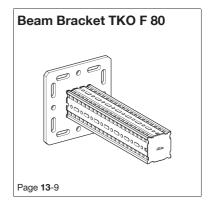


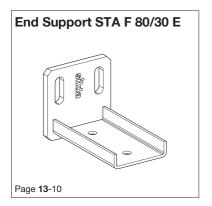
Square Coupling PK F 80 HCP

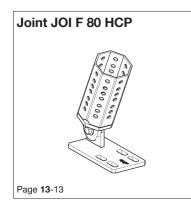


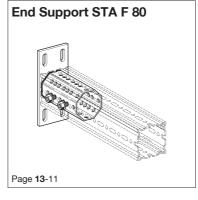


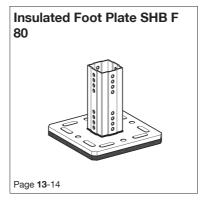


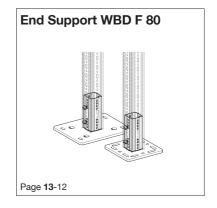


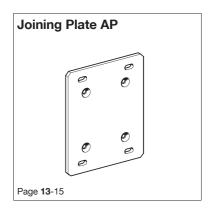




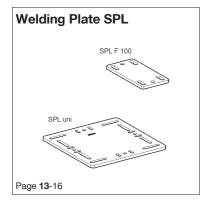




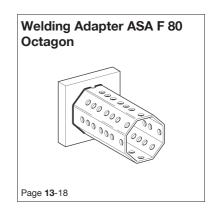


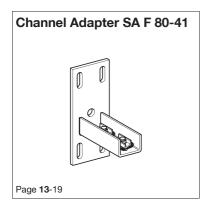




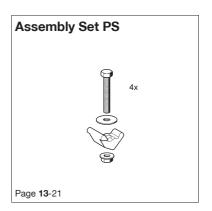


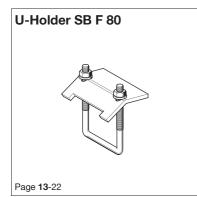
Welding Adapter ASA F 80 Square

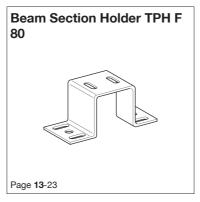








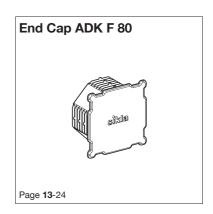


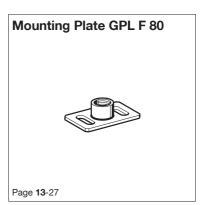




80 2G Slide Set GS F 80 1G Z

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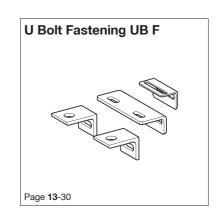


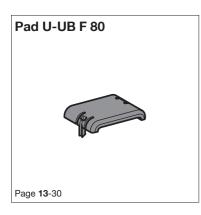






Mounting Plate GPL F 80 Stabil

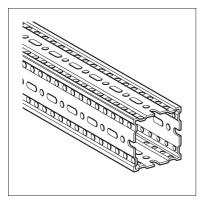












## Beam Section TP F 80

Group: A410

#### Application

Galvanised hollow-box-section for fabrication of steel frames. Designed for both simple two-dimensional supports and complex volumetric arrangements. Holes designed to receive Self Forming Screw FLS in conjunction with the relevant component.

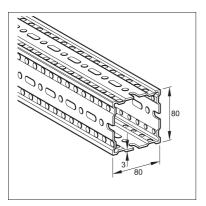
#### **Technical Data**

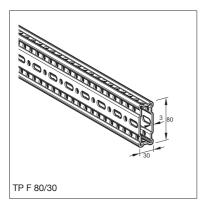
Туре	Section modulus [cm³ ]	Moment of inertia [cm <sup>4</sup> ]	Radius of inertia [cm]	Torsional moment It [cm <sup>₄</sup> ]	Cross section A [cm <sup>2</sup> ]
TP F 80	Wy: 15.87	ly: 63.49	iy: 2.95	98.22	7.28
	Wz: 15.87	lz: 63.49	iz: 2.95		
TP F 80/30	Wy: 8.36	ly: 33.47	iy: 2.76	18.66	4.37
	Wz: 4.03	lz: 6.05	iz: 1.17		

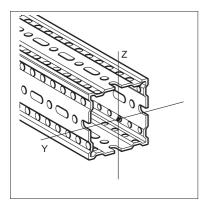
Mechanical properties shown above take into account perforations.

Material: Steel, hcp

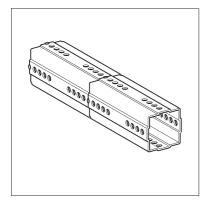
Туре	Weight [kg/m]	Qty. [m]	Part number
TP F 80	6.4	6	192539
TP F 80/30	4.3	6	113407











# Square Coupling PK F 80 HCP

#### Application

Internal splice connecting element for Beam Section TP F 80, particularly suitable for vertical extension. Should the component be used for horizontal application, the bending moment needs to be considered.

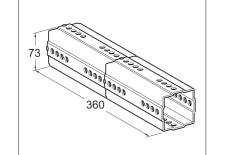
#### Installation

To be fastened with 2 x 4 FLS F Self Forming Screws. For optimal bending moment, distance between screws to be as far from each other as possible.

#### Notice:

Self Forming Screw FLS F to be fastened on two sides with a distance of minimum of 100mm and to be fastened symmetrically.

To optimise the bending moment the FLS F should be installed to maintain the pipe weight of the effective flow - i.e. screws are located top and bottom for horizontal cross bars not sideways.

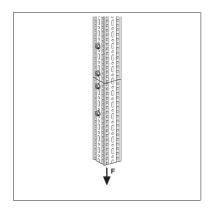


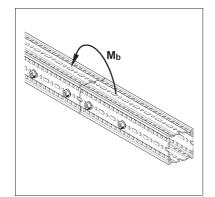


Туре	Adm. longitudinal force (tension/pressure) F	Adm. bending moment Mb
	[kN]	[Nm]
PK F 80 4kt - 360	10.0	500

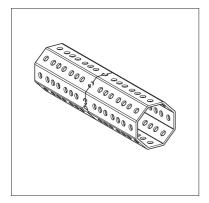
Material: Steel, HCP

Туре	W	Quantity	Part
	[kg]	[pack]	number
PK F 80 4kt - 360	2.1	1	111445









# **Octagonal Coupling PK F 80 HCP**

#### Application

Internal splice connecting element for TP F 80 Beam Section, particularly suitable for vertical extension. Should the component be used for horizontal application, the bending moment needs to be considered. This particular connection element allows rotation of the Framo Beam Section TP F 80 by 45°.

#### Installation

To be fastened with 2 x 4 FLS F Self Forming Screws. For optimal bending moment, distance between screws to be as far from each other as possible.

#### Notice:

Self Forming Screw FLS F to be fastened on two sides with a distance of minimum of 50 mm and to be fastened symmetrically.

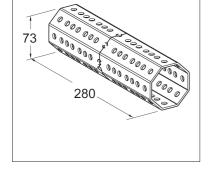
To optimise the bending moment the FLS F should be installed to maintain the pipe weight of the effective flow - i.e. screws are located top and bottom for horizontal cross bars not sideways.

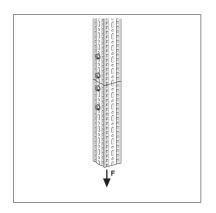
#### **Technical Data**

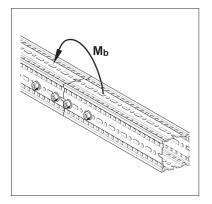
Туре	Adm. longitudinal	Adm. bending
	force (tension/pressure) F	moment Mb
	[kN]	[Nm]
PK F 80 8kt - 280	10,0	250

Material: Steel, HCP

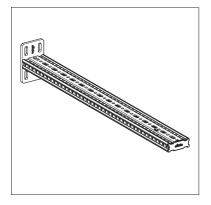
Туре	W	Quantity	Part
	[kg]	[pack]	number
PK F 80 8kt - 280	1.4	1	111446











# Cantilever Bracket AK F 80/30

Group: A420

#### Application

Galvanised hollow-box-section with welded end-plate to serve as cantilever arm. May be used as a crossbar when combined with End Support STA and 4 x Self Forming Screw FLS.

#### Installation

With 4 x Self Forming Screw FLS when fixed to another Framo hollow-box-section. Alternatively with two suitable wall anchors through holes "A" when fixed directly to building structure.

#### **Technical Data**

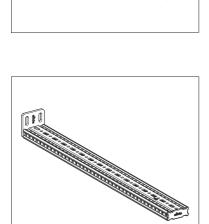
Туре	L [mm]	Dimensions of base plate [mm]	Slots in base plate for
AK F 80/30-400	400	130 x 80 x 8	M10
AK F 80/30-800	800	130 x 80 x 8	M10
AK F 80/30-E-400	400	80 x 80 x 8	M10
AK F 80/30-E-800	800	80 x 80 x 8	M10

Configuration: Material: Plate:

Steel, HCP Steel, HCP Beam section:

Туре	W [kg]	Quantity [pack]	Part number
AK F 80/30-400	2.4	1	113064
AK F 80/30-800	4.2	1	113065
AK F 80/30-E-400	2.2	1	113625
AK F 80/30-E-800	4.0	1	113626

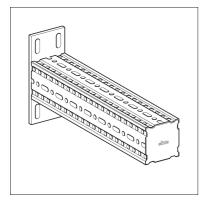
Plate welded with Beam Section F 80/30



AK F 80/30 E

AK F E-600





# **Cantilever Bracket AK F 80**

Group: A420

#### Application

Galvanised hollow-box-section with welded end-plate to serve as cantilever arm. May be used as a crossbar when combined with End Support STA and 4 x Self Forming Screw FLS.

#### Scope of delivery

With pre-assembled End Cap ADK F 80

#### Installation

With 4 x Self Forming Screw FLS when fixed to another Framo hollow-box-section. Alternatively with two suitable wall anchors through holes "A" when fixed directly to building structure.

## **Technical Data**

Туре	L [mm]	Dimensions of base plate [mm]	Slots in base plate for
AK F 80-400	400	190 x 80 x 8	M10
AK F 80-800	800	190 x 80 x 8	M10
AK F 80-E-600	600	165 x 80 x 8	M10

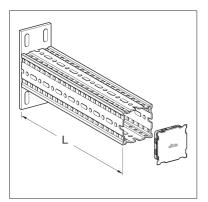
Configuration: Material: Plate: Beam Section:

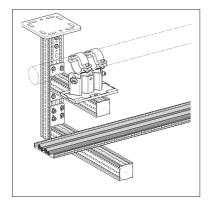
Plate welded to Beam Section TP F 80
 Steel, HCP
 Steel, HCP

# Approvals

MPA tested

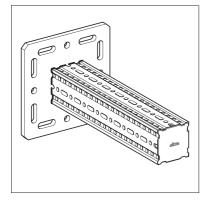
Туре	W [kg]	Quantity [pack]	Part number
AK F 80-400	3.4	1	192764
AK F 80-800	5.8	1	192771
AK F 80-E-600	4.5	1	110370





# 03/2015







Group: A423

#### Application

Galvanised hollow-box-section with welded end-plate to serve as cantilever arm. May be used as a crossbar when combined with End Support STA/End Support WBD and 4 x Self Forming Screw FLS .

#### Scope of delivery

With pre-assembled End Cap ADK F 80.

#### Installation

Depending on the situation, different options are recommended:

- a) Directly to building structure: 4 x suitable wall anchors
- To traditional steel beams between 80 120 mm flange dimensions: 1x b) Assembly Set P2
- c) To traditional steel beams > 120 flange dimension: with on-demand Adaptor Plate (tbc)
- To Sikla Simotec Steel Beams 100/120: with Bracket Plates FV d) 100/120 when positive mechanical connection required

### **Technical Data**

Туре	L [mm]	Dimensions of base plate [mm]	Slots in base plate for
TKO F80-400	400	220 x 220 x 12	M12
TKO F80-800	800	220 x 220 x 12	M12

Configuration Material:

Base plate welded to Beam Section TP F 80

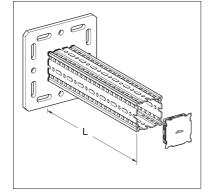
Base plate: Steel, HCP Beam Section:

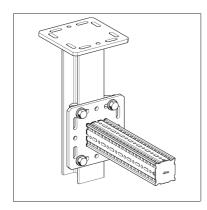
Steel, HCP

## Approvals

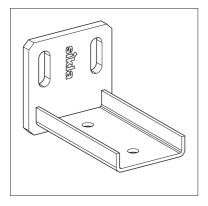
MPA tested

Туре	W [kg]	Quantity [pack]	Part number
TKO F 80-400	6.6	1	192788
TKO F 80-800	9.2	1	192795









# End Support STA F 80/30 E

Group: A422

#### Application

Plug-in component designed to create an endplate at the open end of a Beam Section TP F80/30 a Cantilever bracket AK F80/30.

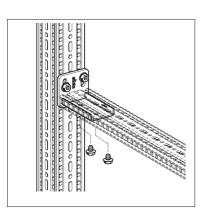
#### Installation

With 2x2 Self Forming Screws FLS when used to connect 2 Beam Sections.
With 2 Self Forming Screws FLS and 2 suitable wall anchors when used to connect to the building structure

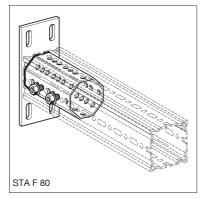
#### **Technical Data**

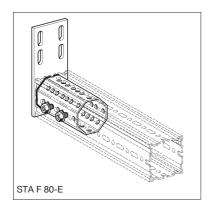
Material: Steel, HCP

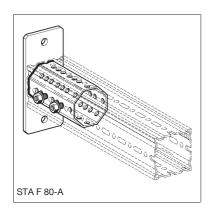
Туре	W	Quantity	Part
	[kg]	[pack]	number
STA F 80/30-E	0.6	1	113066

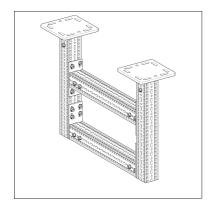












# End Support STA F 80

Group: A422

#### Application

Plug-in component designed to create an endplate at the open end of a Beam Section TP F80 or a Cantilever bracket AK F80.

#### Installation

Depending on the version, following mountings solutions are possible:

- a) With 2x4 Self Forming Screws FLS when used to connect 2 Beam Sections.
- b) With 4 Self Forming Screws FLS applied to the octagonal insert and 2 suitable wall anchors/fixings when connected to the building structure.

#### **Technical Data**

Туре	Dimensions of Base plate [mm]	Slots in base plate for
STA F 80	190 x 80 x 8	M10
STA F 80-E	165 x 80 x 8	M10
STA F 90-A	190 x 80 x 8	M12

Configuration: Material: Plate: Octagonal element:

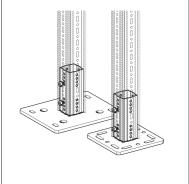
Base plate welded to octagonal element F 80 Steel, HCP ht: Steel, HCP

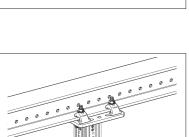
#### Approvals

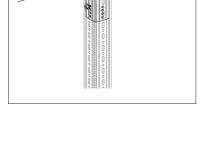
MPA tested

Туре	W [kg]	Quantity [pack]	Part number
STA F 80	1.6	1	192856
STA F 80-E	1.5	1	192863
STA F 80-A	1.7	1	192870









# WED I

## End Support WBD F 80

Group: A421

#### Application

Plug-in component designed to create a square endplate at the open end of a Beam Section TP F80 or a Beam Bracket/Cantilever bracket AK F80. Variation "T" with octagonal insert allows full utilisation of beam section within the space required by the End Support WBD itself.

#### Installation

Depending on the situation, different options are recommended:

- a) Directly to building structure: 4 x suitable wall anchors and 4 Self Forming Screws FLS applied to the square/octagonal insert
- b) To traditional steel beams between 80 300 mm flange dimensions: 1x Assembly Set P2/P3 and 4 Self Forming Screws FLS applied to the square/octagonal insert
- c) To traditional steel beams > 120 flange dimension: with on-demand Adaptor Plate (tbc)
- c) To Sikla Simotec Steel Beams 100/120: with Bracket Plates FV 100/120 when positive mechanical connection required

#### **Technical Data**

Туре	For flange width [mm]	Dimensions of base plate [mm]	Slots in base plate for
WBD F 80-80/120	80 - 120	220 x 220 x 12	M12
WBD F 80-121/160	121 - 160	320 x 260 x 12	M12
WBD F 80-161/200	161 - 200	320 x 310 x 12	M16
WBD F 80-201/300	201 - 300	420 x 220 x 12	M16
WBD F 80-T	80 - 120	220 x 220 x 12	M12

Configuration:

Base plate welded to square F 80 resp. octagonal element F 80

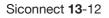
Material: Plate: Si Square F 80: Si Octagonal element F 80: Si

Steel, HCP Steel, HCP Steel, HCP

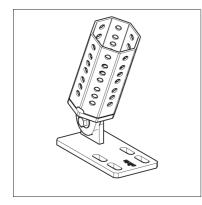
#### Approvals

MPA tested

Туре	W [kg]	Quantity [pack]	Part number
WBD F 80-80/120	5.2	1	192801
WBD F 80-121/160	8.7	1	192818
WBD F 80-161/200	10.2	1	192825
WBD F 80-201/300	9.4	1	192832
WBD F 80-T	4.8	1	192849







# Joint JOI F 80 HCP

#### Application

Flexible connecting element to be used for Framo F 80 Beam Sections at an angle between 0° and 160°, preferably for conjunctions of F 80 Beam Sections among each other or as junction element to primary or secondary steel constructions. Applicable as bracing element, especially for the reinforcement of cross members.

#### Scope of delivery

Thread connection between Mounting Plate and Adapter completely preassembled.

#### Installation

Thread connection by means of 2 x 4 Self Forming Screws FLS 80.

#### Notice

In case of vibration, the thread connection between Mounting Plate and Adapter additionally has to be secured against unscrewing.

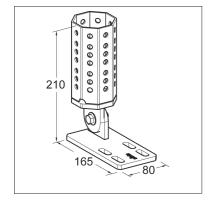
#### **Technical Data**

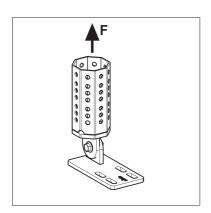
Туре	Permissible load F [kN]
Joi F 80	2.2

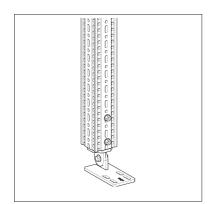
#### Material:

Mounting Plate, Adapter, welded-on links:	Steel, HCP
Screw:	Steel class 8.8
Nut:	Steel class 8

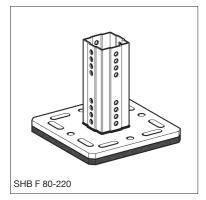
Туре	W	Quantity	Part
	[kg]	[pack]	number
JOI F 80	2.1	1	111448













#### Application

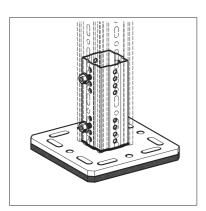
Integrated footplate and permeable rubber compound mat to provide a solution for the support of building services, without the need for penetrative supports. In combination with the Sikla Framo TP F 80 section, any frame structure may be built up from the footplates.

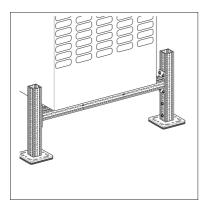
Especially suitable for maintaining the thermal and waterproofing integrity of a roof or basement floor as no penetrative fixings are required to secure the footplates for service supports.

#### Installation

Assembly to Beam Section TP F 80 by means of 4 Self Forming Screws FLS F.

# SHB F 80-300 - 600





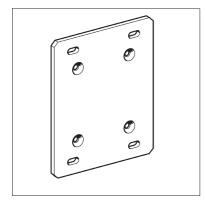
# Technical Data

r commour Data		
Statical E-module:	According to DIN 53513	0.8 - 0.9 N/mm <sup>2</sup>
Dynamical E-module:	According to DIN 53513	0,6 - 2.2 N/mm <sup>2</sup>
Compression set:	DIN 53572	approx. 4.0 % measured 30 min. after release at 50 % compression / 23°C after 72 Std.
Tensile strength:	DIN 53571	0.40 N/mm <sup>2</sup> min.
Ultimate elongation:	DIN 53571	70 % minimum value
Tear strength:	DIN 53515	3.4 N/mm <sup>2</sup> minimum value
Fire resistance:	DIN 4102	B2

Material: Steel, HCP, rubber-compound material

Туре	Plate dimensions [mm]	W [kg]	Quantity [pack]	Part number
SHB F 80-220	220 x 220	5.7	5	198926
SHB F 80-300	300 x 300	5.4	5	113121
SHB F 80-450	450 x 450	12.4	1	113122
SHB F 80-600	600 x 600	27.2	1	113123





## **Joining Plate AP**

Group: A630

#### Application

Interface element to enable the connection of standard endplates of Beam Brackets TKO F80 or F100, TKO 100 or 120 to primary steel with flange width >120 mm. Alternatively this product may be used to achieve a greater distance between wall anchor positions when required by the anchor calculation's result.

#### Scope of delivery

- Joining Plate AP
- 4 Countersink Screws M12 x 40
- 4 Hexagon Nuts M12
- 4 Washers

#### Installation

Connect the Joining Plate AP to the Beam Bracket TKO's end plate by using the accessories above. Then continue with either heavy-duty anchors or Assembly Set P/Beam Clips as required by the building structure.

#### **Technical Data**

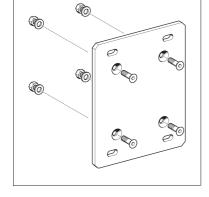
Туре	Dimension of Base Plate L x B [mm]	Perforation for	Connection to flange width [mm]
AP 121/160	320 x 260 x 12	M12	121 - 160
AP 161/200	320 x 310 x 12	M16	161 - 200
AP 201/300	420 x 220 x 12	M16	201 - 300
AP 301/310	440 x 220 x 12	M16	301 - 310

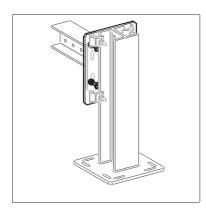
#### Material:

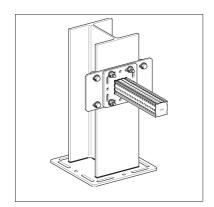
Joining Plate: Bolts: Nuts: Washers:

Steel, hot-dipped galvanised Steel DIN 7991, class 8.8, Dacromet/delta seal Steel, class 8, hot-dipped galvanised Steel, hot-dipped galvanised

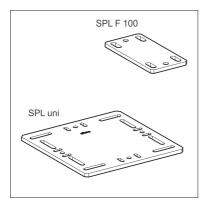
Туре	W [kg]	Quantity [pack]	Part number
AP 121/160	7.9	1	183953
AP 161/200	9.3	1	183962
AP 201/300	8.5	1	183980
AP 301/310	9.8	1	113129











## Welding Plate SPL

Group: A430

#### Application

Interface element to enable a welded connection of load chains, spring hangers etc. to Beam Section TP F. Our type "SPL universal" enables a welded connection to primary steel with flange width up to 300 mm. At the same time it's possible to install type "SPL universal" to Beam Section TP F if a larger installation surface is needed.

The welding plate can be welded directly without previous treatment due to a corrosion-resistant weld-thru coating which is compatible with both the HDG surface of the Framo section and the health and safety requirements of the welding process.

#### Installation

Depending on the type, different installation methods are recommended:

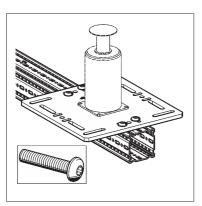
- a) Installation of SPL F 80 or 100 with 4 Self Forming Screws FLS to Beam Section TP F.
- b) Installation of SPL universal with 4 Flange Screws SCR FLA TT M10 x 25 (part no. 110503) to Beam Section TP F.
- c) Installation of SPL universal by means of 1 Assembly Set P2 S (part no. 168494) to primary steel with flange width between 100 and 300 mm.

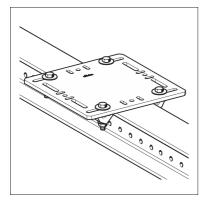
#### **Technical Data**

Туре	Installation surface [mm]	Mounting Plate size [mm]
SPL F 80	70 x 20	110 x 80 x 8
SPL F 100	80 x 80	180 x 90 x 8
SPL universal	220 x 220	370 x 370 x 12

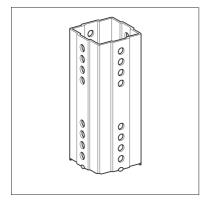
#### Material: Steel, HCP

Туре	W [kg]	Quantity [pack]	Part number
SPL F 80	0.5	1	113831
SPL F 100	1.0	1	113635
SPL universal	11.9	1	113636









# Welding Adapter ASA F 80 Square

Group: A428

#### Application

Welding plate with square insert to receive Framo section. May be implemented into the structural steel design in anticipation of Framo-frames or used in situ as a connection element when clamping is not an option but hot works are permitted.

#### Installation

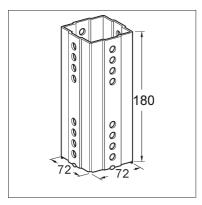
The welding plate of the ASA can be welded directly without previous treatment due to a corrosion-resistant weld-thru coating which is compatible with both the HDG surface of the Framo section and the health and safety requirements of the welding process. Once the ASA adapter has been connected, the coating may also receive paint without previous treatment. The Framo section must be connected to the Welding Adapter ASA with 4 x Self Forming Screw FLS.

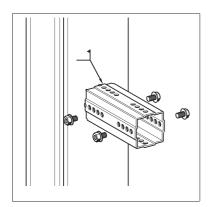


Adm. load: Cantilever: Max. 1.0 kNm Crossbar: See Framo Installation Guidelines

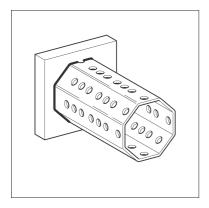
Material: Steel, HCP

Туре	W	Quantity	Part
	[kg]	[pack]	number
ASA F 80	1.0	1	110020









# Welding Adapter ASA F 80 Octagon

Group: A428

#### Application

Welding plate with octagonal insert to receive Framo section. May be implemented into the structural steel design in anticipation of Framo-frames or used in situ as a connection element when clamping is not an option but hot works are permitted. The octagonal insert allows for full utilisation of beam section within the space required by the Welding Adapter ASA itself.

#### Scope of delivery

Mounting Plate 100 with welded on octagonal joint

#### Installation

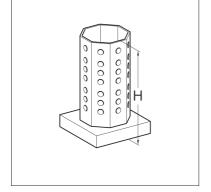
The welding plate of the ASA can be welded directly without previous treatment due to a corrosion-resistant weld-thru coating which is compatible with both the HDG surface of the Framo section and the health and safety requirements of the welding process. Once the ASA adapter has been connected, the coating may also receive paint without previous treatment. The Framo section must be connected to the Welding Adapter ASA with 4 x Self Forming Screw FLS.

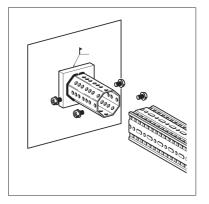
#### **Technical Data**

Туре	Adapter size H [mm]	Mounting Plate size [mm]
ASA F 80 GPL 8kt	140	100 x 100 x 20

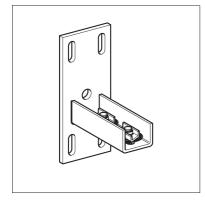
Adm. load cantilever: Max. 0.6 kNm Material: Steel, HCP

Туре	W	Quantity	Part
	[kg]	[pack]	number
ASA E 80 GPL 8kt	22	1	112212









#### Channel Adapter SA F 80-41

Group: A427

#### Application

Interface element to enable a stiff and solid connection between the Framo profile and strut channel of the international 41/41 mm standard. The 41/41 Channel Adapter SA F80 is equipped with automatically locking spring nuts which means that no accessories from the strut channel's range are required in order to make the connection.

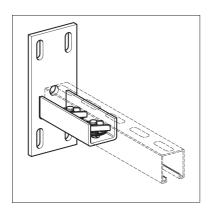
#### Installation

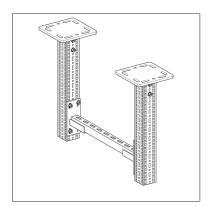
The Channel Adapter SA F 80-41 requires 4 x Self Forming Screw FLS in order to be connected to the Framo profile. The strut channel must be inserted with the slot first whilst pressing the two bolt's heads triggering an automatic 90°-locking operation of the two channel spring nuts. The strut channel is now securely held and can be adjusted. Finally the two screws must be tightened with the appropriate torque for the strut channel used.

#### **Technical Data**

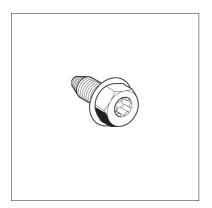
Туре	Dimension of base plate [mm]	Slots in base plate
SA F 80-41	190 x 80 x 8	M10

Туре	W	Quantity	Part
	[kg]	[pack]	number
SA F 80-41	1.4	1	192887









#### Self Forming Screw FLS

Group: A430

#### Application

The Self Forming Screw FLS creates its own thread inside the wall of the Framo pilot hole. During the screw-driving operation, the base steel is re-shaped and hardened to form an air-tight seal between the threads of the screw and the surrounding steel, making it exceptionally resistant to vibrational loosening and increasing fastening strength.

#### **Technical Data**

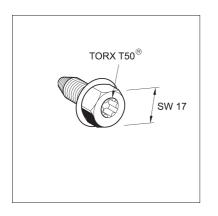
Application	Tightening torque [Nm]
System Framo	60
Connection to Channels MS 41	35

Steel, HCP Material:

## Approvals

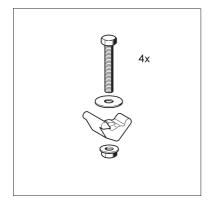
MPA tested

Туре	W	Quantity	Part
	[kg]	[pack]	number
FLS F	0.03	100	192512



#### Framo 80





#### **Assembly Set PS**

Group: A640

#### Application

Element for connecting Beam Bracket TKO, Angled Beam Bracket SKO or End Support WBD to a beam section.

#### Scope of delivery

Туре	Beam Clip [Qty.]	Hexagon bolt 8.8 [Qty.]	Washer [Qty.]	Hexagon nut [Qty.]
Set P2 S	4 x P2	4 x M12 x 80	8 x 12/40	4 x M12
Set P3 S	4 x P3	4 x M16 x 100	8 x 16/125	4 x M16
Set P2/2 S	2 x P2	2 x M12 x 80	4 x 12/40	2 x M12

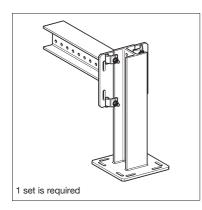
#### Installation

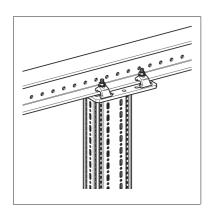
- The narrow ends of the Beam Clips must be fixed to the beam flange.
- Max. perm. torque of all M12 bolts: 85 Nm (Set P2 S)
- Max. perm. torque of all M16 bolts: 150 Nm (Set P3 S)
- Once fully tightened, the hexagon bolts must not be re-used!

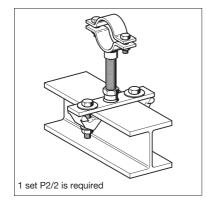
#### **Technical Data**

Material: Steel and cast iron, hcp

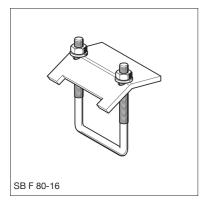
Туре	W	Qty.	Part
	[kg]	[set]	number
Set P2 S	1.6	1	168494
Set P3 S	2.0	1	179147
Set P2/2 S	0.6	1	183800

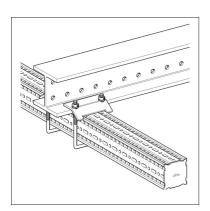












# SB F 80-40

#### **U-Holder SB F 80**

Group: A439

#### Application

Pre-assembled component to clamp Beam Section F80 to the flange side of traditional steel sections.

Scope of delivery Type SB F 80-16: Holder with thread M10 Plate 2 Hexagon nuts M10 2 Washers

Type SB F 80-40: Holder with thread M12 Plate 2 Beam Clips P2 2 Hexagon nuts M12 2 Washers

#### Installation

U-holder to be used in pairs. Type 16 up to flange thickness 16 mm Type 40 up to flange thickness 40 mm

#### **Technical Data**

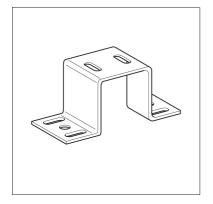
Туре	Thread	Max. adm. tensile load	Tightening torque
SB F 80-16	M10	5.0 kN per U-bolt	30 Nm
SB F 80-40	M12	5.0 kN per U-bolt	40 Nm

#### Material:

U-Holder:	Steel, HCP
Plate:	Steel, HCP
Beam Clip:	Steel resp. Cast Iron, HCP
Nut/Washer:	Steel, HCP

Туре	W [kg]	Quantity [pack]	Part number
SB F 80-16	0.6	20	192683
SB F 80-40	1.5	10	194010





#### Beam Section Holder TPH F 80

Group: A425

#### Application

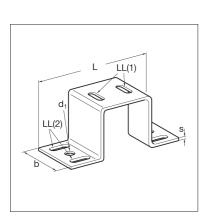
Interface element to connect 90° intersecting Beam Sections F80. Alternatively the Beam Section Holder TPH may be used to connect only one beam section to an even surface with suitable wall anchors or with cast-in channel accessories.

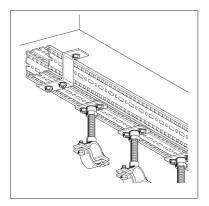
#### Installation

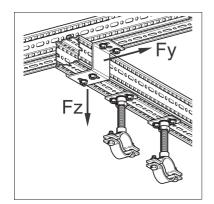
Connecting one Beam Section F80 90° to another one by using 6 x Self Forming Screw FLS applied through all elongated holes. Connecting to any other surface or member by using 2 x Self Forming Screws FLS through the two elongated holes on the top of the Beam Section Holder TPH F80 plus 2 appropriate fixing elements up to M12 through the two holes "d1".

#### **Technical Data**

Туре	L x w x th [mm]	Ø d₁ [mm]	Elongated hole LL1 d x a [mm]	Elongated hole LL2 d x a [mm]	Perm. load under 90° to the beam axis Fy = Fz [kN]
TPH F 80	181 x 50 x 4	13	11 x 20	-	7
TPH F 80 C	199 x 80 x 4	14	11 x 20	11 x 20	10



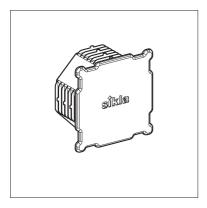




#### Material: Steel, HCP or hot dipped galvanised

Туре	W [kg]	Quantity [pack]	Part number
TPH F 80	0.5	10	195765
TPH F 80 C	0.8	10	111732





#### End Cap ADK F 80

Group: A430

#### Application

Plastic end cap to close cut ends of Beam Section F80 to meet both visual and health & safety requirements. Standard Cantilever- and Beam Brackets (AK F80 and TKO F80) already include this end cap.

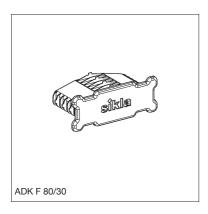
#### Installation

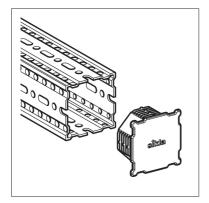
Mallet required.

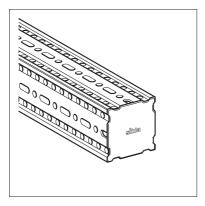
#### **Technical Data**

Material: PE, yellow

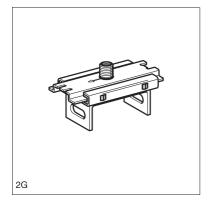
Туре	W [kg]	Quantity [pack]	Part number
ADK F 80	0.03	25	192674
ADK F 80/30	0.02	25	113067











#### Slide Set GS F 80 2G

Group: A436

#### Application

Pipe guide for twin-clamp connection designed to clutch the Beam Section F80 fixed by 2 x Self Forming Screws FLS.

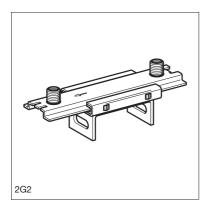
#### Installation

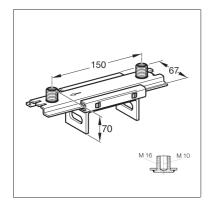
Pipe clamp connection points "2G" receive M10 studs or M16 by adapter connection.

#### **Technical Data**

Perm. load elevated position: Perm. load suspended position: Permanent temperature range:

1,2 kN 0,6 kN 130° C





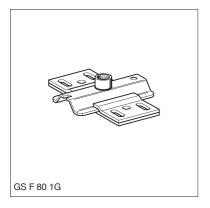
Material: Slide element: Slide bar: Retaining plate:

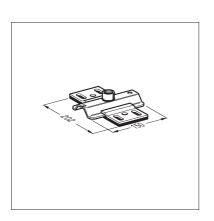
Steel, HCP Polyamide (glass-fibre reinforced) Steel, HCP

Туре	W [kg]	Quantity [pack]	Part number
GS F 80 2G	0.6	10	196700
GS F 80 2G2	0.7	10	196717

#### Framo 80







#### Slide Set GS F 80 1G Z

Group: A436

#### Application

Heavy duty Slide Set for installing to Framo Beam Section TP F 80 or Sikla Channels.

 $^{1}\!\prime_{2}"$  thread connection allows for a direct connection of the pipe clamp Stabil I -  $^{1}\!\prime_{2}"$  by means of the  $^{1}\!\prime_{2}"$  threaded tube and without the need for further adapter parts.

#### Scope of delivery

Set of Slide Set, Slide Plate and 2 Guiding Brackets.

6 kN

#### Installation

Fixing to Beam Section F 80 using 4 Thread Forming Screws F 80. Fixing to channel either by using 2 T-head Bolts HZ 41 M12 x 25 or 2 Channel nuts HZ 41-M12 with 2 Hexagon Bolts M12/30.

-20° up to +130° C (at the slide plate)

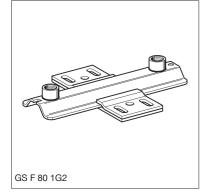
#### **Technical Data**

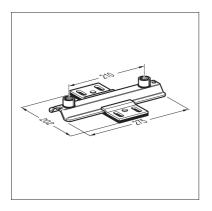
Permissible load: Temperature range:

#### Material:

Slide plate: Polyamide PA 6.6 Guiding bracket: Steel, hot-dipped galvanised		5
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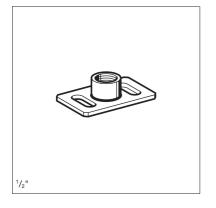
Туре	W [kg]	Qty. [set]	Part number
GS F 80 1G Z	1.0	10	192924
GS F 80 1G2 Z	1.4	10	192917





#### Framo 80





## Mounting Plate GPL F 80 Group: A438

#### Application

Interface component to connect threaded bar and threaded tube to Beam Section F80.

#### Installation

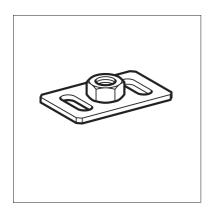
Requires 2 x Self Forming Screw FLS per Mounting Plate GPL.

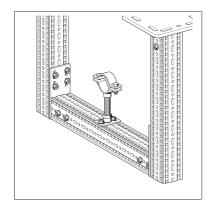
#### **Technical Data**

Dimensions of base plate: Material:

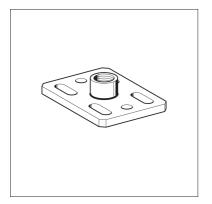
80 x 50 x 4 mm Steel, hot-dipped galvanised

Туре	W [kg]	Quantity [pack]	Part number
GPL F 80-1/2"	0.1	50	192900
GPL F 80-M10	0.1	50	113004
GPL F 80-M12	0.1	50	112911
GPL F 80-M16	0.2	50	195833









#### Mounting Plate GPL F 80 Stabil HCP

Group: A430

#### Application

Adapter plate for installing pipe clamps to Beam Section TP F80 or Channel System by means of threaded tube  $1/2^{"}$  or thread Connection.

#### Installation

Direct connection of plate to Beam Section TP F80 by means of 4 Self Forming Screws FLS F 80. Connection to the Channel System by means of Speed Nut CC41 and Hexagon Bolts. The two drilled holes in the Adapter Plate mean that the Plate may also be installed to concrete.

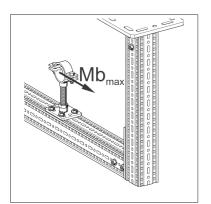
#### **Technical Data**

Material:

Steel, HCP

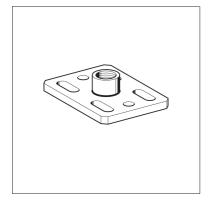
Permissible bending moment of the Threaded Tube  $^{1}\!/_{2}^{"}$  Mb\_max, should not be exceeded. Any lateral loads on the pipe clamp also need to be considered.

B C C C S S	



Туре Dimension Elongated hole Ø W Quantity Part L x W x Th dxa [mm] [kg] [pack] number [mm] [mm] GPL F 80 ST-1/2" 110 x 80 x 8 11 x 31 11 0.50 25 112719





#### Mounting Plate GPL F 80 Stabil

Group: 1227

#### Application

Adapter plate for installing pipe clamps to Beam Section TP F80 or Channel System by means of threaded tube  $1/2^{"}$ .

#### Installation

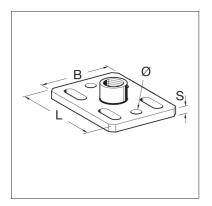
Direct connection of plate to Beam Section TP F80 by means of 4 Self Forming Screws FLS F 80. Connection to the Channel System by means of Speed Nut CC41 and Hexagon Bolts. The two drilled holes in the Adapter Plate mean that the Plate may also be installed to concrete.

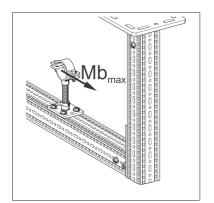
#### **Technical Data**

Permissible bending moment of the Threaded Tube 1/2" MB<sub>max</sub>, should not be exceeded. Any lateral loads on the pipe clamp also need to be considered.

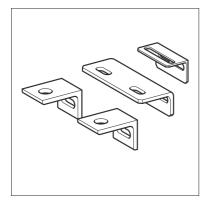
Material: Steel, electro-galvanised

Туре	Dimension L x W x Th [mm]	Elongated hole d x a [mm]	Ø [mm]	W [kg]	Quantity [pack]	Part number
GPL F 80 ST-1/2"	110 x 80 x 8	11 x 31	11	0.50	25	451280
GPL F 80 ST-3/4"	110 x 80 x 8	11 x 31	11	0.50	25	451281
GPL F 80 ST-1"	110 x 80 x 8	11 x 31	11	0.50	25	451282









#### U Bolt Fastening UB F

Group: A430

#### Application

U Bolt Fastening to connect standard U-Bolts required for pipework to the supporting Beam Sections, Cantilever Brackets and Beam Brackets F80 or F100.

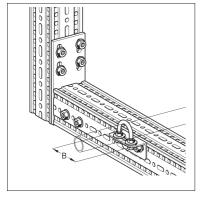
#### Scope of delivery

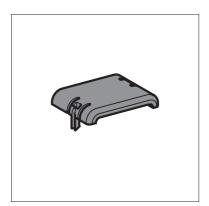
For U-bolts ≥ 4" always 2 U-bolt fastenings F are needed.

#### **Technical Data**

Material: Steel, HCP or hot-dipped galvanised

Туре	B [mm]	W [kg]	Quantity [pack]	Part number
UB F <sup>1</sup> / <sub>2</sub> " - 1 <sup>1</sup> / <sub>2</sub> "	85	0.13	25	192931
UB F 2" - 3"	165	0.64	10	196212
UB F 4" - 6"	45	0.18	20	113124
UB F 8" - 12"	45	0.15	20	113125
UB F 378 - 530	45	0.15	20	113126







Group: A430

#### Application

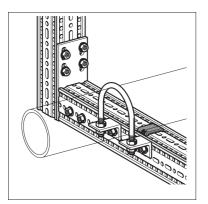
Insulation and surface protection pad to be used on demand when a pipes' expansion and contraction occurs directly on the F80 section.

#### **Technical Data**

Material: Range of temperature:

Polyamide PA 6.0 -20° up to +130° C

Туре	W	Quantity	Part
	[kg]	[pack]	number
U-UB F 80	0.01	50	198797







#### **Threaded Tube GR**

Group: 1310

#### Application

- To be used as
- a direct connection element between Mounting Plate and Pipe Clamp or
- a support rod in combination with Socket Angle or Universal Joints as angular support.

#### Scope of delivery

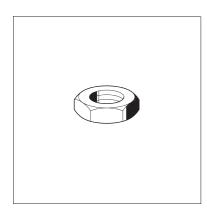
Standard length 2m. Shorter pre-cut parts available on request.

#### **Technical Data**

Screw thread as per DIN EN ISO 228

Material: Steel, electro-galvanised

Туре	Length	Weight [kg/m]	Qty. [m]	Part number
G <sup>1</sup> / <sub>2</sub> "	2 m	1.02	2	151102



# Locking Nut NT G Group: 1310

#### Application

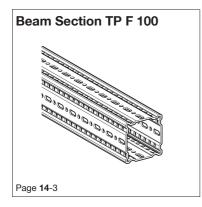
Suitable for the Sikla Threaded Tubes and thread connectors (such as mounted in Slide Sets).

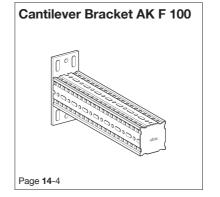
#### **Technical Data**

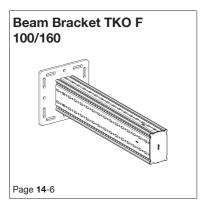
Material: Steel, electro-galvanised

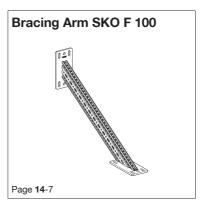
Туре	W	Quantity	Part
	[kg]	[pack]	number
G <sup>1</sup> / <sub>2</sub> "	0.04	25	157092

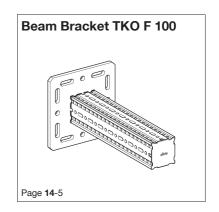


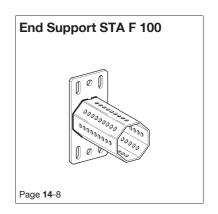


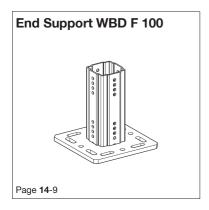


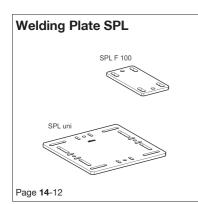


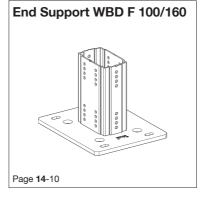


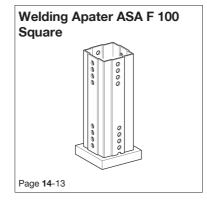


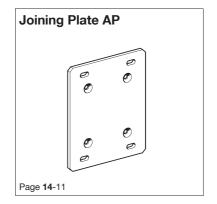


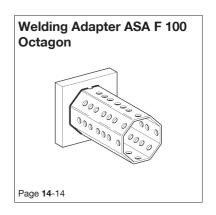




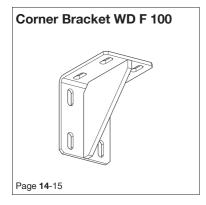


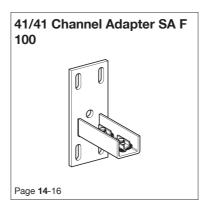


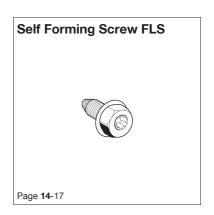


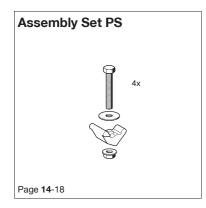




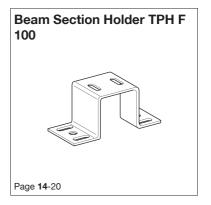


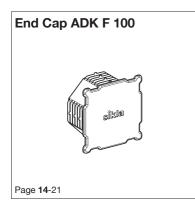




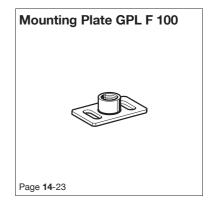


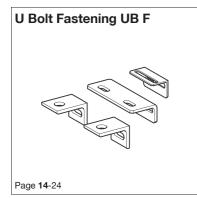


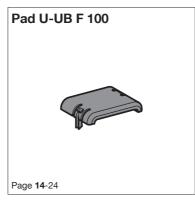




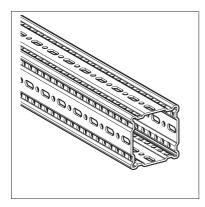












#### Beam Section TP F 100

Group: A810

#### Application

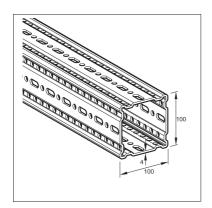
Galvanised hollow-box-section for fabrication of steel frames. Designed for both simple two-dimensional supports and complex volumetric arrangements. Holes designed to receive Self Forming Screw FLS in conjunction with the relevant component.

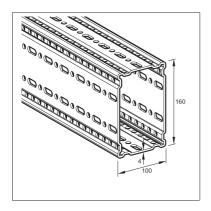
#### **Technical Data**

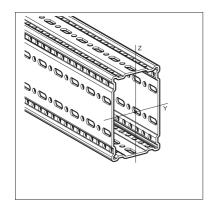
Туре	Section modulus [cm³ ]	Moment of inertia [cm <sup>4</sup> ]	Radius of inertia [cm]	Torsional moment It [cm 4]	Cross section A [cm <sup>2</sup> ]
TP F 100	Wy: 36.27 Wz: 36.27	ly: 181.38 lz: 181.38	iy: 3.90 iz: 3.90	302.40	11.92
TP F 100/160	Wy: 69.67 Wz: 52.71	ly: 557.41 lz: 263.54	iy: 6.00 iz: 4.12	641.34	15.48

Mechanical properties shown above take into account perforations.

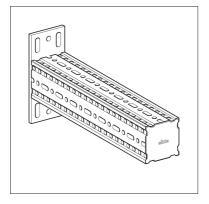
Туре	Weight [kg/m]	Qty. [m]	Part number
TP F 100	10.8	6	112904
TP F 100/160	14.3	6	112905

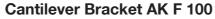












Group: A820

#### Application

Galvanised hollow-box-section with welded end-plate to serve as cantilever arm. May be used as a crossbar when combined with End Support STA and 4 x Self Forming Screw FLS.

#### Installation

With 4 x Self Forming Screw FLS when fixed to another Framo hollow-boxsection. Alternatively with two suitable wall anchors through holes "A" when fixed directly to building structure.

#### **Technical Data**

Туре	L [mm]	Dimensions of base plate [mm]	Slots in base plate for	Round hole A for
AK F 100-400	400	210 x 100 x 8	M10	M12
AK F 100-800	800	210 x 100 x 8	M10	M12
AK F 100-1200	1200	210 x 100 x 8	M10	M12
AK F 100-E-600	600	210 x 100 x 8	M10	M12

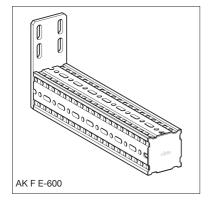
Plate welded to Beam Section TP F 100

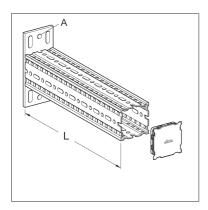
Configuration: Material:

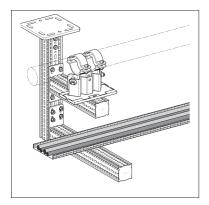
Plate: Beam Section:

Steel, HCP : Steel, HCP

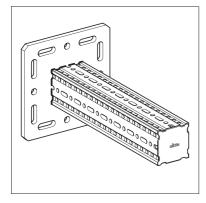
Туре	W	Quantity	Part
	[kg]	[pack]	number
AK F 100-400	5.7	1	113068
AK F 100-800	10.1	1	113069
AK F 100-1200	14.7	1	113419
AK F 100-E-600	7.8	1	113070











#### Beam Bracket TKO F 100

Group: A823

#### Application

Galvanised hollow-box-section with welded end-plate to serve as cantilever arm. May be used as a crossbar when combined with End Support STA/End Support WBD and  $4 \times Self$  Forming Screw FLS.

#### Scope of delivery

With pre-assembled End Cap ADK F100

#### Installation

Depending on the situation, different options are recommended:

- a) Directly to building structure: 4x suitable wall anchors.
- b) To traditional steel beams between 80 120 mm flange dimensions: with on-demand Adaptor Plate (tbc).
- c) To traditional steel beams > 120 flange dimension: with on-demand Adaptor Plate (tbc)
- d) To Sikla Simotec Steel Beams 100/120: with Bracket Plates FV 100/120 when positive mechanical connection required.

#### **Technical Data**

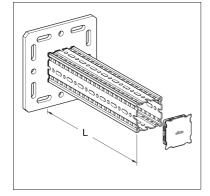
Туре	L [mm]	Dimensions of base plate [mm]	Slots in base plate for
TKO F 100-400	400	220 x 220 x 12	M12
TKO F 100-800	800	220 x 220 x 12	M12
TKO F 100-1200	1200	220 x 220 x 12	M12

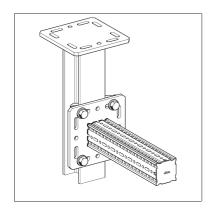
Configuration: Material: Plate: Beam Section:

Steel, HCP Steel, HCP

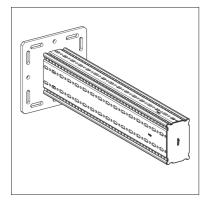
Туре	W [kg]	Quantity [pack]	Part number
TKO F 100-400	8.6	1	113071
TKO F 100-800	12.8	1	113072
TKO F 100-1200	17.5	1	113421

Base plate welded to Beam Section TP F 100









#### Beam Bracket TKO F 100/160

Group: A823

#### Application

Galvanised hollow-box-section with welded end-plate to serve as cantilever arm. May be used as a crossbar when combined with End Support STA/End Support WBD and  $4 \times Self$  Forming Screw FLS.

#### Scope of delivery

With pre-assembled End Cap ADK F100

#### Installation

Depending on the situation, different options are recommended:

- a) Directly to building structure: 4x suitable wall anchors.
- b) To traditional steel beams between 80 120 mm flange dimensions: with on-demand Adaptor Plate (tbc).
- c) To traditional steel beams > 120 flange dimension: with on-demand Adaptor Plate (tbc)
- d) To Sikla Simotec Steel Beams 100/120: with Bracket Plates FV 100/120 when positive mechanical connection required.

#### **Technical Data**

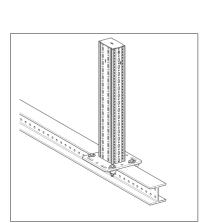
Туре	L [mm]	Dimensions of base plate [mm]	Slots in base plate for
TKO F 100/160-800	800	280 x 280 x 12	M12
TKO F 100/160-1200	1200	280 x 280 x 12	M12

Configuration:

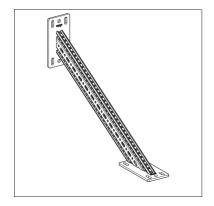
Material: Base plate: Steel, HCP Beam Section: Steel, HCP

Туре	W [kg]	Quantity [pack]	Part number
TKO F 100/160-800	18.5	1	113097
TKO F 100/160-1200	24.5	1	113420

Base plate welded to Beam Section TP F 100/160







#### Bracing Arm SKO F 100

Group: A823

#### Application

Bracing arm for reinforcement of frames made from Beam Section TP F100 and/ or Cantilever Bracket AK F100.

#### Installation

- With 2x4 Self Forming Screw FLS when used inside a corner of two F100 size hollow-box sections.

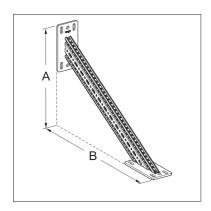
- With 4x Self Forming Screw FLS and 2x suitable wall anchors/fixings when used to connect between one

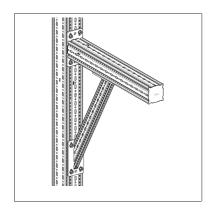
F 100 size hollow-box section and the building structure.

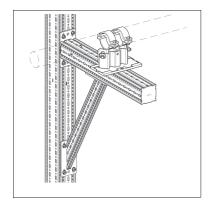
#### **Technical Data**

Туре	Assembly dimension A	Assembly dimension B
SKO F 100	450	710

Туре	W	Quantity	Part
	[kg]	[pack]	number
SKO F 100	5.5	1	113096

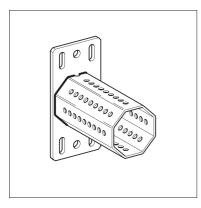






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Group: A822

#### Application

Plug-in component designed to create an endplate at the open end of a Beam Section TP F 100 or a Cantilever bracket AK F 100. Variation types F 100-80 (E) are designed to combine F 100 with F 80 beam sections. Octagonal insert allows full utilisation of beam section within the space required by the End Support STA itself.

#### Installation

Depending on the situation, different options are recommended:

- a) With 2x4 Self Forming Screws FLS when used to connect 2 Beam Sections.
- b) With 4 Self Forming Screws FLS applied to the octagonal insert and 2 suitable wall anchors/fixings when connected to the building structure.

#### **Technical Data**

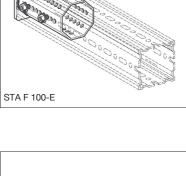
Туре	Dimensions of base plate [mm]	Slotting A in base plate for	Slotting B in base plate for
STA F 100	210 x 100 x 8	M12	M10
STA F 100-E	185 x 100 x 8	M10	M10
STA F 100-80	210 x 100 x 8	M12	M10
STA F 100-80-E	185 x 100 x 8	M10	M10

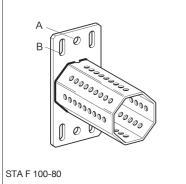
Configuration: Material: Base plate: Octagon:

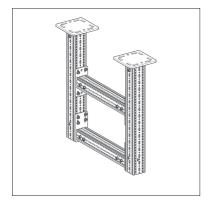
n: Base plate welded to Octagon F 100 or F 80

ate: Steel, HCP n: Steel, HCP

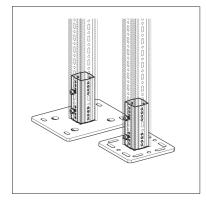
Туре	W [kg]	Quantity [pack]	Part number
STA F 100	2.4	1	113073
STA F 100-E	2.2	1	113074
STA F 100-80	2.0	1	113337
STA F 100-80-E	1.8	1	113481

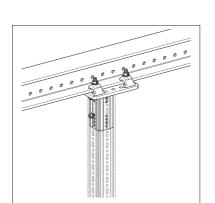


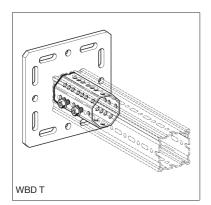


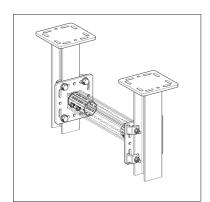












#### End Support WBD F 100

Group: A821

#### Application

Plug-in component designed to create a square endplate at the open end of a Beam Section TP F 100 or a Beam Bracket/Cantilever bracket AK F 100. Variation "T" with octagonal insert allows full utilisation of beam section within the space required by the End Support WBD itself.

#### Installation

Depending on the situation, different options are recommended:

- Directly to building structure: 4 x suitable wall anchors and 4 Self a) Forming Screws FLS applied to the square/octagonal insert
- To traditional steel beams between 80 300 mm flange dimensions: 1x b) Assembly Set P2/P3 and 4 Self Forming Screws FLS applied to the square/octagonal insert
- To traditional steel beams > 120 flange dimension: with on-demand C) Adaptor Plate (tbc)
- To Sikla Simotec Steel Beams 100/120: with Bracket Plates FV d) 100/120 when positive mechanical connection required

#### **Technical Data**

Туре	For flange width [mm]	Dimensions of base plate [mm]	Slots in base plate for
WBD F 100-80/120	80 - 120	220 x 220 x 12	M12
WBD F 100-121/160	121 - 160	320 x 260 x 12	M12
WBD F 100-161/200	161 - 200	320 x 310 x 12	M16
WBD F 100-201/300	201 - 300	420 x 220 x 12	M16
WBD F 100-T	80 - 120	220 x 220 x 12	M12

Configuration:

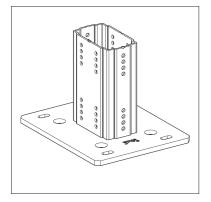
Base plate welded to square resp. octagonal element

Material: Base plate: Square F 80: Octagonal element F 80:

Steel, HCP Steel, HCP Steel, HCP

Туре	W [kg]	Quantity [pack]	Part number
WBD F 100-80/120	6.1	1	113075
WBD F 100-121/160	9.7	1	113076
WBD F 100-161/200	11.2	1	113077
WBD F 100-201/300	10.3	1	113078
WBD F 100-T	5.3	1	113079





#### End Support WBD F 100/160

Group: A821

#### Application

Plug-in component designed to create a square endplate at the open end of a Beam Section TP F100 or a Beam Bracket.

#### Installation

Depending on the situation, different options are recommended:

- a) Directly to building structure: 4 x suitable wall anchors and 4 Self Forming Screws FLS applied to the square/octagonal insert.
- b) To traditional steel beams between 80 300 mm flange dimensions: 1x Assembly Set P2/P3 and 4 Self Forming Screws FLS applied to the square/octagonal insert.
- c) To traditional steel beams > 120 flange dimension: with on-demand Adaptor Plate (tbc).
- d) To Sikla Simotec Steel Beams 100/120: with Bracket Plates FV 100/120 when positive mechanical connection required.

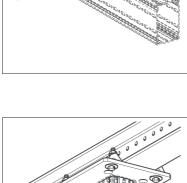
#### **Technical Data**

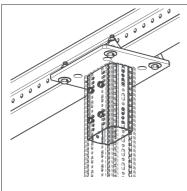
Туре	For flange width [mm]	Dimensions of base plate [mm]	Slots in base plate for
WBD F 100/160-121/160	121 - 160	320 x 260 x 12	M12
WBD F 100/160-161/200	161 - 200	320 x 310 x 12	M16
WBD F 100/160-201/300	201 - 300	420 x 220 x 12	M16

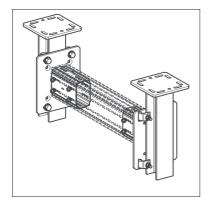
Configuration: Base plate welded to square F 100/60 Material:

Plate: Steel, HCP Square F 100: Steel, HCP

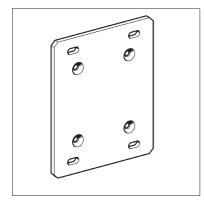
Туре	W [kg]	Quantity [pack]	Part number
WBD F100/160-121/160	10.53	1	113098
WBD F100/160-161/200	11.14	1	113099
WBD F100/160-201/300	11.95	1	113100











#### **Joining Plate AP**

Group: A630

#### Application

Interface element to enable the connection of standard endplates of Beam Brackets TKO F80 or F100, TKO 100 or 120 to primary steel with flange width >120 mm. Alternatively this product may be used to achieve a greater distance between wall anchor positions when required by the anchor calculation's result.

#### Scope of delivery

- Joining Plate AP
- 4 Countersink Screws M12 x 40
- 4 Hexagon Nuts M12
- 4 Washers

#### Installation

Connect the Joining Plate AP to the Beam Bracket TKO's end plate by using the accessories above. Then continue with either heavy-duty anchors or Assembly Set P/Beam Clips as required by the building structure.

#### **Technical Data**

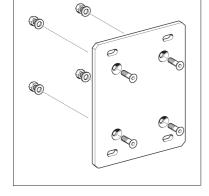
Туре	Dimension of Base Plate L x B [mm]	Perforation for	Connection to flange width [mm]
AP 121/160	320 x 260 x 12	M12	121 - 160
AP 161/200	320 x 310 x 12	M16	161 - 200
AP 201/300	420 x 220 x 12	M16	201 - 300
AP 301/310	440 x 220 x 12	M16	301 - 310

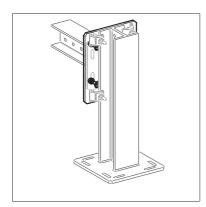
#### Material:

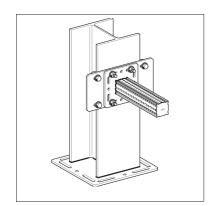
Joining Plate: Bolts: Nuts: Washers:

Steel, hot-dipped galvanised Steel DIN 7991, class 8.8, Dacromet/delta seal Steel, class 8, hot-dipped galvanised Steel, hot-dipped galvanised

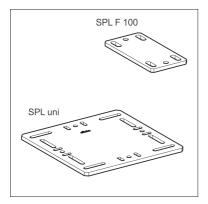
Туре	W [kg]	Quantity [pack]	Part number
AP 121/160	7.9	1	183953
AP 161/200	9.3	1	183962
AP 201/300	8.5	1	183980
AP 301/310	9.8	1	113129











#### Welding Plate SPL

Group: A430

#### Application

Interface element to enable a welded connection of load chains, spring hangers etc. to Beam Section TP F. Our type "SPL universal" enables a welded connection to primary steel with flange width up to 300 mm. At the same time it's possible to install type "SPL universal" to Beam Section TP F if a larger installation surface is needed.

The welding plate can be welded directly without previous treatment due to a corrosion-resistant weld-thru coating which is compatible with both the HDG surface of the Framo section and the health and safety requirements of the welding process.

#### Installation

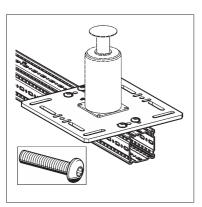
Depending on the type, different installation methods are recommended:

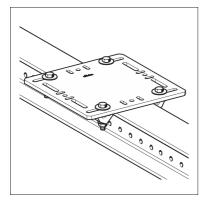
- a) Installation of SPL F 80 or 100 with 4 Self Forming Screws FLS to Beam Section TP F.
- b) Installation of SPL universal with 4 Flange Screws SCR FLA TT M10 x 25 (part no. 110503) to Beam Section TP F.
- c) Installation of SPL universal by means of 1 Assembly Set P2 S (part no. 168494) to primary steel with flange width between 100 and 300 mm.

#### **Technical Data**

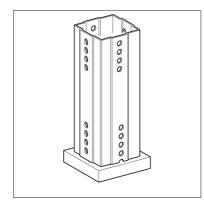
Туре	Installation surface [mm]	Mounting Plate size [mm]
SPL F 80	70 x 20	110 x 80 x 8
SPL F 100	80 x 80	180 x 90 x 8
SPL universal	220 x 220	370 x 370 x 12

Туре	W [kg]	Quantity [pack]	Part number
SPL F 80	0.5	1	113831
SPL F 100	1.0	1	113635
SPL universal	11.9	1	113636









#### Welding Apater ASA F 100 Square

Group: A828

#### Application

Welding plate with square insert to receive Framo section. May be implemented into the structural steel design in anticipation of Framo-frames or used in situ as a connection element when clamping is not an option but hot works are permitted.

#### Scope of delivery

Mounting Plate 100 with welded on square joint.

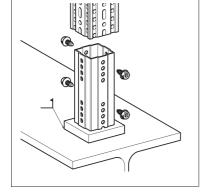
#### Installation

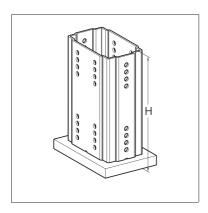
The welding plate of the ASA can be welded directly without previous treatment due to a corrosion-resistant weld-thru coating which is compatible with both the HDG surface of the Framo section and the health and safety requirements of the welding process. Once the ASA adapter has been connected, the coating may also receive paint without previous treatment. The Framo section must be connected to the Welding Adapter ASA with 4 x Self Forming Screw FLS.

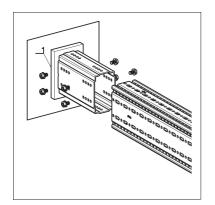
#### **Technical Data**

Туре	Adapter size H [mm]	Mounting Plate size [mm]
ASA F 100 GPL 4kt	240	120 x 120 x 20
ASA F 100/160 GPL 4kt	240	180 x 120 x 20

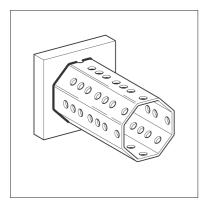
Туре	W [kg]	Quantity [pack]	Part number
ASA F 100 GPL 4kt	4.4	1	113339
ASA F 100/160 GPL 4kt	6.5	1	113410











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#### Welding Adapter ASA F 100 Octagon

Group: A828

#### Application

Welding plate with octagonal insert to receive Framo section. May be implemented into the structural steel design in anticipation of Framo-frames or used in situ as a connection element when clamping is not an option but hot works are permitted. The octagonal insert allows for full utilisation of beam section within the space required by the Welding Adapter ASA itself.

#### Scope of delivery

Mounting Plate 100 with welded on octagonal joint.

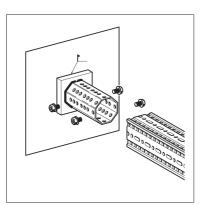
#### Installation

The welding plate of the ASA can be welded directly without previous treatment due to a corrosion-resistant weld-thru coating which is compatible with both the HDG surface of the Framo section and the health and safety requirements of the welding process. Once the ASA adapter has been connected, the coating may also receive paint without previous treatment. The Framo section must be connected to the Welding Adapter ASA with 4 x Self Forming Screw FLS.

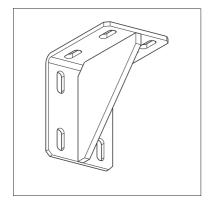
#### **Technical Data**

Туре	Adapter size H [mm]	Mounting Plate size [mm]
ASA F 100 GPL 8kt	200	120 x 120 x 20

Туре	W	Quantity	Part
	[kg]	[pack]	number
ASA F 100 GPL 8kt	2.1	1	113080







#### Corner Bracket WD F 100

Group: A430

#### Application

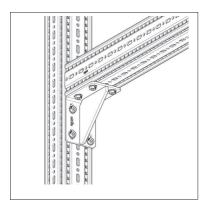
Component to be used for connections between two F100 or F100/160 sections when the structural design requires an alternative to the End Support STA F 100 as the default solution.

#### Installation

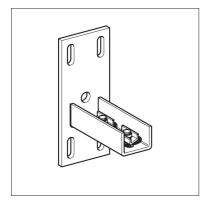
By using 8 x Self Forming Screw FLS

#### **Technical Data**

Туре	W	Quantity	Part
	[kg]	[pack]	number
WD F 100 140/140	1.9	1	113095







#### 41/41 Channel Adapter SA F 100

Group: A827

#### Application

Interface element to enable a stiff and solid connection between the Framo profile and strut channel of the international 41/41 mm standard. The 41/41 Channel Adapter SA F100 is equipped with automatically locking spring nuts which means that no accessories from the strut channel's range are required in order to make the connection.

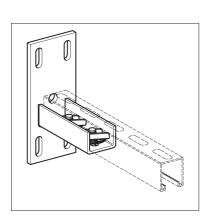
#### Installation

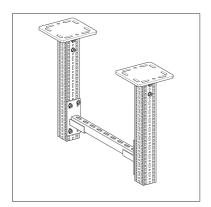
The Channel Adapter SA F100-41 requires 4 x Self Forming Screw FLS in order to be connected to the Framo profile. The strut channel must be inserted with the slot first whilst pressing the two bolt's heads triggering an automatic  $90^{\circ}$ -locking operation of the two channel spring nuts. The strut channel is now securely held and can be adjusted. Finally the two screws must be tightened with the appropriate torque for the strut channel used.

#### **Technical Data**

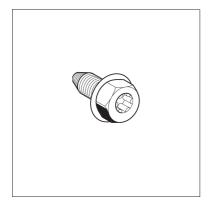
Туре	Dimension of base plate [mm]	Slots in base plate
SA F 100-41	190 x 80 x 8	M10

Туре	W	Quantity	Part
	[kg]	[pack]	number
SA F 100-41	1.8	1	113081









### Self Forming Screw FLS

Group: A430

#### Application

The Self Forming Screw FLS creates its own thread inside the wall of the Framo pilot hole. During the screw-driving operation, the base steel is re-shaped and hardened to form an air-tight seal between the threads of the screw and the surrounding steel, making it exceptionally resistant to vibrational loosening and increasing fastening strength.

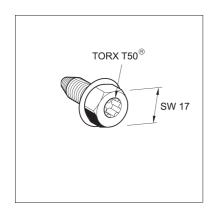
#### **Technical Data**

Application	Tightening torque [Nm]
System Framo	60
Connection to Channels MS 41	35

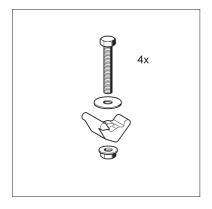
Material: Steel, HCP

Approvals MPA tested

Туре	W	Quantity	Part
	[kg]	[pack]	number
FLS F	0.03	100	192512







#### **Assembly Set PS**

Group: A640

#### Application

Element for connecting Beam Bracket TKO, Angled Beam Bracket SKO or End Support WBD to a beam section.

#### Scope of delivery

Туре	Beam Clip [Qty.]	Hexagon bolt 8.8 [Qty.]	Washer [Qty.]	Hexagon nut [Qty.]
Set P2 S	4 x P2	4 x M12 x 80	8 x 12/40	4 x M12
Set P3 S	4 x P3	4 x M16 x 100	8 x 16/125	4 x M16
Set P2/2 S	2 x P2	2 x M12 x 80	4 x 12/40	2 x M12

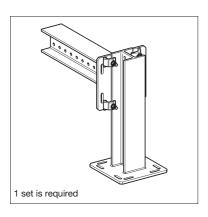
#### Installation

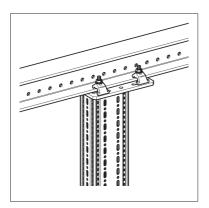
- The narrow ends of the Beam Clips must be fixed to the beam flange.
- Max. perm. torque of all M12 bolts: 85 Nm (Set P2 S)
- Max. perm. torque of all M16 bolts: 150 Nm (Set P3 S)
- Once fully tightened, the hexagon bolts must not be re-used!

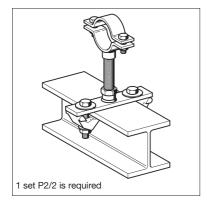
#### **Technical Data**

Material: Steel and cast iron, hcp

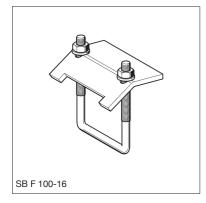
Туре	W [kg]	Qty. [set]	Part number
Set P2 S	1.6	1	168494
Set P3 S	2.0	1	179147
Set P2/2 S	0.6	1	183800

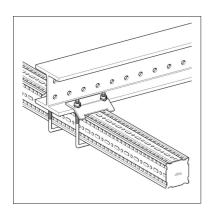












## U-Holder SB F 100

Group: A839

#### Application

Pre-assembled component to clamp Beam Section F100 to the flange side of traditional steel sections.

#### Scope of delivery

Type SB F 100-16: Holder with thread M10 Plate 2 Hexagon nuts M10 2 Washers

Type SB F 100-40 and 100/160-40 Holder with thread M12 Plate 2 Beam Clips P2 2 Hexagon nuts M12 2 Washers

#### Installation

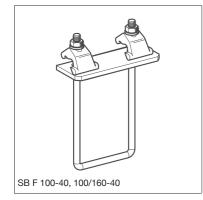
U-Holder to be used in pairs. Type 16 up to flange thickness 16 mm Type 40 up to flange thickness 40 mm

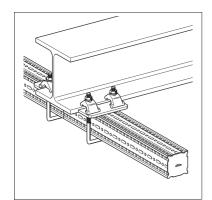
#### **Technical Data**

Material: U-Holder: Steel, Plate: Steel, Beam Clip Steel Hex-nut/Washer: Steel,

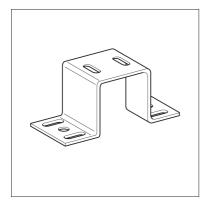
Steel, HCP Steel, HCP Steel resp. Cast iron, HCP er: Steel, HCP

Туре	W [kg]	Quantity [pack]	Part number
SB F 100-16	0.7	20	113082
SB F 100-40	1.6	10	113083
SB F 100/160-40	1.7	10	113101









#### Beam Section Holder TPH F 100

Group: A825

#### Application

Interface element to connect 90° intersecting Beam Sections F100. Alternatively the Beam Section Holder TPH may be used to connect only one beam section to an even surface with suitable wall anchors or with cast-in channel accessories.

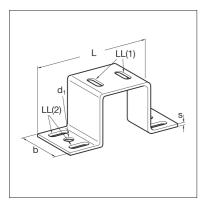
#### Installation

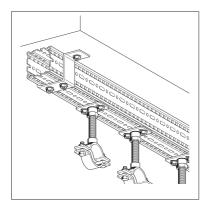
Connecting one Beam Section F100 90° to another one by using 6 x Self Forming Screw FLS applied through all elongated holes. Connecting to any other surface or member by using 2 x Self Forming Screws FLS through the two elongated holes on the top of the Beam Section Holder TPH F100 plus 2 appropriate fixing elements up to M12 through the two holes "d1".

#### **Technical Data**

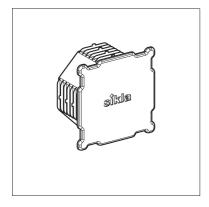
Туре	Lxbxs [mm]	Ød₁ [mm]	Elongated hole LL1 d x a [mm]	Elongated hole LL2 d x a [mm]
TPH F 100 C	219 x 100 x 4		11 x 20	11 x 20
TPH F 100/80 C	199 x 100 x 4	14	11 x 20	11 x 20

Туре	W [kg]	Quantity [pack]	Part number
TPH F 100 C	1.2	10	113084
TPH F 100/80 C	1.0	10	113085









#### End Cap ADK F 100

Group: A430

#### Application

Plastic end cap to close cut ends of Beam Section F100 to meet both visual and health & safety requirements. Standard Cantilever- and Beam Brackets (AK F100 and TKO F100) already include this end cap.

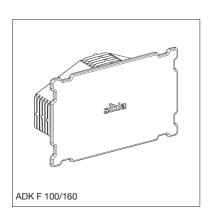
#### Installation

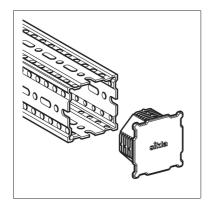
Mallet required.

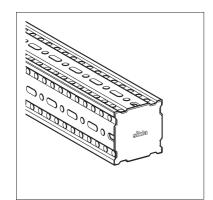
#### **Technical Data**

Material: PE, colour yellow

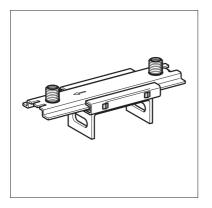
Туре	W [kg]	Quantity [pack]	Part number
ADK F 100	0.05	25	113086
ADK F 100/160	0.08	25	113102











#### Slide Set GS F 100 2G

Group: A436

#### Application

Pipe guide for twin-clamp connection designed to clutch the Beam Section F100 fixed by 2 x Self Forming Screws FLS.

#### Installation

Pipe clamp connection points "2G" receive M10 studs or M16 by adapter connection.

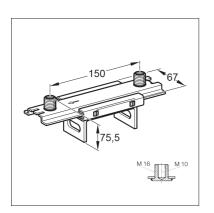
#### **Technical Data**

Permanent temperature range: 130° C

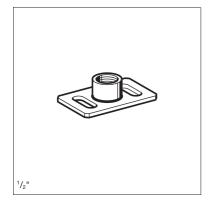
#### Material:

Slide element: Slide bars: Retaining plate: Steel, HCP Polyamide (glass-fibre reinforced) Steel, HCP

Туре	W	Quantity	Part
	[kg]	[pack]	number
GS F 100 2G2	0.8	10	113093







# Mounting Plate GPL F 100 Group: A838

#### Application

Interface component to connect threaded bar and threaded tube to Beam Section F100.

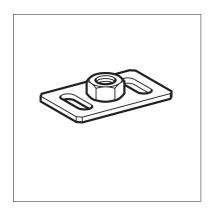
#### Installation

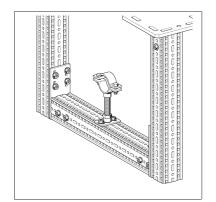
Requires 2 x Self Forming Screw FLS per Mounting Plate GPL.

**Technical Data** Dimensions of Base plate: Material:

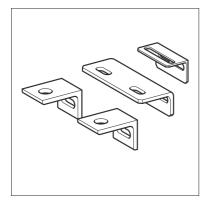
100 x 50 x 4 mm Steel, HCP

Туре	W [kg]	Quantity [pack]	Part number
GPL F 100-1/2"	0.2	50	113089
GPL F 100-M10	0.2	50	113338
GPL F 100-M12	0.2	50	113646
GPL F 100-M16	0.2	50	113090









# U Bolt Fastening UB F

Group: A430

# Application

U Bolt Fastening to connect standard U-Bolts required for pipework to the supporting Beam Sections, Cantilever Brackets and Beam Brackets F80 or F100.

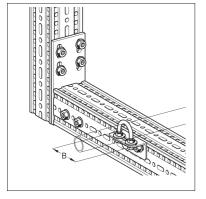
# Scope of delivery

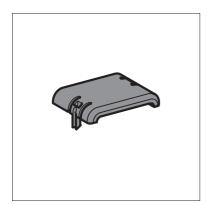
For U-bolts ≥ 4" always 2 U-bolt fastenings F are needed.

# **Technical Data**

Material: Steel, HCP or hot-dipped galvanised

Туре	B [mm]	W [kg]	Quantity [pack]	Part number
UB F <sup>1</sup> / <sub>2</sub> " - 1 <sup>1</sup> / <sub>2</sub> "	85	0.13	25	192931
UB F 2" - 3"	165	0.64	10	196212
UB F 4" - 6"	45	0.18	20	113124
UB F 8" - 12"	45	0.15	20	113125
UB F 378 - 530	45	0.15	20	113126





# Pad U-UB F 100

Group: A430

### Application

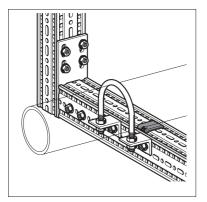
Insulation and surface protection pad to be used on demand when a pipes' expansion and contraction occurs directly on the F100 section.

### **Technical Data**

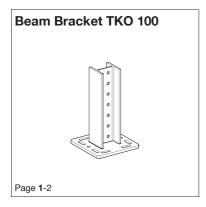
Material: Range of temperature:

Polyamide PA 6.0 -20° up to +130° C

Туре	W	Quantity	Part
	[kg]	[pack]	number
U-UB F 100	0.01	50	113094

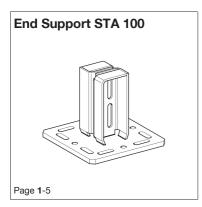


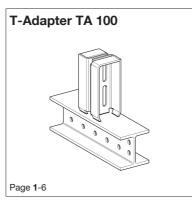


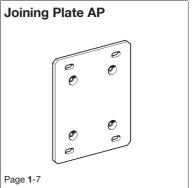


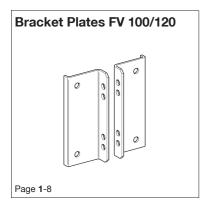
Joining Beam Bracket QKO 100 Page 1-3

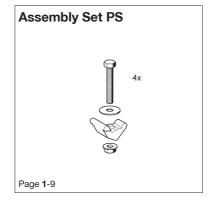


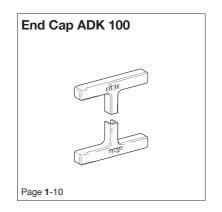




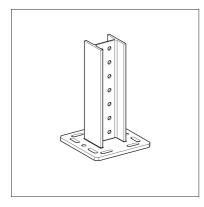












# Beam Bracket TKO 100

# Application

Element for mounting to floors, ceilings or walls or for assembling crossbars.

# Installation

Depending on the situation, different options are recommended:

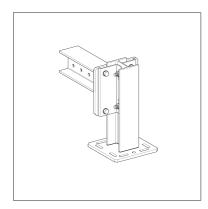
- a) Fixing to building structure using 4 heavy-duty anchors M12.
- b) Frictional connection to steel beams (flange width 80 120 mm) with Assembly Set P2.
- c) Interlocking connection to other beam brackets TKO 100 or 120 by means of Bracket Plates FV 100/120.

# **Technical Data**

Configuration: Material:

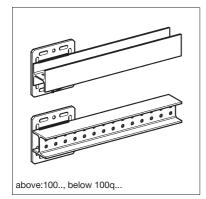
ation: Base plate welded to IPBI 100 beam Steel, hot-dipped galvanised

	Туре
0	TKO
	TKO
	TKO
0	TKO
014 0 12	TKO
30 170	TKO
220	TKO
	TKO
	TKO
	TKO
	TKO



Туре	L [mm]	W [kg]	Quantity [pack]	Part number
TKO 100 x 250	250	8.5	1	193099
TKO 100 x 350	350	10.4	1	185402
TKO 100 x 400	400	11.2	1	185411
TKO 100 x 450	450	11.9	1	185420
TKO 100 x 500	500	12.7	1	185429
TKO 100 x 550	550	13.7	1	185438
TKO 100 x 600	600	14.2	1	185447
TKO 100 x 650	650	15.0	1	185456
TKO 100 x 700	700	16.6	1	185465
TKO 100 x 750	750	17.2	1	185474
TKO 100 x 800	800	17.9	1	185483
TKO 100 x 850	850	18.8	1	185492
TKO 100 x 900	900	19.6	1	185501
TKO 100 x 950	950	20.3	1	185510
TKO 100 x 1000	1000	21.2	1	185519
TKO 100 x 1100	1100	22.3	1	185528
TKO 100 x 1200	1200	25.2	1	185537
TKO 100 x 1300	1300	25.8	1	185546
TKO 100 x 1400	1400	28.6	1	185555
TKO 100 x 1500	1500	30.1	1	185564
TKO 100 x 2000	2000	39.0	1	185573





# Joining Beam Bracket QKO 100

# Application

Element for vertical assembly on concrete or steel beams, especially for risers.

# Installation

Depending on the situation, different options are recommended:

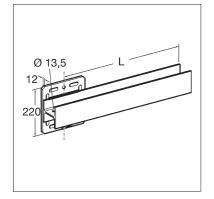
- Fixing on concrete by means of 4 heavy duty anchors M12 a)
- Frictional connection to steel beams (flange width 80 120 mm) by means b) of Assembly Set P2.
- Interlocking connection to TKO 100 or 120 by means of Bracket Plates FV c) 100/120

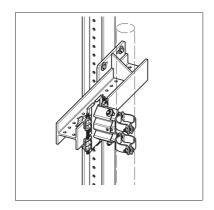
# Technical Data

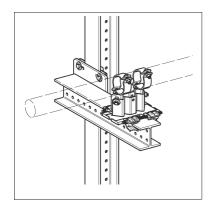
Confi Mate

innical Data	
nfiguration:	Base plate and support flange welded to IPBI 100
erial:	Steel, hot-dipped galvanised

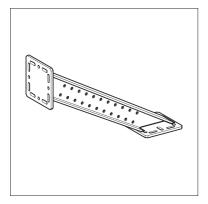
Туре	L [mm]	W [kg]	Quantity [pack]	Part number
QKO 100 x 600	600	17.1	1	183917
QKO 100 x 1000	1000	24.1	1	183926
QKO 100q x 600	600	16.5	1	183935
QKO 100q x 1000	1000	23.5	1	183944











# Angled Beam Bracket SKO 100

# Application

Beam Bracket suitable as support for horizontal structures or as reinforcement of bearing constructions on site.

# Installation

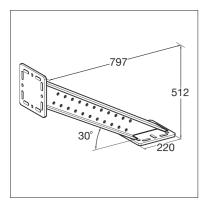
Depending on the situation, different options are recommended:

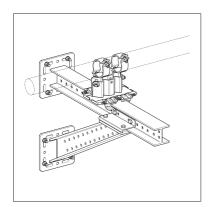
- a) Fixing to the building structure using 4 heavy-duty anchors M12.
- b) Frictional construction to steel beams (flange width 80 120 mm) with Assembly Set P2.
- c) Interlocking connection to Beam Bracket TKO 100 or 120 by means of Bracket Plates FV 100/120.

# **Technical Data**

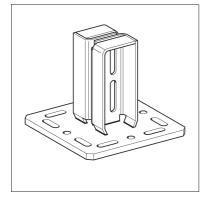
Configuration:Base plate welded to beam section 100Material:Steel, hot-dipped galvanised

Туре	W	Quantity	Part
	[kg]	[pack]	number
SKO 100-30 x 760	22.0	1	191531









# End Support STA 100

# Application

In connection with Beam Bracket TKO 100, the End Support STA 100 enables the construction of crossbars, as well as further conjuctions between building structure and steel construction. By means of the slotted holes a simple compensation of structural deviations is possible.

# Scope of delivery

Base plate welded to beam holder Accessories:

4 Hexagon Bolts M12 x 35

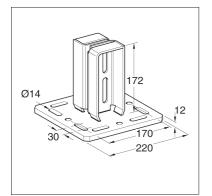
4 Hexagon Nuts M12

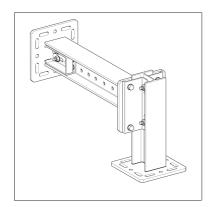
8 Washers

# **Technical Data**

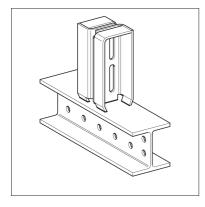
Material:	
STA 100:	Steel, hot-dipped galvanised
Bolts:	Steel, class 8.8, hot-dipped galvanised
Nuts:	Steel, class 8.8, hot-dipped galvanised
Washers:	Steel, hot-dipped galvanised

Туре	W	Quantity	Part
	[kg]	[pack]	number
STA 100	6.4	1	183971









# T-Adapter TA 100

# Application

In combination with Beam Bracket TKO 100, the T-Adapter allows different Tstructures on the floor or hanging T-structures without need of further accessories. Oblong holes permit a simple compensation on structural situations.

# Scope of delivery

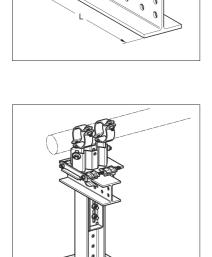
T-Adapter TA 100 Accessories: 4 Hexagon Bolts M12 x 45 4 Hexagon Nuts M12

8 Washers

# **Technical Data**

Configuration:<br/>Material:Beam 100 welded to beam holderTA 100:Steel, hot-dipped galvanisedBolts:Steel, class 8.8, hot-dipped galvanisedNuts:Steel, class 8, hot-dipped galvanisedWashers:Steel, hot-dipped galvanised

Туре	L [mm]	W [kg]	Quantity [pack]	Part number
TA 100 x 200	200	5.1	1	191081
TA 100 x 400	400	8.4	1	191166
TA 100 x 600	600	11.8	1	191099

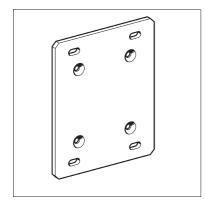


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# **Joining Plate AP**

# Application

Interface element to enable the connection of standard endplates of Beam Brackets TKO F80 or F100, TKO 100 or 120 to primary steel with flange width >120 mm. Alternatively this product may be used to achieve a greater distance between wall anchor positions when required by the anchor calculation's result.

# Scope of delivery

Joining Plate AP

- 4 Countersink Screws M12 x 40
- 4 Hexagon Nuts M12

4 Washers

# Installation

Connect the Joining Plate AP to the Beam Bracket TKO's end plate by using the accessories above. Then continue with either heavy-duty anchors or Assembly Set P/Beam Clips as required by the building structure.

# **Technical Data**

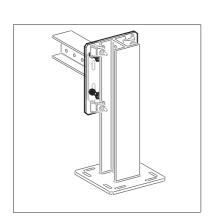
Туре	Dimension of Base Plate L x B [mm]	Perforation for	Connection to flange width [mm]
AP 121/160	320 x 260 x 12	M12	121 - 160
AP 161/200	320 x 310 x 12	M16	161 - 200
AP 201/300	420 x 220 x 12	M16	201 - 300
AP 301/310	440 x 220 x 12	M16	301 - 310

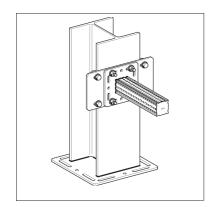
### Material:

Joining Plate: Bolts: Nuts: Washers:

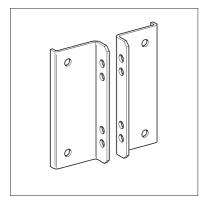
Steel, hot-dipped galvanised Steel DIN 7991, class 8.8, Dacromet/delta seal Steel, class 8, hot-dipped galvanised Steel, hot-dipped galvanised

Туре	W [kg]	Quantity [pack]	Part number
AP 121/160	7.9	1	183953
AP 161/200	9.3	1	183962
AP 201/300	8.5	1	183980
AP 301/310	9.8	1	113129









# Bracket Plates FV 100/120

### Application

For safe interlocking connection of a Beam Bracket or an End Support STA to other Beam Brackets TKO (adjustment as per grid with 25 or 50 mm).

# Scope of delivery

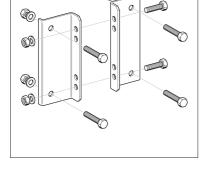
Two identical plates. Accessories: 2 Hexagon Bolts M12 x 35 4 Hexagon Bolts M12 x 45 6 Hexagon Nuts M12 6 Washers

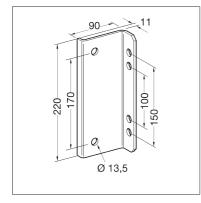
# Installation

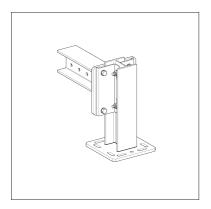
Mount Bracket Plates to Beam Bracket TKO by using 2 Hexagon Bolts M12 x 35. Then attach requested Beam Bracket TKO or End Support STA by using 4 Hexagon Bolts M12 x 45.

# **Technical Data**

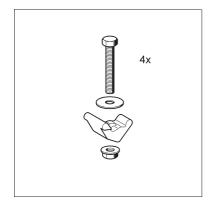
Material: Bracket Plates: Bolts: Nuts: Washers:	Steel, clas Steel, clas	ot-dipped galvanised lass 8.8, hot-dipped galvanised lass 8, hot-dipped galvanised ot-dipped galvanised			
Туре		W [kg]	Quantity [pack]	Part number	
FV 100/120		2.5	<b>1</b>	187616	











# **Assembly Set PS**

# Application

Element for connecting Beam Bracket TKO, Angled Beam Bracket SKO or End Support WBD to a beam section.

# Scope of delivery

Туре	Beam Clip [Qty.]	Hexagon bolt 8.8 [Qty.]	Washer [Qty.]	Hexagon nut [Qty.]
Set P2 S	4 x P2	4 x M12 x 80	8 x 12/40	4 x M12
Set P3 S	4 x P3	4 x M16 x 100	8 x 16/125	4 x M16
Set P2/2 S	2 x P2	2 x M12 x 80	4 x 12/40	2 x M12

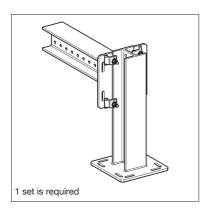
# Installation

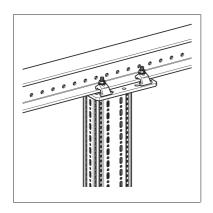
- The narrow ends of the Beam Clips must be fixed to the beam flange.
- Max. perm. torque of all M12 bolts: 85 Nm (Set P2 S)
- Max. perm. torque of all M16 bolts: 150 Nm (Set P3 S)
- Once fully tightened, the hexagon bolts must not be re-used!

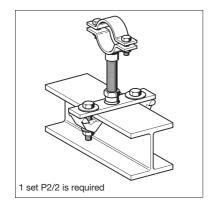
### **Technical Data**

Material: Steel and cast iron, hcp

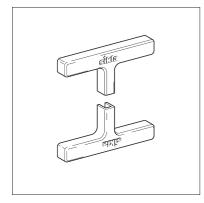
Туре	W [kg]	Qty. [set]	Part number
Set P2 S	1.6	1	168494
Set P3 S	2.0	1	179147
Set P2/2 S	0.6	1	183800











# End Cap ADK 100

# Application

Suitable as end cap for STF 100 Beams, Beam Brackets, Beam Angles and other elements based on the Simotec Beam STF 100 or any HEA 100 shape steel beam. The signal colour is helpful in accident prevention.

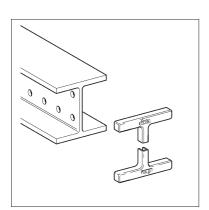
# Scope of delivery

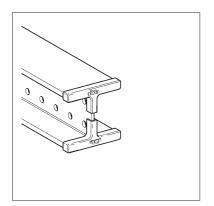
Loose, two End Caps are necessary for each beam end.

# **Technical Data**

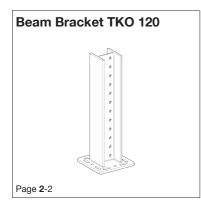
Material: HDPE (for temperature range -20° to + 80°C), yellow

Туре	W	Quantity	Part
	[kg]	[pack]	number
ADK 100	0.02	50	190433

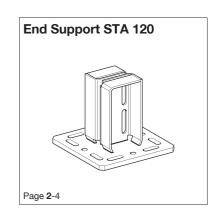


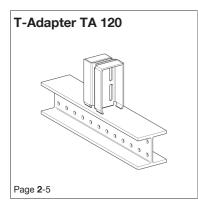


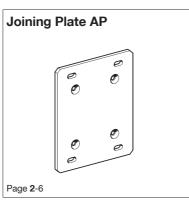


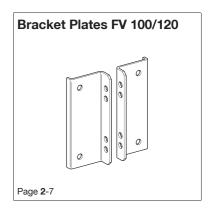


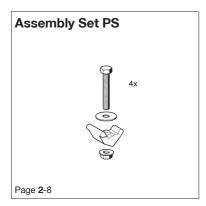






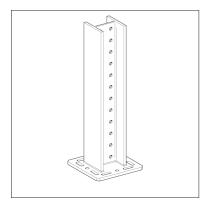












# Beam Bracket TKO 120

# Application

Element for mounting to floors, ceilings or walls, or for assembling crossbars. Types TKO 120 x 1500, 2000 and 3000 are not suitable for cantilever arrangements.

### Installation

Depending on the situation, different options are recommended:

- a) Fixation to building structure using 4 heavy duty anchors M12.
- b) Frictional connection to steel beams (flange width 80 120 mm) with Assembly Set P2.
- c) Interlocking connection to further Beam Brackets by means of Bracket Plates FV100/120.

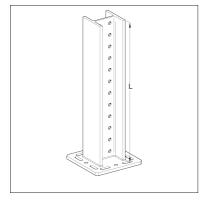
The Ø 13 mm holes following a 50 mm grid allow the combination with other products using M12 bolts.

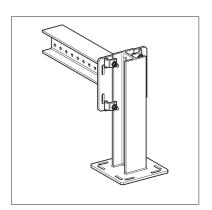
# **Technical Data**

Dimensions of base plate	Slots in base plate for	Ø of punched holes	Grid of holes	
[mm]		[mm]	[mm]	
220 x 220 x 12	M12	13	50	

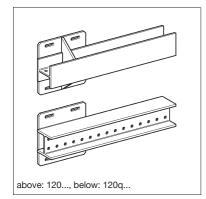
Configuration:Base plate welded to IPB120Material:Steel, hot-dipped galvanised

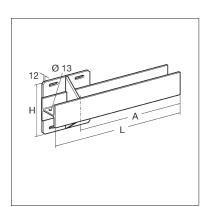
Туре	L [mm]	W [kg]	Quantity [pack]	Part number
TKO 120 x 350	350	13.3	1	193150
TKO 120 x 600	600	19.9	1	193167
TKO 120 x 800	800	25.2	1	193174
TKO 120 x 1000	1000	30.5	1	193181
TKO 120 x 1500	1500	43.7	1	193198
TKO 120 x 2000	2000	56.9	1	193204
TKO 120 x 3000	3000	83.4	1	193105

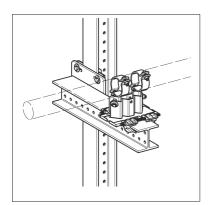












# Joining Beam Bracket QKO 120

# Application

The Joining Beam Bracket enables the attachment of beams on concrete or at other steel girders. The connection of further STF Beam elements is made by Beam Connectors.

# Installation

Depending on the situation, different options are recommended:

- a) Fixation to concrete by means of 4 heavy duty anchors M12 or M16. Frictional connection to steel beams with Assembly Set P2 (for flange b)
- width 80 120 mm) Interlocking connection to TKO 100 or 120 by means of Bracket Plates c) FV 100/120.

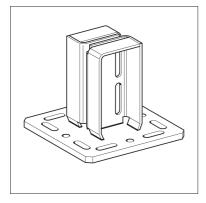
# **Technical Data**

Туре	Dimensions of base plate H x H [mm]	Length of beam section A / L [mm]	Slots in base plate for
QKO 120 and QKO 120q x 600	220 x 220	600/700	M12
QKO 120 and QKO 120q x 1000	220 x 220	1000/1100	M12

Configuration: Base plate and support flange welded to an IPB 120 beam section Material: Steel, hot-dipped galvanised

Туре	W [kg]	Quantity [pack]	Part number
QKO 120 x 600	23.2	1	193228
QKO 120 x 1000	33.7	1	193235
QKO 120q x 600	22.4	1	193242
QKO 120q x 1000	33.6	1	193259





# End Support STA 120

### Application

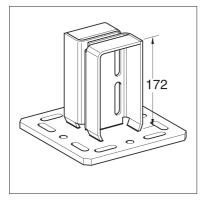
In combination with Beam Bracket TKO 120, the End Support enables the construction of crossbars, as well as further conjuctions between building structure and steel construction. By means of oblong holes a simple compensation of structural deviations is possible.

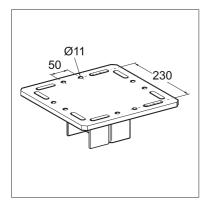
Scope of delivery End Support STA 120 Accessories: 4 Hexagon bolts M12 x 40 8 Washers

# **Technical Data**

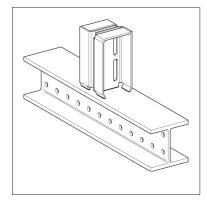
Thickness of base plate [mm]	Slot in base for
220 x 220 x 12	M12

Material: STA 120: Bolts: Nuts: Washers:	,	8.8, hot-dip 8, hot-dipp	oped galvanised ed galvanised	
Туре		W [kg]	Quantity [pack]	Part number
STA 120		6.8	1	193211









# T-Adapter TA 120

# Application

In combination with Beam Bracket TKO 120, the T-Adapter permits different Tstructures on the floor or hanging T-structures without need of further accessories. Oblong holes permit a simple compensation on structural situations.

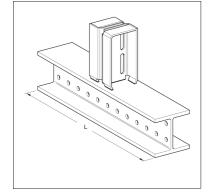
# Scope of delivery T-Adapter TA 120

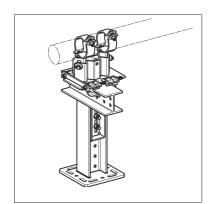
- T-Adapter TA 120 Accessories:
- 4 Hexagon bolts M12 x 40
- 4 Hexagon nuts M12 × 40
- 8 Washers

# **Technical Data**

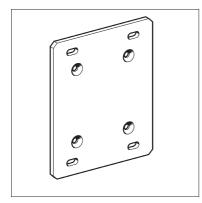
Configuration: Material:	Beam section 120 welded to beam holder
TA 120:	Steel, hot-dipped galvanised
Bolts:	Steel, class 8.8, hot-dipped galvanised
Nuts:	Steel, class 8, hot-dipped galvanised
Washers:	Steel, hot-dipped galvanised

Туре	L [mm]	W [kg]	Quantity [pack]	Part number
TA 120 x 200	200	8.1	1	193112
TA 120 x 400	400	14.0	1	193129
TA 120 x 600	600	19.0	1	193136









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# **Joining Plate AP**

# Application

Interface element to enable the connection of standard endplates of Beam Brackets TKO F80 or F100, TKO 100 or 120 to primary steel with flange width >120 mm. Alternatively this product may be used to achieve a greater distance between wall anchor positions when required by the anchor calculation's result.

# Scope of delivery

Joining Plate AP

4 Countersink Screws M12 x 40

4 Hexagon Nuts M12

4 Washers

# Installation

Connect the Joining Plate AP to the Beam Bracket TKO's end plate by using the accessories above. Then continue with either heavy-duty anchors or Assembly Set P/Beam Clips as required by the building structure.

# **Technical Data**

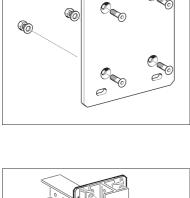
Туре	Dimension of Base Plate L x B [mm]	Perforation for	Connection to flange width [mm]
AP 121/160	320 x 260 x 12	M12	121 - 160
AP 161/200	320 x 310 x 12	M16	161 - 200
AP 201/300	420 x 220 x 12	M16	201 - 300
AP 301/310	440 x 220 x 12	M16	301 - 310

### Material:

Joining Plate: Bolts: Nuts: Washers:

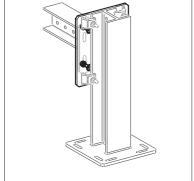
Steel, hot-dipped galvanised Steel DIN 7991, class 8.8, Dacromet/delta seal Steel, class 8, hot-dipped galvanised Steel, hot-dipped galvanised

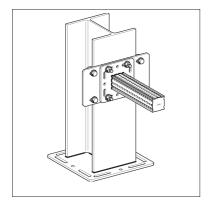
Туре	W [kg]	Quantity [pack]	Part number
AP 121/160	7.9	1	183953
AP 161/200	9.3	1	183962
AP 201/300	8.5	1	183980
AP 301/310	9.8	1	113129



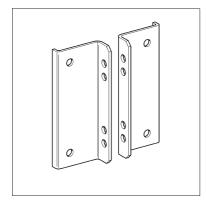
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# Bracket Plates FV 100/120

# Application

For safe interlocking connection of a Beam Bracket or an End Support STA to other Beam Brackets TKO (adjustment as per grid with 25 or 50 mm).

# Scope of delivery

Two identical plates.

Accessories:

- 2 Hexagon Bolts M12 x 35
- 4 Hexagon Bolts M12 x 45
- 6 Hexagon Nuts M12
- 6 Washers

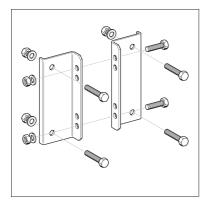
# Installation

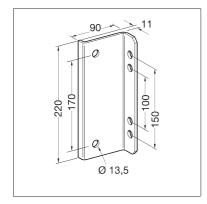
Mount Bracket Plates to Beam Bracket TKO by using 2 Hexagon Bolts M12 x 35. Then attach requested Beam Bracket TKO or End Support STA by using 4 Hexagon Bolts M12 x 45.

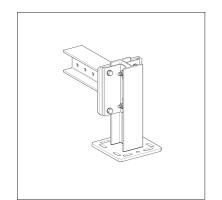
# **Technical Data**

Material: Bracket Plates: Bolts: Nuts: Washers:	Steel, hot-dipped galvanised Steel, class 8.8, hot-dipped galvanised Steel, class 8, hot-dipped galvanised Steel, hot-dipped galvanised	
Туре	W Quantity	

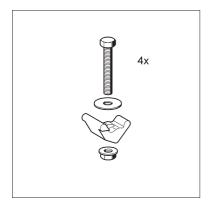
Туре	W	Quantity	Part
	[kg]	[pack]	number
FV 100/120	2.5	1	187616











# **Assembly Set PS**

# Application

Element for connecting Beam Bracket TKO, Angled Beam Bracket SKO or End Support WBD to a beam section.

# Scope of delivery

Туре	Beam Clip [Qty.]	Hexagon bolt 8.8 [Qty.]	Washer [Qty.]	Hexagon nut [Qty.]
Set P2 S	4 x P2	4 x M12 x 80	8 x 12/40	4 x M12
Set P3 S	4 x P3	4 x M16 x 100	8 x 16/125	4 x M16
Set P2/2 S	2 x P2	2 x M12 x 80	4 x 12/40	2 x M12

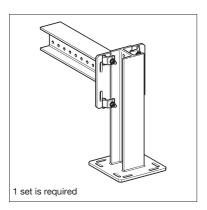
### Installation

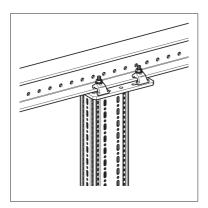
- The narrow ends of the Beam Clips must be fixed to the beam flange.
- ◆ Max. perm. torque of all M12 bolts: 85 Nm (Set P2 S)
- Max. perm. torque of all M16 bolts: 150 Nm (Set P3 S)
- Once fully tightened, the hexagon bolts must not be re-used!

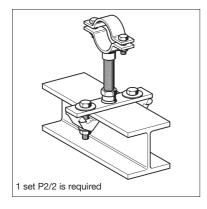
# **Technical Data**

Material: Steel and cast iron, hcp

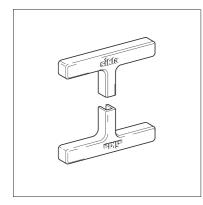
Туре	W [kg]	Qty. [set]	Part number
Set P2 S	1.6	1	168494
Set P3 S	2.0	1	179147
Set P2/2 S	0.6	1	183800











# End Cap ADK 120

# Application

Suitable as end cap for Beam Brackets 120, Joining Beam Brackets 120 and other elements based on steel beam HEB 120. The signal colour is helpful in accident prevention.

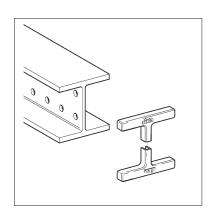
# Installation

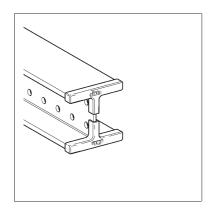
Loose, two End Caps are necessary for each beam end. Can easily be fitted and keeps securely in place.

# **Technical Data**

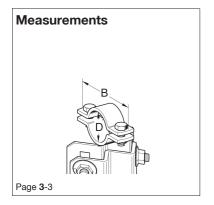
Material: HDPE (for temperature range -20 to +80° C), yellow

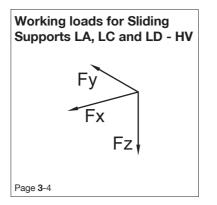
Туре	W	Quantity	Part
	[kg]	[pack]	number
ADK 120	0.02	50	173189

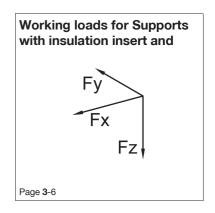


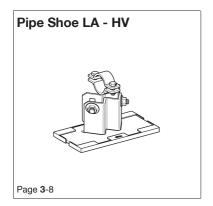


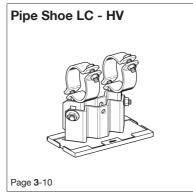


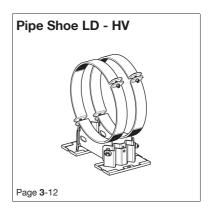


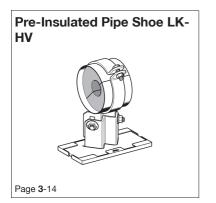


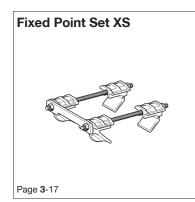




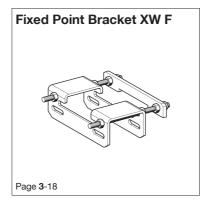


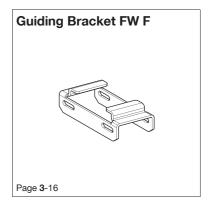


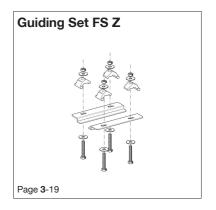




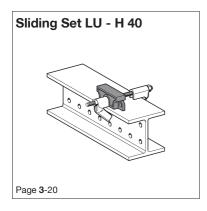


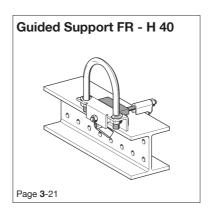


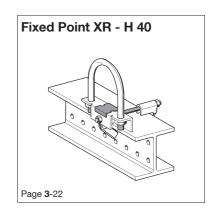




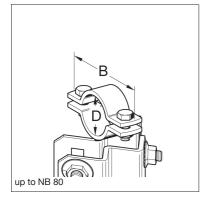


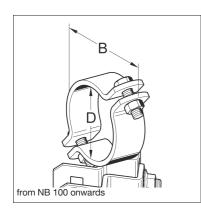












# B

### Pipe Clamp Material [mm] Pipe NB Pipe D Pipe Clamp Hex. bolts B [mm] 15 22 85 30 x 5 M10 x 40 27 M10 x 40 20 92 30 x 5 M10 x 40 25 34 100 30 x 5 M10 x 40 32 43 111 30 x 5 40 M10 x 40 49 117 30 x 5 50 M12 x 45 61 139 40 x 5 M12 x 45 65 77 156 40 x 5 M12 x 45 80 89 168 40 x 5 M12 x 50 100 115 165 50 x 5 M12 x 50 125 140 183 50 x 5 M12 x 55 150 169 215 50 x 8 M12 x 55 200 220 252 50 x 8 M16 x 65 250 273 306 60 x 8 M16 x 65 300 324 347 60 x 8 M16 x 65 350 356 375 60 x 8 400 407 423 70 x 8 M16 x 65 500 508 524 70 x 8 M16 x 65 600 610 626 70 x 8 M16 x 65

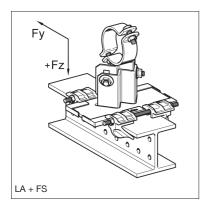
Supports without insulation insert

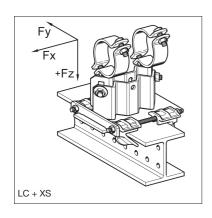
Measurements

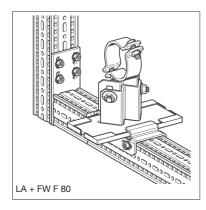
# Supports with insulation insert

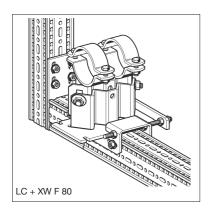
Pipe NB	Pipe D	Insulation Thickness [mm]	Insulation Length [mm]	Pipe Clamp B [mm]	Pipe Clamp Material [mm]	Hex. bolts
25	33.7	50	100	180	50 x 5	M12 x 50
32	42.4	50	100	187	50 x 5	M12 x 50
40	48.3	50	100	190	50 x 5	M12 x 50
50	60.3	50	100	199	50 x 5	M12 x 50
65	76.1	60	100	237	50 x 8	M12 x 55
80	88.9	60	100	245	50 x 8	M12 x 55
100	114.3	60	200	278	50 x 8	M16 x 60
125	139.7	60	200	295	50 x 8	M16 x 60
150	168.3	60	200	319	60 x 8	M16 x 65
200	219.1	60	200	363	60 x 8	M16 x 65
250	273.0	60	200	412	60 x 8	M16 x 65
300	323.9	80	200	503	70 x 8	M16 x 65











# Working loads for Sliding Supports LA, LC and LD - HV

Basis for assessment EC 3, working loads for Supports in delivery status

### Sliding Support LA - HV + Guiding Set FS resp. Fixed Point Set XS Sliding Support LA - HV + Guiding Bracket FW F 80 resp. Fixed Point Bracket XW F 80

		-	_		1	_	_	_	
Height	DN	Fx [kN]	Fy [kN]	+ Fz [kN]		- Fz FS 80/120	- Fz FW F 80	- Fz XS 80/120	- Fz XW F 80
		X-Supports only	[KIN]	נגואן		[kN]	[kN]	[kN]	[kN]
90	≤ 25	9.1	5.2	15.4		14	6.1	15.4	15.4
90	32	8.8	4.9	15.4		14	6.1	15.4	15.4
90	40	8.6	4.8	15.4		14	6.1	15.4	15.4
90	50	8.2	4.4	15.4		14	6.1	15.4	15.4
90	65	7.7	3.9	15.4		14	6.1	15.4	15.4
90	80	7.3	3.6	15.4		14	6.1	15.4	15.4
90	100	6.5	2.8	15.4		14	6.1	15.4	15.4
90	125	5.7	2.1	15.4		14	6.1	15.4	15.4
90	150	4.7	1.3	15.4		14	6.1	15.4	15.4
150	≤ 25	8.0	4.2	15.4		14	6.1	15.4	15.4
150	32	7.9	3.9	15.4		14	6.1	15.4	15.4
150	40	7.8	3.9	15.4		14	6.1	15.4	15.4
150	50	7.6	3.6	15.4		14	6.1	15.4	15.4
150	65	7.4	3.2	15.4		14	6.1	15.4	15.4
150	80	7.2	3.0	15.4		14	6.1	15.4	15.4
150	100	6.9	2.5	15.4		14	6.1	15.4	15.4
150	125	6.5	2.0	15.4		14	6.1	15.4	15.4
150	150	6.1	1.4	15.4		14	6.1	15.4	15.4
200	≤ 25	6.3	3.6	15.4		14	6.1	15.4	15.4
200	32	6.2	3.5	15.4		14	6.1	15.4	15.4
200	40	6.2	3.4	15.4		14	6.1	15.4	15.4
200	50	6.0	3.2	15.4		14	6.1	15.4	15.4
200	65	5.9	3.0	15.4		14	6.1	15.4	15.4
200	80	5.7	2.8	15.4		14	6.1	15.4	15.4
200	100	5.5	2.4	15.4		14	6.1	15.4	15.4
200	125	5.2	2.0	15.4		14	6.1	15.4	15.4
200	150	4.9	1.6	15.4		14	6.1	15.4	15.4

Sliding Support LC - HV + Guiding Set FS resp. Fixed Point Set XS Sliding Support LC - HV + Guiding Bracket FW F 80 resp. Fixed Point Bracket XW F 80





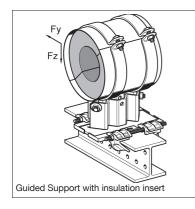
Height	DN	Fx [kN]	Fy [kN]	+ Fz [kN]	- Fz FS 80/120	- Fz FW F 80	- Fz XS 80/120	- Fz XW F 80
		X-Supports only			[kN]	[kN]	[kN]	[kN]
90	≤ 25	14.3	6.3	17.0	14	6.1	17	17
90	32	14.1	6.2	17.0	14	6.1	17	17
90	40	14.0	6.1	17.0	14	6.1	17	17
90	50	13.9	5.9	17.0	14	6.1	17	17
90	65	13.6	5.6	17.0	14	6.1	17	17
90	80	13.5	5.4	17.0	14	6.1	17	17
90	100	13.1	5.0	17.0	14	6.1	17	17
90	125	12.7	4.5	17.0	14	6.1	17	17
90	150	12.3	4.0	17.0	14	6.1	17	17
90	200	11.6	3.2	17.0	14	6.1	17	17
90	250	10.8	2.3	17.0	14	6.1	17	17
90	300	10.1	1.5	17.0	14	6.1	17	17
150	≤ 25	8.5	4.9	17.0	14	6.1	17	17
150	32	8.5	4.8	17.0	14	6.1	17	17
150	40	8.5	4.7	17.0	14	6.1	17	17
150	50	8.4	4.6	17.0	14	6.1	17	17
150	65	8.4	4.4	17.0	14	6.1	17	17
150	80	8.4	4.3	17.0	14	6.1	17	17
150	100	8.3	4.0	17.0	14	6.1	17	17
150	125	8.3	3.7	17.0	14	6.1	17	17
150	150	8.2	3.3	17.0	14	6.1	17	17
150	200	8.1	2.7	17.0	14	6.1	17	17
150	250	8.0	2.1	17.0	14	6.1	17	17
150	300	7.9	1.5	17.0	14	6.1	17	17
200	≤ 25	7.3	5.3	17.0	14	6.1	17	17
200	32	7.2	5.2	17.0	14	6.1	17	17
200	40	7.2	5.1	17.0	14	6.1	17	17
200	50	7.1	4.9	17.0	14	6.1	17	17
200	65	7.0	4.7	17.0	14	6.1	17	17
200	80	6.9	4.6	17.0	14	6.1	17	17
200	100	6.7	4.3	17.0	14	6.1	17	17
200	125	6.5	4.0	17.0	14	6.1	17	17
200	150	6.3	3.6	17.0	14	6.1	17	17
200	200	5.9	3.0	17.0	14	6.1	17	17
200	250	5.5	2.3	17.0	14	6.1	17	17
200	300	5.1	1.7	17.0	14	6.1	17	17
200	300	5.1	1.7	17.0	14	0.1	17	17

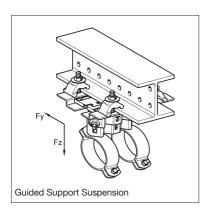
Sliding Support LD - HV + 2 x Guiding Set FS resp. 2 x Fixed Point Sets XS Sliding Support LD - HV + 2 x Guiding Bracket FW F 80 resp. 2 x Fixed Point Bracket XW F 80

Height	DN	Fx	Fy	+ Fz		- Fz	- Fz	- Fz	- Fz
		[kN]	[kN]	[kN]		FS 80/120	FW F 80	XS 80/120	XW F 80
		X-Supports only				[kN]	[kN]	[kN]	[kN]
90	≤ 350	25.0	13.1	32.8		28	12.2	32.8	32.8
90	400	22.5	11.9	32.8		28	12.2	32.8	32.8
90	500	20.8	9.4	32.8		28	12.2	32.8	32.8
90	600	10.3	7.2	32.8		28	12.2	32.8	32.8
150	≤ 350	25.0	12.9	32.8		28	12.2	32.8	32.8
150	400	22.5	11.5	32.8		28	12.2	32.8	32.8
150	500	17.3	8.8	32.8		28	12.2	32.8	32.8
150	600	8.7	6.3	32.8		28	12.2	32.8	32.8
200	≤ 350	25.0	11.3	32.8		28	12.2	32.8	32.8
200	400	20.5	10.2	32.8		28	12.2	32.8	32.8
200	500	15.7	8.1	32.8		28	12.2	32.8	32.8
200	600	7.5	6.1	32.8		28	12.2	32.8	32.8
<b>L</b> ustha	Eurther statical product datas are sucilable on request								

Further statical product datas are available on request.







# Working loads for Supports with insulation insert and suspension

Basis of assessment EC 3, working loads for Supports in delivery status

# Sliding Supports LK - HV + Guiding Set FS

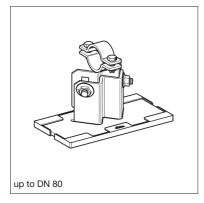
Height	DN	Fy	± Fz
5		[kŃ]	[kN]
150	25	3.1	3.1
150	32	3.8	3.8
150	40	4.3	4.3
150	50	4.0	3.9
150	65	2.8	2.8
150	80	2.5	2.4
150	100	4.5	17.0
150	125	4.1	17.0
150	150	3.6	17.0
150	200	2.8	17.0
150	250	1.9	17.0
150	300	0.4	17.0

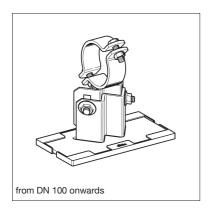


# Sliding Supports LC - HV + Guiding Set FS Z

Height	DN	Fy	± Fz
		[kŃ]	[kN]
90	25	5.0	10.0
90	32	4.8	10.0
90	40	4.7	10.0
90	50	4.5	10.0
90	65	4.2	10.0
90	80	4.0	10.0
90	100	3.6	10.0
90	125	3.3	10.0
90	150	3.1	10.0
90	200	2.7	10.0
90	250	2.3	10.0
90	300	1.5	10.0
150	25	3.2	10.0
150	32	3.1	10.0
150	40	3.1	10.0
150	50	3.0	10.0
150	65	2.8	10.0
150	80	2.8	10.0
150	100	2.6	10.0
150	125	2.4	10.0
150	150	2.3	10.0
150	200	2.0	10.0
150	250	1.7	10.0
150	300	1.3	10.0
200	25	2.5	10.0
200	32	2.4	10.0
200	40	2.4	10.0
200	50	2.3	10.0
200	65	2.2	10.0
200	80	2.2	10.0
200	100	2.1	10.0
200	125	2.0	10.0
200	150	1.9	10.0
200	200	1.7	10.0
200	250	1.5	10.0
200	300	1.1	10.0







# Pipe Shoe LA - HV

# Application

Pipe Shoe - Single Clamp

For pipes on suitable surfaces. Height-adjustable in steps of 2.5mm. When resting on steel beams, a minimum flange width of 80 mm is recommended.

### Scope of delivery

Upper and lower part are bolted together allowing height adjustment. The slide plate is fixed to the lower part.

# **Technical Data**

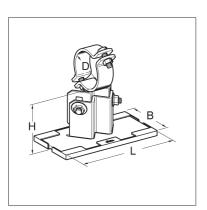
Туре	Height H as delivered [mm]	Height H Range [mm]
LA - HV 90	90	88.5 113.5
LA - HV 150	150	116 168.5
LA - HV 200	200	171 223.5

Dimensions: Metal plate: Slide plate incl.:

Material: Metal plates: Bolts, Nuts: Slide Plate: Temperature range: L = 250 mm x B = 100 mm L = 256 mm x B = 105 mm

Steel, HCP Steel, HCP Polyamide 6.0, glass fibre reinforced, black -20 up to +130° C (at the slide plate)





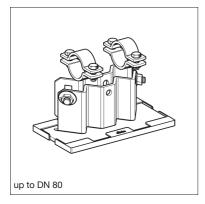


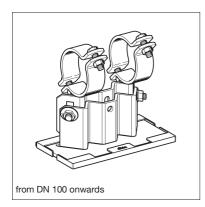
Note: HV 200 - minimum quantity and delivery time on request



Туре	D (pipe) [mm]	W [kg]	Quantity [pack]	Part number
LA - HV 90 DN 15	21.3	2.8	1	112386
LA - HV 90 DN 20	26.9	2.8	1	112387
LA - HV 90 DN 25	33.7	2.9	1	110035
LA - HV 90 DN 32	42.4	2.9	1	110036
LA - HV 90 DN 40	48.3	3.0	1	110037
LA - HV 90 DN 50	60.3	3.1	1	110038
LA - HV 90 DN 65	76.1	3.2	1	110039
LA - HV 90 DN 80	88.9	3.3	1	110040
LA - HV 90 DN 100	114.3	3.6	1	110041
LA - HV 90 DN 125	139.7	3.7	1	110042
LA - HV 90 DN 150	168.3	4.8	1	110043
LA - HV 150 DN 15	21.3	3.1	1	112388
LA - HV 150 DN 20	26.9	3.1	1	112389
LA - HV 150 DN 25	33.7	3.2	1	110044
LA - HV 150 DN 32	42.4	3.2	1	110045
LA - HV 150 DN 40	48.3	3.3	1	110046
LA - HV 150 DN 50	60.3	3.5	1	110047
LA - HV 150 DN 65	76.1	3.6	1	110048
LA - HV 150 DN 80	88.9	3.6	1	110049
LA - HV 150 DN 100	114.3	3.9	1	110050
LA - HV 150 DN 125	139.7	4.1	1	110051
LA - HV 150 DN 150	168.3	5.1	1	110052
LA - HV 200 DN 15	21.3	3.5	1	112390
LA - HV 200 DN 20	26.9	3.5	1	112391
LA - HV 200 DN 25	33.7	3.5	1	110053
LA - HV 200 DN 32	42.4	3.6	1	110054
LA - HV 200 DN 40	48.3	3.6	1	110055
LA - HV 200 DN 50	60.3	3.8	1	110056
LA - HV 200 DN 65	76.1	3.9	1	110057
LA - HV 200 DN 80	88.9	3.9	1	110058
LA - HV 200 DN 100	114.3	4.3	1	110059
LA - HV 200 DN 125	139.7	4.4	1	110060
LA - HV 200 DN 150	168.3	5.4	1	110061







# Pipe Shoe LC - HV

# Application

Pipe Shoe - Double Clamp

For pipes on suitable surfaces. Height-adjustable in steps of 2.5 mm. When resting on steel beams, a minimum flange width of 80 mm is recommended.

### Scope of delivery

Upper and lower part are bolted together allowing height adjustment. The slide plate is fixed to the lower part.

# **Technical Data**

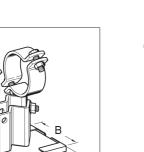
Туре	Height H as delivered [mm]	Height H range [mm]
LC - HV 90	90	88.5 113.5
LC - HV 150	150	116 168.5
LC - HV 200	200	171 223.5

Dimensions: Metal plate: Slide plate incl.:

Material: Metal parts: Bolts, Nuts: Slide plate: Temperature range: L = 250 mm x B = 100 mm L = 256 mm x B = 105 mm

Steel, HCP Steel, HCP Polyamide 6.0, glass fibre reinforced, black -20 up to +130° C (at the slide plate)

# **Approvals**



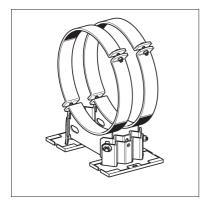
tested

Note: HV 200 - minimum quantity and delivery time on request



Туре	D (pipe) [mm]	W [kg]	Quantity [pack]	Part number
LC - HV 90 DN 15	21.3	3.5	[pack]	112392
LC - HV 90 DN 20	26.9	3.5	1	112393
LC - HV 90 DN 25	33.7	3.6	1	110062
LC - HV 90 DN 32	42.4	3.7	1	110063
LC - HV 90 DN 40	48.3	3.7	1	110064
LC - HV 90 DN 50	60.3	4.1	1	110065
LC - HV 90 DN 65	76.1	4.3	1	110066
LC - HV 90 DN 80	88.9	4.4	1	110067
LC - HV 90 DN 100	114.3	5.1	1	110068
LC - HV 90 DN 125	139.7	5.4	1	110069
LC - HV 90 DN 150	168.3	7.4	1	110070
LC - HV 90 DN 200	219.1	8.3	1	110071
LC - HV 90 DN 250	273.0	11.1	1	110072
LC - HV 90 DN 300	323.9	12.0	1	110073
LC - HV 150 DN 15	21.3	4.0	1	112394
LC - HV 150 DN 20	26.9	4.0	1	112395
LC - HV 150 DN 25	33.7	4.0	1	110074
LC - HV 150 DN 32	42.4	4.1	1	110075
LC - HV 150 DN 40	48.3	4.2	1	110076
LC - HV 150 DN 50	60.3	4.6	1	110077
LC - HV 150 DN 65	76.1	4.8	1	110078
LC - HV 150 DN 80	88.9	4.9	1	110079
LC - HV 150 DN 100	114.3	5.5	1	110080
LC - HV 150 DN 125	139.7	5.8	1	110081
LC - HV 150 DN 150	168.3	7.8	1	110082
LC - HV 150 DN 200	219.1	8.8	1	110083
LC - HV 150 DN 250	273.0	11.6	1	110084
LC - HV 150 DN 300	323.9	12.6	1	110085
LC - HV 200 DN 15	21.3	4.5	1	112396
LC - HV 200 DN 20	26.9	4.5	1	112397
LC - HV 200 DN 25	33.7	4.6	1	110086
LC - HV 200 DN 32	42.4	4.9	1	110087
LC - HV 200 DN 40	48.3	4.9	1	110088
LC - HV 200 DN 50	60.3	5.2	1	110089
LC - HV 200 DN 65	76.1	5.3	1	110090
LC - HV 200 DN 80	88.9	5.4	1	110091
LC - HV 200 DN 100	114.3	6.1	1	110092
LC - HV 200 DN 125	139.7	6.2	1	110093
LC - HV 200 DN 150	168.3	8.4	1	110094
LC - HV 200 DN 200	219.1	9.5	1	110095
LC - HV 200 DN 250	273.0	12.0	1	110096
LC - HV 200 DN 300	323.9	13.0	1	110097







# Application

Pipe Shoe - Dual Base For pipes on suitable surfaces. Height-adjustable in steps of 2.5 mm. When

resting on steel beams, a minimum flange width of 80 mm is recommended.

### Scope of delivery

The upper part and the two lower parts are bolted together allowing height adjustment. The slide plates are fixed to the lower parts.

# Installation

To guarantee that both sliding plates rest correctly, both webs must be adjusted to exactly the same height.

# **Technical Data**

Туре	Height H as delivered [mm]	Height H range [mm]	B [mm]
	as delivered [mm]	range [mm]	funni
LD - HV 90	90	88.5 113.5	320
LD - HV 150	150	116 168.5	320
LD - HV 200	200	171 223.5	320

Dimensions: Metal plate: Slide plate incl.:

L = 250 mm L = 256 mm

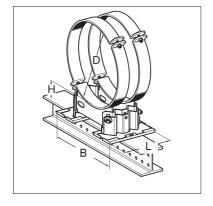
# Material:

Metal parts: Bolts, Nuts: Slide plate: Temperature range: Steel, HCP Steel, HCP Polyamide 6.0, glass fibre reinforced, black -20 up to +130° C (at the slide plates)

# Approvals



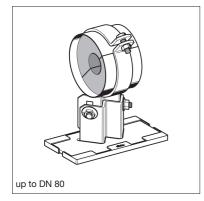
Note: HV 200 - minimum quantity and delivery time on request



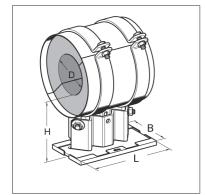


Туре	D (pipe) [mm]	W [kg]	Quantity [pack]	Part number
LD - HV 90 DN 200	219.1	11.9	1	112398
LD - HV 90 DN 250	273.0	14.5	1	112399
LD - HV 90 DN 300	323.9	15.7	1	112400
LD - HV 90 DN 350	355.6	16.6	1	110098
LD - HV 90 DN 400	406.4	19.0	1	110099
LD - HV 90 DN 500	508.0	22.4	1	110100
LD - HV 90 DN 600	610.0	25.1	1	110101
LD - HV 150 DN 200	219.1	13.2	1	112401
LD - HV 150 DN 250	273.0	15.9	1	112402
LD - HV 150 DN 300	323.9	17.0	1	112403
LD - HV 150 DN 350	355.6	18.1	1	110102
LD - HV 150 DN 400	406.4	20.4	1	110103
LD - HV 150 DN 500	508.0	24.1	1	110104
LD - HV 150 DN 600	610.0	26.4	1	110105
LD - HV 200 DN 200	219.1	14.3	1	112404
LD - HV 200 DN 250	273.0	16.9	1	112405
LD - HV 200 DN 300	323.9	18.0	1	112406
LD - HV 200 DN 350	355.6	19.0	1	110106
LD - HV 200 DN 400	406.4	21.4	1	110107
LD - HV 200 DN 500	508.0	24.8	1	110108
LD - HV 200 DN 600	610.0	27.5	1	110109









# **Pre-Insulated Pipe Shoe LK-HV**

# Application

Pipe Shoe with insulation

With PUR insulation insert for pipes on suitable surfaces. Height-adjustable in steps of 2.5 mm. When resting on steel beams, a minimum flange width of 80 mm is recommended.

# Scope of delivery

Upper and lower part are bolted together allowing height adjustment. The slide plate is fixed to the lower part. Pipe Clamp, load spread metal sheet and insulation insert are pre-assembled.

### **Technical Data**

NB	Form	Height H as delivered [mm]	Height H range [mm]
DN 25 - 50	Single clamp	150	137.5 167.5
DN 65 - 80	Single clamp	150	147.5 177.5
DN 100 - 250	Double clamp	150	150 180
DN 300	Double clamp	150	150 160

L = 250 mm x B = 100 mm

L = 256 mm x B = 105 mm

Dimensions: Metal plate: Slide plate incl.:

Material: Metal parts: Grub screws, nuts: Slide plate: Insulation insert: Load spread sheet Temperature range: Steel, HCP Steel, HCP Polyamide 6.0, glass fibre reinforced, black PUR, 200 kg/m <sup>3</sup>

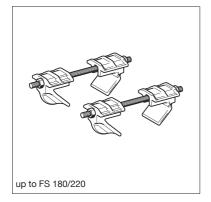
Aluminium (on request: Steel, galvanised, stainless steel) -30 up to +120° C

1	Approvals					
1	TÜVRheinland®					
	tested					

ualit

Туре	D (pipe) [mm]	W [kg]	Quantity [pack]	Part number
LK - HV 150 DN 25	33.7	4.6	1	110110
LK - HV 150 DN 32	42.4	4.8	1	110111
LK - HV 150 DN 40	48.3	5.5	1	110112
LK - HV 150 DN 50	60.3	4.4	1	110113
LK - HV 150 DN 65	76.1	6.2	1	110114
LK - HV 150 DN 80	88.9	6.6	1	110115
LK - HV 150 DN 100	114.3	12.0	1	110116
LK - HV 150 DN 125	139.7	13.9	1	110117
LK - HV 150 DN 150	168.3	14.5	1	110118
LK - HV 150 DN 200	219.1	16.6	1	110119
LK - HV 150 DN 250	273.0	18.6	1	110120
LK - HV 150 DN 300	323.9	24.2	1	110121





# **Guiding Set FS**

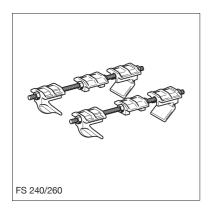
# Application

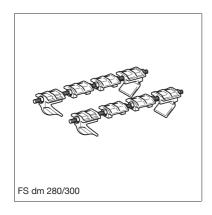
Element for completing Guided Pipe Shoes based on Sliding Pipe Shoes. Max. beam flange width t  $\leq$  30 mm

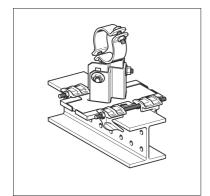
# **Technical Data**

Material:Metal sheets:Steel, HCPGrub screws, nuts:Steel, HCPClamping Hooks:Cast iron, HCP

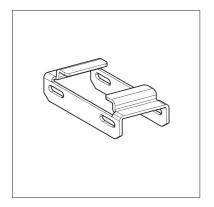
Туре	For flange width	W	Qty.	Part
	[mm]	[kg]	[set]	number
FS 80/120	80 - 120	2.0	1	110350
FS 140/160	140 - 160	2.2	1	110351
FS 180/220	180 - 220	2.3	1	110352
FS 240/260	240 - 260	2.8	1	110353
FS dm 280/300	280 - 300	3.3	1	112887











# Guiding Bracket FW F Group: A705

Application Element for modification of Sliding Pipe Shoes to Guided Pipe Shoes.

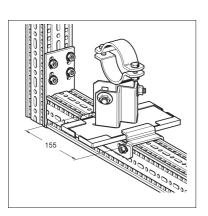
# Installation

Connection to Beam Section F 80 or F 100 by means of 4 Self-Forming Screws FLS F.

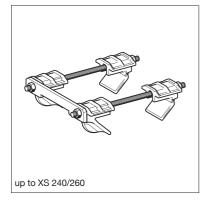
# **Technical Data**

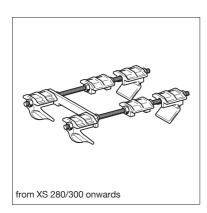
Steel, hot-dipped galvanised Material:

Туре	W [kg]	Quantity [pack]	Part number
FW F 80	0.6	1	110349
FW F 100	0.7	1	113088









#### Fixed Point Set XS

#### Application

Modification of Sliding Pipe Shoes to Fixed Point Pipe Shoes. The slide plate has to be removed. Max. beam flange width t  $\leq$  30 mm

#### **Technical Data**

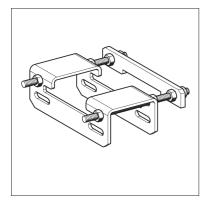
Material:Metal parts:Steel, HCPGrub screws, nuts:Steel, HCPClamping hooks:Cast iron, HCP

#### Approvals



Туре	For flange width [mm]	W [kg]	Qty. [set]	Part number
XS 80/120	80 - 120	2.3	1	110357
XS 140/160	140 - 160	2.4	1	110358
XS 180/220	180 - 220	2.5	1	110359
XS 240/260	240 - 260	2.6	1	110360
XS 280/300	280 - 300	3.2	1	110361





### Fixed Point Bracket XW F

#### Application

Element for modification of Sliding Pipe Shoes to Fixed Point Pipe Shoes.

#### Installation

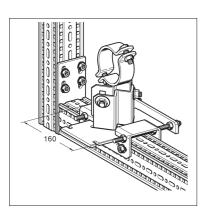
The slide plate of the Pipe Shoe is disassembled. Connection to the Beam Section F 80 or F 100 by means of 4 Self Forming Screws FLS F.

#### **Technical Data**

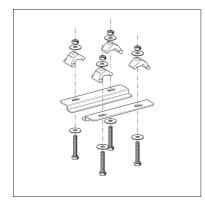
Material: Steel, HCP

#### Approvals

Туре	W [kg]	Quantity [pack]	Part number
XW F 80	1.3	1	110356
XW F 100	1.6	1	113087







#### Guiding Set FS Z

#### Application

For suspension of a Guided Pipe Shoe from a Simotec Beam Section 100 resp. 120 or another steel girder with a flange width of 80 up to 120 mm. Max. beam flange width t  $\leq$  33 mm

#### Scope of delivery

Two identical guide rails and Assembly Set P2.

#### Installation

The guide rails are to be fixed with Assembly Set P2 below the beam with 2mm clearance to the support at the side. Torque for the M12 bolts of the Assembly Set = 85 Nm.

#### **Technical Data**

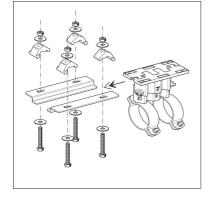
Material: Metal parts: Grub screws, nuts:

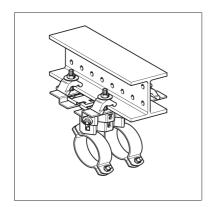
Steel, HCP Steel, HCP

#### Approvals

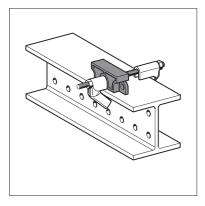


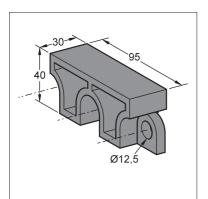
Туре	For flange width	W	Qty.	Part
	[mm]	[kg]	[set]	number
FS Z 80/120	80 - 120	3.1	1	110398











#### Sliding Set LU - H 40

#### Application

Serves as a base for pipes, to be fixed on steel beams with minimum flange width of 80 mm. For pipe sizes up to NB 150, one PA block is sufficient. For pipes of NV 200 up to 300, two blocks are to be bolted together to provide a bigger rest (any number of PA blocks can be lined up).

#### Scope of delivery

NB 25 up to NB 150: 1 PA block and 1 Clamping Set NB 200 up to NB 300: 2 PA blocks and 2 Clamping Sets Accessories per Clamping Set: 2 Clamping Hooks C 1 Grub Screw M12 x 200 3 Nuts M12

When attaching to beams with flanges wider than 120 mm, longer bolts have to be used.

#### Installation

The pipe slides directly on the 40 mm high PA blocks. The lateral guide of the pipe has to be provided by other means. From DN 200 on, pre-assemble the PA blocks using a M12 x 30 hexagon bolt and a hexagon nut first.

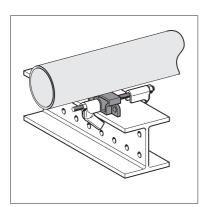
#### **Technical Data**

NB	H [mm]	Clamping Sets [Pcs.]	PA blocks [Pcs.]
DN 25 - 150	40	1	1
DN 200 - 300	40	2	2

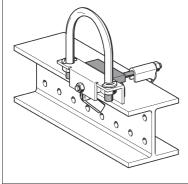
Material:

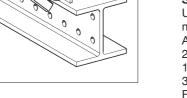
Clamping Hooks: Grub Screws, Nuts: PA block: Temperature range: Steel HCP Steel, HCP Polyamide 6.0, 30 % glass fibre reinforced, black -20 to +130° C (at the PA block)

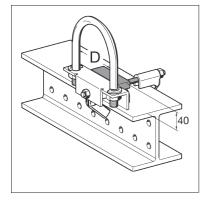
Туре	For pipes of dia. [mm] from to	W [kg]	Quantity [pack]	Part number
LU - H 40 DN 25 - 150	33.7 - 168.3	0.7	1	164241
LU - H 40 DN 200 - 300	219.1 - 323.9	1.4	1	164250

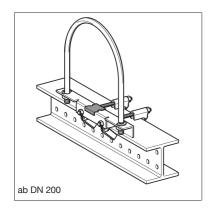


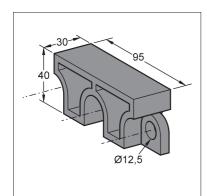












#### Guided Support FR - H 40

#### Application

Guided Support for attachment on steel beams with minimum flange width of 80 mm.

#### Scope of delivery

U-Bolt with welded-on semi-washers and 2 hexagon nuts, U-profile (bended metal) with PA block(s) resp. impressed PA base.

Accessories per Clamping Set:

2 Clamping Hooks C

1 Grub Screw M12 x 200

3 Nuts M12

For attachment to beams with flanges wider than 120 mm, longer bolts have to be used.

#### Installation

The pipe slides on the PA block resp. the PA base, which is slightly higher than the U-profile (approx. 1 mm).

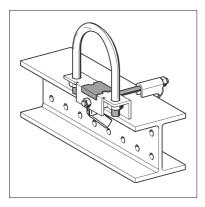
#### **Technical Data**

Material: U-Bolt: Metal parts: Grub Screws, Nuts: PA-block: Temperature range:

**DIN 3570, HCP** Steel, HCP Steel, HCP Polyamide 6.0, 30 % glass fibre reinforced, black -20 to +130° C (at the PA block)

Туре	D (pipe) [mm]	W [kg]	Quantity [pack]	Part number
FR - H 40 DN 25	33.7	1.1	1	164269
FR - H 40 DN 32	42.4	1.0	1	167891
FR - H 40 DN 40	48.3	1.1	1	164278
FR - H 40 DN 50	60.3	1.2	1	164287
FR - H 40 DN 65	76.1	1.3	1	167907
FR - H 40 DN 80	88.9	1.4	1	164296
FR - H 40 DN 100	114.3	1.8	1	164302
FR - H 40 DN 125	139.7	2.0	1	164311
FR - H 40 DN 150	168.3	2.2	1	164320
FR - H 40 DN 200	219.1	4.2	1	164339
FR - H 40 DN 250	273.0	4.8	1	164348
FR - H 40 DN 300	323.9	5.3	1	164357





#### **Fixed Point XR - H 40**

#### Application

Fixed Point for attachment on steel beams with minimum flange width of 80 mm.

#### Scope of delivery

U-Bolt with nuts, U-profile, PA block and Clamping Set(s) Accessories per Clamping Set: 2 Clamping Hooks C 1 Grub Screw M12 x 200 3 nuts M12

When attaching to beams with flanges wider than 120 mm, longer bolts have to be used.

#### Installation

Material: U-Bolt:

Metal parts:

PA block:

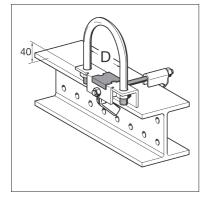
The pipe weight presses the pipe into the PA block to such an extent that, in working condition, the lower edge of the pipe is at about 40 mm.

#### **Technical Data**

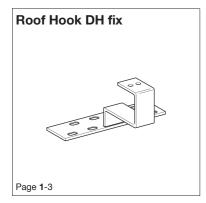
Туре	Н	Clamping Sets	
	[mm]	[Pcs.]	
DN 25 - 150	40	1	
DN 200 - 300	40	2	

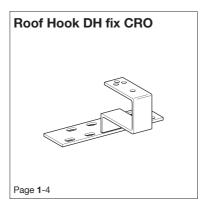
**DIN 3570, HCP** Steel, HCP Grub Screws, Nuts: Steel, HCP Polyamide 6.0, 30 % glass fibre reinforced, black Temperature range: -20 to +130° C (at the PA block)

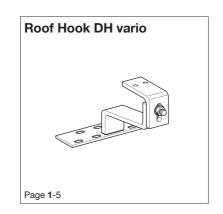
Туре	D (pipe) [mm]	W [kg]	Quantity [pack]	Part number
XR - H 40 DN 25	33.7	0.9	1	164366
XR - H 40 DN 32	42.4	1.0	1	167916
XR - H 40 DN 40	48.3	1.0	1	164375
XR - H 40 DN 50	60.3	1.1	1	164384
XR - H 40 DN 65	76.1	1.2	1	167925
XR - H 40 DN 80	88.9	1.3	1	164393
XR - H 40 DN 100	114.3	1.7	1	164409
XR - H 40 DN 125	139.7	1.9	1	164418
XR - H 40 DN 150	168.3	2.1	1	164427
XR - H 40 DN 200	219.1	3.4	1	164436
XR - H 40 DN 250	273.0	4.4	1	164445
XR - H 40 DN 300	323.9	5.0	1	164454

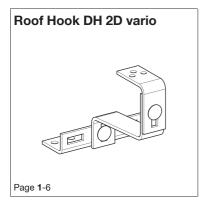


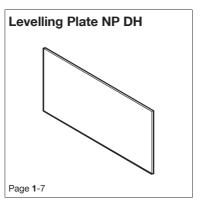


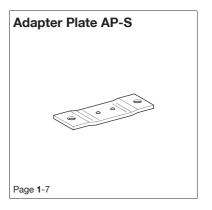




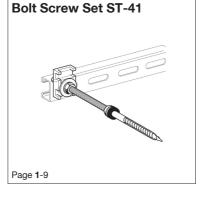


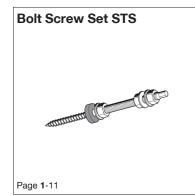


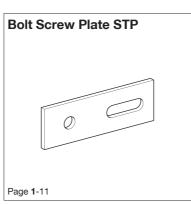


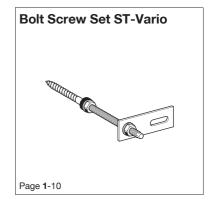








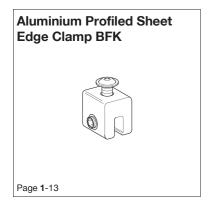






Solar Panel Support System 1-1

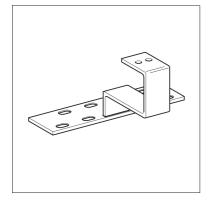












#### **Roof Hook DH fix**

Group: E401

#### Application

Roof Hook for standard tiles and roof batten thickness 24 resp. 30 mm. To provide a simple direct fixing of Channel 41 to the roof by means of one Self Forming Screw FLS.

#### Installation

- 1. Remove roof tiles.
- 2. Position the hook where the trough of the tile was located. Position the base plate of the Roof Hook in full contact with the rafter. If needed auxiliary battens should be used for roof fixing.
- 3. Fix the Roof Hook with two Torx Flat Head Coach Screws FLAH 10 x 100.
- 4. Clear removed tiles from the respective area and put them back to their original position.
- 5. Fix the Channel onto the Roof Hook through the slotted rear face of the profile with one Self Forming Screw. For roof structures > 50 mm the Roof Hook could be shimed.

Roof Hooks for special tiles /profiles on request. In order to preserve the balanced loading of the roof we recommend this application to all rafters.

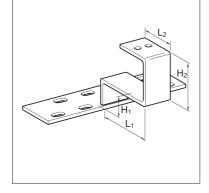
#### **Technical Data**

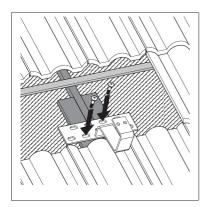
Max. perm. loads:

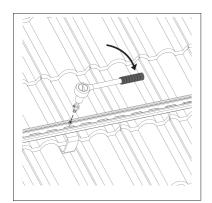
Туре	F <sub>z</sub> [kN]	Fq [kN]
DH fix-40/8	2.5	1.25
DH fix-45/5	1.2	0.75
DH fix-45/8	2.5	1.25
DH fix-50/8	2.5	1.25

Material:	Steel, HCP or HDG
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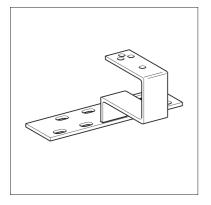
Туре	H₁ [mm]	H₂ [mm]	L₁ [mm]	L <sub>2</sub> [mm]	W [kg]	Quantity [pack]	Part number
DH fix-40/8	40	85	105	65	1.00	1	110002
DH fix-45/5	45	80	105	65	0.91	1	194072
DH fix-45/8	45	80	105	65	1.01	1	196762
DH fix-50/8	50	80	105	65	1.10	1	111444











#### **Roof Hook DH fix CRO**

Group: E401

#### Application

Roof Hook for standard tiles and roof batten thickness 24 resp. 30 mm. To provide a simple direct fixing of Channel 41 to the roof by means of one Self Forming Screw FLS or of Channel ALU 27/42 by means of Beam Clamps P0 ALU and Flange Screws SCR FLA TT.

#### Installation

- 1. Remove roof tiles.
- 2. Position the hook where the trough of the tile was located. Position the base plate of the Roof Hook in full contact with the rafter. If needed auxiliary battens should be used for roof fixing.
- 3. Fix the Roof Hook with two Hexagon Wood Screws FLAH 10 x 100.
- 4. Clear removed tiles from the respective area and put them back to their original position.
- 5. Fix the Channel 41 onto the Roof Hook through the slotted rear face of the profile with one Self Forming Screw FLS. For connection with Channel ALU 27/42 tighten the Roof Hook by means of two Beam Clamps P0 ALU TT and two Flange Screws SCR FLA TT M10 x 25. For roof structures > 50 mm the Roof Hook could be shimed.

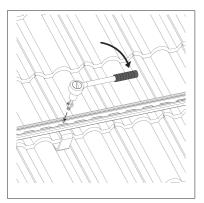
In order to preserve the balanced loading of the roof we recommend this application to all rafters.

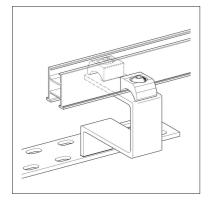
#### **Technical Data**

Max. perm. load:: Material:

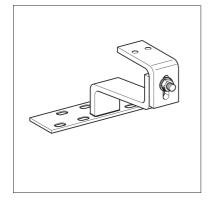
Fz = 2,5 kN, Fq = 1,25 kN Steel, HCP

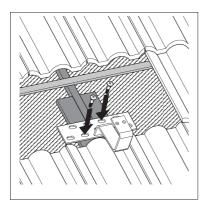
Туре				L₂ [mm]	W [kg]	Quantity [pack]	Part number
DH fix CRO-45/8	45	80	105	104	1.14	1	112151











## Roof Hook DH vario

Group: E401

#### Application

Height-adjustable Roof Hook for roofs with variable rafter-distance. To provide a simple direct fixing of Channel 41 to the roof by means of one Self Forming Screw FLS. The height adjustment allows for an exact adjustment of uneven roof constructions. The large setting range allows the use of the Roof Hook even for roof tiles with deeper profile.

#### Installation

- 1. Remove roof tiles.
- 2. Position the hook where the trough of the tile was located. Position the base plate of the Roof Hook in full contact with the rafter. If needed auxiliary battens should be used for roof fixing.
- 3. Fix the Roof Hook with two Torx Flat Head Coach Screws FLAH 10 x 100.
- 4. Clear removed tiles from the respective area and put them back to their original position.
- 5. Fix the Channel 41 onto the Roof Hook through the slotted rear face of the profile with one Self Forming Screw FLS. For structures thicker than 45 mm, the Roof Hook could be shimed.

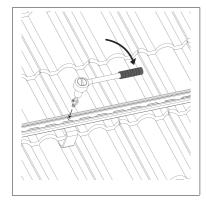
In order to preserve the balanced loading of the roof we recommend this application to all rafters.

#### **Technical Data**

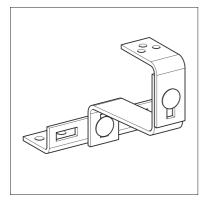
Base Plate:22Material Hook:40Stand-off distance:fromMax. perm. load:FzMaterial:St

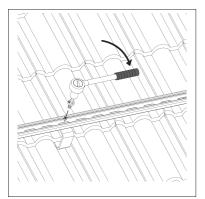
220 x 60 x 5 mm 40 x 8 mm from trough tile 85 - 105 mm Fz = 2.0 kN, Fq = 1.0 kN Steel, HCP or HDG

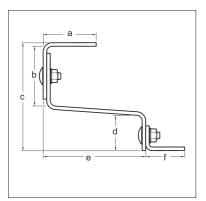
Туре	W	Quantity	Part
	[kg]	[pack]	number
DH 45 vario	1.23	1	196779











#### **Roof Hook DH 2D vario**

Group: E401

#### Application

Height-adjustable Roof Hook for roofs with variable rafter-distance. The height adjustment allows for an exact adjustment of uneven roof constructions. The large setting range allows the use of the Roof Hook even for roof tiles with deeper profile.

To provide a simple direct fixing of Channel MS 41 to the roof by means of one Self Forming Screw FLS or of Channel MS ALU 27/42 with one Beam Clamp P0 ALU and one Flange Screw SCR FLA M10 x 25 HCP.

#### Installation

- 1. Remove roof tiles.
- 2. Position the hook where the trough of the tile was located. Position the base plate of the Roof Hook in full contact with the rafter. If needed auxiliary battens should be used for roof fixing.
- 3. Fix the Roof Hook with two Torx Flat Head Coach Screws FLAH 10 x 100.
- 4. Clear removed tiles from the respective area and put them back to their original position.
- Fix the Channel MS 41 onto the Roof Hook through the slotted rear face of the profile with one Self Forming Screw FLS. Alternative: Fasten Beam Clamp P0 ALU with one Flange Screw SCR FLA M10 x 25 HCP, apply Channel MS ALU 27/42, click it on and screw Flange Screw tight with max. 20 Nm.

In order to preserve the balanced loading of the roof we recommend this application to all rafters.

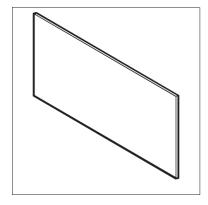
#### **Technical Data**

Туре	Suitable for Sikla Channel		b [mm]	c [mm]	d [mm]	e [mm]	f [mm]
DH 2D vario	MS 41 HCP MS 41/31 ALU	75	73-98	130-164	145-154	115	56
	MS 27/42 ALU						

mm

Туре	W	Quantity	Part
	[kg]	[pack]	number
DH 2D vario	0.98	1	113261





#### Levelling Plate NP DH

Group: E100

#### Application

For height adjustment to support the Roof Hooks on uneven roof constructions or varying brick heights.

#### Scope of delivery

Set, each with 25 pieces à 5 mm and à 3 mm

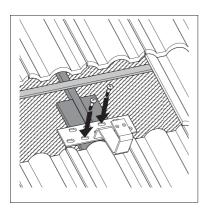
#### Installation

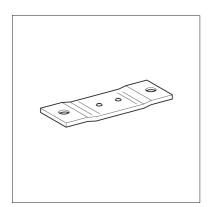
Place the Levelling Plate under the Roof Hook and fix it with the Torx Flat Head Coach Screw FLAH.

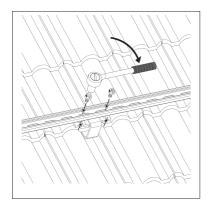
#### **Technical Data**

Material: Wood

Туре	Plate	W	Pack.	Part
	dimensions [mm]	[kg]	[Set]	number
NP DH	100 x 60	0.66	1	111462







# Adapter Plate AP-S Group: E401

#### Application

Enables connection between Channel 41 and Roof Hook in case a direct connection is not possible due to lack of tolerance adjustment < 9 mm.

#### Installation

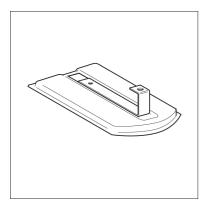
Place Adapter Plate under the Roof Hook and fix the Channel from the top with two Self-Forming Screws. The geometric design of the Adapter Plate creates a form-locked connection with the Roof Hook.

#### **Technical Data**

Material: Steel, HCP or HDG

Туре	W	Quantity	Part
	[kg]	[pack]	number
AP-S	0.14	1	194119





#### Roof Hook Set "Plain Tile" DH-BS

Group: E401

#### Application

Roof Hook Set for direct replacement of Plain Tile type roof tile, to mount Channel 41. Fix Roof Hook Set with Torx Flat Head Coach Screw FLAH 8 x 80. The Channel of height  $\leq$  45mm needs to be fixed with a Speed Nut NT CC HCP and a Flange Screw SCR FLA M10 x 25.

#### Scope of delivery

Roof Hook Set comprises a steel tile and a rafter hook.

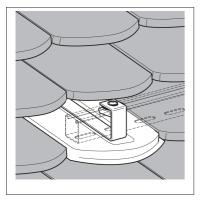
#### Installation

- 1. Remove roof tile and replace it with the Roof Hook Set 'Plain Tile'.
- 2. Screw the Roof Hook Set down at the junction point roof batten/rafter.
- 3. Click Speed Nut NT CC M10 HCP into the channel (such that it is installed in the body of the channel) and place it to the underside of the hook. Screw tight this pre-assembly with Flange Screw SCR FLA M10x25 so that the channel is secured against the underside of the hook.

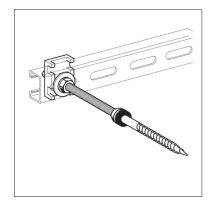
In order to preserve the balanced loading of the roof we recommend an application to all rafters.

#### **Technical Data**

Max. perm. loads: Material:	$F_z$ and $F_y = 1.0$ kN				
Tile:	Steel 1.0350, electro-galvanised according to DIN EN 10346				
Hook:	HCP or HDG				
Туре	W [kg]	Qty. [set]	Part number		
DH-BS	0.52	1	194089		







#### **Bolt Screw Set ST-41**

Group: E401

#### Application

For attachment of Channel 41 and Flex Frames to profiled insulated roof sheets, trapezoidal decking or sandwich panels with a timber batten sub-structure.

#### Scope of delivery

Two Bolt Screws incl. Sealing, Nuts, Spacers and Holding Bracket in polybag.

#### Installation

- 1. Drill a Ø 8.5 mm hole through the highest point of the roofing into the timber battens below. Use Channel as a drilling template.
- 2. Drill out a Ø13mm counter-bore hole through the roof material to the face of the batten.
- 3. Install the Bolt Screw such that the woodscrew thread is fully engaged to the timber in order to provide the maximum load capacity. The sealing disk should be compressed against the batten. Insert and fix the channel.

#### **Technical Data**

ST-41

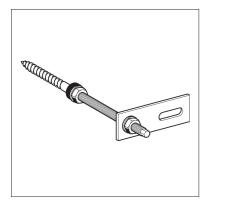
Max. perm. loads: up to  $F_z = 3.0 \text{ kN}$ Fq according to roof pitch and screw option Material: Holding Bracket and Washer 12/40: HCP or HDG Bolt Screw, Nut and Spacer: Stainless steel 304 EPDM Sealing: Туре W Quantity Part [kg] [pack] number

1

195130

0.71





#### **Bolt Screw Set ST-Vario**

Group: E401

#### Application

For attachment of Channel 41 to profiled insulated roof sheets, trapezoïdal decking or sandwich panels with a timber batten sub-structure.

#### Scope of delivery

Two Bolt Screws incl. Sealing and Nuts, Spacers and Vario Plate in polybag.

#### Installation

- 1. Drill a  $\emptyset$  8.5 mm hole through the highest point of the roofing into the timber battens below.
- 2. Drill out a Ø 13mm counter-bore hole through the roof material to the face of the batten.
- 3. Install the Bolt Screw such that the woodscrew thread is fully engaged to the timber in order to provide the maximum load capacity. Compress the sealing disk against the batten and adjust Vario Plate.
- 4. Pre-assemble the enclosed Channel Nuts and Bolts. Insert the channel from the bottom up and tighten it. For higher sub-structures, the Channel may be fixed on top of the Vario Plate. Screw connection then is done on the back of the Channel.

up to  $F_z = 1.0 \text{ kN}$ 

#### **Technical Data**

max. perm. loads:

	Fq according to roof pitch and screw option
Material:	
Vario Plate:	HCP or HDP
Bolt Screw, Nut and Spacer:	Stainless steel 304 (A2)
Sealing:	EPDM

Туре	W	Quantity	Part
	[kg]	[pack]	number
ST-Vario	0.76	1	192557





#### **Bolt Screw Set STS**

Group: E401

#### Application

For attachment of Channels and Flex Frames to profiled insulated roof sheets, trapezoidal decking or sandwich panels with a timber batten sub-structure.

#### Scope of delivery

Bolt Screw incl. Sealing, Nuts and Spacers.

#### Installation

- 1. Drill a Ø 6.5 mm hole through the highest point of the roofing into the timber battens below. Use Channel as a drilling template
- 2. Drill out a Ø13mm counter-bore hole through the roof material to the face of the batten.
- Install the Bolt Screw such that the woodscrew thread is fully engaged to the timber in order to provide the maximum load capacity. The sealing disk should be compressed against the batten. Insert Channel or Bolt Screw Plate STP and tighten the self-locking flange nut (wrench size 15).

#### **Technical Data**

Max. perm. loads:

Material: Bolt Screw, Nut and Spacer: Sealing: up to Fz = 1,8 kNFq according to roof pitch and screw option

Stainless steel 304
EPDM

Туре	W [kg]	Quantity [pack]	Part number
M10 x 100	0.10	100	111450
M10 x 150	0.11	100	111451
M10 x 200	0.14	50	111452

# 0

#### **Bolt Screw Plate STP**

Group: E401

#### Application

Unit to compensate construction tolerances and to fix channel systems in combination with Bolt Screw Set STS.

#### Installation

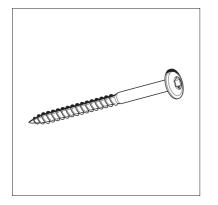
The installation of Channels 41 will preferably be done by Flange Screw SCR FLA HCP M10 x 25 and Hexagon Nut NT hdg M10.

#### **Technical Data**

Material: Steel, HCP

Туре	Plate dimensions [mm]	Dimensions of elongated hole [mm]	W [kg]	Quantity [pack]	Part number
STP	120 x 30	40 x 11	0.14	30	111467





#### Torx Flat Head Coach Screw FLAH

Group: 1369

#### Application

Flange screw with perfectly aligned properties for the constructional timber work, available in diameters 8 and 10 mm.

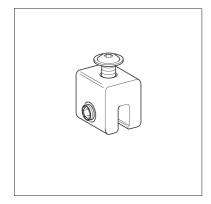
- Simple handling is secured due to ideal load transmission.
- The head dia. is aligned to the slots of Channel 41. Thus for direct assembly through the elongated hole of the channel, a good load bearing capacity is secured.
- The cutting notch allows direct screwing in without pre-drilling and allows a pinpoint locating.
- In addition, the tip avoids reliably the splitting of the battens behind.
- The high bearing of loads given by the flat head reduces the necessary fixing points. Especially for the fixing of roof hooks, an economical handling is assured.

#### **Technical Data**

Material: Steel, galvanised

Туре	Ø [mm]	Length [mm]	Screw tool	W [kg]	Quantity [pack]	Part number
8/40	8	40	T 40	0.01	50	110804
8/60	8	60	T 40	0.02	50	110805
8/80	8	80	T 40	0.02	50	110806
10/70	10	70	T 40	0.03	50	110807
10/100	10	100	T 40	0.04	50	110809





#### Aluminium Profiled Sheet Edge Clamp BFK

Group: E401

#### Application

Clamp for aluminum-profiled roof sheet to fix Channel 41.

#### Scope of delivery

Clamp with clamping screw and one hex-drive bit per packaging unit included.

#### Installation

- 1. Position the clamp to the edge seam and tighten it up to 17 Nm.
- 2. Apply the channel and fix it with Flange Screw M10x15.

#### **Technical Data**

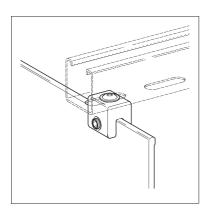
Material:

Edge seam thickness:

Max. perm. load vertical to the roof:

1.5 - 4.0 kN depending on the roof structure ≤ 7.0 mm Aluminium

Туре	W	Quantity	Part
	[kg]	[pack]	number
BFK	0.06	90	198780



#### Aluminium Profiled Sheet Ridge Clamp BFK-R Group: E401

#### Application

Clamp for aluminum-profiled roof sheet to fix Channel 41.

**Note:** Load information must consider the data based on the manufacturer's calculation table.

#### Scope of delivery

Clamp incl. connection elements.

#### Installation

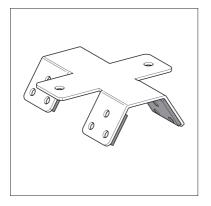
- 1. Position the clamp on the ridge of the aluminum-profile and screw tight.
- 2. Apply the channel and fix it with Flange Screw SCR FLA M10x25, Washer 10/40 and M10 Nut HCP.

#### **Technical Data**

max. perm. load: Material:	F <sub>z</sub> = 1.2 kN Stainless Steel	304 (A2)		
Turne	144	Quantity	I.	

Туре	W	Quantity	Part
	[kg]	[pack]	number
BFK-R	0.14	25	194058





#### **Trapezoidal Roof Support TBH 1**

Group: E401

#### Application

For the attachment of Channels 41 and Flex Frames to trapezoidal steel roof sheets or insulated sandwich panel roof structures with a steel sub-structure.

#### Installation

- 1. Put the Trapezoidal Roof Support on the corrugation of the trapezoidal sheet and fix each strap with suitable self-drilling screws.
- 2. Apply the channel and fix it with each 2 Self Forming Screws FLS F 80

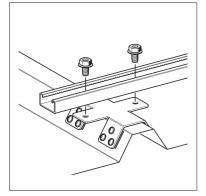
The perm. load is depending on the trapezoidal sheet, inserted screws, number of screws etc. and so is to be checked in individual cases.

#### **Technical Data**

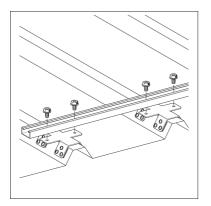
Туре	A [mm]	C [mm]	W	Tensile load Fz <sub>adm.</sub> max. [kN] <sup>1)</sup>
TBH 1	40	93	64°	1.5

<sup>1)</sup> For application ≥ 1 drilling screw JT3-2H-4.8x19E14 per link and steel sheet thickness top belt ≥ 1mm

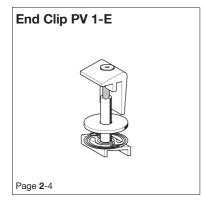
Туре	W	Quantity	Part
	[kg]	[pack]	number
TBH 1	0.28	1	111468

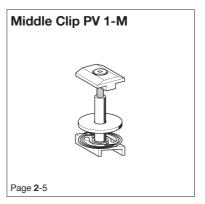


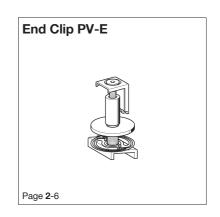
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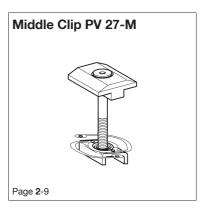


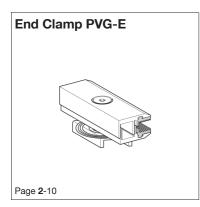


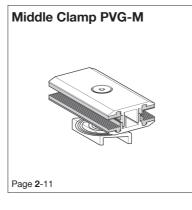


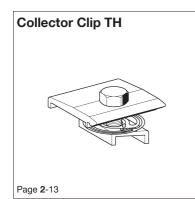


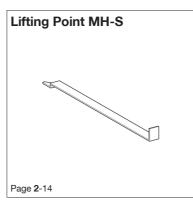








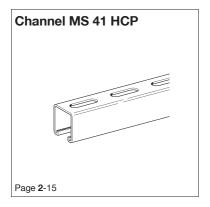






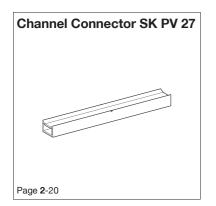




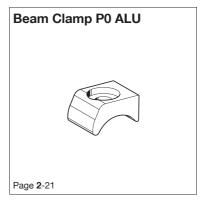


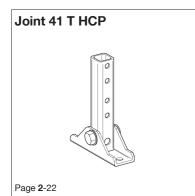
Channel Connector SK-L HCP

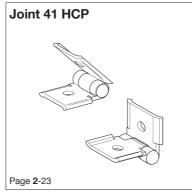


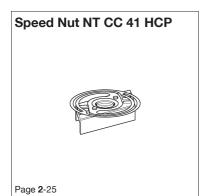






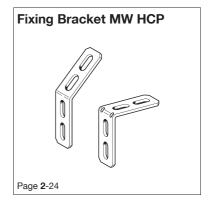








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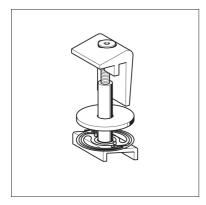




Cable H	older KHP	
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#### **Construction Components**





#### End Clip PV 1-E

Group: E314

#### Application

Edge fastening and assembly block for all typical framed Photovoltaic panels to be used with high loads caused by wind suction. Suits panel thicknesses of 35 -50 mm for any angle. Bimetal corrosion restistance, by using seal-coating on the support (washer and sleeve). Clamping forces applied at outer edge of panel to prevent undue tensioning of glass.

#### Scope of delivery

Fully assembled unit comprising Speed Nut, Support and Clip.

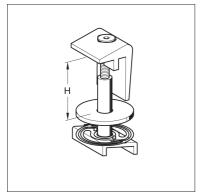
#### Installation

Insert Speed Nut into the open channel slot at any position required. Adjust the clip to the panel and tighten it with max. 10 Nm.

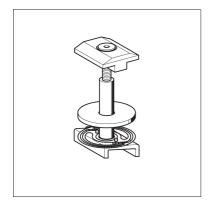
#### **Technical Data**

adm. shear force 90° to panel surface: adm. tensile load:	0.5 kN/clip 3.2 kN/clip
Material:	
Clip:	Aluminium
Screw:	Stainless steel 304
Stud bolt, Washer and Speed Nut:	HCP

Туре	Panel thickness [mm]	W [kg]	Quantity [pack]	Part number
PV 1-E	35 - 50	0.11	50	199503







#### Middle Clip PV 1-M

Group: E314

#### Application

Middle fastening and assembly block for all typical framed Photovoltaic panels to be used with high loads caused by wind suction. Suits panel thicknesses (H) of 35 - 50 mm for any angle. Bimetal corrosion resistance, by using seal-coating on the support (washer and sleeve). Clamping forces applied at outer edge of panel to prevent undue tensioning of glass.

#### Scope of delivery

Fully assembled unit comprising Speed Nut, Support and Clip. No loose parts.

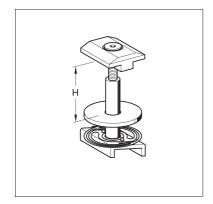
#### Installation

Fix Middle Clip into the required position by pressing the Speed Nut into the channel. Slide the Middle Clip along the channel so that it grips onto the existing PV panel already in position. Put the next panel on the frame and tighten the Middle Clip with max 10 Nm.

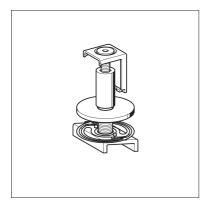
#### **Technical Data**

adm. shear force 90° to panel surface: adm. tensile load: Material:			1.0 kN/clip 3.2 kN/clip		
Clip: Screw: Stud bolt, Washer and Speed Nut:			minium inless steel 304 o		
Туре	Panel thickness	W [kg]	Quantity [pack]	nun	

Туре	Panel	W	Quantity	Part
	thickness [mm]	[kg]	[pack]	number
PV 1-M	35 - 50	0.09	50	199510







#### **End Clip PV-E**

Group: E314

#### Application

Edge fastening and assembly block for all typical framed Photovoltaic panels. Suits panel thicknesses of 28 - 50 mm for any angle. Bimetal corrosion restistance, by using seal-coating on the support (washer and sleeve). No gap occurs between the frame and End clip, when using form lock clip. Clamping forces applied at outer edge of panel to prevent undue tensioning of glass.

#### Scope of delivery

Fully assembled unit comprising Speed Nut, Support and Clip.

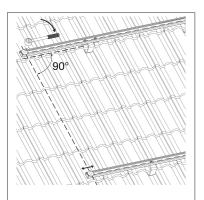
#### Installation

Insert Speed Nut into the open channel slot at any position required. Adjust the bolt into the right position (90° to channel) and tighten it with max. 15 Nm by using standard bit (hexagon socket 4mm, Form C8). The exact position of the bolt gives a strong end-stop for fixing the first panels. Put the L-clip on the top of the assembly, put the panel against the bolt and tighten the L-clip over the panel frame with a setting torque of 3 Nm max.

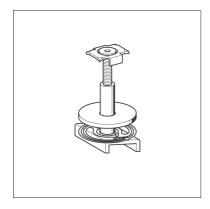
#### **Technical Data**

Prevention of panel slip and tension load up to 1.5 kN per Clip. Material: Clip and screw: Bolt, Washer and Speed Nut: HCP

Туре	Panel thickness [mm]	W [kg]	Quantity [pack]	Part number
PV-E 28 - 50	28 - 50	0.10	50	193297







#### Middle Clip PV-M

Group: E314

#### Application

Middle fastening and assembly block for all typical framed Photovoltaic panels. Suits panel thicknesses of 28 - 50 mm for any angle.

Bimetal corrosion resistance, by using seal-coating on support (washer and sleeve). No gap occurs between the frame and End Clamp, when using form lock clip. Clamping forces applied at outer edge of panel to prevent undue tensioning of glass.

#### Scope of delivery

Fully assembled unit comprising Speed Nut, Support and Clip. No loose parts.

#### Installation

Fix Middle Clip into the required position by pressing the Speed Nut into the channel. Slide the Middle Clip along the channel so that it grips onto the existing PV panel already in position. Put the next panel on the frame and slide into position. To join the panels, tighten Middle Clip with a setting torque of max. 3Nm.

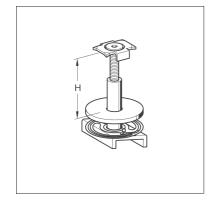
In case of higher, dynamic loadings (e.g. tracking devices,) the torque can be increased up to 7 Nm max. In addition it has to be checked whether more elements are necessary to secure the fixing

#### **Technical Data**

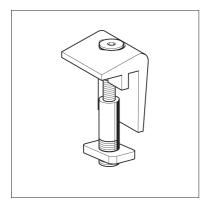
Prevention of panel slip and tension load up to 1.5 kN per Clip. Material: Clip and screw: Stainless steel A2

Bolt, Washer and Speed Nut: HCP

Туре	Panel thickness [mm]	W [kg]	Quantity [pack]	Part number
PV-M 28 - 50	28 - 50	0.08	50	193303







#### End Clip PV 27-E

Group: E314

#### Application

Edge fastening and assembly block for aluminium framed Photovoltaic panels to Channel MS ALU. Suits panel thicknesses of 35 - 50 mm for any angle. Clamping forces applied at outer edge of panel to prevent undue tensioning of glass.

#### Scope of delivery

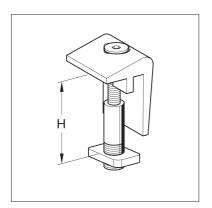
Fully assembled unit comprising Speed Nut, Support and Clip.

#### Installation

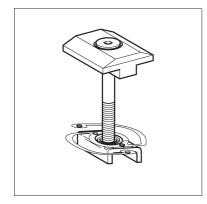
Insert Speed Nut into the open channel slot at any position required and tighten it with max. 8 Nm by using standard bit (hexagon socket 4mm, Form C8). Put the Clip on the top of the assembly, put the panel against the bolt and tighten the Clip over the panel frame with a setting torque of 5 Nm max.

#### **Technical Data**

Adm. shear force 9 Adm. tensile load: Material:			<n clip<br=""><n clip<="" th=""><th></th></n></n>	
Clip: Stud bolt:			ninium	
Speed Nut:		Stair	nless steel	
Туре	Panel thickness [mm]	W [kg]	Quantity [pack]	Part number
PV 27-E	35 - 50	0.06	50	111726







#### Middle Clip PV 27-M

Group: E314

#### Application

Middle fastening and assembly block for all aluminium framed Photovoltaic Panels to Channel MS ALU. Suits panel thicknesses of 34 - 52 mm for any angle.

Clamping forces applied at outer edge of panel to prevent undue tensioning of glass.

#### Scope of delivery

Fully assembled unit comprising Speed Nut, Support and Clip. No loose parts.

#### Installation

Fix Middle Clip into the required position by pressing the Speed Nut into the Channel MS ALU. Slide the Middle Clip along the channel so that it grips onto the existing PV panel already in position. Put the next panel on the frame and slide into position. To join the panels, tighten Middle Clip with a setting torque of max. 5Nm.

#### **Technical Data**

PV 27-M 44 - 52

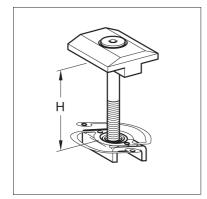
Adm. shear force 90° to par Adm. tensile load:	el surface:	0,5 kN/cli 1,0 kN/cli		
Material: Clip: Screw and Speed nut:		Aluminiun HCP	n	
Туре	Panel thickness [mm]	W [kg]	Quantity [pack]	Part number
PV 27-M 34 - 42	34 - 42	0.03	50	111727
PV 27-M 39 - 47	39 - 47	0.03	50	111832

0.04

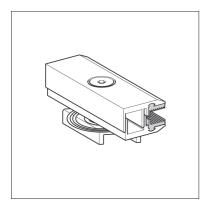
50

111833

44 - 52







#### **End Clamp PVG-E**

Group: E314

#### Application

End Clamp for secure, yet tension-free support of unframed Photovoltaic panels in Sikla Channel System 41. The elastomeric-lining avoids any metal contact between panel and clamp. Suitable for panel thickness of 6 to 10 mm.

#### Scope of delivery

Completely assembled unit, including Speed Nut CC 41 and screw.

#### Installation

Fix the End Clamp into the required position by pressing the Speed Nut into the channel. Slide the panel into the End Clamp and tighten the screw.

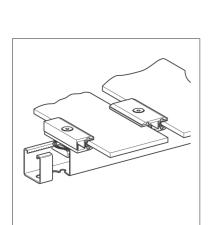
#### **Technical Data**

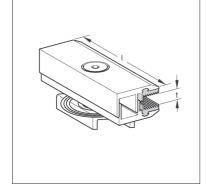
Max. adm. load (tension):	1,2 kN/clamp
Max. tightening torque:	5 Nm
Material:	
Clamp:	Aluminium
Screw:	Stainless steel A2
Channel Nut:	Steel, HCP

#### Approvals

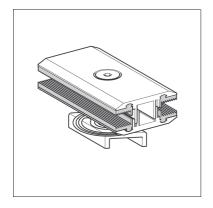
First Solar Approval

Туре	l	t	W	Quantity	Part
	[mm]	[mm]	[kg]	[pack]	number
PVG-E	80	6 - 10	0.11	50	198384









#### Middle Clamp PVG-M

Group: E314

#### Application

Middle Clamp for secure, yet tension-free support of unframed Photovoltaic panels in Sikla Channel System 41. The elastomeric-lining avoids any metal contact between the panel and the clamp. Suitable for panel thickness of 6 to 10 mm.

#### Scope of delivery

Completely assembled unit, including Speed Nut CC 41 and screw.

#### Installation

Fix the Middle Clamp into the required position by pressing the Speed Nut into the channel. Slide the Middle Clamp along the channel so that it grips onto the existing PV panel already in position. Slide the next PV panel into the Middle Clamp and tighten the screw.

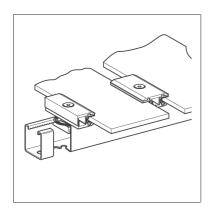
#### **Technical Data**

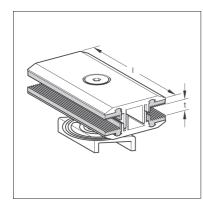
Max. adm. load (tension): Max. tightening torque:	1,2 kN/Clamp 5 Nm
Material:	
Clamp:	Aluminium
Screw:	Stainless steel A2
Channel Nut:	Steel, HCP

#### Approvals

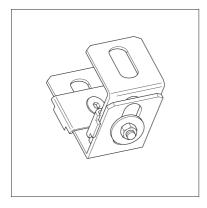
First Solar Approval

Туре	l	t	W	Quantity	Part
	[mm]	[mm]	[kg]	[pack]	number
PVG-M	80	6 - 10	0.12	50	198377









#### **Collector Clip BBS**

Group: E314

#### Application

Element to be used for form-close and safe connection of solar collectors to Channel System 41. It is possible to position the Collector Clip in steps of 90° to the channel slot without any rotation. Therefore it is also suitable for lateral assembly.

#### Scope of delivery

Collector clip, pre-assembled with CC 41-channel adaption.

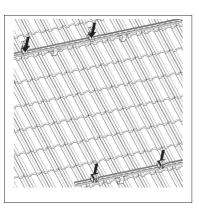
#### Installation

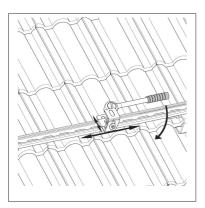
Lock the Collector Clip at any position of the channel by means of pressure on the screw. Set the required horizontal position and the vertical distance, which is given by the external dimension of the solar collector. Tighten Collector Clip on the channel. Drop the solar collector into the bottom Collector Clips. Now fix the top Collector Clips to the solar collector.

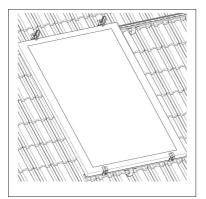
#### **Technical Data**

Material: Steel, HCP

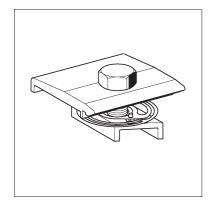
Туре	Adjustable range [mm]	W [kg]	Quantity [pack]	Part number
BBS	90 - 150	0.54	8	198810











#### **Collector Clip TH**

Group: E314

#### Application

Collector Clip to attach solar collectors with flat aluminium connection profiles to Channels 41.

#### Scope of delivery

Fully assembled unit comprising Speed Nut, Support and Clip. No loose parts.

#### Installation

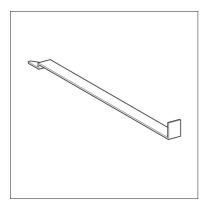
Lock the Collector Clip by pressing it into the Channel 41 at any place. Put the collector on the channel and slide the clip into parallel, correct position. Tighten the Clip with max. 10 Nm.

#### **Technical Data**

Adm. shear force 90° to panel surface = 0,8 kN / clipMaterial:Clip:AluminiumScrew:Stainless steel 304Speed nut:Steel,HCP

Туре	Panel thickness [mm]	W [kg]	Quantity [pack]	Part number
TH	3 - 4.5	0.07	12	111473





#### Lifting Point MH-S

Group: E100

#### Application

Assembly tool to aid installation and support of PV panel modules on sloping roofs. Fitting to all Channels 41. After assembly the lifting point could remain in the channel to prevent slipping of the PV panels.

#### Advice

To achieve the correct ongoing adjustment of a row of PV panels, fix a minimum of the first three adjacent PV panels with Lifting Points before removing them.

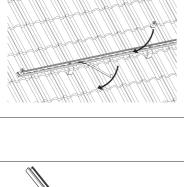
#### Installation

Insert two Lifting Points into the lower Channel 41. Put the PV panels on the channel and slide them down to the bearing lug of the Lifting Points. Slide the PV panels to the end clamps and fix. Install Middle Clamps, slide to edge of PV panels and fix. Press the Lifting Point and turn it to the right, to remove the Lifting Point (if required). Use two Lifting Points per module.

#### **Technical Data**

Steel, HCP Material:

Туре	W	Quantity	Part
	[kg]	[pack]	number
MH-S	0.28	1	194096



# **Flex Frame FXR SCR**

Group: E400

#### Application

Element to fix Photovoltaic (PV) panels onto flat or shallow sloping roofs. Angular adjustment at a slope of 30°. Allowing simple connection to existing concrete block or bolt screws.

#### Scope of delivery

Frames are delivered flat in pairs to reduce storage space. Further slopes or higher load requirements on demand.

#### Installation

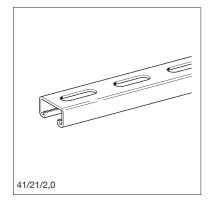
Fix the Flex Frame at the side with the joint first, tilt it and tighten the fixing bracket.

#### **Technical Data**

Nominal load per cl Material:	hannel: ≤ 3,5 kN (p	≤ 3,5 kN (pression)			
Channel:	Steel 1.035 surface coa		ed strip to	DIN EN 10327,	
Connecting parts:	Steel, HCP	0			
Туре	Length L [mm]	W [kg]	Pack. [pair]	Part number	
FXR SCR	1250	8.40	1	198940	







#### **Channel MS 41 HCP**

Group: 1811

#### Application

Element for easily and efficiently pre-assembling crossbars, wall brackets and supporting structures on construction sites or in workshops.

#### Scope of delivery

Available as single or double channels. Double channels are joined together by clinching.

#### Installation

All Channels MS 41 hcp are serrated inside and provide numerous combination options with other high corrosion protected system components.

#### **Technical Data**

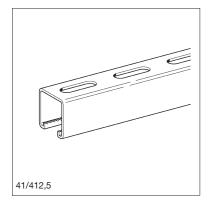
Material: Steel, HCP

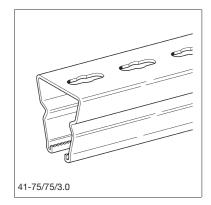
D = Double channel

Туре	Section modulus	Moment of inertia	Radius of gyration
W/H/th [mm]	[cm <sup>3</sup> ]	[cm4 ]	[cm]
41/21/2.0	W <sub>y</sub> : 0.82	l <sub>y</sub> : 0.92	i <sub>y</sub> : 0.76
	W <sub>z</sub> : 2.12	l <sub>z</sub> : 4.35	i <sub>z</sub> : 1.65
41/31/2.0	W <sub>y</sub> : 1.60	l <sub>y</sub> : 2.77	i <sub>y</sub> : 1.13
	W <sub>z</sub> : 2.88	l <sub>z</sub> : 5.90	i <sub>z</sub> : 1.65
41/41/2.0	W <sub>y</sub> : 2.43	l <sub>y</sub> : 5.16	i <sub>y</sub> : 1.46
	W <sub>z</sub> : 3.65	l <sub>z</sub> : 7.48	i <sub>z</sub> : 1.75
41/41/2.5	W <sub>y</sub> : 2.96	l <sub>y</sub> : 6.19	i <sub>y</sub> : 1.43
	W <sub>z</sub> : 4.41	l <sub>z</sub> : 9.05	i <sub>z</sub> : 1.72
41/62/2.5	W <sub>y</sub> : 5.54	l <sub>y</sub> : 17.70	i <sub>y</sub> : 2.10
	W <sub>z</sub> : 6.27	l <sub>z</sub> : 12.86	i <sub>z</sub> : 1.79
41-75/75/3.0	W <sub>y</sub> : 10.31	l <sub>y</sub> : 44.42	i <sub>y</sub> : 2.53
	W <sub>z</sub> : 11.59	l <sub>z</sub> : 43.48	i <sub>z</sub> : 2.50
41/21/2.0 D	W <sub>v</sub> : 2.35	l <sub>v</sub> : 4.93	i <sub>v</sub> : 1.24
	W <sub>z</sub> : 4.24	l <sub>z</sub> : 8.70	i <sub>z</sub> : 1.65
41/41/2.5 D	W <sub>v</sub> : 9.02	l <sub>v</sub> : 36.99	i <sub>v</sub> : 2.46
	W <sub>z</sub> : 8.82	l <sub>z</sub> : 18.10	i <sub>z</sub> : 1.72
41-75/75/3.0 D	W <sub>v</sub> : 30.72	l <sub>v</sub> : 230.40	i <sub>v</sub> : 4.07
	W <sub>z</sub> : 23.07	l <sub>z</sub> : 86.96	i <sub>z</sub> : 2.50

Type W/H/th [mm]	Cross section A [cm <sup>2</sup> ]	Distance e [cm]	Max. point carrying capacity F <sub>max</sub> [kN]	Max. torsional moment Mq [Nm]
41/21/2.0	1.61	1.12	4.0	44.5
41/31/2.0	2.17	1.73	4.0	44.5
41/41/2.0	2.43	2.12	4.0	44.5
41/41/2.5	3.05	2.09	6.0	44.5
41/62/2.5	4.01	3.20	6.0	44.5
41-75/75/3.0	6.95	4.31	10.0	44.5
41/21/2.0 D	3.21	2.10	4.0	44.5
41/41/2.5 D	6.09	4.10	6.0	44.5
41-75/75/3.0 D	13.90	7.50	10.0	44.5

Notice: All values take into account the perforation of the channels. For load charts, see chapter "Pressix CC 41".







#### Approvals

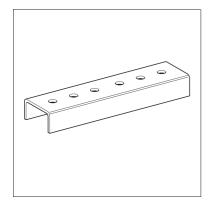


This product is has obtained the "RAL Gütezeichen Rohrbefestigung" and is subject to external surveillance according to RAL GZ-655.

\* = no RAL quality label

Туре	Length [m]	Slot pattern	Weight [kg/m]	Qty. [m]	Part number
41/21/2.0	6	3	1.32	6	193860
41/31/2.0	6	3	1.64	6	198896
41/41/2.0	6	3	1.97	6	196724
41/41/2.5	6	3	2.36	6	161497
41/62/2.5	6	3	3.13	6	199527
41-75/75/3.0	6	4	5.68	6	174008
41/21/2.0 D *	6	3	2.64	6	193884
41/41/2.5 D *	6	3	4.74	6	166748
41-75/75/3.0 D *	6	4	11.24	6	173981





### **Channel Connector SK-L HCP**

Group: 1853

### Application

Element for connecting Channels. The multiple bearing of the Channel is to be secured. The Channel Connector should not to be used between the last two bearing points. In combination with Channels > 41/21 the admissible limit has to be respected.

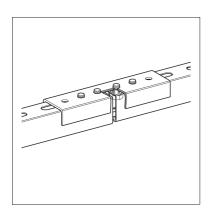
### Installation

Position the Channel Connector on the back of the channel and bolt together the channel ends (through the channel slots) by means of each two Self Forming Screws FLS F 80.

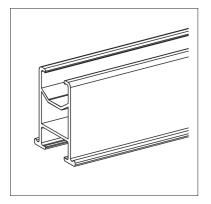
### **Technical Data**

Max. adm. limit/ flexion: 300 Nm Material: Steel S235 JR, HCP

Туре	For channel	Channel height h <sub>max</sub> [mm]	Overall length [mm]	W [kg]	Quantity [pack]	Part number
SK-L	41	62	180	0.36	10	198971







### **Channel MS ALU**

Group: E111

### Application

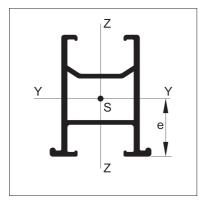
Suitable for easy and professional assembly of support constructions for solar panels. Creation of a cross bracing with Channels MS Alu 27/42 only is possible by using Cross Connector CRO ALU. Simple handling due to the used aluminium material.

### Installation

Using the Sikla CC Connecting Parts allows for easy and fast assembly of solar panels.

### **Technical Data**

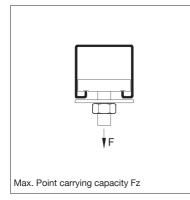
Material: Aluminium

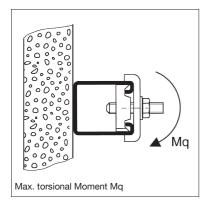


Туре	Section modulus [cm <sup>3</sup> ]	Moment of inertia [cm <sup>4</sup> ]	Radius of inertia [cm]
27/42	W <sub>y</sub> : 1.89	l <sub>y</sub> : 4.28	i <sub>y</sub> : 1.25
	W <sub>z</sub> : 1.97	l <sub>z</sub> : 3.47	i <sub>z</sub> : 1.13
41/31/2,0	W <sub>y</sub> : 1.60	l <sub>y</sub> : 2.77	i <sub>y</sub> : 1.13
	W <sub>z</sub> : 2.88	l <sub>z</sub> : 5.90	i <sub>z</sub> : 1.65

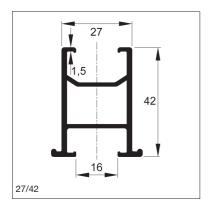
Туре	Cross section	Distance	Max. point	Max. torsional
	A [cm <sup>2</sup> ]	e [cm]	carrying capacity	moment
			F <sub>max</sub> (tension) [kN]	Mq [Nm]
27/42	2.74	2.26	1.5	10
41/31/2.0	2.17	1.73	1.5	10

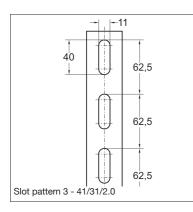
Туре	Length [m]	Weight [kg/m]	Qty. [m]	Part number
27/42	6.15	0.75	6	111713
41/31/2.0	6.00	0.55	6	112637

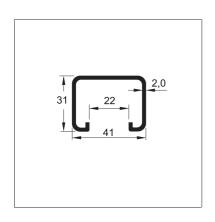




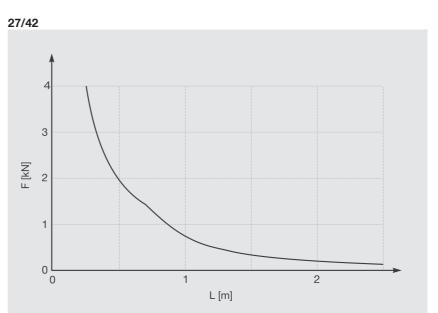




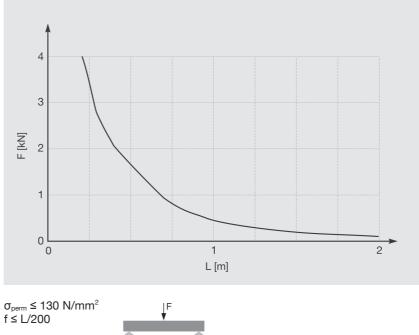




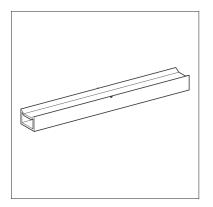












### **Channel Connector SK PV 27**

Group: E112

### Application

Channel Connector for easy and secure prolongation resp. connection of Channel MS ALU. The channel opening at the junction remains open for the assembly of further components.

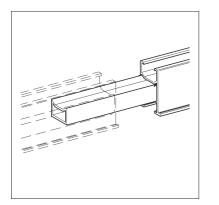
### Installation

Insert Channel Connector SK PV up to the marking into the Channel, then mount the next channel.

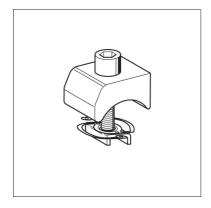
### **Technical Data**

Adm. bending moment: 200 Nm Material: Aluminium

Туре	W	Quantity	Part
	[kg]	[pack]	number
PV 27	0.06	100	111812







### **Cross Connector CRO ALU**

Group: E112

### Application

Cross combination among the Channels MS ALU and the Assembly System Pressix CC 27.

#### Scope of delivery

Complete unit consisting of Channel Nut, Screw and Clip, no loose parts.

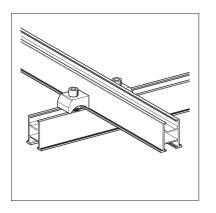
#### Installation

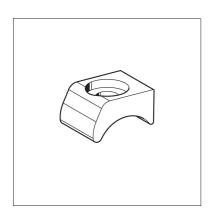
Lock the Cross Connector by pressing it into the Channel MS ALU at any place, push it against the crossing channel and tighten at max. 5Nm.

### **Technical Data**

Perm. shear force at bilateral arrangement:	1,1 kN
Per. tensile load:	1,0 kN
Material:	
Clip:	Aluminium
Screw and Channel Nut:	HCP

Туре	W	Quantity	Part
	[kg]	[pack]	number
CRO	0.04	100	111813





## Beam Clamp P0 ALU

Group: E112

### Application

Element for direct fixing of Channel MS ALU 27/42 to Roof Hook DH fix CRO by means of Flange Screw SCR FLA HCP TT M10 x 25.

### Installation

Position Channel MS ALU on the Roof Hook, install Beam Clamps P0 and thighten Flange Screw with max. 20 Nm.

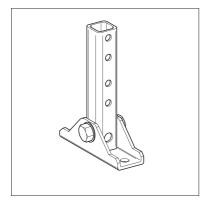
### **Technical Data**

Material: Aluminium

Туре	W	Quantity	Part
	[kg]	[pack]	number
P0 TT	0.02	50	112384

### **Construction Components**





### Joint 41 T HCP

Group: 1842

### Application

To be used for connecting Channels MS 41 to optionally bended structures such as tunnels, bended roof frames etc. under different angles. Especially suitable as brace support. Arrangement of the channel opening to all directions is possible.

### Scope of delivery

Pre-assembled with captive screw and nut.

### Installation

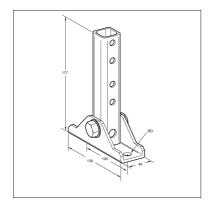
Fixation to walls, ceiling and floors by means of dowels. Adjustment of angle during assembly. Easy, fast and secure assembly of the channel with two Self Forming Screws FLS F 80.

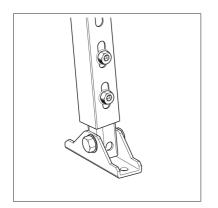
### **Technical Data**

Max. adm. load (vertical assembly to ceiling): Material:

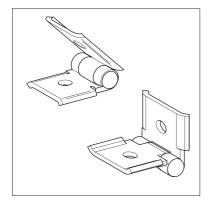
4.4 kN Steel S235 JR, HCP

Туре	Ø D	W	Quantity	Part
	[mm]	[kg]	[pack]	number
JOI 41 T	10.5	0.81	20	197615









### Joint 41 HCP

Group: 1842

### Application

For connecting Channels MS 41 allowing for variable angle-adjustment ranging from 0° - 180°. Suitable for direct connection to the building structure and, in combination with channel, can be used as an angular support for bracketry.

### Installation

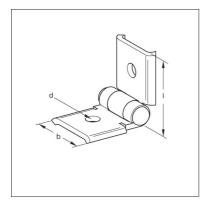
Connecting possibilities: Back of the channel with Channel Nut HZ 41 and screw Opening of the channel with Speed Nut CC 41 and screw

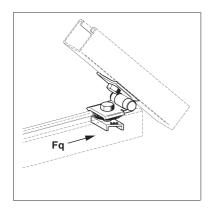
### **Technical Data**

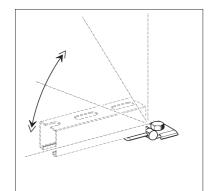
Nominal load: For Tightening torque: 50 Material: S

: Fq = 2.0 kN per juncture rque: 50 Nm Steel S235 JR, HCP

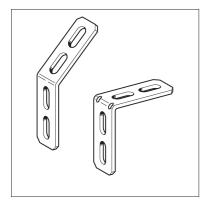
Туре	d [mm]	b [mm]	l [mm]	W [kg]	Quantity [pack]	Part number
JOI 41 V	10.5	48	54	0.18	50	198049
JOI 41 Z	10.5	48	54	0.18	50	199244











# Fixing Bracket MW HCP Group: 1826

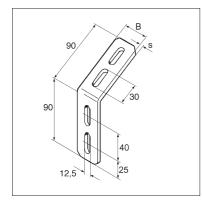
### Application

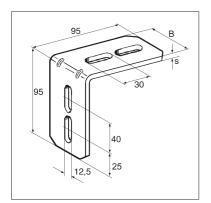
Suitable for Sikla Channels MS 41. Useful addition to Support Brackets for integration in crossbars and other structures composed of hot-dipped galvanised channels.

### **Technical Data**

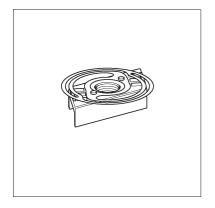
Material: Steel, HCP

Туре	B [mm]	s [mm]	W [kg]	Quantity [pack]	Part number
90/90/30°	40	4	0.23	25	194041
90/90/45°	40	5	0.23	25	162045
95/95/90°	40	5	0.23	25	162036









## Speed Nut NT CC 41 HCP

Group: 1814

### Application

In particular useful for installation in vertical channels or places of difficult access.

Further advantages:

- For all Sikla Channels MS 41, independent of the channel's height.
- No getting stuck on bolt heads when sliding in the channel.
- No appearance of settlement after tightening.

### Scope of delivery

Channel Nut and Spring are tightely connected.

### Installation

After inserting the Speed Nut into the channel opening, it is turned to the right as far as it will go by exerting slight pressure on it; deinstallation may be effected by following the instructions on the reverse order. Installation and deinstallation do not require tools and may be repeated several times.

### **Technical Data**

	M6	M8	M10	M12
Tightening torque 8.8 <sup>1)</sup> [Nm]	10	25	40	80

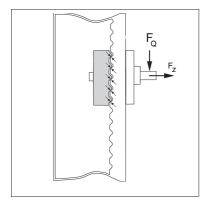
<sup>1)</sup> Using lower steel classes, the value are to be reduced accordingly.

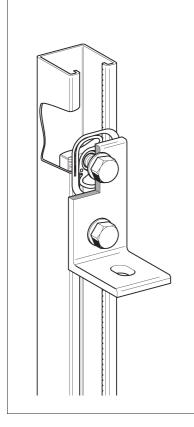
Channel thickness [mm]	M6 FZ ≤ [kN]	M8 FZ ≤ [kN]	M10 FZ ≤ [kN]	M12 FZ ≤ [kN]	M6 FQ ≤ [kN]	M8 FQ ≤ [kN]	M10 FQ ≤ [kN]	M12 FQ ≤ [kN]
1.5	3.2	4.7	4.7	7.5	0.7	1.8	2.9	7.5
2.0	3.2	5.8	5.8	10	0.9	2.1	3.4	9
2.5	3.2	5.8	5.8	11	1.0	2.6	4.1	9
3.0	3.2	5.8	5.8	13	1.1	2.8	4.4	9

Note: The permissible load capacities of the channels are to be respected.

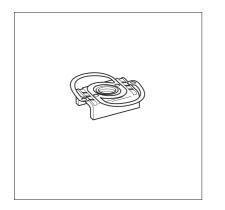
Material:	
CC-Channel Nut:	Steel class, HCP
Spring washer:	Sheet metal spring steel, rustproof

Туре	W [kg]	Quantity [pack]	Part number
CC 41-M6	0.03	50	198698
CC 41-M8	0.03	50	198650
CC 41-M10	0.03	50	186284
CC-41 M12	0.06	50	110015









## Speed Nut NT CC 27 HCP

Group: S315

### Application

In particular useful for installation in vertical channels or where access is difficult.

Further advantages:

- Can be used in all Sikla Channels MS 27, independent of the channel's height.
- No getting stuck on bolt heads when sliding in the channel.
- No appearance of settlement after tightening.

### Scope of delivery

Channel Nut and Spring are tightely connected.

### Installation

After inserting the Speed Nut into the channel opening, exert a slight axial pressure. This will cause the nut to turn to the right and engage into the channel. De-installation simply requires the nut to be turned to the left and pulled free. Installation and de-installation do not require tools and may be repeated several times.

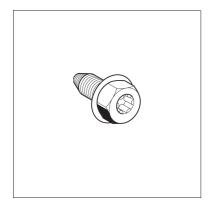
Tighten the part to be connected - that's it!

### **Technical Data**

Fz =	1,5 kN
Material:	
Channel Nut:	Steel, class 5.6, HCP
Spring washer:	Sheet metal spring steel, rustproof

Туре	W [kg]	Quantity [pack]	Part number
CC 27-M6	0.01	100	111716
CC 27-M8	0.01	100	111717





## Self Forming Screw FLS F

Group: A430

### Application

The Self Forming Screw FLS creates its own thread inside the wall of the Framo pilot hole. During the screw-driving operation, the base steel is re-shaped and hardened to form an air-tight seal between the threads of the screw and the surrounding steel, making it exceptionally resistant to vibrational loosening and increasing fastening strength.

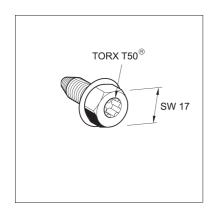
### **Technical Data**

Application	Tightening torque [Nm]
System Framo	60
Connection to Channels MS 41	35

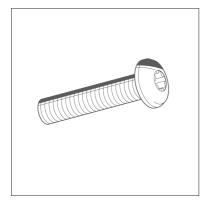
Material: Steel, HCP

Approvals MPA tested

Туре	W	Quantity	Part
	[kg]	[pack]	number
FLS F	0.03	100	192512







### Flange Screw SCR FLA HCP

Group: 1875

### Application

Type M10 x 15 allows fixation of Channels by means of Drive Plug AN, without exceeding the max. permissible screw-in depth or to go under the min. screw-in depth required.

Type M10 x 25 is the ideal connecting part for two Sikla Channels MS 41.

Versions "TT" are self-forming screws. Type M10 x 55 is applicable for fixing components with thickness of max. 41 mm to "Framo 80" system.

### Installation

The maximum admissible tightening torque strictly has to be observed.

### **Technical Data**

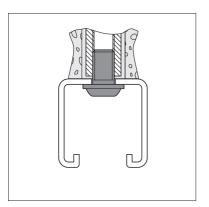
M10 x 15 and M10 x 25 Drive:

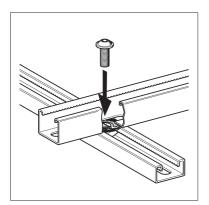
Internal hexagon SW 6

TT M10 x 25 and TT M10 x 55 max. adm. tightening torque: Drive: Material:

20 Nm (max. adm.) Torx-T50 Steel, HCP

Туре	Length [mm]	W [kg]	Quantity [pack]	Part number
M10 x 15	15	0.01	100	199107
M10 x 25	25	0.02	100	198353
TT M10 x 25	25	0.02	600	110503
TT M10 x 55	55	0.04	500	197608









### **Cable Holder KHP**

Group: E100

### Application

Clip for connecting cables up to a diameter of 16mm to PV mounting systems. Suitable to slot into the back of all Channels MS 41 with min. profile thickness of 2mm.

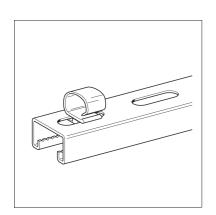
### Installation

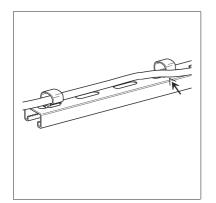
The cable holder is locked by a simple 90 degree right turn in the elongated holes of the mounting rail.

### **Technical Data**

Material: PA, nature

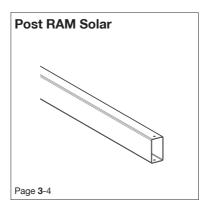
Туре	W	Quantity	Part
	[kg]	[pack]	number
KHP	0.01	500	110879

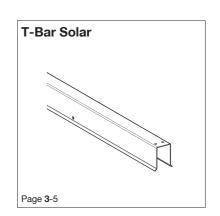


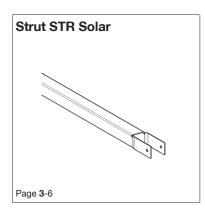






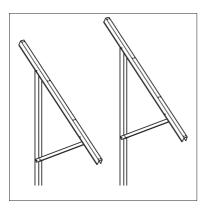












### **Ground Mount System**

Group: E400

### Application

Cost-effective ground mount system for large-scale PV plants.

Substantial overall cost reduction due to the foundation technology based on pile-driven supports. On the one hand wind and snow loads are transfered into the soil by the friction between the post and the soil and on the other hand via the pressure at the peak end of the post due to compressed rocky soil inside the post, creating a safe foundation. The buckling resistant geometry of the section prevents torsional deformation of the posts in case of hitting obstacles during installation.

Selection, configuration and design of the structural system components are the result of the individual analysis of the project, which guarantee the most effective use of material.

#### Benefits:

- No soil sealing
- Extremely quick mounting time
- Simple assembly
- Prefabricated system
- Perfectly synchronised system components only 6 parts required
- High durability due to excellent HCP surface protection
- Optimum utilisation of material resources
- Mounting time up to 1 km length per day
- Simple adjustment options during assembly by means of defined friciton
- Simple, cost-saving deconstruction

#### Scope of delivery

Ground mount system comprising post, t-bar, channel, module clamps, screws, plus additional strut (optionally required)

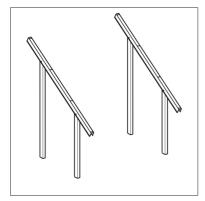
System	Post	T-Bar	Strut
	RAM Solar OAR	Solar OAT	STR Solar OA
Single Post System with bracing	1	1	1
Dual Post System	2	1	-

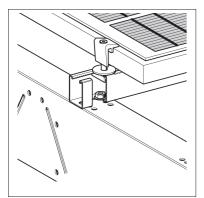
#### Installation

The selection of foundation and design of supporting structure is based on individual structural analysis according to the current state of standardisation and specifications.

- 1. Drive the posts into the soil. The piling depth is based upon the results of the geological survey.
- Connect the t-bar onto the post. Screw the guide bolt in the aligned t-bar/ post drill hole. Adjust the t-bar according to the pitch angle and tighten with the remaining screws.
- 3. Place the horizontal channels on top of the t-bars and fix them in position. Install the channel connectors and fix them with screws.
- 4. Click in place the module clamps. Alternatively, with shorter tables, steps 3 and 4 could be executed still in horizontal position before adjustment of the inclination.
- 5. Place the modules onto the construction, position them and tighten the module clamps.

#### **Technical Data**

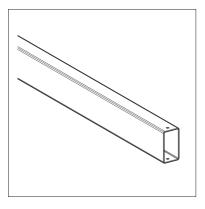






Туре	Weight [kg/m]	Qty. [m]	W [kg]	Quantity [pack]	Part number
Post RAM Solar OAL 3 mm HCP	7.68	1			113167
T-Bar Solar OAL 3 mm HCP	6.31	1			113168
Strut STR Solar OAL 3 mm HCP			5.38	1	113166







Group: E400

### Application

Post as part of Sikla Ground Mount System for mounting Photovoltaic panels. Cost-effective ground mount system for large-scale PV plants. Substantial overall cost reduction due to the foundation technology based on pile-driven supports. On the one hand wind and snow loads are transfered into the soil by the friction between the post and the soil and on the other hand via the pressure at the peak end of the post due to compressed rocky soil inside the post, creating a safe foundation. The buckling resistant geometry of the section prevents torsional deformation of the posts in case of hitting obstacles during installation.

Selection, configuration and design of the structural system components are the result of the individual analysis of the project, which guarantee the most effective use of material.

Benefits:

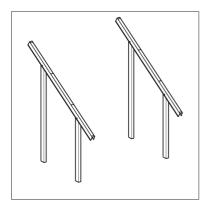
- No soil sealing
- Extremely quick mounting time
- Simple assembly
- Prefabricated system
- · Perfectly synchronised system components only 6 parts required
- + High durability due to excellent HCP surface protection
- Optimum utilisation of material resources
- Mounting time up to 1 km length per day
- Simple adjustment options during assembly by means of defined friciton
- Simple, cost-saving deconstruction

### Installation

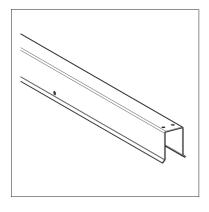
Ramming of the post according to geological expertise.

### **Technical Data**

Туре	Weight	Qty.	Part
	[kg/m]	[m]	number
Post RAM Solar OAL 3 mm HCP	7.68	1	113167







### **T-Bar Solar**

Group: E400

### Application

T-Bar as part of Sikla Ground Mount System for mounting Photovoltaic panels. Cost-effective ground mount system for large-scale PV plants. Substantial overall cost reduction due to the foundation technology based on pile-driven supports. On the one hand wind and snow loads are transfered into the soil by the friction between the post and the soil and on the other hand via the pressure at the peak end of the post due to compressed rocky soil inside the post, creating a safe foundation. The buckling resistant geometry of the section prevents torsional deformation of the posts in case of hitting obstacles during installation.

Selection, configuration and design of the structural system components are the result of the individual analysis of the project, which guarantee the most effective use of material.

#### Benefits:

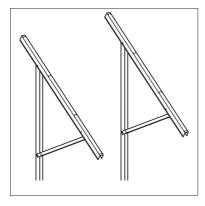
- No soil sealing
- Extremely quick mounting time
- Simple assembly
- Prefabricated system
- Perfectly synchronised system components only 6 parts required
- + High durability due to excellent HCP surface protection
- Optimum utilisation of material resources
- Mounting time up to 1 km length per day
- Simple adjustment options during assembly by means of defined friciton
- Simple, cost-saving deconstruction

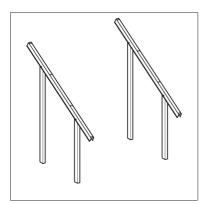
### Installation

Fastening of T-Bar to the Post with Strut and screw connections according to installation instructions.

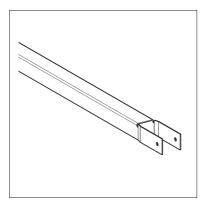
### **Technical Data**

Туре	Weight	Qty.	Part
	[kg/m]	[m]	number
T-Bar Solar OAL 3 mm HCP	6.31	1	113168











Group: E400

### Application

Strut as part of Sikla Ground Mount System for mounting Photovoltaic panels. Cost-effective ground mount system for large-scale PV plants. Substantial overall cost reduction due to the foundation technology based on pile-driven supports. On the one hand wind and snow loads are transfered into the soil by the friction between the post and the soil and on the other hand via the pressure at the peak end of the post due to compressed rocky soil inside the post, creating a safe foundation. The buckling resistant geometry of the section prevents torsional deformation of the posts in case of hitting obstacles during installation.

Selection, configuration and design of the structural system components are the result of the individual analysis of the project, which guarantee the most effective use of material.

Benefits:

- No soil sealing
- Extremely quick mounting time
- Simple assembly
- Prefabricated system
- Perfectly synchronised system components only 6 parts required
- + High durability due to excellent HCP surface protection
- Optimum utilisation of material resources
- Mounting time up to 1 km length per day
- Simple adjustment options during assembly by means of defined friciton
- Simple, cost-saving deconstruction

### Installation

Fastening of T-Bar to the Post with Strut and screw connections according to installation instructions.

### **Technical Data**

Туре	W	Quantity	Part
	[kg]	[pack]	number
Strut STR Solar OAL 3 mm HCP	5.38	1	113166

