sikla

Industrial Pipe Supports

Product Data

Technical Guide Lines

Contact us for a training session

The siFramo system by Sikla is a modular steel framing system designed to make up support frames on site or off site without a need for hot works for the following types of projects:

- Chemical & Petrochemical Plants
- Data Centre
- Oil & Gas
- Mining
- Pharmaceutical Manufacturing
- Premium Building Services (rooftop supports & plant rooms)
- Power Engineering (CCGT, EfW)
- Water Treatment

Time and cost saving is at the heart of Sikla's product range and solutions. Our DfMA include the design and manufacture of steel framing to optimise assembly/fabrication time on the shopfloor with the added benefits of:

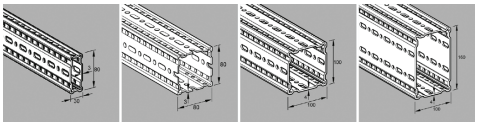
- CAD & Structural Design
- Customised Components
- Pre-assembly
- Simplifed logistics

Benefits:

- Easy-to-use modular steelwork support system
- Significant productivity gains versus conventional steel
- fabrication
- One size and type of vibration-proof thread forming
- screw for all connections
- Compliance to EN 1090-1 (CE)
- HDG coating to EN-ISO1461 and AS/NZS2312
- No nuts or back plates at member joints
- Connection to all types of primary building structures
- Higher performance / lower weight of steel ratio
- Maximum flexibility / minimum installation time
- Parts re-usable after disassembly
- Adjustable components to allow for revisions and building tolerances
- Typical support shapes documented including load capacities and dimensions
- Compatible with generic strut systems
- No hot works – no clashes – no shut down
- Easy Mothballing of temporary frame installations

What is siFramo?

siFramo is a versatile, multifunctional support system that offers maximum flexibility using a compact range of off-the-shelf components. All of our systems can be fully implemented in to the piping design process at detailed engineering stage.

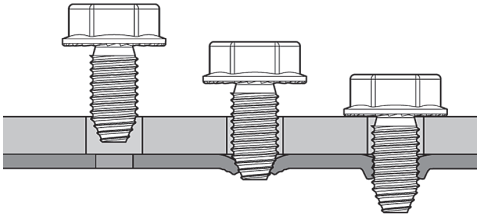


Sikla products offer these four key benefits:

- All parts are reusable without wastage
- Strong but lightweight, cutting down the total tonnage of
- steel required for the project
- Our products are readily available from stock, with a distribution network that offers quick lead times
- And there is no need for hot works!

These benefits form the foundation of siFramo:

- Lightweight from only 4.3kg per M
- Easily adjustable connections secured
- Minimal assembly by using a thread forming, shake proof fastening.



All siFramo products are fully compatible with engineered hangers and supports from global suppliers including our own Simotec pipe support range.

To see how we can help benefit your project, please contact us with your requirements.

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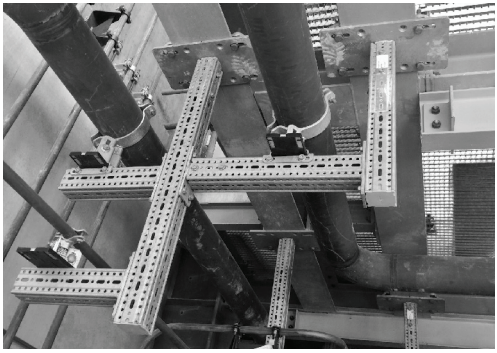
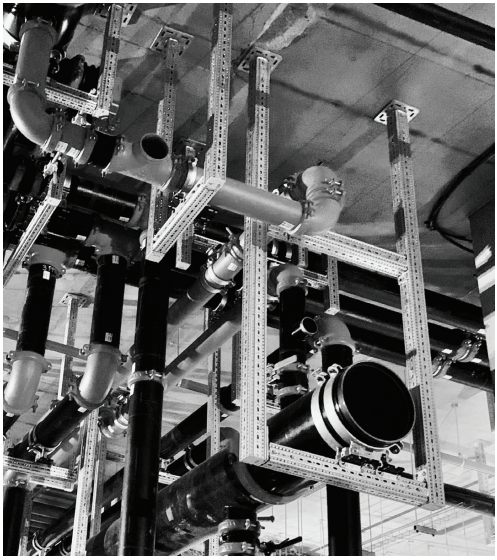
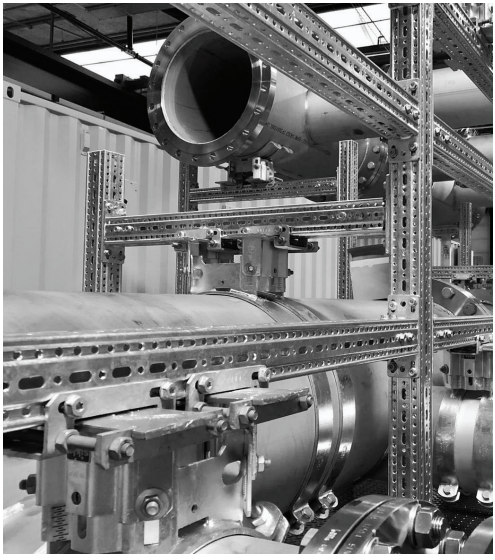
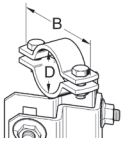




Measurements



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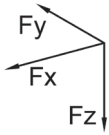
Working loads for Sliding Supports LA, LC and LD - HV



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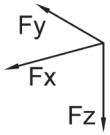
Working loads for Supports with insulation insert and suspension



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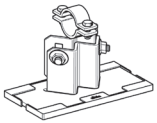
Pipe Shoe LA - HV



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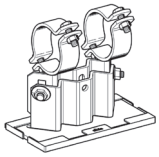
Pipe Shoe LC - HV



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Pipe Shoe LD - HV

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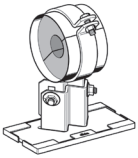
Pre-Insulated Pipe Shoe LK-HV



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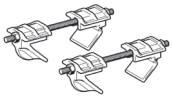
Guiding Set FS



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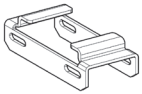
Guiding Bracket FW F



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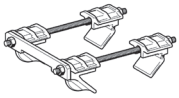
Fixed Point Set XS



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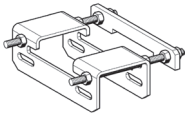
Fixed Point Bracket XW F



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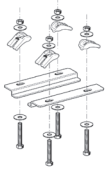
Guiding Set FS Z



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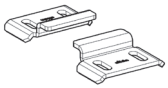
Guiding Bracket FW F L/Z



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Glass Fabric Tape GSK

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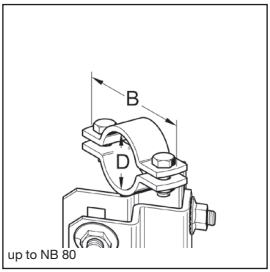
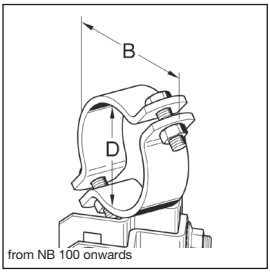
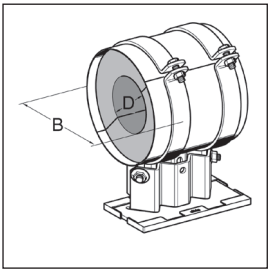


up to NB 80



from NB 100 onwards



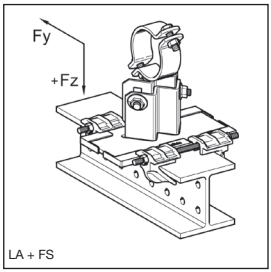
Measurements

Supports without insulation insert

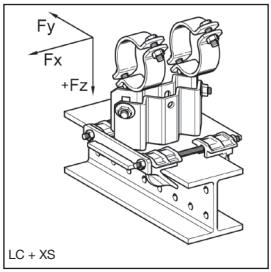
Pipe NB	Pipe D	Pipe Clamp B [mm]	Pipe Clamp Material [mm]	Hex. bolts
15	22	85	30 x 5	M10 x 40
20	27	92	30 x 5	M10 x 40
25	34	100	30 x 5	M10 x 40
32	43	111	30 x 5	M10 x 40
40	49	117	30 x 5	M10 x 40
50	61	139	40 x 5	M12 x 45
65	77	156	40 x 5	M12 x 45
80	89	168	40 x 5	M12 x 45
100	115	165	50 x 5	M12 x 50
125	140	183	50 x 5	M12 x 50
150	169	215	50 x 8	M12 x 55
200	220	252	50 x 8	M12 x 55
250	273	306	60 x 8	M16 x 65
300	324	347	60 x 8	M16 x 65
350	356	375	60 x 8	M16 x 65
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 with insulation insert

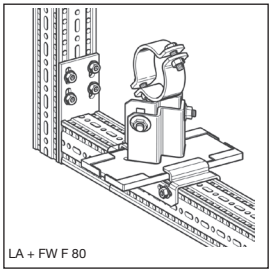
Pipe NB	Pipe D	Insulation Thickness [mm]	Insulation Length [mm]	Pipe Clamp B [mm]	Pipe Clamp Material [mm]	Hex. bolts
25	33.7	50	100	180	50 x 5	M12 x 50
32	42.4	50	100	187	50 x 5	M12 x 50
40	48.3	50	100	190	50 x 5	M12 x 50
50	60.3	50	100	199	50 x 5	M12 x 50
65	76.1	60	100	237	50 x 8	M12 x 55
80	88.9	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

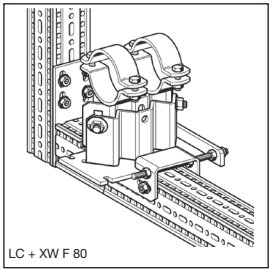


LA + FS



LC + XS


LA + FW F 80


LC + XW F 80

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

Height	DN	Fx * [kN] X-Supports only	Fy [kN]	+ Fz [kN]		- Fz FS 80/120 [kN]	- Fz FW F 80 [kN]	- Fz XS 80/120 [kN]	- Fz XW F 80 [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

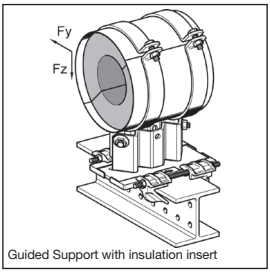
Height	DN	Fx * [kN] X-Supports only	Fy [kN]	+ Fz [kN]	- Fz FS 80/120 [kN]	- Fz FW F 80 [kN]	- Fz XS 80/120 [kN]	- Fz XW F 80 [kN]
90	≤ 25	14.3	6.3	17.0	14	6.1	17	17
90	32	14.1	6.2	17.0	14	6.1	17	17
90	40	14.0	6.1	17.0	14	6.1	17	17
90	50	13.9	5.9	17.0	14	6.1	17	17
90	65	13.6	5.6	17.0	14	6.1	17	17
90	80	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

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

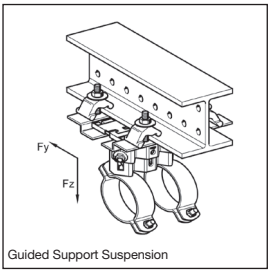
Height	DN	Fx * [kN] X-Supports only	Fy [kN]	+ Fz [kN]	- Fz FS 80/120 [kN]	- Fz FW F 80 [kN]	- Fz XS 80/120 [kN]	- Fz XW F 80 [kN]
90	≤ 350	25.0	13.1	32.8	28	12.2	32.8	32.8
90	400	22.5	11.9	32.8	28	12.2	32.8	32.8
90	500	20.8	9.4	32.8	28	12.2	32.8	32.8
90	600	10.3	7.2	32.8	28	12.2	32.8	32.8
150	≤ 350	25.0	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

* Axial fixed point forces can only be attained by the professional use of anti-slip protections (e.g. cleats, stoppers). Those have to be planned during the design of the piping and are on the responsibilty of the piping manufacturer.

Further statical product datas are available on request.



Guided Support with insulation insert



Guided Support Suspension

Working loads for Supports with insulation insert and suspension

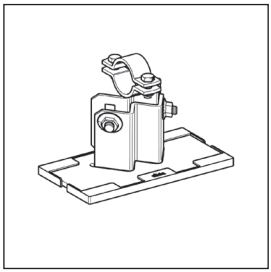
Basis of assessment EC 3, working loads for Supports in delivery status

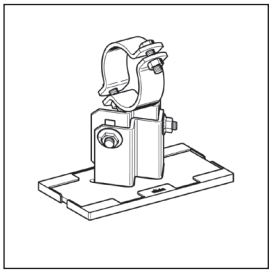
Sliding Supports LK - HV + Guiding Set FS

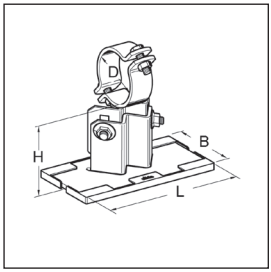
Height	DN	Fy [kN]	± Fz[kN]
150	25	3.1	3.1
150	32	3.8	3.8
150	40	4.3	4.3
150	50	4.0	3.9
150	65	2.8	2.8
150	80	2.5	2.4
150	100	4.5	17.0
150	125	4.1	17.0
150	150	3.6	17.0
150	200	2.8	17.0
150	250	1.9	17.0
150	300	0.4	17.0

Sliding Supports LC - HV + Guiding Set FS Z

Height	DN	Fy [kN]	± Fz [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

Type	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

Tightening torque screw connections:

Clamping bolts	tightening torque [Nm]	height adjustment	tightening torque [Nm]
DN 15 - 40	40	bolts in the bar	80
DN 50 - 150	50	bolts in the bar	80

Dimensions:
Metal plate: L = 250 mm x B = 100 mm
Slide plate incl.: L = 256 mm x B = 105 mm

Material:
Metal plates: Steel, HCP
Bolts, Nuts: Steel, HCP
Slide Plate: Polyamide 6.0, glass fibre reinforced, black

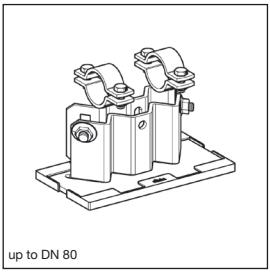
Temperature range slide plate: -20°C to +130°C
Media temperature t_f : -20°C to +300°C (if t_f > 270°C, remove slide plate)

Approvals / Compliance

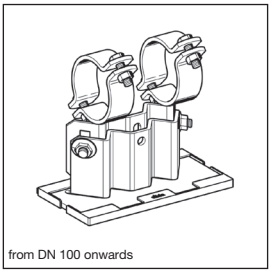
TÜVRheinland® LGA tested Quality 102793

Note: HV 200 - minimum quantity and delivery time on request

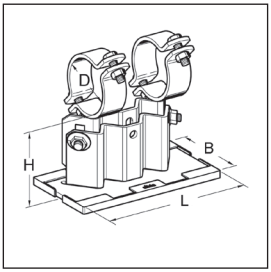
Type	D (pipe) [mm]	W [kg]	Quantity [pack]	Part number
LA - HV 90 DN 15	21.3	2.8	1	**112386**
LA - HV 90 DN 20	26.9	2.8	1	**112387**
LA - HV 90 DN 25	33.7	2.9	1	**110035**
LA - HV 90 DN 32	42.4	2.9	1	**110036**
LA - HV 90 DN 40	48.3	3.0	1	**110037**
LA - HV 90 DN 50	60.3	3.1	1	**110038**
LA - HV 90 DN 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**



up to DN 80



from DN 100 onwards



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

Type	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

Tightening torque screw connections:

Clamping bolts	tightening torque [Nm]	height adjustment	tightening torque [Nm]
DN 15 - 40	40	bolts in the bar	80
DN 50 - 200	50	bolts in the bar	80
DN 250 - 300	60	bolts in the bar	80

Dimensions:
Metal plate: L = 250 mm x B = 100 mm
Slide plate incl.: L = 256 mm x B = 105 mm

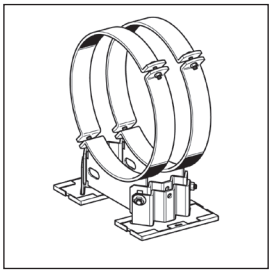
Material:
Metal parts: Steel, HCP
Bolts, Nuts: Steel, HCP
Slide plate: Polyamide 6.0, glass fibre reinforced, black

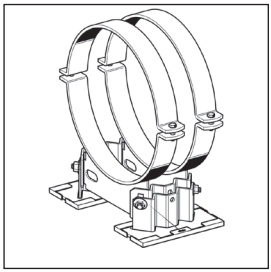
Temperature range slide plate:: -20°C to +130°C
Media temperature t_f : -20°C to +300° C (if t_f > 270°C, remove slide plate)

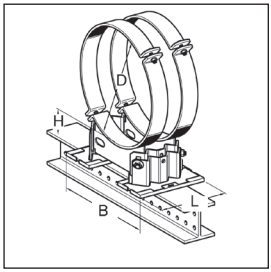
Approvals / Compliance

Note: HV 200 - minimum quantity and delivery time on request

Type	D (pipe) [mm]	W [kg]	Quantity [pack]	Part number
LC - HV 90 DN 15	21.3	3.5	1	**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	7.1	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**







Pipe Shoe LD - HV

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. In order to reduce the spacings of the lugs the pipe clamps from DN 350 are rotated by 45° (see illustration).

Installation

to exactly the same height.

Technical Data

Type	Height H as delivered [mm]	Height H range [mm]	B [mm] DN 200 - 300	B [mm] DN 350 - 600
LD - HV 90	90	88.5 ... 113.5	285	325
LD - HV 150	150	116 ... 168.5	285	325
LD - HV 200	200	171 ... 223.5	285	325

Tightening torque screw connections:

Clamping bolts	tightening torque [Nm]	height adjustment	tightening torque [Nm]
DN 200	50	bolts in the bar	80
DN 250 - 600	60	bolts in the bar	80

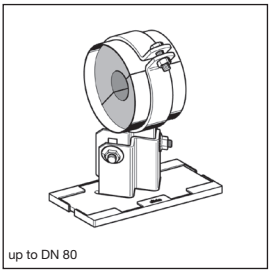
Dimensions:
Metal plate: L = 250 mm
Slide plate incl.: L = 256 mm

Material:
Metal parts: Steel, HCP
Bolts, Nuts: Steel, HCP
Slide plate: Polyamide 6.0, glass fibre reinforced, black
Temperature range slide plate:: -20°C to +130°C
Media temperature t_f : -20°C to +300°C (if t_f > 270°C, remove slide plate)

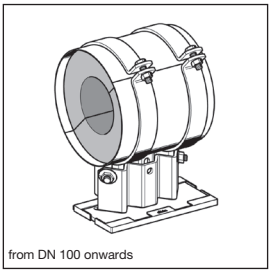
Approvals / Compliance

Note: HV 200 - minimum quantity and delivery time on request

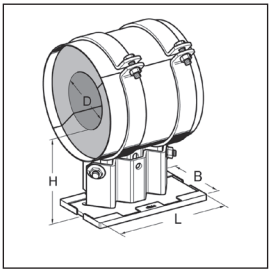
Type	D (pipe) [mm]	W [kg]	Quantity [pack]	Part number
LD - HV 90 DN 200	219.1	11.9	1	**112398**
LD - HV 90 DN 250	273.0	14.5	1	**112399**
LD - HV 90 DN 300	323.9	15.7	1	**112400**
LD - HV 90 DN 350	355.6	16.6	1	**110098**
LD - HV 90 DN 400	406.4	19.0	1	**110099**
LD - HV 90 DN 500	508.0	22.4	1	**110100**
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**



up to DN 80



from DN 100 onwards



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

Tightening torque screw connections:

Clamping bolts	tightening torque [Nm]	height adjustment	tightening torque [Nm]
DN 25 - 80	50	bolts in the bar	80
DN 100 - 300	60	bolts in the bar	80

Insulation thickness:

NB	insulation thickness [mm]
DN 25 - 50	50
DN 65 - 250	60
DN 300	80

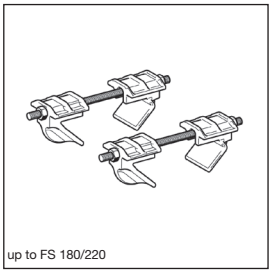
The laying rules of DIN 4140 have to be respected (existing gaps have to be sealed by means of sealing paste if necessary).

Dimensions:
Metal plate: L = 250 mm x B = 100 mm
Slide plate incl.: L = 256 mm x B = 105 mm

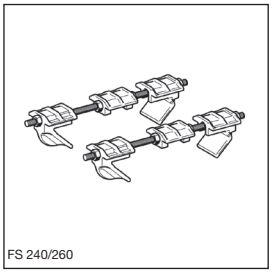
Material:
Metal parts: Steel, HCP
Grub screws, nuts: Steel, HCP
Slide plate: Polyamide 6.0, glass fibre reinforced, black
Insulation insert: PUR, 200 kg/m ^{3}
Load spread sheet Aluminium (on request: Steel, galvanised, stainless steel)
Temperature range: -30 up to +120° C

Approvals / Compliance

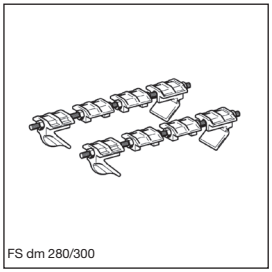
Type	D (pipe) [mm]	W [kg]	Quantity [pack]	Part number
LK - HV 150 DN 25	33.7	4.1	1	**110110**
LK - HV 150 DN 32	42.4	4.2	1	**110111**
LK - HV 150 DN 40	48.3	4.3	1	**110112**
LK - HV 150 DN 50	60.3	4.4	1	**110113**
LK - HV 150 DN 65	76.1	6.2	1	**110114**
LK - HV 150 DN 80	88.9	6.6	1	**110115**
LK - HV 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**



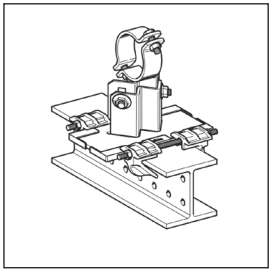
up to FS 180/220



FS 240/260



FS dm 280/300



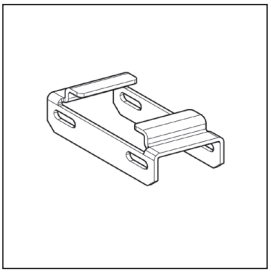
Guiding Set FS

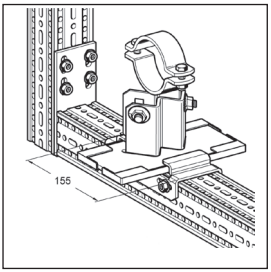
Application
Element for completing Guided Pipe Shoes based on Sliding Pipe Shoes.
Max. beam flange width t ≤ 30 mm

Scope of delivery
Pre-assembled Guiding Set containing:
4 Clamping hooks
2 Grub screws
Lift-off preventions:
2 for FS 240/260
4 for FS 280/300
Hexagon nuts:
4 for FS 80/120, FS 140/160 and FS 180/220 each
8 for FS 240/260 and 12 for FS 280/300

Technical Data
Material:
Metal sheets: Steel, HCP
Grub screws, nuts: Steel, HCP
Clamping hooks: Cast iron, HCP

Type	For flange width [mm]	W [kg]	Qty. [set]	Part number
FS 80/120	80 - 120	2.0	1	**110350**
FS 140/160	121 - 160	2.1	1	**110351**
FS 180/220	161 - 220	2.3	1	**110352**
FS 240/260	221 - 260	2.8	1	**110353**
FS 280/300	261 - 300	3.3	1	**112887**





Guiding Bracket FW F

Group: A705

Application

Element for modification of Sliding Pipe Shoes to Guided Pipe Shoes.

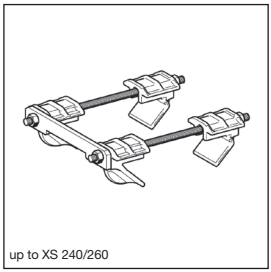
Installation

Connection to Beam Section F 80 or F 100 by means of 4 Self-Forming Screws FLS F.

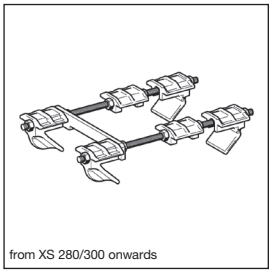
Technical Data

Material: Steel, hot-dipped galvanised

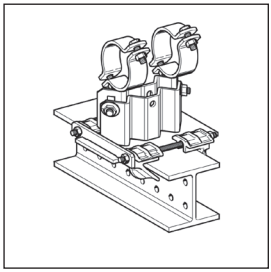
Type	W [kg]	Quantity [pack]	Part number
FW F 80	0.6	1	**110349**
FW F 100	0.7	1	**113088**



up to XS 240/260



from XS 280/300 onwards



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 ≤ 30 mm

Scope of delivery
Pre-assembled Fixed Point Set containing:
4 Clamping hooks
2 Grub screws
1 Cross bar
2 Lift-off preventions (XS 280/300)
Hexagon nuts:
4 for XS 80/120 and XS 140/160 each
6 for XS 180/220 and XS 240/260 each
10 for XS 280/300

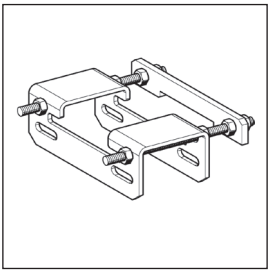
Installation
Axial fixed point forces can only be attained by the professional use of anti-slip protections (e.g. cleats, stoppers). Those have to be planned during the design of the piping and are on the responsibilty of the piping manufacturer.

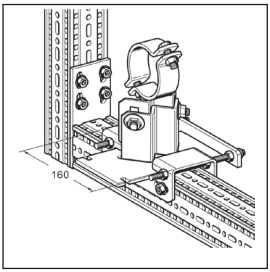
Technical Data
Material:

Metal parts:	Steel, HCP
Grub screws, nuts:	Steel, HCP
Clamping hooks:	Cast iron, HCP

Approvals / Compliance

Type	For flange width [mm]	W [kg]	Qty. [set]	Part number
XS 80/120	80 - 120	2.3	1	**110357**
XS 140/160	121 - 160	2.4	1	**110358**
XS 180/220	161 - 220	2.5	1	**110359**
XS 240/260	221 - 260	2.6	1	**110360**
XS 280/300	261 - 300	3.2	1	**110361**





Fixed Point Bracket XW F

Application
Element for modification of Sliding Pipe Shoes to Fixed Point Pipe Shoes.

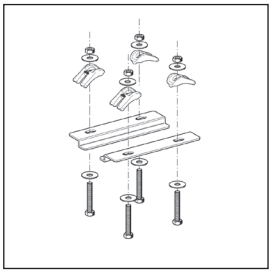
Installation
The slide plate of the Pipe Shoe is disassembled. Connection to the Beam Section F 80 or F 100 by means of 4 Self Forming Screws FLS F.

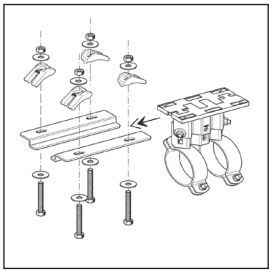
Axial fixed point forces can only be attained by the professional use of anti-slip protections (e.g. cleats, stoppers). Those have to be planned during the design of the piping and are on the responsibilty of the piping manufacturer.

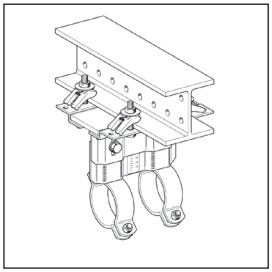
Technical Data
Material: Steel, HCP

Approvals / Compliance

Type	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 ≤ 33 mm

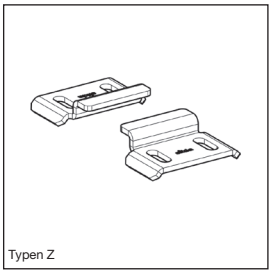
Scope of delivery
Two identical support rails and one connection kit comprising:
4 Beam Clips SPA 5P AU - M12 HCP
4 Hexagon Bolts M12 x 80 - 8.8 HCP
4 Hexagon Nuts M12-8 HCP
4 Washers 40/12/3 HCP

Installation
The guide rails are to be fixed with the attached connection kit below the beam with 2mm clearance to the support at the side. Torque for the M12 bolts of the Assembly Set = 85 Nm.

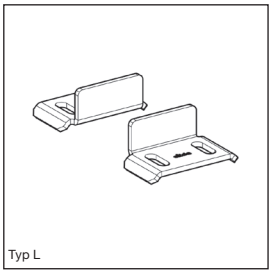
Technical Data
Material:
Metal parts: Steel, HCP
Grub screws, nuts: Steel, HCP

Approvals / Compliance

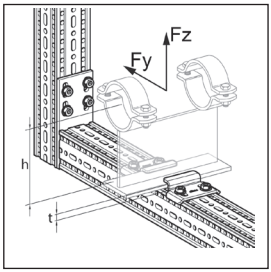
Type	For flange width [mm]	W [kg]	Qty. [set]	Part number
FS Z 80/120	80 - 120	2.7	1	**110398**

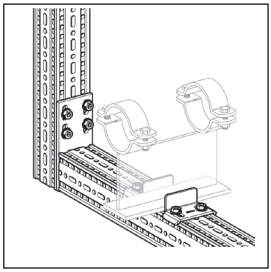


Typen Z



Typ L





Guiding Bracket FW F L/Z

Group: A705

Application

Using this Guiding Bracket it's possible to guide Pipe Shoes with different plate thicknesses. The different versions of Type Z are suitable for the respective specified maximum plate thickness (t)and so additionally allow the absorption of lifting forces.

Scope of delivery

Delivery as set comprising 2 Guiding Brackets.

Installation

Installation on top of Beam Section TP F 80 repectively F 100 with 2 Self Forming Screws FLS F per Guiding Bracket, i.e. per set 4 Self Forming Screws have to be used altogether. You can find the Self Forming Screw in the siFramo chapters (section Siconnect).
For Type Z exists a clearance of 3 mm in the vertical z-axis. Please ensure a clearance of 3 mm in the vertical y-axis for all types.

Technical Data

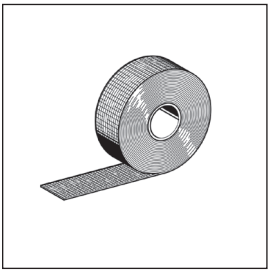
Type	perm. load Fy [kN]	perm. torque via Fy* [kNm]	perm. load Fz [kN]
FW F 80, all Types Z	1.9	0.4	5.0
FW F 80, Typ L	1.9	-	-
FW F 100, all Types Z	1.9	0.4	6.4
FW F 100, Typ L	1.9	-	-

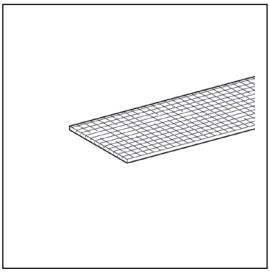
* the torque is calculated by M = Fy x h, whereas the perm. load for Fy may not be exceeded. Dimension h refers from the middle of the pipe to the top of the base plate.
The perm. loads have been determined by load tests following DIN EN 13480-3 annex J.
The used Pipe Shoe has to be verified separately.

Material: Steel, HCP

* suitable for Sikla Pipe Shoes

Type	t [mm]	W [kg]	Qty. [set]	Part number
FW F 80 Z 6	6	0.5	25	**113628**
FW F 80 Z 9	9	0.5	25	**113629**
FW F 80 Z 12 *	12	0.5	25	**113630**
FW F 80 Z 15	15	0.5	25	**113975**
FW F 80 L	-	0.5	25	**113627**
FW F 100 Z 6	6	0.6	25	**113632**
FW F 100 Z 9	9	0.6	25	**113633**
FW F 100 Z 12 *	12	0.6	25	**113634**
FW F 100 Z 15	15	0.6	25	**113976**
FW F 100 L	-	0.6	25	**113631**





Glass Fabric Tape GSK

Group: 1291

Application

Einlage für Rohrschellen zur thermischen und galvanischen Trennung (Vermeidung von Kontaktkorrosion). The Glass Fabric Tape is classified in the hydrolytic class I (best class) according to DIN 12111 regarding resistance to water. So it has an excellent resistance to acid and neutral solutions.

Scope of delivery

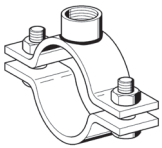
In rolls, self-adhesive on one side, coated with PE peel-off foil on the adhesive side.

Technical Data

Temperature range:	Up to +500°C permanent exposure
Density:	2,6 g/cm^3
Tensile strength:	3.400 - 3.700 N/mm^2
Resistant to:	Oils, greases, solvents and organic acids.

Type	Width [mm]	Thickness [mm]	Roll [m]	Part number
30 x 2	30	2.0	10	**114865**
40 x 2	40	2.0	10	**114866**
50 x 2	50	2.0	10	**114867**
60 x 2	60	2.0	10	**114868**
70 x 2	70	2.0	10	**114869**

Pipe Clamp Stabil I-1/2" HCP



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Pipe Clamp Stabil RB-A HCP

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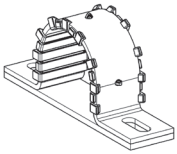
U Clamp RUC I



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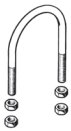
U Bolt RUB 3570 A HCP



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Rubber Profile SAL SBR/EPDM

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Rubber Profile SAL Silicone

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Cellular Rubber MSK

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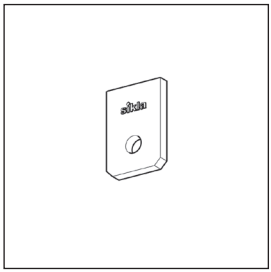
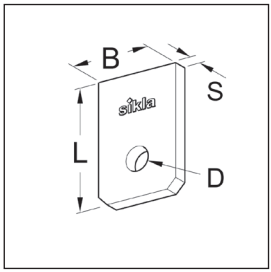
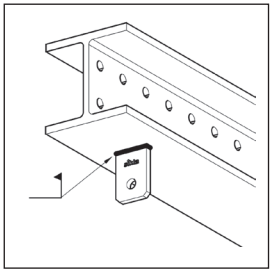
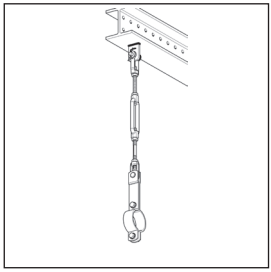








Weld-on Eye-Plate HPA

Group: A299

Application

Weld-on Eye Plate to primary steel beam sections and steel plates. The Weld-on Eye-Plate serves as a basic element for the connection of the Rod Hanger Load Chain Assembly LKV in sizes M10 up to M16 rod and Pipe Clamps type Stabil Form C LK. It may also be welded directly to the Welding Plates type SPL if required.

Installation

Align the Weld-on Eye Plate to the primary steel section and weld in place. The weld-on eye plate can be welded directly without prior treatment due to a weldable corrosion-resistant coating (no zinc impurity to weld).
Recommended fillet weld 4mm thick (throat thickness = 4mm)

Technical Data

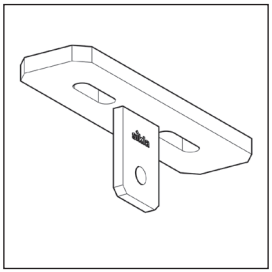
Type	max. perm. tensile load [kN]
M10	11.2
M12	12.1
M16	12.5

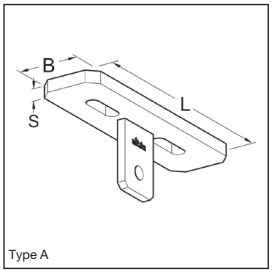
The implementation and construction requirements of the components, their design as well as their verifications and load tests were carried out following the standards VGB R 510 L part I, KTA 3205.3 and DIN EN 13480-3.

Type	L [mm]	B [mm]	S [mm]	D [mm]
M10	65	45	8	11
M12	65	45	8	13
M16	65	45	8	17

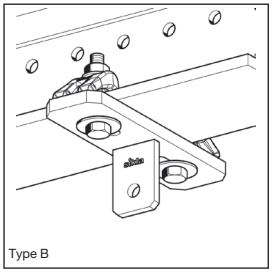
Material: Steel, HCP

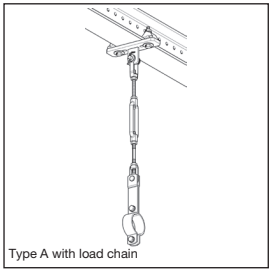
Type	W [kg]	Quantity [pack]	Part number
HPA M10-2	0.2	10	**113017**
HPA M12-2	0.2	10	**113018**
HPA M16-2	0.2	10	**113019**





Type A


Type B


Type A with load chain

Beam System Eye-Plate HP 80/99

Group: A299

Application

Connecting component for the direct attachment of rod hanger assemblies to beam sections with a flange width 80-99mm. The pre-welded Eye-Plate serves as a basic element for the connection of the Rod Hanger Load Chain Assembly LKV in sizes M10 up to M16 rod and Pipe Clamps type Stabil Form C LK.

Installation

The Beam System Eye-Plate HP 80/99 is clamped to the supporting steel beam section by means of Assembly Set MS 5P M12 S2. The Eye-Plate can also be fastened directly to concrete by means of 2no. M12 anchors.
Type A: Load Chain runs crosswise to the beam
Type B: Load Chain runs longitudinally to the beam

Technical Data

Type	max. perm. tensile load [kN]
M10	11.2
M12	12.1
M16	12.5

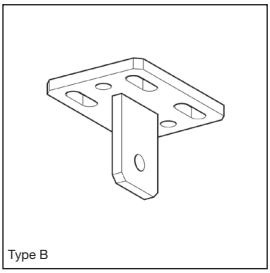
The implementation and construction requirements of the components, their design as well as their verifications and load tests were carried out following the standards VGB R 510 L part I, KTA 3205.3 and DIN EN 13480-3.

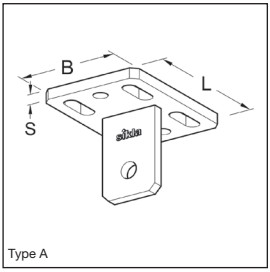
L [mm]	B [mm]	S [mm]
200	60	12

Material: Steel, HCP

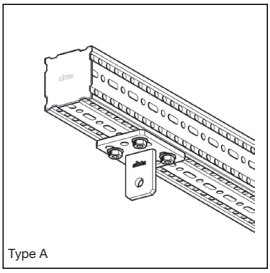
Hinweis: Delivery time on request

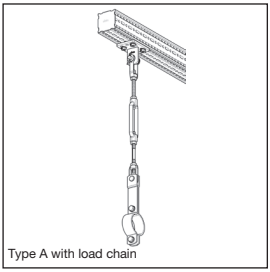
Type	W [kg]	Quantity [pack]	Part number
HP 80/99 - A M10	1.2	10	**113029**
HP 80/99 - A M12	1.3	10	**113030**
HP 80/99 - A M16	1.5	10	**113031**
HP 80/99 - B M10	1.2	10	**113026**
HP 80/99 - B M12	1.3	10	**113027**
HP 80/99 - B M16	1.5	10	**113028**


Type B



Type A


Type A


Type A with load chain

siFramo Eye-Plate HP F 80

Group: A299

Application

Connecting component for the direct attachment of rod hanger assemblies to the siFramo 80 system. The pre-welded Eye-Plate serves as a basic element for the connection of the Rod Hanger Load Chain Assembly LKV in sizes M10 up to M16 rod and Pipe Clamps type Stabil Form C LK.

Installation

The siFramo Eye-Plate HP F 80 is fastened to the supporting siFramo 80 section by means of 4no. FLS F screws. The siFramo Eye-Plate can also be fastened directly to concrete by means of 2no. M10 anchors.
Type A: Load Chain runs crosswise to the beam
Type B: Load Chain runs longitudinally to the beam

Technical Data

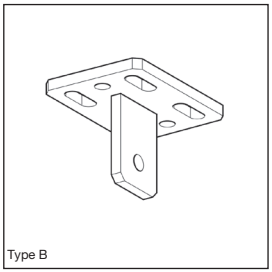
Type	max. perm. tensile load [kN]
M10	11.2
M12	12.1
M16	12.5

The implementation and construction requirements of the components, their design as well as their verifications and load tests were carried out following the standards VGB R 510 L part I, KTA 3205.3 and DIN EN 13480-3.

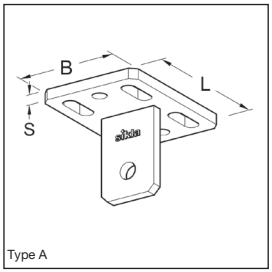
L [mm]	B [mm]	S [mm]
110	80	8

Material: Steel, HCP

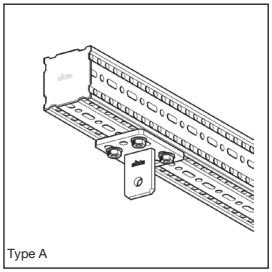
Type	W [kg]	Quantity [pack]	Part number
HP F 80 - A M10	0.6	10	**113023**
HP F 80 - A M12	0.6	10	**113024**
HP F 80 - A M16	0.6	10	**113025**
HP F 80 - B M10	0.6	10	**113020**
HP F 80 - B M12	0.6	10	**113021**
HP F 80 - B M16	0.6	10	**113022**



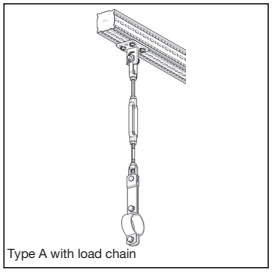
Type B



Type A



Type A



Type A with load chain

siFramo Eye-Plate HP F 100

Group: A299

Application

Connecting component for the direct attachment of rod hanger assemblies to the siFramo 100 system. The pre-welded Eye-Plate serves as a basic element for the connection of the Rod Hanger Load Chain Assembly LKV in sizes M10 up to M16 rod and Pipe Clamps type Stabil Form C LK.

Installation

The siFramo Eye-Plate HP F 100 is fastened to the supporting siFramo 100 section by means of 4no. FLS F screws. The siFramo Eye-Plate can also be fastened directly to concrete by means of 2no. M10 anchors.
Type A: Load Chain runs crosswise to the beam
Type B: Load Chain runs longitudinally to the beam

Technical Data

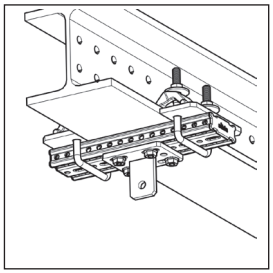
Type	max. perm. tensile load [kN]
M10	11.2
M12	12.1
M16	12.5

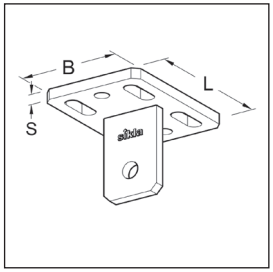
The implementation and construction requirements of the components, their design as well as their verifications and load tests were carried out following the standards VGB R 510 L part I, KTA 3205.3 and DIN EN 13480-3.

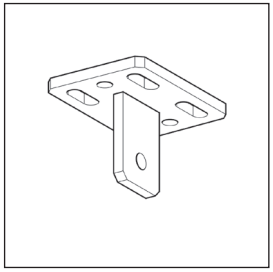
L [mm]	B [mm]	S [mm]
110	100	8

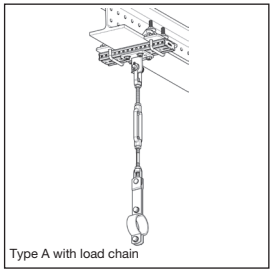
Material: Steel, HCP

Type	W [kg]	Quantity [pack]	Part number
HP F 100 - A M10	0.8	10	**115050**
HP F 100 - A M12	0.8	10	**115051**
HP F 100 - A M16	0.8	10	**115052**
HP F 100 - B M10	0.8	10	**115047**
HP F 100 - B M12	0.8	10	**115048**
HP F 100 - B M16	0.8	10	**115049**








Type A with load chain

Beam Connection LKA

Group: A299

Application

Connecting assembly for the direct attachment of rod hanger assemblies to beam sections with a flange width 100-310mm. The pre-welded Eye-Plate which is fastened to the siFramo80/30 section serves as a basic element for the connection of the Rod Hanger Load Chain Assembly LKV in sizes M10 up to M16 rod and Pipe Clamps type Stabil Form C LK.

Scope of delivery

Support assembly to connect the rod hanger load chain LKV to the beam, consisting of:
1 Beam Section siFramo 80/30 (see length variants in table below) with pre-welded siFramo Eye-Plate HP F 80
2 U-Holders SB F 80/30-40

Installation

Connect the Beam Section siFramo 80/30 length with pre-welded siFramo Eye-Plate HP F 80 to the underside of the existing steel beam by means of the U-Holders SB F 80/30-40.
Tightening torque for the U-Holder clamps : 40 Nm
Type A: Load Chain runs crosswise to the beam
Type B: Load Chain runs longitudinally to the beam

Technical Data

Max. perm. tensile load according beam width:

Type	100 - 199 mm	200 - 310 mm
M10	10.9 kN	10.8 kN
M12	11.5 kN	11.3 kN
M16	12.1 kN	11.9 kN

The implementation and construction requirements of the components, their design as well as their verifications and load tests were carried out following the standards VGB R 510 L part I, KTA 3205.3 and DIN EN 13480-3.

siFramo Eye-Plate HP F 80:

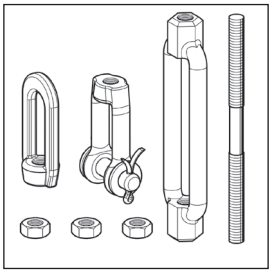
L [mm]	B [mm]	S [mm]
110	80	8

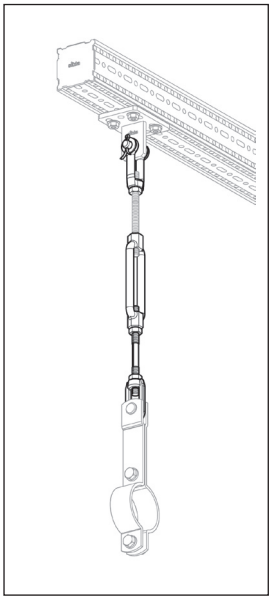
siFramo 80/30:

Beam width [mm]	L [mm]	B [mm]	H [mm]
100 - 160	300	80	30
161 - 310	440	80	30

Material: Steel, HCP

Type	W [kg]	Quantity [pack]	Part number
LKA-A 100/160 M10	5.0	2	**115833**
LKA-A 100/160 M12	5.0	2	**115834**
LKA-A 100/160 M16	5.0	2	**115835**
LKA-A 161/300 M10	5.6	2	**115836**
LKA-A 161/300 M12	5.6	2	**115837**
LKA-A 161/300 M16	5.6	2	**115838**
LKA-B 100/160 M10	5.0	2	**115826**
LKA-B 100/160 M12	5.0	2	**115827**
LKA-B 100/160 M16	5.0	2	**115828**
LKA-B 161/300 M10	5.6	2	**115829**
LKA-B 161/300 M12	5.6	2	**115831**
LKA-B 161/300 M16	5.6	2	**115832**





Rod Hanger Load Chain Assembly LKV

Group: A299

Application

The Rod Hanger Load Chain Assembly group connects components in the load chain with their counterparts, such as lugs, eye-plates and Pipe Clamp Stabil Form C LK.

Scope of delivery

Rod Hanger Load Chain Assembly LKV:
1 eye nut
1 threaded clevis with pin
1 turnbuckle
1 tie rod
3 lock nuts

The length of the upper threaded rod has to be determined and cut according to the overall suspension height required. In order to avoid unintentional rotation during assembly, the threaded clevis and turnbuckle components have to be locked off.

Installation

Preassemble the rod hanger components and connect to the Eye-Plate by means of the threaded clevis (push-through installation of pin to form complete rod hanger suspension from sub-structure). The turnbuckle enables adjustable height setting in the assembled state. In order to avoid unintentional rotation the threaded clevis, turnbuckle and eye nut have to be locked off(3 hexagon nuts).

Technical Data

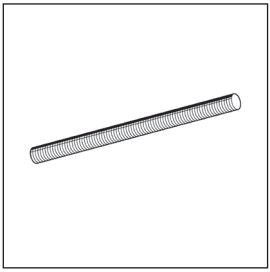
Type	max. perm. tensile load [kN]
M10	11.2
M12	12.1
M16	14.0

The implementation and construction requirements of the components, their design as well as their verifications and load tests were carried out following the standards VGB R 510 L part I, KTA 3205.3 and DIN EN 13480-3.

Type	combinable Type Pipe Clamp C LK
LKV M10	22 - 89
LKV M12	22 - 89
LKV M16	115 - 324

Material: Steel, HCP

Type	W [kg]	Quantity [pack]	Part number
LKV M10	0.4	10	**113919**
LKV M12	0.7	10	**113920**
LKV M16	1.4	10	**113921**



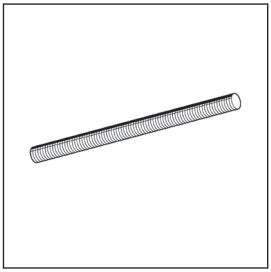
Threaded Rod GST HCP

Group: 1817

Technical Data

Material: Steel Class 4.8, HCP

Type	Length	Weight [kg/m]	Qty. [m]	Part number
M10	1 m	0.49	25	**114842**
M10	2 m	0.49	50	**114112**
M10	3 m	0.49	30	**116569**
M12	1 m	0.70	25	**114843**
M12	2 m	0.70	20	**114113**
M12	3 m	0.70	30	**116570**
M16	1 m	1.30	10	**114844**
M16	2 m	1.30	20	**116572**
M16	3 m	1.30	15	**116571**



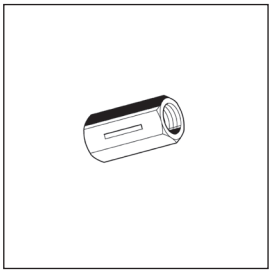
Threaded Stud GST HCP

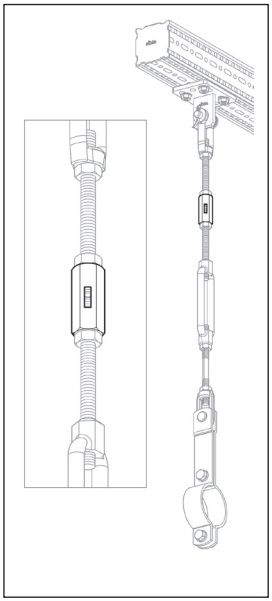
Group: 1816

Technical Data

Material: Steel Class 4.8, HCP

Type	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**
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**





Rod Coupling AD IG/IG HCP

Group: 1832

Application

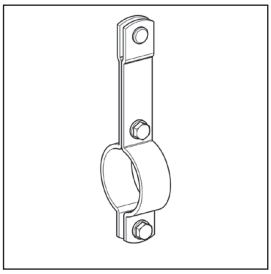
Connection element to extend threaded rods for suspension heights of Sikla Load Chains of more than 3 meters effective length of thread. With slot for visual check of screw depth of both ends of the threaded rods. The HCP-surface of the Rod Coupling in combination with other HCP-components guarantees a consistent corrosion protection for all individual parts.
During assembly the Rod Coupling has to be locked with two hexagon nuts (not included in scope of delivery).

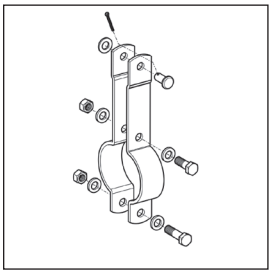
Technical Data

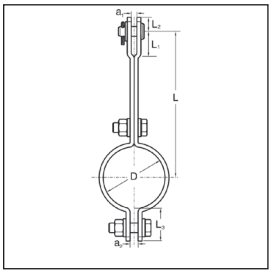
Type	max. perm. tensile load [kN]
M10	18.6
M12	27.0
M16	39.2

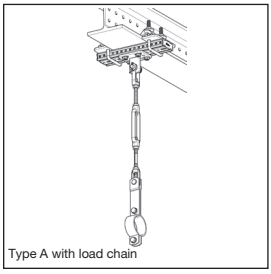
Material: Steel, HCP

Type	Length [mm]	A/F	W [kg]	Quantity [pack]	Part number
M10 x 30	30	17 mm	0.04	100	**116700**
M12 x 35	35	17 mm	0.04	50	**116701**
M16 x 40	40	22 mm	0.07	50	**116702**








Type A with load chain

Stabil Form C LK

Group: A299

Application

Industrial pipe clamp following VGB-R 510 L for standard industrial pipe supports. The pipe clamp Stabil Form C LK can be used as pendulum suspension or as part of a rod hanger.

Scope of delivery

With screws and nuts (class 8.8 or 8) and bolts incl. splint. The pipe clamp is delivered pre-assembled.

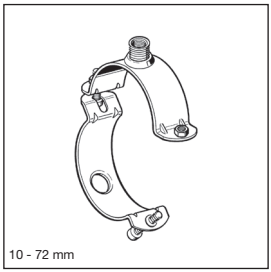
Technical Data

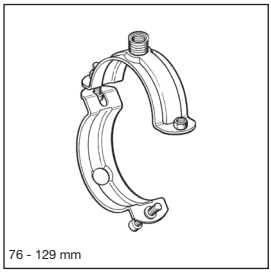
Type	perm. load [kN]	recommended Rod Hanger Arrangement LKV
22 - 89	4.0	LKV M10 / LKV M12
115 - 169	5.4	LKV M16
220 - 324	9.3	LKV M16

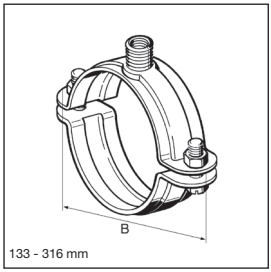
Type	D [mm]	a_1 [mm]	a_2 [mm]	L [mm]	L_1 [mm]	L_2 [mm]	L_3 [mm]	B x S [mm]
22	22	7	10	90	29	12	33	30 x 5
27	27	7	10	93	29	12	34	30 x 5
34	34	7	10	107	29	12	35	30 x 5
44	44	7	10	113	29	12	36	30 x 5
49	49	7	10	126	29	12	36	30 x 5
61	61	7	10	144	28	18	40	40 x 5
77	77	7	10	183	28	18	41	40 x 5
89	89	7	10	189	28	18	41	40 x 5
115	115	11	16	221	38	23	41	50 x 6
140	140	11	16	234	38	23	41	50 x 6
169	169	11	16	249	38	23	41	50 x 6
220	220	11	16	280	38	23	47	50 x 8
273	273	11	16	311	38	23	56	60 x 8
324	324	11	16	336	38	23	56	60 x 8

Material: Steel, HCP

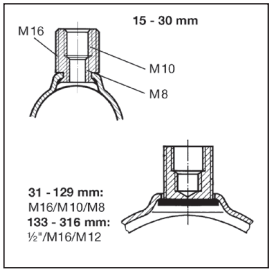
Type	W [kg]	Quantity [pack]	Part number
22	0.45	25	**113103**
27	0.48	25	**113104**
34	0.54	25	**113105**
44	0.57	25	**113106**
49	0.58	25	**113107**
61	0.98	10	**113108**
77	1.17	10	**113109**
89	1.24	10	**113110**
115	1.83	10	**113111**
140	1.98	10	**113112**
169	2.16	1	**113113**
220	3.74	1	**113114**
273	5.24	1	**113115**
324	5.84	1	**113116**


10 - 72 mm


76 - 129 mm



133 - 316 mm



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).

Installation
FM size range 1" to 4" is approved with ≥ M10 only.
For FM applications use M10 only.
For VdS applications use M10 only if size is >2" to 4".

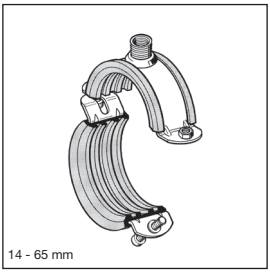
Technical Data

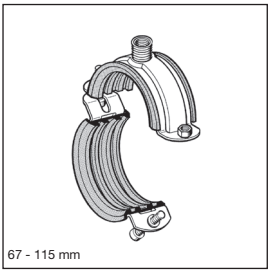
Size [mm]	Max. working load (tension)
10 - 30	2,0 kN
31 - 129	5,0 kN
133 - 173	8,0 kN
176 - 316	12,5 kN

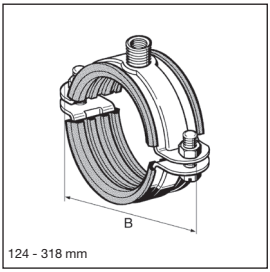
Material: Steel, HCP

Approvals / Compliance
VdS-Approval No. G4920027, * = FM Approval

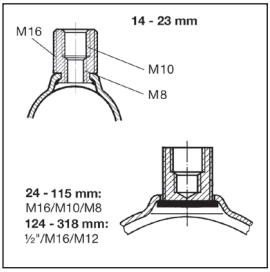
Size range [mm]	NB	Material W x th [mm]	Thread connection	B [mm]	W [kg]	Qt [pack]	Part number
10 - 14		25 x 2.0	M16/M10/M8	60	0.07	50	**113832**
15 - 19	3/8"	25 x 2.0	M16/M10/M8	57	0.07	50	**112216**
20 - 24	1/2"	25 x 2.0	M16/M10/M8	63	0.08	50	**112217**
25 - 30	3/4"	25 x 2.0	M16/M10/M8	69	0.08	50	**112218**
31 - 35*	1"	30 x 2.5	M16/M10/M8	74	0.12	50	**112219**
36 - 41*		30 x 2.5	M16/M10/M8	81	0.13	50	**113833**
40 - 45*	1 1/4"	30 x 2.5	M16/M10/M8	85	0.13	50	**112220**
48 - 53*	1 1/2"	30 x 2.5	M16/M10/M8	94	0.15	50	**112221**
54 - 59*		30 x 2.5	M16/M10/M8	101	0.16	50	**112222**
60 - 65*	2"	30 x 2.5	M16/M10/M8	108	0.17	50	**112223**
67 - 72*		30 x 2.5	M16/M10/M8	114	0.18	50	**112224**
76 - 81 M*	2 1/2"	30 x 3.0	M16/M10/M8	137	0.28	25	**115767**
82 - 87 M*		30 x 3.0	M16/M10/M8	143	0.29	25	**115768**
88 - 93 M*	3"	30 x 3.0	M16/M10/M8	149	0.31	25	**115769**
102 - 108 M*		30 x 3.0	M16/M10/M8	163	0.34	25	**115770**
110 - 116 M*	4"	30 x 3.0	M16/M10/M8	171	0.36	25	**115771**
124 - 129 M*		30 x 3.0	M16/M10/M8	184	0.39	25	**115772**
133 - 140*		40 x 4.0	1/2"/M16/M12	210	0.74	10	**112231**
140 - 148*	5"	40 x 4.0	1/2"/M16/M12	218	0.76	10	**112232**
149 - 155*		40 x 4.0	1/2"/M16/M12	225	0.81	10	**112233**
159 - 165*		40 x 4.0	1/2"/M16/M12	235	0.82	10	**112234**
167 - 173*	6"	40 x 4.0	1/2"/M16/M12	243	0.85	10	**112235**
176 - 184		40 x 4.0	1/2"/M16/M12	255	0.95	10	**112236**
188 - 194		40 x 4.0	1/2"/M16/M12	265	0.98	10	**112237**
199 - 205		40 x 4.0	1/2"/M16/M12	276	1.03	10	**112238**
207 - 216		40 x 4.0	1/2"/M16/M12	287	1.07	10	**112239**
219 - 225	8"	40 x 4.0	1/2"/M16/M12	296	1.11	10	**112240**
244 - 250		40 x 4.0	1/2"/M16/M12	321	1.23	10	**112242**
267 - 273	10"	40 x 4.0	1/2"/M16/M12	344	1.25	10	**112244**
278 - 284		40 x 4.0	1/2"/M16/M12	355	1.35	10	**112245**
297 - 303		40 x 4.0	1/2"/M16/M12	374	1.42	10	**112246**
310 - 316		40 x 4.0	1/2"/M16/M12	387	1.47	10	**112247**


14 - 65 mm


67 - 115 mm



124 - 318 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 - 65	2,0 kN	2
67 - 115	2,0 kN	3
124 - 162	2,9 kN	5
165 - 214	3,5 kN	10
219 - 305	7,5 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 $FZ_{perm,fi}$ in case of fire

Size range [mm]	FWD 30 [N]	FWD 60 [N]	FWD 90 [N]	FWD 120 [N]	Deformation δ_{max} [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:	Steel, electro-galvanised
Sound absorption lining:	SBR/EPDM sticked in (black) - (see chapter "Sound Absorption Products")

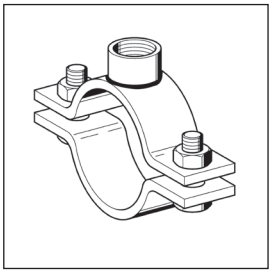
Approvals / Compliance

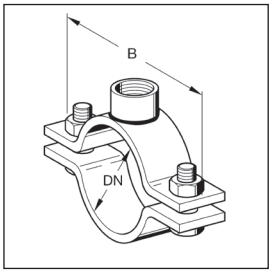
This product has been awared the RAL quality mark "pipe supports" and "fire-tested pipe supports" and is subject to continuous external monitoring according to RAL GZ-655.

* = no RAL quality mark

For the size ranges of 67 - 72 up to 108 - 115 two connection variants are temporarily available.

Size range [mm]	NB	Material W x th [mm]	Thread connection	B [mm]	W [kg]	Qt [pack]	Part number
14 - 18	3/8"	25 x 2.0	M16/M10/M8	63	0.08	50	**107680**
19 - 23	1/2"	25 x 2.0	M16/M10/M8	69	0.09	50	**107699**
24 - 28	3/4"	30 x 2.5	M16/M10/M8	74	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	1 1/4"	30 x 2.5	M16/M10/M8	94	0.17	50	**107282**
47 - 52	1 1/2"	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 M		30 x 3.0	M16/M10/M8	137	0.30	25	**115773**
73 - 78 M	2 1/2"	30 x 3.0	M16/M10/M8	143	0.31	25	**115774**
79 - 85 M		30 x 3.0	M16/M10/M8	149	0.33	25	**115775**
88 - 93 M	3"	30 x 3.0	M16/M10/M8	157	0.36	25	**115776**
100 - 106 M		30 x 3.0	M16/M10/M8	171	0.39	25	**115778**
108 - 115 M	4"	30 x 3.0	M16/M10/M8	180	0.42	25	**115780**
124 - 129		40 x 4.0	1/2"/M16/M12	210	0.89	10	**107389**
131 - 137		40 x 4.0	1/2"/M16/M12	218	0.93	10	**107398**
138 - 144	5"	40 x 4.0	1/2"/M16/M12	225	0.96	10	**107404**
148 - 154		40 x 4.0	1/2"/M16/M12	235	1.00	10	**107413**
156 - 162		40 x 4.0	1/2"/M16/M12	243	1.05	10	**107422**
165 - 171	6"	40 x 4.0	1/2"/M16/M12	255	1.18	10	**107431**
177 - 183		40 x 4.0	1/2"/M16/M12	265	1.23	10	**107440**
188 - 194		40 x 4.0	1/2"/M16/M12	276	1.25	10	**107459**
196 - 203		40 x 4.0	1/2"/M16/M12	287	1.32	10	**148911**
205 - 214		40 x 4.0	1/2"/M16/M12	296	1.35	10	**148920**
219 - 225	8"	40 x 4.0	1/2"/M16/M12	307	1.41	10	**107468**
244 - 250		40 x 4.0	1/2"/M16/M12	332	1.55	10	**107477**
267 - 273	10"	40 x 4.0	1/2"/M16/M12	355	1.62	10	**107486**
278 - 284		40 x 4.0	1/2"/M16/M12	366	1.67	10	**112718**
299 - 305		40 x 4.0	1/2"/M16/M12	387	1.80	10	**107495**
307 - 318 *		40 x 4.0	1/2"/M16/M12	400	1.95	10	**189974**





Pipe Clamp Stabil I-$^1/_2$" HCP

Group: A022

Application
Heavy pipe clamp for industrial application.

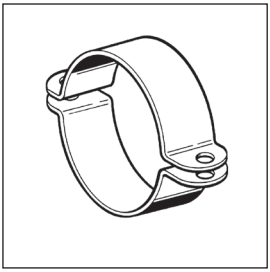
Scope of delivery
Two-piece pipe clamp with all around welded $^1/_2$" nut with clamping bolts and nuts.

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

Type	Material b x s [mm]	Clamping screws	B [mm]	Max. adm. load (tension) [kN]
22	30 x 5	M10 x 35	85	4.7
27	30 x 5	M10 x 35	92	4.7
34	30 x 5	M10 x 35	100	4.7
44	30 x 5	M10 x 35	112	4.7
49	30 x 5	M10 x 35	117	4.7
61	40 x 5	M12 x 40	139	8
77	40 x 5	M12 x 40	156	8
89	40 x 5	M12 x 40	168	8
115	50 x 5	M12 x 40	194	11

Type	For pipe [NB]	W [kg]	Quantity [pack]	Part number
22	15	0.28	25	**188147**
27	20	0.31	25	**188156**
34	25	0.32	25	**188165**
44	32	0.36	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**



Pipe Clamp Stabil RB-A HCP

Group: 1860

Application

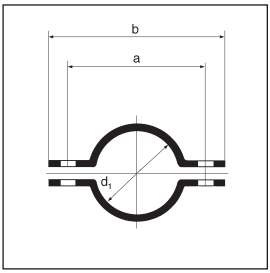
For particularly high static requirements in plant construction. Design similar to DIN 3567. The perforations on both sides allow the application of standardised bolts and threaded nuts out of the Sikla product range.

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

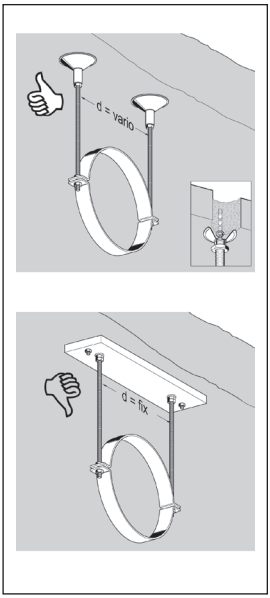


Size [mm]	Max. adm. load (tension) [kN]
13 - 49	11.0
57 - 89	15.5
90 - 169	22.0
188 - 610	42.0

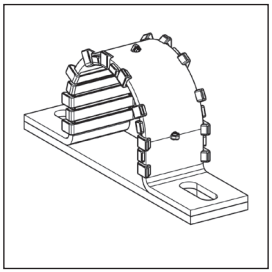
The max. perm. load capacity of connected parts (e.g. anchors) shall be considered.

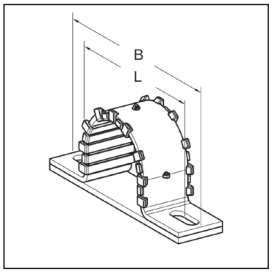
The max. adm. load capacity is determined by the application of statistical methods, resulting from the breaking loads, under oberservance of a max. adm. deformation of 1.5 mm or 2% of the max. stretchable pipe dia.

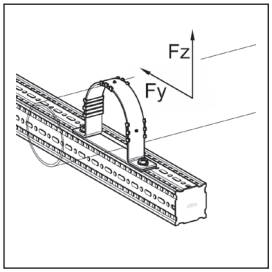
Material: Steel, HCP

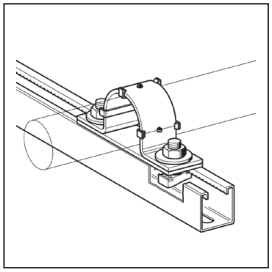


Size d_1 [mm]	Size range [mm]	Material W x th [mm]	Recommended clamping bolts	a [mm]	b [mm]	W [kg]	Qt [pack]	Part number
18	13 - 18	30 x 5.0	M10 x 40	54	83	0.17	25	**112790**
22	17 - 22	30 x 5.0	M10 x 40	56	85	0.18	25	**112791**
27	23 - 27	30 x 5.0	M10 x 40	63	92	0.20	25	**112792**
34	30 - 34	30 x 5.0	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 80	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**









U Clamp RUC I

Group: A023

Application

Guided Support for the installation of siFramo Beam Sections, Channels 41 and steel girders (H-, I- and Double-U) to support overlying pipelines. This U Clamp can be used as an alternative for Non-Grip (Guide) U Bolt applications. The sliding plate reduces friction between pipe and substructure. The plastic layer and the sliding plate ensure a galvanic isolation between pipe and U Clamp as well as substructure, so it's possible to fasten e.g. stainless steel pipes.

Scope of delivery

U Clamp RUC I with pre-assembled plastic layer. Sliding plate enclosed.

Installation

Depending on the existing substructure the following options are possible:

a) On top of siFramo Beam Sections with Self Forming Screws FLS
b) On top of Channels 41 with bolts M10 and suitable Channel Nut
c) On top of steel girders (H-, I- and Double-U) with bolts M10

Technical Data

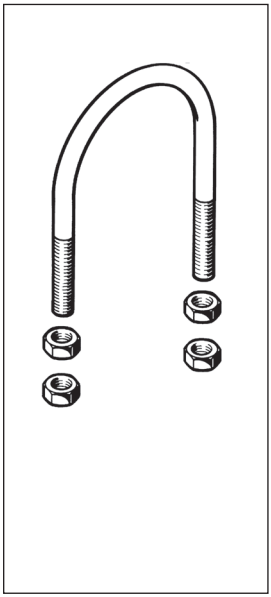
Type	perm. load Fy [kN]	perm. load Fz [kN]
27 - 121	0.6	2.3
152 - 336	0.2	0.8

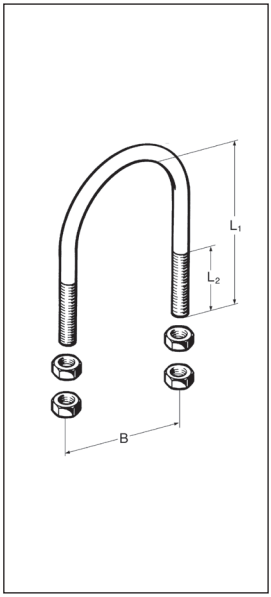
The perm. loads have been determined by load tests following DIN EN 13480-3 annex J.
For the installation on top of steel girders and Channels 41 the load capacities of these substructures (and connection parts) have to be verified.

Material:

Clamp body:	Steel, HCP
Layer and sliding plate:	Thermoplastic resins
Temperature range:	-20°C to +90°C (at layer and sliding plate)

Type	NB	Material [mm]	B [mm]	L [mm]	Dimensions of elongated hole [mm]	W [kg]	Quantity [pack]	Part number
27	15	40 x 4	134	91	11 x 20	0.22	25	**113393**
33	20	40 x 4	140	97	11 x 20	0.23	25	**113394**
40	25	40 x 4	147	104	11 x 20	0.26	25	**113395**
48	32	40 x 4	155	112	11 x 20	0.29	25	**113396**
55	40	40 x 4	161	118	11 x 20	0.30	25	**113397**
67	50	40 x 4	173	130	11 x 20	0.35	25	**113398**
83	65	40 x 4	189	146	11 x 20	0.42	25	**113399**
95	80	40 x 4	202	159	11 x 20	0.46	25	**113400**
121	100	40 x 4	227	184	11 x 20	0.55	25	**113401**
152	125	40 x 4	259	216	11 x 20	0.65	10	**113402**
181	150	40 x 4	287	244	11 x 20	0.77	10	**113403**
232	200	40 x 4	338	295	11 x 20	0.93	10	**113404**
286	250	40 x 4	392	349	11 x 20	1.14	5	**113405**
336	300	40 x 4	443	400	11 x 20	1.35	1	**113406**





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.

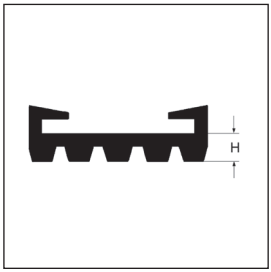
Installation

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

Material: Steel, HCP

Type	NB	B [mm]	L_1 [mm]	L_2 [mm]	Thread	W [kg]	Quantity [pack]	Part number
26.9	3/4"	40	60	40	M 10	0.12	50	**162179**
33.7	1"	48	66	40	M 10	0.12	50	**162188**
42.4	1 1/4"	56	76	50	M 10	0.14	50	**162197**
48.3	1 1/2"	62	82	50	M 10	0.14	50	**162203**
60.3	2"	76	97	50	M 12	0.23	50	**162212**
76.1	2 1/2"	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**



Rubber Profile SAL SBR/EPDM

Group: 1294

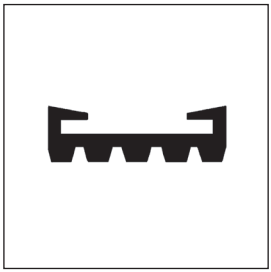
Application

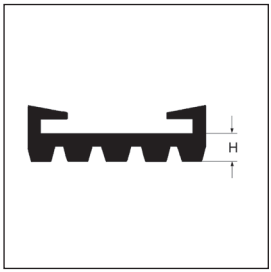
Sound absorption lining for steel straps and pipe clamps (also according to DIN 4109).
Application up to +110°C.

Technical Data

Material:	SBR/EPDM, black
Hardness:	45+/-5° Shore
Temperature range:	-50°C up to +110°C
Breaking elongation:	560 %
Tear strength:	500 N/cm^2
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^{13} Ohm
Volume resistance:	2 x 10^{13} 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

Type	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	0.19	30	**146502**
STD 2	30 x 3.0	4.0	4	0.20	30	**146511**
STD 3	40 x 4.0	6.0	5	0.31	30	**146520**
STD 4	50 x 5.0	7.0	5	0.39	30	**146539**
STD 5	70 x 6.0	7.0	7	0.52	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).

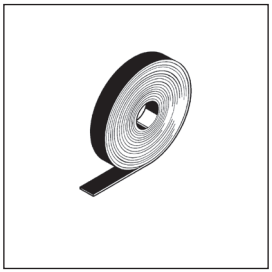
Technical Data

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^2
Impact absorption:	30 %
Fire resistance:	Material class B2 (DIN 4102), non-dripping
Sound absorption:	Up to 16 dB(A)
Surface resistance:	1 x 10^{11} Ohm
Volume resistance:	1 x 10^{15} Ohm
Resistant to:	Animal and vegetable fats, glycerine and ethyl alcohol
Partially resistant to:	Diluted acids and lyes, chlorinated and aromatic 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 / Compliance

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.

Type	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**



Cellular Rubber MSK

Group: 1293

Application
Sound absorption lining for steel straps and pipe clamps.

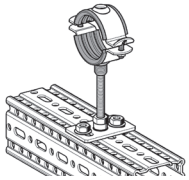
Scope of delivery
In rolls, self-adhesive on one side, coated with peel-off foil on the adhesive side.

Technical Data

Sound absorption value:	12 dB(A)
Temperature range:	-40°C up to +90°C
Ozone and weather resistance:	Good
Cell structure:	Closed
Resistent to:	Diluted acids, lyes, alkaline solutions, water, aqueous solutions up to 70°C, No absorption of moisture
Not resistant to:	Hot oils, fuels, aliphatic and aromatic hydrocarbons and chloric gas

Type	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**

Assembly Group BG14 F80-M10



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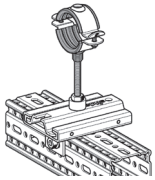
Assembly Group BG15 F80-M10



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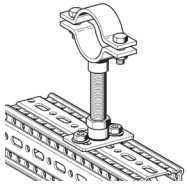
Assembly Group BG14 F80-1/2"



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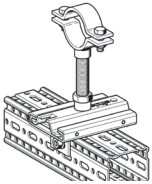
Assembly Group BG15 F80-1/2"



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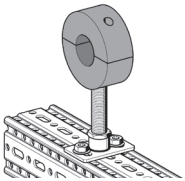
Assembly Group BG44 F80-1/2"



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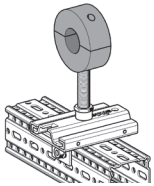
Assembly Group BG45 F80-1/2"



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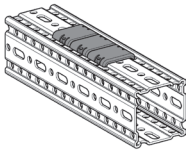
Assembly Group BG51 F80



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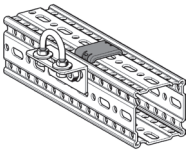
Assembly Group BG22 F80



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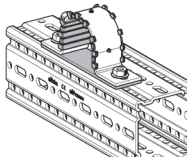
Assembly Group BG52 F80/100



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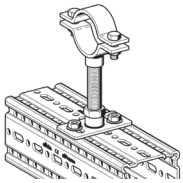
Assembly Group BG16 F100-1/2"



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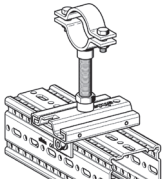
Assembly Group BG17 F100-1/2"



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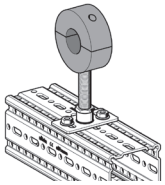
Assembly Group BG49 F100-1/2"



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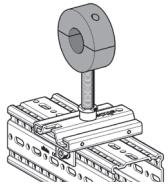
Assembly Group BG50 F100-1/2"



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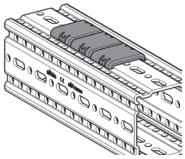
Assembly Group BG54 F100



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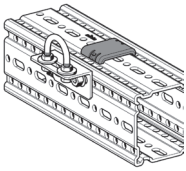
Assembly Group BG22 F100



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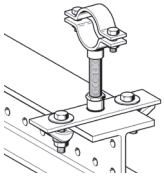
Assembly Group BG60 T100-1/2"



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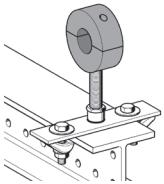
Assembly Group BG61 T100-1/2"



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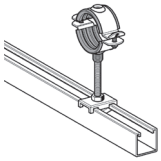
Assembly Group BG11 MS41-M10



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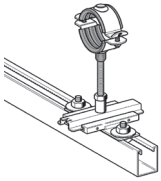
Assembly Group BG13 MS41-M10



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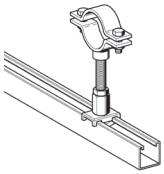
Assembly Group BG11 MS41-1/2"



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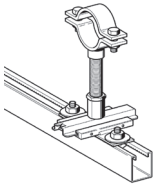
Assembly Group BG13 MS41-1/2"



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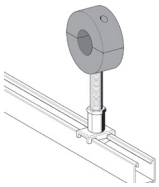
Assembly Group BG48 MS41-1/2"



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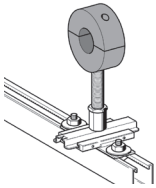
Assembly Group BG42 MS41-1/2"



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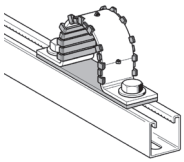
Assembly Group BG57 MS41



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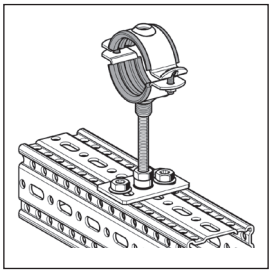


Assembly Group BG14 F80-M10

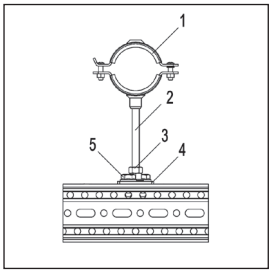
Group: 1102

Application

An Assembly Group containing components to make up a permanent pipe connection with the pipe clamp Stabil D-3G. The Assembly Group is designed for use with the Beam Section TP F 80. It is connected using the Self Forming Screw FLS F, and the height is adjusted via the Threaded Rod M10.
The pipe clamp with sound absorption lining ensures sound absorption in accordance with DIN 4109.

Scope of delivery

The components are grouped together by type and are delivered separately according to the individual components. The threaded rod is supplied by the metre (1 m) and is shortened to suit on site.



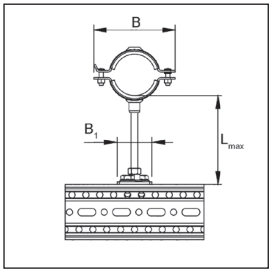
Parts list:
Item 1 Pipe Clamp Stabil D-3G with lining
Item 2 Threaded Rod GST M10 x 1000
Item 3 Hexagon Nut M10
Item 4 Mounting Plate GPL F80-M10
Item 5 Self Forming Screw FLS F

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

$L_{max,\ vertical}$ = 150 mm
$L_{max,\ horizontal}$ = not recommended

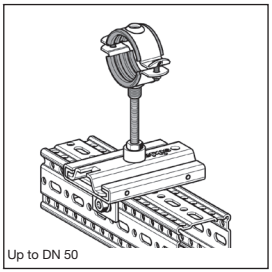


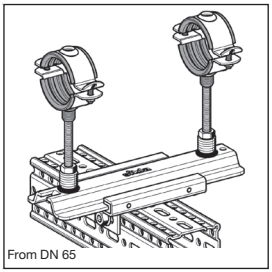
Material:

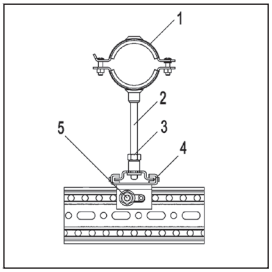
Pipe clamp and conncetion parts:	Steel, HCP
Screws and nuts:	Steel, HCP
Sound absorption lining:	SBR/EPDM, black, bonded in

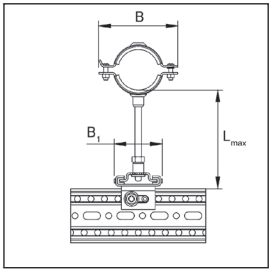
Note: pre-assembly on request!

Type	Size range [mm]	B_1 [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	19 - 23	50	68	0.35	1	**110200**
DN 20	24 - 28	50	75	0.38	1	**110201**
DN 25	33 - 37	50	81	0.40	1	**110202**
DN 32	40 - 45	50	93	0.42	1	**110203**
DN 40	47 - 52	50	104	0.44	1	**110204**
DN 50	60 - 65	50	117	0.46	1	**110205**
DN 65	73 - 78	50	150	0.56	1	**110206**
DN 80	88 - 93	50	164	0.61	1	**110207**
DN 100	108 - 115	50	187	0.67	1	**110208**


Up to DN 50


From DN 65





Assembly Group BG15 F80-M10

Group: 1102

Application

An Assembly Group for use as a guided support with the pipe clamp Stabil D-3G. The Assembly Group is designed for use with the Beam Section TP F 80. It is connected using the Self Forming Screw FLS F, and the height is adjusted via the Threaded Rod M10.
The pipe clamp with sound absorption lining ensures sound absorption in accordance with DIN 4109.

Scope of delivery

The components are grouped together by type and are delivered separately according to the individual components. The threaded rod is supplied by the metre (1 m) and is shortened to suit on site.

Parts list:
Item 1 Pipe Clamp Stabil D-3G with lining
Item 2 Threaded Rod GST M10 x 1000
Item 3 Hexagon Nut M10
Item 4 Slide Set GS F80 2G / GS F80 2G2
Item 5 Self Forming Screw FLS F

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

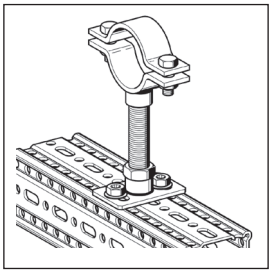
$L_{max,\ vertical}$ = 150 mm
$L_{max,\ horizontal}$ = not recommended

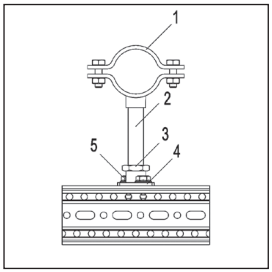
Material:

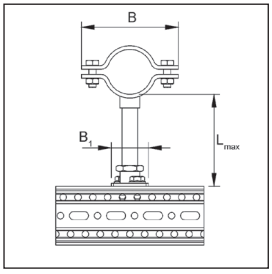
Pipe clamp and connecting parts:	Steel, HCP
Bolts and nuts:	Steel, HCP
Sound absorption lining:	SBR/EPDM, black, captively bonded in

Note: pre-assembly on request!

Type	Size range [mm]	B_1 [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	19 - 23	67	68	0.86	1	**110218**
DN 20	24 - 28	67	75	0.89	1	**110219**
DN 25	33 - 37	67	81	0.91	1	**110220**
DN 32	40 - 45	67	93	0.93	1	**110221**
DN 40	47 - 52	67	104	0.95	1	**110222**
DN 50	60 - 65	67	117	0.97	1	**110223**
DN 65	73 - 80	67	150	1.55	1	**110224**
DN 80	88 - 93	67	164	1.65	1	**110225**
DN 100	108 - 115	67	187	1.77	1	**110226**







Assembly Group BG14 F80-$^1/_2$"

Group: 1102

Application
An Assembly Group containing components to make up a permanent pipe connection with the heavy Pipe Clamp Stabil I-$^1/_2$". The Assembly Group is designed for use with the Beam Section TP F 80. It is connected using the Self Forming Screw FLS F, and the height is adjusted via the Threaded Tube $^1/_2$".

Scope of delivery
The components are grouped together by type and are delivered separately according to the individual components. The threaded tube is supplied by the metre (2 m) and is shortened to suit on site.

Parts list:
Item 1 Pipe Clamp Stabil I-$^1/_2$".
Item 2 Threaded Tube GR 2 m $^1/_2$"
Item 3 Locking Nut NT G $^1/_2$"
Item 4 Mounting Plate GPL F80-$^1/_2$"
Item 5 Self Forming Screw FLS F

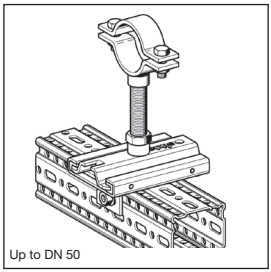
Installation
The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

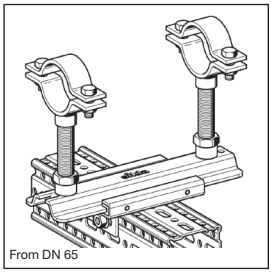
Technical Data
$L_{max,\ vertical}$ = 300 mm
$L_{max,\ horizontal}$ = 150 mm

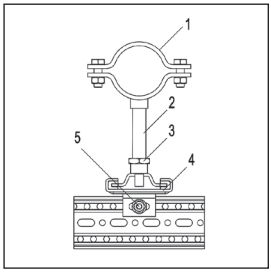
Material:
Pipe clamp and connecting parts: Steel, HCP
Bolts and nuts: Steel, HCP

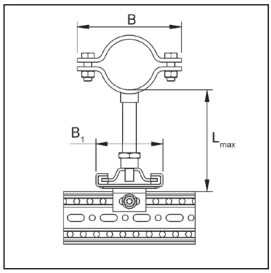
Note: pre-assembly on request!

Type	Size range [mm]	B_1 [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	17 - 22	50	85	0.83	1	**110209**
DN 20	23 - 27	50	92	0.84	1	**110210**
DN 25	30 - 34	50	100	0.87	1	**110211**
DN 32	40 - 44	50	112	0.91	1	**110212**
DN 40	45 - 49	50	117	0.93	1	**110213**
DN 50	57 - 61	50	139	1.15	1	**110214**
DN 65	73 - 77	50	156	1.23	1	**110215**
DN 80	85 - 89	50	168	1.29	1	**110216**
DN 100	109 - 115	50	194	1.58	1	**110217**


Up to DN 50


From DN 65





Assembly Group BG15 F80-$^1/_2$"

Group: 1102

Application

An Assembly Group for use as a guided support with the heavy Pipe Clamp Stabil I-$^1/_2$". The Assembly Group is designed for use with the Beam Section TP F 80. It is connected using the Self Forming Screw FLS F, and the height is adjusted via the Threaded Tube $^1/_2$".

Scope of delivery

The components are grouped together by type and are delivered separately according to the individual components. The threaded tube is supplied by the metre (2 m) and is shortened to suit on site.

Parts list:
Item 1 Pipe Clamp Stabil I-$^1/_2$"
Item 2 Threaded Tube GR 2 m $^1/_2$"
Item 3 Locking Nut NT G $^1/_2$"
Item 4 Slide Set GS F80 1G / Slide Set GS F80 1G2
Item 5 Self Forming Screw FLS F

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

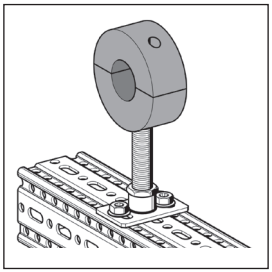
Technical Data

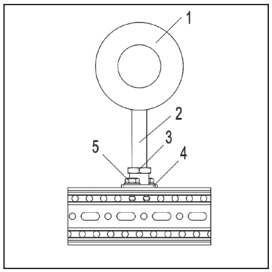
$L_{max,\ vertical}$ = 200 mm
$L_{max,\ horizontal}$ = not recommended

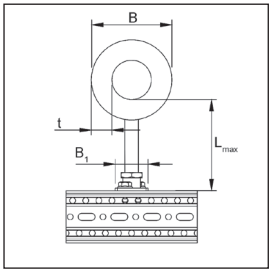
Material:
Pipe clamp and connecting parts: Steel, HCP
Bolts and nuts: Steel, HCP

Note: pre-assembly on request!

Type	Size range [mm]	B_1 [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	16 - 22	102	85	1.98	1	**110227**
DN 20	23 - 27	102	92	1.99	1	**110228**
DN 25	30 - 34	102	100	2.02	1	**110229**
DN 32	39 - 44	102	112	2.06	1	**110230**
DN 40	44 - 49	102	117	2.08	1	**110231**
DN 50	57 - 61	102	139	2.30	1	**110232**
DN 65	73 - 77	102	156	3.74	1	**110233**
DN 80	85 - 89	102	168	3.86	1	**110234**
DN 100	109 - 116	102	194	4.44	1	**110235**







Assembly Group BG44 F80-$^1/_2$"

Group: 1102

Application
An Assembly Group containing components to make up a permanent pipe connection with the insulated Chilled Water Clamp RB for chiller plants and cool water systems. The Assembly Group is designed for use with the Beam Section TP F 80. It is connected using Self Forming Screw FLS F, and the height is adjusted via the Threaded Tube $^1/_2$".

Scope of delivery
The components are grouped together by type and are delivered separately according to the individual components. The threaded tube is supplied by the metre (2 m) and is shortened to suit on site.

Parts list:
Item 1 Chilled Water Clamp RB
Item 2 Threaded Tube GR 2 m $^1/_2$"
Item 3 Locking Nut NT G $^1/_2$"
Item 4 Mounting Plate GPL F80-$^1/_2$"
Item 5 Self Forming Screw FLS F

Installation
The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

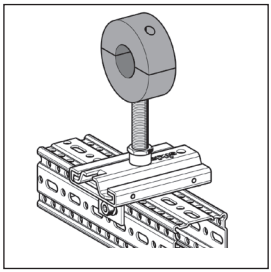
Technical Data
$L_{max,\ vertical}$ = 300 mm
$L_{max,\ horizontal}$ = 150 mm

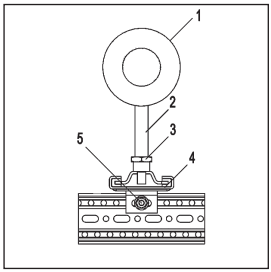
Material:

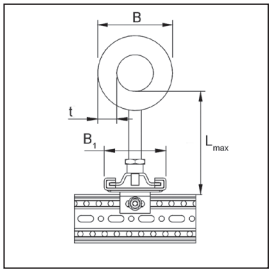
Connecting parts:	Steel, HCP
Bolts and nuts:	Steel, HCP
Insulating body:	PUR foam (250 kg/m^3 , B2), μ = 1200
	λ = 0,045 W/mK (0°C)
Area of use:	-50°C to +105°C

Note: pre-assembly on request!

Type	Nominal widths [DN]	B_1 [mm]	B [mm]	t [mm]	W [kg]	Quantity [pack]	Part number
21/30	15	50	81	30	0.73	1	**110283**
27/30	20	50	87	30	0.73	1	**110284**
33/30	25	50	93	30	0.74	1	**110285**
42/30	32	50	102	30	0.75	1	**110286**
48/30	40	50	108	30	0.75	1	**110287**
60/30	50	50	120	30	0.84	1	**110289**
76/30	65	50	136	30	0.96	1	**110290**
89/30	80	50	149	30	1.01	1	**110291**
114/40	100	50	195	30	1.59	1	**110292**







Assembly Group BG45 F80-1/2"

Group: 1102

Application

An Assembly Group for use as a guided support with the insulated Chilled Water Clamp RB for chiller plants and cool water systems. The Assembly Group is designed for use with the Beam Section TP F 80. It is connected using Self Forming Screw FLS F, and the height is adjusted via the Threaded Tube 1/2".

Scope of delivery

The components are grouped together by type and are delivered separately according to the individual components. The threaded tube is supplied by the metre (2 m) and is shortened to suit on site.

Parts list:
Item 1 Chilled Water Clamp RB
Item 2 Threaded Tube GR 2 m 1/2"
Item 3 Locking Nut NT 1/2"
Item 4 Slide Set GS F80 1G
Item 5 Self Forming Screw FLS F

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

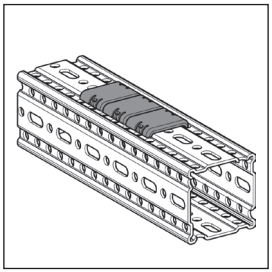
$L_{max,\ vertical}$ = 200 mm
$L_{max,\ horizontal}$ = not recommended

Material:

Connecting parts:	Steel, HCP
Bolts and nuts:	Steel, HCP
Insulating body:	PUR foam (250 kg/m³ , B2), μ = 1200 λ = 0,045 W/mK (0°C)
Area of use:	-50°C to +105°C

Note: pre-assembly on request!

Type	Nominal widths [DN]	B_1 [mm]	B [mm]	t [mm]	W [kg]	Quantity [pack]	Part number
21/30	15	102	81	30	1.88	1	**110299**
27/30	20	102	87	30	1.88	1	**110300**
33/30	25	102	93	30	1.89	1	**110301**
42/30	32	102	102	30	1.90	1	**110302**
48/30	40	102	108	30	1.90	1	**110303**
60/30	50	102	120	30	1.99	1	**110304**
76/30	65	102	136	30	2.11	1	**110305**
89/30	80	102	149	30	2.16	1	**110306**
114/40	100	102	195	40	2.74	1	**110307**



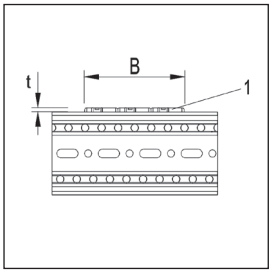
Assembly Group BG51 F80

Group: 1102

Application
An Assembly Group for the supporting of pipes without complex requirements and without heat insulation. This allows free sliding of the pipe in all dimensions on the Beam Section TP F 80.

Scope of delivery
The components are grouped together by type and are delivered separately according to the individual components. An Assembly Group comprises 3 U-UB pads.

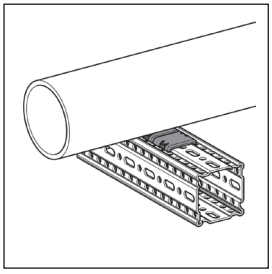
Parts list:
Item 1 Pad U-UB F 80



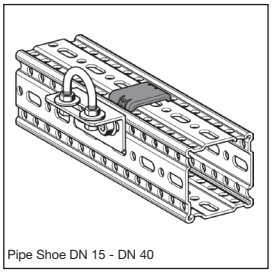
Installation
According to the anticipated sideways movement of the supported pipes, 1 to 3 U-UB pads should be clicked into the beam section.

Number U-UB pad	Width B [mm]	t [mm]
1	40	5
2	80	5
3	120	5

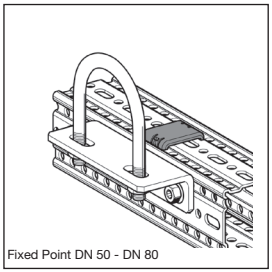
Technical Data
Material: Polyamide PA 6.0
Area of use: -20°C to +130°C



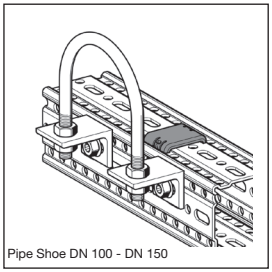
Type	Nominal widths [DN]	W [kg]	Quantity [pack]	Part number
F 80	15 - 150	0.03	1	**112742**



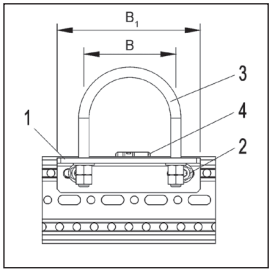
Pipe Shoe DN 15 - DN 40



Fixed Point DN 50 - DN 80



Pipe Shoe DN 100 - DN 150



Assembly Group BG22 F80

Group: 1102

Application

An Assembly Group for the fastening of pipes without complex requirements and without heat insulation. By adapting the hexagon nuts supplied, both guided supports and fixed points can be created.

Scope of delivery

The components are grouped together by type and are delivered separately according to the individual components. For U-bolts with a size of DN 100 upwards, always use two U Bolt Fastening UB Fs.

Parts list:
Item 1 U Bolt Fastening UB F
Item 2 Self Forming Screw FLS F
Item 3 U Bolt RUB
Item 4 Pad U-UB F 80

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site. When used as a guided support, the nuts located both above and below the UB fastening must be tightened, enabling the pipe to freely move. In the case of fixed points, the permissible forces of the structural connection and bending forces of the bolt must not be exceeded.

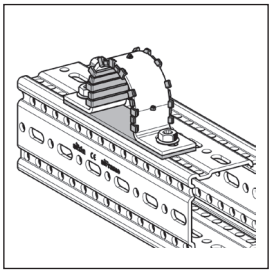
Technical Data

Material:

Pipe clamp and connecting parts:	Steel, HCP
Bolts and nuts:	Steel, HCP
U-UB Pad:	Polyamide PA 6.0

Note: pre-assembly on request!

Type	OD of pipe [mm]	B_1 [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	21.3	85	30	0.28	1	**110236**
DN 20	26.9	85	40	0.32	1	**110237**
DN 25	33.7	85	48	0.32	1	**110238**
DN 32	42.4	85	56	0.34	1	**110239**
DN 40	48.3	85	62	0.34	1	**110240**
DN 50	60.3	146	76	0.94	1	**110241**
DN 65	76.1	146	94	0.97	1	**110242**
DN 80	88.9	146	106	1.00	1	**110243**
DN 100	114.3	181	136	1.06	1	**110244**
DN 125	139.7	209	164	1.14	1	**110245**
DN 150	168.3	237	192	1.23	1	**110246**



Assembly Group BG52 F80/100

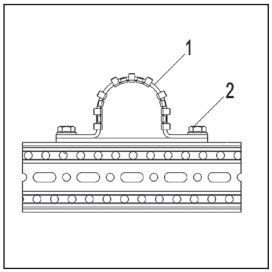
Group: 1102

Application

An Assembly Group for the creation of guided supports for pipes without complex requirements and without heat insulation. As an alternative to U-bolts, this U-clamp is ideal for space-saving, direct assembly on the supporting structure. The slide plate reduces the friction between the pipe and supporting structure (siFramo sections).
A galvanic separation between the pipe and U-clamp and the supporting structure is achieved through the plastic linings and slide plate, meaning that VA pipes can also be secured, for example.

Scope of delivery

The components are grouped together by type and are delivered separately according to the individual components.



Parts list:
Item 1 U-Camp RUC I
Item 2 Self Forming Screw FLS F

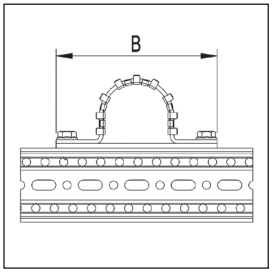
Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

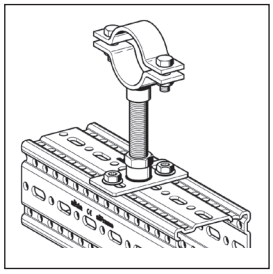
Material:

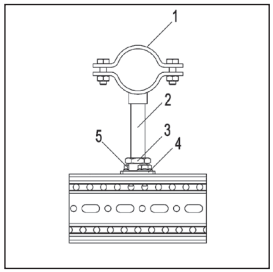
Clamp body:	Steel, HCP
Lining and slide plate:	Thermoplastic resins
Area of use:	-20°C to +90°C (at lining and slide plate)

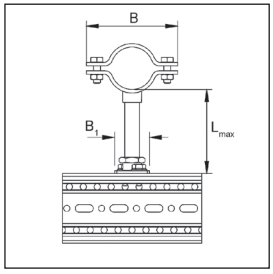


Note: pre-assembly on request!

Type	Nominal widths [DN]	B [mm]	W [kg]	Quantity [pack]	Part number
27	15	134	0.28	1	**114656**
33	20	140	0.29	1	**114657**
40	25	147	0.32	1	**114658**
48	32	155	0.34	1	**114659**
55	40	161	0.36	1	**114660**
67	50	173	0.41	1	**114661**
83	65	189	0.48	1	**114662**
95	80	202	0.52	1	**114663**
121	100	227	0.61	1	**114664**
152	125	259	0.71	1	**114665**
181	150	287	0.83	1	**114666**
232	200	338	0.99	1	**114667**
286	250	392	1.20	1	**114668**
336	300	443	1.34	1	**114669**







Assembly Group BG16 F100-$^1/_2$"

Group: 1102

Application

An Assembly Group containing components to make up a permanent pipe connection with the heavy Pipe Clamp Stabil I-$^1/_2$". The Assembly Group is designed for use with the Beam Section TP F 100. It is connected using the Self Forming Screw FLS F, and the height is adjusted via the Threaded Tube $^1/_2$".

Scope of delivery

The components are grouped together by type and are delivered separately according to the individual components. The threaded tube is supplied by the metre (2 m) and is shortened to suit on site.

Parts list:
Item 1 Pipe Clamp Stabil I-$^1/_2$"
Item 2 Threaded Tube GR 2 m $^1/_2$"
Item 3 Locking Nut NT G $^1/_2$"
Item 4 Mounting Plate GPL F 100-$^1/_2$"
Item 5 Self Forming Screw FLS F

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

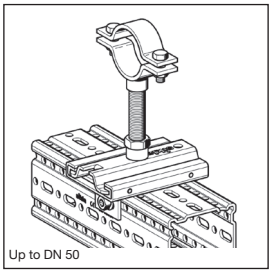
$L_{max,\ vertical}$ = 300 mm
$L_{max,\ horizontal}$ = 150 mm

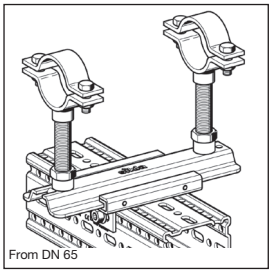
Material:

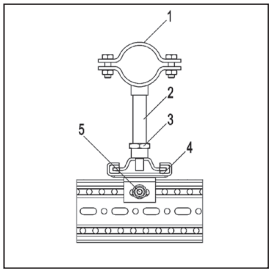
Pipe clamp and connecting parts:	Steel, HCP
Bolts and nuts:	Steel, HCP

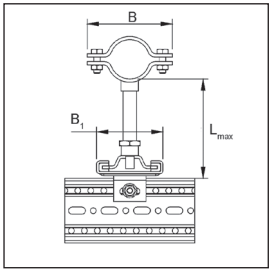
Note: pre-assembly on request!

Type	Size range [mm]	B_1 [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	16 - 22	50	85	0.85	1	**113842**
DN 20	23 - 27	50	92	0.88	1	**113843**
DN 25	30 - 34	50	100	0.91	1	**113844**
DN 32	39 - 44	50	112	0.95	1	**113845**
DN 40	44 - 49	50	117	0.97	1	**113846**
DN 50	57 - 61	50	139	1.19	1	**113847**
DN 65	73 - 77	50	156	1.27	1	**113848**
DN 80	85 - 89	50	168	1.33	1	**113849**
DN 100	109 - 116	50	194	1.62	1	**113850**


Up to DN 50


From DN 65





Assembly Group BG17 F100-$^1/_2$"

Group: 1102

Application
An Assembly Group for use as a guided support with the heavy Pipe Clamp Stabil I-$^1/_2$". The Assembly Group is designed for use with the Beam Section TP F 100. It is connected using the Self Forming Screw FLS F, and the height is adjusted via the Threaded Tube $^1/_2$".

Scope of delivery
The components are grouped together by type and are delivered separately according to the individual components. The threaded tube is supplied by the metre (2 m) and is shortened to suit on site.

Parts list:
Item 1 Pipe Clamp Stabil I-$^1/_2$".
Item 2 Threaded Tube GR 2 m $^1/_2$"
Item 3 Locking Nut NT G $^1/_2$"
Item 4 Slide Set GS F 100 1G / Slide Set GS F 100 1G2
Item 5 Self Forming Screw FLS F

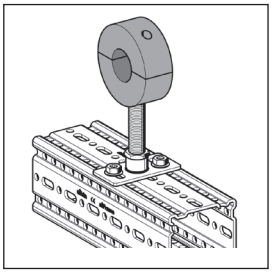
Installation
The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

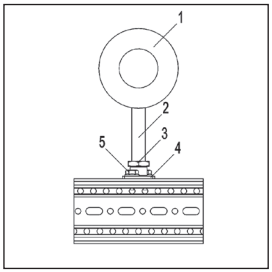
Technical Data
$L_{max,\ vertical}$ = 200 mm
$L_{max,\ horizontal}$ = not recommended

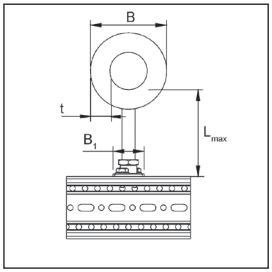
Material:
Pipe clamp and connecting parts: Steel, HCP
Bolts and nuts: Steel, HCP

Note: pre-assembly on request!

Type	Size range [mm]	B_1 [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	16 - 22	102	85	2.00	1	**113851**
DN 20	23 - 27	102	92	2.01	1	**113852**
DN 25	30 - 34	102	100	2.04	1	**113853**
DN 32	39 - 44	102	112	2.08	1	**113854**
DN 40	44 - 49	102	117	2.10	1	**113855**
DN 50	57 - 61	102	139	2.32	1	**113856**
DN 65	73 - 77	102	156	3.76	1	**113857**
DN 80	85 - 89	102	168	3.88	1	**113858**
DN 100	109 - 116	102	194	4.46	1	**113859**







Assembly Group BG49 F100-$^1/_2$"

Group: 1102

Application

An Assembly Group containing components to make up a permanent pipe connection with the insulated Chilled Water Clamp RB for chiller plants and cool water systems. The Assembly Group is designed for use with the Beam Section TP F 100. It is connected using Self Forming Screw FLS F, and the height is adjusted via the Threaded Tube $^1/_2$".

Scope of delivery

The components are grouped together by type and are delivered separately according to the individual components. The threaded tube is supplied by the metre (2 m) and is shortened to suit on site.

Parts list:
Item 1 Chilled Water Clamp RB
Item 2 Threaded Tube GR 2 m $^1/_2$"
Item 3 Locking Nut NT G $^1/_2$"
Item 4 Mounting Plate GPL F 100-$^1/_2$"
Item 5 Self Forming Screw FLS F

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

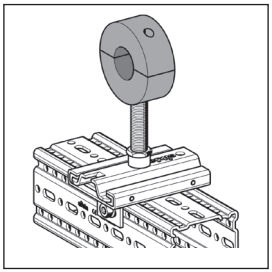
$L_{max,\ vertical}$ = 300 mm
$L_{max,\ horizontal}$ = 150 mm

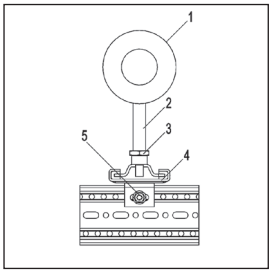
Material:

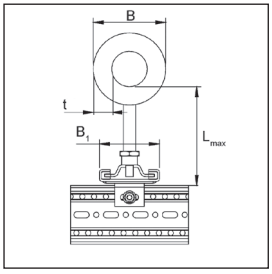
Assembly parts:	Steel, HCP
Bolts and nuts:	Steel, HCP
Insulating body:	PUR foam (250 kg/m^3 , B2) μ = 1200, λ = 0,045 W/mK (0°C)
Area of use:	-50°C to +105°C

Note: pre-assembly on request!

Type	Nominal widths [DN]	B_1 [mm]	B [mm]	t [mm]	W [kg]	Quantity [pack]	Part number
21/30	15	50	81	30	0.77	1	**113860**
27/30	20	50	87	30	0.77	1	**113861**
33/30	25	50	93	30	0.78	1	**113862**
42/30	32	50	102	30	0.79	1	**113863**
48/30	40	50	108	30	0.79	1	**113864**
60/30	50	50	120	30	0.88	1	**113865**
76/30	65	50	136	30	1.00	1	**113866**
89/30	80	50	149	30	1.05	1	**113867**
114/40	100	50	195	40	1.63	1	**113868**







Assembly Group BG50 F100-$^1/_2$"

Group: 1102

Application
An Assembly Group for use as a guided support with the insulated Chilled Water Clamp RB for chiller plants and cool water systems. The Assembly Group is designed for use with the Beam Section TP F 100. It is connected using Self Forming Screw FLS F, and the height is adjusted via the Threaded Tube $^1/_2$".

Scope of delivery
The components are grouped together by type and are delivered separately according to the individual components. The threaded tube is supplied by the metre (2 m) and is shortened to suit on site.

Parts list:
Item 1 Chilled Water Clamp RB
Item 2 Threaded Tube GR 2 m $^1/_2$"
Item 3 Locking Nut NT 1/2“
Item 4 Slide Set GS F100 1G
Item 5 Self Forming Screw FLS F

Installation
The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

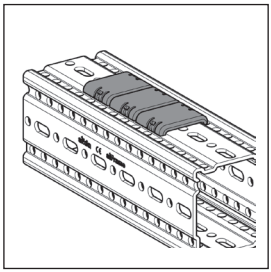
Technical Data
$L_{max,\ vertical}$ = 200 mm
$L_{max,\ horizontal}$ = not recommended

Material:

Assembly parts:	Steel, HCP
Bolts and nuts:	Steel, HCP
Insulating body:	PUR foam (250 kg/m^3 , B2) μ = 1200, λ = 0,045 W/mK (0°C)
Area of use:	-50°C to +105°C

Note: pre-assembly on request!

Type	Nominal widths [DN]	B_1 [mm]	B [mm]	t [mm]	W [kg]	Quantity [pack]	Part number
21/30	15	102	81	30	1.90	1	**113869**
27/30	20	102	87	30	1.90	1	**113870**
33/30	25	102	93	30	1.91	1	**113871**
42/30	32	102	102	30	1.92	1	**113872**
48/30	40	102	108	30	1.92	1	**113873**
60/30	50	102	120	30	2.01	1	**113874**
76/30	65	102	136	30	2.13	1	**113875**
89/30	80	102	149	30	2.18	1	**113876**
114/40	100	102	195	40	2.76	1	**113877**



Assembly Group BG54 F100

Group: 1102

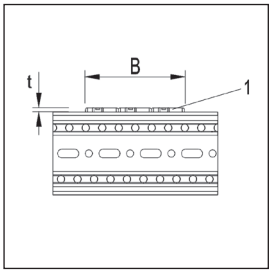
Application

An Assembly Group for the supporting of pipes without complex requirements and without heat insulation on siFramo beam sections. This allows free sliding of the pipe in all directions on the Beam Section TP F 100.

Scope of delivery

The components are grouped together by type and are delivered separately according to the individual components. An Assembly Group comprises 3 U-UB pads.

Parts list:
Item 1 Pad U-UB F 100



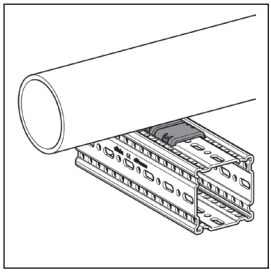
Installation

According to the anticipated sideways movement of the supported pipes, 1 to 3 U-UB pads should be clicked into the beam section.

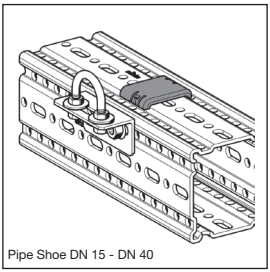
Number U-UB pad	Width B [mm]	t [mm]
1	40	5
2	80	5
3	120	5

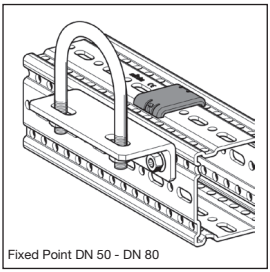
Technical Data

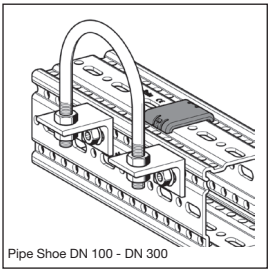
Material: Polyamide PA 6.0
Area of use: -20°C to +130°C

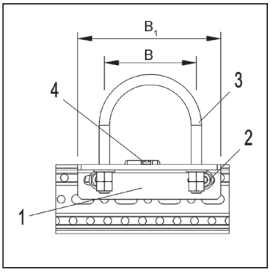


Type	Nominal widths [DN]	W [kg]	Quantity [pack]	Part number
F 100	15 - 300	0.03	1	**113913**


Pipe Shoe DN 15 - DN 40


Fixed Point DN 50 - DN 80


Pipe Shoe DN 100 - DN 300



Assembly Group BG22 F100

Group: 1102

Application

An Assembly Group for the fastening of pipes without complex requirements and without heat insulation on SiFramo sections. By adapting the hexagon nuts supplied, both guided supports and fixed points can be created.

Scope of delivery

The components are grouped together by type and are delivered separately according to the individual components. For U-bolts with a size of DN 100 upwards, always use two U Bolt Fastening UB Fs.

Parts list:
Item 1 U Bolt Fastening UB F
Item 2 Self Forming Screw FLS F
Item 3 U Bolt RUB
Item 4 Pad U-UB F 100

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site. When used as a guided support, the nuts located both above and below the UB fastening must be tightened, enabling the pipe to freely move.. In the case of permanent pipe connections, the permissible forces of the structural connection and bending forces of the bolt must not be exceeded.

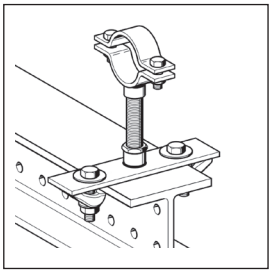
Technical Data

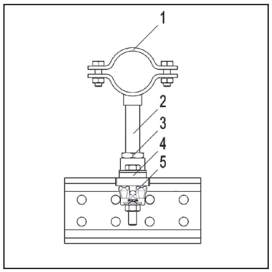
Material:

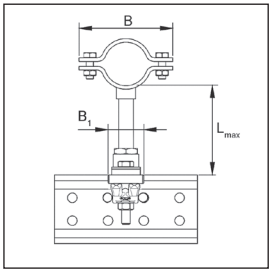
Pipe clamp and connecting parts:	Steel, HCP
Bolts and nuts:	Steel, HCP
U-UB pad:	Polyamide PA 6.0

Note: pre-assembly on request!

Type	OD of pipe [mm]	B_1 [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	21.3	85	30	0.28	1	**113977**
DN 20	26.9	85	40	0.32	1	**113978**
DN 25	33.7	85	48	0.32	1	**113979**
DN 32	42.4	85	56	0.34	1	**113980**
DN 40	48.3	85	62	0.34	1	**113981**
DN 50	60.3	146	76	0.94	1	**113982**
DN 65	76.1	146	94	0.97	1	**113983**
DN 80	88.9	146	106	1.00	1	**113984**
DN 100	114.3	181	136	1.06	1	**113985**
DN 125	139.7	209	164	1.14	1	**113986**
DN 150	168.3	237	192	1.23	1	**113987**
DN 200	219.1	293	248	2.03	1	**116919**
DN 250	273.0	347	302	2.30	1	**116920**
DN 300	323.9	397	352	2.94	1	**116921**







Assembly Group BG60 T100-$^1/_2$"

Group: 1102

Application

An Assembly Group containing components to make up a permanent pipe connection with the heavy Pipe Clamp Stabil I-$^1/_2$". The Assembly Group is designed for use with the Beam System 100 and steel beams up to a flange width of 100 mm. It is connected using the Assembly Set MS 5P, and the height is adjusted via the Threaded Tube $^1/_2$".

Scope of delivery

The components are grouped together by type and are delivered separately according to the individual components. The threaded tube is supplied by the metre (2 m) and is shortened to suit on site.

Parts list:
Item 1 Pipe Clamp Stabil I-$^1/_2$".
Item 2 Threaded Tube GR 2 m $^1/_2$"
Item 3 Locking Nut NT G $^1/_2$"
Item 4 Mounting Plate GPL Stabil R$^1/_2$"-100
Item 5 Assembly Set MS 5P

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

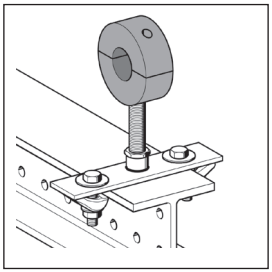
$L_{max,\ vertical}$ = 300 mm
$L_{max,\ horizontal}$ = 150 mm

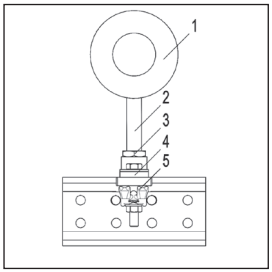
Material:

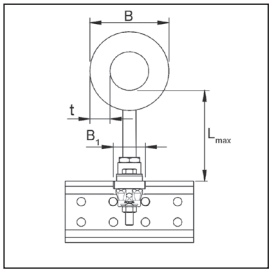
Pipe clamp and connecting parts:	Steel, HCP
Bolts and nuts:	Steel, HCP

Note: pre-assembly on request!

Type	Size range [mm]	B_1 [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	16 - 22	50	85	1.75	1	**112724**
DN 20	23 - 27	50	92	1.76	1	**112725**
DN 25	30 - 34	50	100	1.79	1	**112726**
DN 32	39 - 44	50	112	1.83	1	**112727**
DN 40	44 - 49	50	117	1.85	1	**112728**
DN 50	57 - 61	50	139	2.07	1	**112729**
DN 65	73 - 77	50	156	2.15	1	**112730**
DN 80	85 - 89	50	168	2.21	1	**112731**
DN 100	109 - 116	50	194	2.50	1	**112732**







Assembly Group BG61 T100-$^1/_2$"

Group: 1102

Application
An Assembly Group containing components to make up a permanent pipe connection with the insulated Chilled Water Clamp RB for chiller plants and cool water systems. The Assembly Group is designed for use with the 100 beam system and steel beams up to a flange width of 100 mm. It is connected using the Assembly Set MS 5P, and the height is adjusted via the Threaded Tube ½".

Scope of delivery
The components are grouped together by type and are delivered separately according to the individual components. The threaded tube is supplied by the metre (2 m) and is shortened to suit on site.

Parts list:
Item 1 Chilled Water Clamp RB
Item 2 Threaded Tube GR 2 m $^1/_2$"
Item 3 Locking Nut NT G $^1/_2$"
Item 4 Mounting Plate GPL Stabil R$^1/_2$"-100
Item 5 Assembly Set MS 5P

Installation
The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

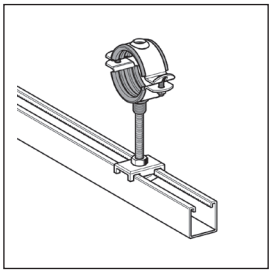
Technical Data
$L_{max,\ vertical}$ = 300 mm
$L_{max,\ horizontal}$ = 150 mm

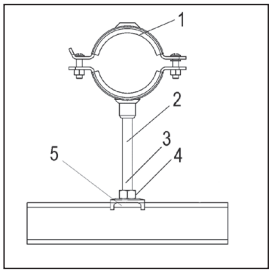
Material:

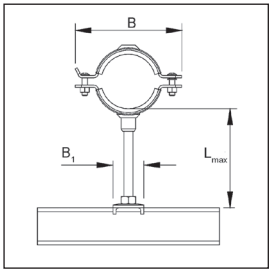
Connecting parts:	Steel, HCP
Bolts and nuts:	Steel, HCP
Insulating body:	PUR foam (250 kg/m^3 , B2), μ = 1200
	λ = 0,045 W/mK (0°C)
Area of use:	-50°C to +105°C

Note: pre-assembly on request!

Type	Nominal widths [DN]	B_1 [mm]	B [mm]	t [mm]	W [kg]	Quantity [pack]	Part number
21/30	15	50	81	30	1.65	1	**112733**
27/30	20	50	87	30	1.65	1	**112734**
33/30	25	50	93	30	1.66	1	**112735**
42/30	32	50	102	30	1.67	1	**112736**
48/30	40	50	108	30	1.67	1	**112737**
60/30	50	50	120	30	1.76	1	**112738**
76/30	65	50	136	30	1.88	1	**112739**
89/30	80	50	149	30	1.93	1	**112740**
114/40	100	50	195	40	2.51	1	**112741**







Assembly Group BG11 MS41-M10

Group: 1102

Application

An Assembly Group containing components to make up a permanent pipe connection with the pipe clamp Stabil D-3G. The Assembly Group is designed for use with the Sikla 41 channel system. The height is adjusted using the Threaded Rod M10. The pipe clamp with sound absorption lining ensures sound absorption in accordance with DIN 4109.

Scope of delivery

The components are grouped together by type and are delivered separately according to the individual components. The threaded rod is supplied by the metre (1 m) and is shortened to suit on site.

Parts list:
Item 1 Pipe Clamp Stabil D-3G with lining
Item 2 Threaded Rod GST M10 x 1000
Item 3 Hexagon Nut M10
Item 4 Holding Bracket HK 41/10
Item 5 Threaded Plate NT HZ41-M10

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

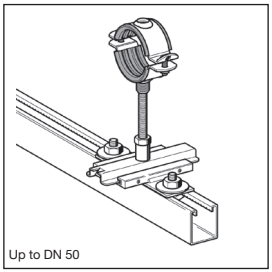
$L_{max,\ vertical}$ = 150 mm
$L_{max,\ horizontal}$ = not recommended

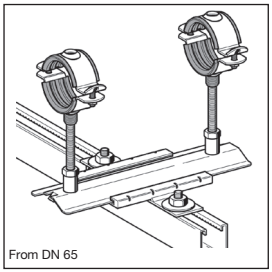
Material:

Pipe clamp and connecting parts:	Steel, HCP
Bolts and nuts:	Steel, HCP
Sound absorption lining:	SBR/EPDM, black, captively bonded in

Note: pre-assembly on request!

Type	Size range [mm]	B_1 [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	19 - 23	35	68	0.27	1	**110144**
DN 20	24 - 28	35	75	0.30	1	**110145**
DN 25	33 - 37	35	81	0.32	1	**110146**
DN 32	40 - 45	35	93	0.34	1	**110147**
DN 40	47 - 52	35	104	0.36	1	**110148**
DN 50	60 - 65	35	117	0.38	1	**110149**
DN 65	73 - 78	35	150	0.48	1	**110150**
DN 80	88 - 93	35	164	0.53	1	**110151**
DN 100	108 - 115	35	187	0.59	1	**110152**


Up to DN 50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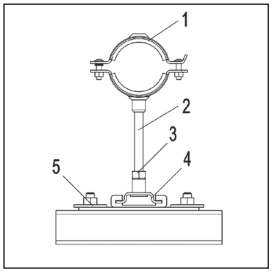
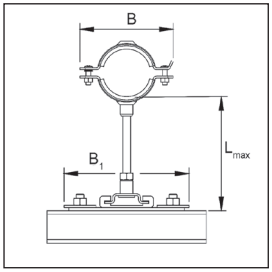




Assembly Group BG13 MS41-M10

Group: 1102

Application
An Assembly Group for use as a guided support with the pipe clamp Stabil D-3G. The Assembly Group is designed for use with the Sikla 41 channel system. The height is adjusted using the Threaded Rod M10. The pipe clamp with sound absorption lining ensures sound absorption in accordance with DIN 4109.

Scope of delivery
The components are grouped together by type and are delivered separately according to the individual components. The threaded rod is supplied by the metre (1 m) and is shortened to suit on site.

Parts list:
Item 1 Pipe Clamp Stabil D-3G with lining
Item 2 Threaded Rod GST M10 x 1000
Item 3 Hexagon Nut NT M10
Item 4 Slide Set GS 2G-PL / Slide Set GS 2G2-PL
Item 5 T-Head Bolt TBO HZ41 M10 x 20

Installation
The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

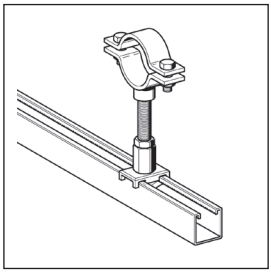
Technical Data
$L_{max,\ vertical}$ = 150 mm
$L_{max,\ horizontal}$ = not recommended

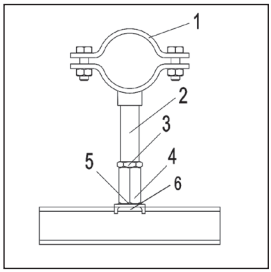
Material:

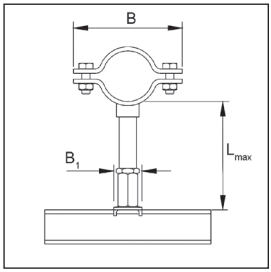
Pipe clamp and connecting parts:	Steel, HCP
Bolts and nuts:	Steel, HCP
Sound absorption lining:	SBR/EPDM, black, captively bonded in

Note: pre-assembly on request!

Type	Size range [mm]	B_1 [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	19 - 23	140	68	0.90	1	**110180**
DN 20	24 - 28	140	75	0.93	1	**110182**
DN 25	33 - 37	140	81	0.95	1	**110183**
DN 32	40 - 45	140	93	0.97	1	**110184**
DN 40	47 - 52	140	104	0.99	1	**110185**
DN 50	60 - 65	140	117	1.01	1	**110186**
DN 65	73 - 78	140	150	1.62	1	**110187**
DN 80	88 - 93	140	164	1.72	1	**110188**
DN 100	108 - 115	140	187	1.84	1	**110189**







Assembly Group BG11 MS41-$^1/_2$"

Group: 1102

Application

An Assembly Group containing components to make up a permanent pipe connection with the heavy Pipe Clamp Stabil I-$^1/_2$". The Assembly Group is designed for use with the Sikla 41 channel system. The height is adjusted via the Threaded Tube $^1/_2$".

Scope of delivery

The components are grouped together by type and are delivered separately according to the individual components. The threaded tube is supplied by the metre (2 m) and is shortened to suit on site.

Parts list:
Item 1 Pipe Clamp Stabil I-$^1/_2$".
Item 2 Threaded Tube GR 2 m $^1/_2$"
Item 3 Locking Nut NT G $^1/_2$"
Item 4 Adapter AD IG/IG $^1/_2$"/M16
Item 5 Holding Bracket HK 41/16
Item 6 T-Head Bolt TBO HZ41 M16 x 25

Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

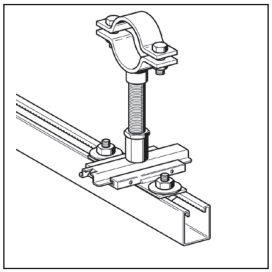
$L_{max,\ vertical}$ = 300 mm
$L_{max,\ horizontal}$ = 150 mm

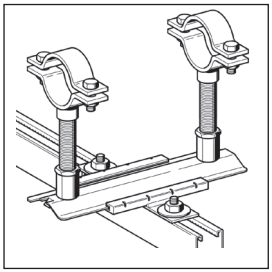
Material:

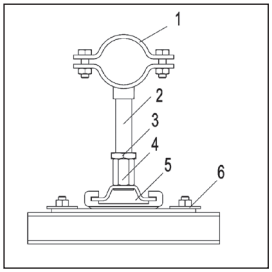
Pipe clamp and connecting parts:	Steel, HCP
Bolts and nuts:	Steel, HCP

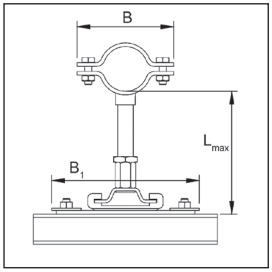
Note: pre-assembly on request!

Type	Size range [mm]	B_1 [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	16 - 22	35	85	0.92	1	**110153**
DN 20	23 - 27	35	92	0.93	1	**110154**
DN 25	30 - 34	35	100	0.96	1	**110155**
DN 32	39 - 44	35	112	1.04	1	**110156**
DN 40	44 - 49	35	117	1.02	1	**110157**
DN 50	57 - 61	35	139	1.24	1	**110158**
DN 65	73 - 77	35	156	1.32	1	**110159**
DN 80	85 - 89	35	168	1.38	1	**110160**
DN 100	109 - 116	35	194	1.67	1	**110161**









Assembly Group BG13 MS41-$^1/_2$"

Group: 1102

Application
An Assembly Group for use as a guided support with the heavy Pipe Clamp Stabil I-$^1/_2$". The Assembly Group is designed for use with the Sikla 41 channel system. The height is adjusted via the Threaded Tube $^1/_2$".

Scope of delivery
The components are grouped together by type and are delivered separately according to the individual components. The threaded tube is supplied by the metre (2 m) and is shortened to suit on site.

Parts list:
Item 1 Pipe Clamp Stabil I-$^1/_2$".
Item 2 Threaded Tube GR 2 m $^1/_2$"
Item 3 Locking Nut NT G $^1/_2$"
Item 4 Adapter AD IG/IG ½“ / ½”s
Item 5 Slide Set GS H3G-PL / Slide Set GS H3G2-PL
Item 6 T-Head Bolt TBO HZ41 M10 x 20

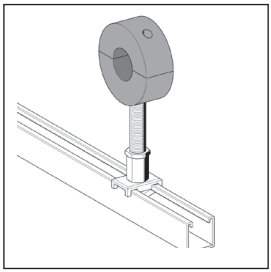
Installation
The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

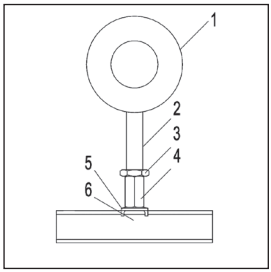
Technical Data
$L_{max,\ vertical}$ = 200 mm
$L_{max,\ horizontal}$ = not recommended

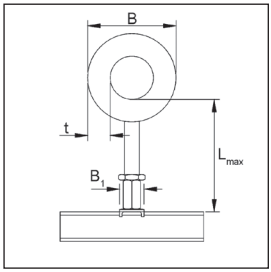
Material:
Pipe clamp and connecting parts: Steel, HCP
Bolts and nuts: Steel, HCP

Note: pre-assembly on request!

Type	Size range [mm]	B_1 [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	16 - 22	190	85	2.17	1	**110191**
DN 20	23 - 27	190	92	2.18	1	**110192**
DN 25	30 - 34	190	100	2.21	1	**110193**
DN 32	39 - 44	190	112	2.29	1	**110194**
DN 40	44 - 49	190	117	2.27	1	**110195**
DN 50	57 - 61	190	139	2.49	1	**110196**
DN 65	73 - 77	190	156	3.97	1	**110197**
DN 80	85 - 89	190	168	4.09	1	**110198**
DN 100	109 - 116	190	194	4.67	1	**110199**







Assembly Group BG48 MS41-$^1/_2$"

Group: 1102

Application
An Assembly Group containing components to make up a permanent pipe connection with the insulated Chilled Water Clamp RB for chiller plants and cool water systems. The Assembly Group is designed for use with the Sikla 41 channel system. The height is adjusted via the Threaded Tube $^1/_2$".

Scope of delivery
The components are grouped together by type and are delivered separately according to the individual components. The threaded tube is supplied by the metre (2 m) and is shortened to suit on site.

Parts list:
Item 1 Chilled Water Clamp RB
Item 2 Threaded Tube GR 2 m $^1/_2$"
Item 3 NT $^1/_2$" locking nut
Item 4 Adapter AD IG/IG $^1/_2$"/M16
Item 5 Holding Bracket HK 41/16
Item 6 T-Head Bolt TBO HZ41 M16 x 25

Installation
The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

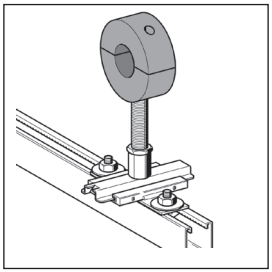
Technical Data
$L_{max,\ vertical}$ = 200 mm
$L_{max,\ horizontal}$ = not recommended

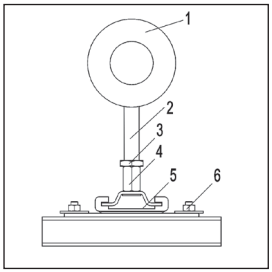
Material:

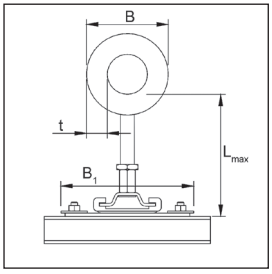
Connecting parts:	Steel, HCP
Bolts and nuts:	Steel, HCP
Insulating body:	PUR foam (250 kg/m^3 , B2), μ = 1200 λ = 0,045 W/mK (0°C)
Area of use:	-50°C to +105°C

Note: pre-assembly on request!

Type	Nominal widths [DN]	B_1 [mm]	B [mm]	t [mm]	W [kg]	Quantity [pack]	Part number
21/30	15	35	81	30	1.82	1	**113904**
27/30	20	35	87	30	1.82	1	**113905**
33/30	25	35	93	30	1.83	1	**113906**
42/30	32	35	102	30	1.84	1	**113907**
48/30	40	35	108	30	1.84	1	**113908**
60/30	50	35	120	30	1.93	1	**113909**
76/30	65	35	136	30	1.05	1	**113910**
89/30	80	35	149	30	1.10	1	**113911**
114/40	100	35	195	40	1.68	1	**113912**







Assembly Group BG42 MS41-$^1/_2$"

Group: 1102

Application
An Assembly Group for use as a guided support with the insulated Chilled Water Clamp RB for chiller plants and cool water systems. The Assembly Group is designed for use with the Sikla 41 channel system. The height is adjusted via the Threaded Tube $^1/_2$".

Scope of delivery
The components are grouped together by type and are delivered separately according to the individual components. The threaded tube is supplied by the metre (2 m) and is shortened to suit on site.

Parts list:
Item 1 Chilled Water Clamp RB
Item 2 Threaded Tube GR 2 m $^1/_2$"
Item 3 Locking Nut NT G $^1/_2$"
Item 4 Adapter AD IG/IG $^1/_2$"/$^1/_2$"
Item 5 Slide Set H3G-PL
Item 6 T-Head Bolt TBO HZ41 M10 x 20

Installation
The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

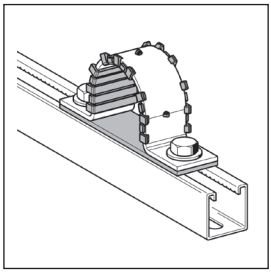
Technical Data
$L_{max,\ vertical}$ = 200 mm
$L_{max,\ horizontal}$ = not recommended

Material:

Connecting parts:	Steel, HCP
Bolts and nuts:	Steel, HCP
Insulating body:	PUR foam (250 kg/m^3 , B2), μ = 1200 λ = 0,045 W/mK (0°C)
Area of use:	-50°C to +105°C

Note: pre-assembly on request!

Type	Nominal widths [DN]	B_1 [mm]	B [mm]	t [mm]	W [kg]	Quantity [pack]	Part number
21/30	15	190	81	30	2.07	1	**110268**
27/30	20	190	87	30	2.07	1	**110269**
33/30	25	190	93	30	2.08	1	**110270**
42/30	32	190	102	30	2.09	1	**110271**
48/30	40	190	108	30	2.09	1	**110272**
60/30	50	190	120	30	2.18	1	**110273**
76/30	65	190	136	30	2.30	1	**110274**
89/30	80	190	149	30	2.35	1	**110275**
114/40	100	190	195	40	2.93	1	**110276**



Assembly Group BG57 MS41

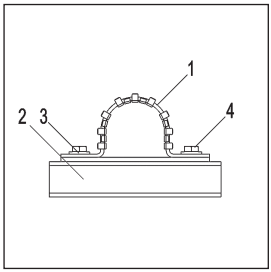
Group: 1102

Application

An Assembly Group for the creation of guided supports for pipes without complex requirements and without heat insulation. As an alternative to U-bolts, this U-clamp is ideal for space-saving, direct assembly on the supporting structure. The slide plate reduces the friction between the pipe and supporting structure. A galvanic separation between the pipe and U-clamp and the supporting structure is achieved through the captive plastic linings and slide plate, meaning that VA pipes can also be secured, for example.

Scope of delivery

The components are grouped together by type and are delivered separately according to the individual components.



Parts list:
Item 1 U-Camp RUC I
Item 2 Threaded Plate NT CC 41-M10
Item 3 U Washer US 10/125
Item 4 Hexagon Bolt SKT M10 x 25

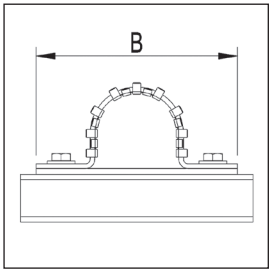
Installation

The assembly of the individual components to form an Assembly Group is carried out during the course of pipe installation on the construction site.

Technical Data

Material:

Clamp body:	Steel, HCP
Lining and slide plate:	Thermoplastic resins
Area of use:	-20°C to +90°C (at lining and slide plate)



Note: pre-assembly on request!

Type	Nominal widths [DN]	B [mm]	W [kg]	Quantity [pack]	Part number
27	15	134	0.34	1	**114670**
33	20	140	0.35	1	**114671**
40	25	147	0.38	1	**114672**
48	32	155	0.40	1	**114673**
55	40	161	0.42	1	**114674**
67	50	173	0.47	1	**114675**
83	65	189	0.54	1	**114676**
95	80	202	0.58	1	**114677**
121	100	227	0.67	1	**114678**

Mounting Plate GPL F

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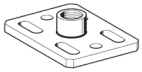
Mounting Plate GPL F 80 Stabil



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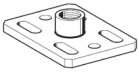
Mounting Plate GPL F Stabil HCP



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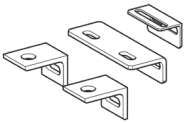
U Bolt Docking Bracket F



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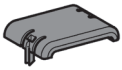
Pad U-UB F



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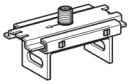
Slide Set GS F 80 2G



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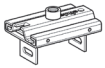
Slide Set GS F 1G



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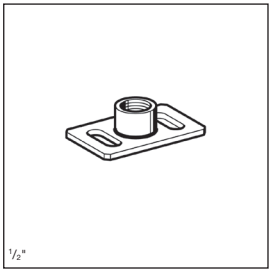
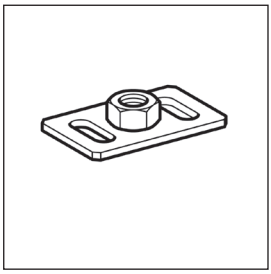
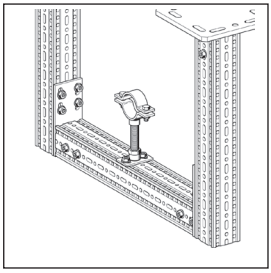






Mounting Plate GPL F

Group: A438

Application

Interface component to connect threaded bar and threaded tube to Beam Section F 80 or F 100.

Installation

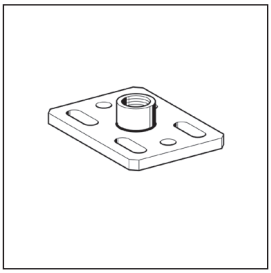
Requires 2 x Self Forming Screw FLS per Mounting Plate GPL.

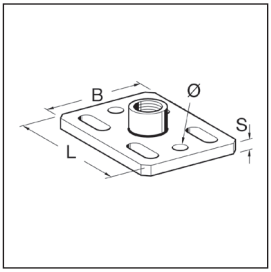
Technical Data

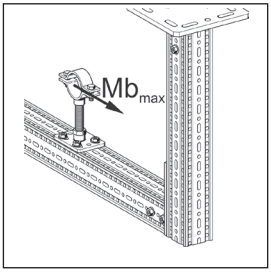
Type	Tension [kN]	Perm. bending moment [Nm]
GPL F 80-1/2"	8.0	53
GPL F 80-M10	8.0	15
GPL F 80-M12	8.0	26
GPL F 80-M16	8.0	62
GPL F 100-1/2"	8.0	53
GPL F 100-M10	8.0	15
GPL F 100-M12	8.0	26
GPL F 100-M16	8.0	62

Dimensions of base plate GPL F 80: 80 x 50 x 4 mm
Dimensions of base plate GPL F 100: 100 x 50 x 4 mm
Material: Steel, HCP

Type	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**
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**







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.

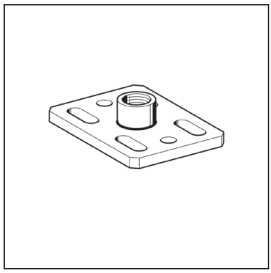
Technical Data

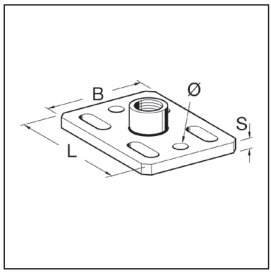
Permissible bending moment of the Threaded Tube $^1/_2$" $MB_{max.}$ should not be exceeded. Any lateral loads on the pipe clamp also need to be considered.

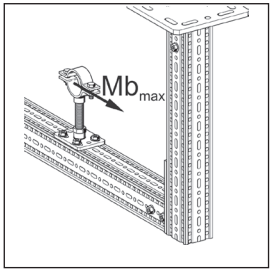
Type	Tension [kN]	Lateral force [kN]	Perm. bending moment [Nm]
GPL F 80 ST-$^1/_2$"	18.0	13.0	53
GPL F 80 ST-$^3/_4$"	18.0	13.0	138
GPL F 80 ST-1"	18.0	13.0	277

Material: Steel, electro-galvanised

Type	Dimension L x W x Th [mm]	Elongated hole d x a [mm]	Ш [mm]	W [kg]	Qt [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**







Mounting Plate GPL F Stabil HCP

Group: A438

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.

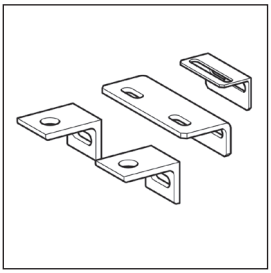
Permissible bending moment of the Threaded Tube $^1/_2$" $Mb_{max,}$ should not be exceeded. Any lateral loads on the pipe clamp also need to be considered.

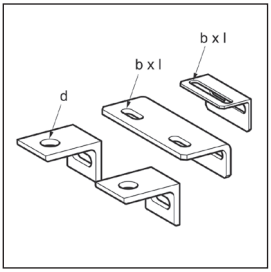
Technical Data

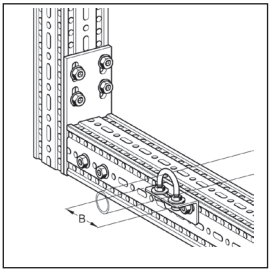
Type	Tension [kN]	Lateral force [kN]	Perm. bending moment [Nm]
GPL F 80 ST-$^1/_2$"	18.0	13.0	53
GPL F 100 ST-$^1/_2$"	18.0	13.0	53

#zeile material: #zelle Steel, HCP #/tabelle

Type	Dimension L x W x Th [mm]	Elongated hole d x a [mm]	Ш [mm]	W [kg]	Quantity [pack]	Part number
GPL F 80 ST-$^1/_2$"	110 x 80 x 8	11 x 20	11	0.50	25	**112719**
GPL F 100 ST-$^1/_2$"	110 x 100 x 8	11 x 20	11	0.80	25	**117266**
GPL F 100 ST-1"	110 x 100 x 8	11 x 20	11	0.80	25	**117268**







U Bolt Docking Bracket F

Group: A430

Application

Docking bracket to connect standard U-Bolts required for pipework to the supporting Beam Sections, Cantilever Brackets and Beam Brackets F80 or F100.

Scope of delivery

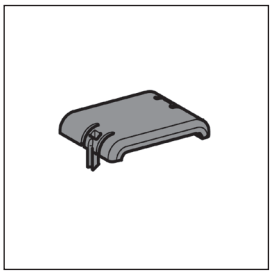
For U-bolts ≥ 4" always 2 U-bolt fastenings F are needed.

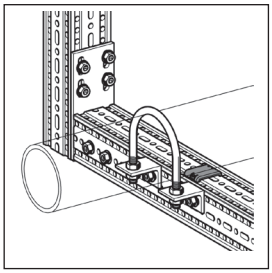
Technical Data

Typ	d [mm]	b x l [mm]	B [mm]
UB F 1/2" - 1 1/2"	-	65 x 11	85
UB F 2" - 3"	-	20 x 13	165
UB F 4" - 6"	17	-	45
UB F 8" - 12"	22	-	45
UB F 378 - 530	26	-	45

Material: Steel, HCP

Type	W [kg]	Quantity [pack]	Part number
UB F 1/2" - 1 1/2"	0.13	25	**192931**
UB F 2" - 3"	0.44	10	**196212**
UB F 4" - 6"	0.18	20	**113124**
UB F 8" - 12"	0.18	20	**113125**
UB F 378 - 530	0.18	20	**113126**





Pad U-UB F

Group: A430

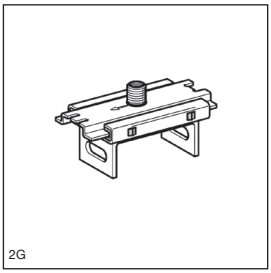
Application

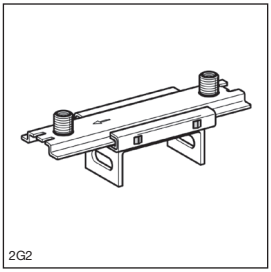
Insulation and surface protection pad to be used on demand when a pipes' expansion and contraction occurs directly on the F80 section.

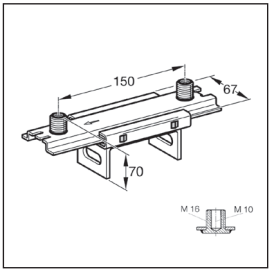
Technical Data

Material: Polyamide PA 6.0
Range of temperature: -20° up to +130° C

Type	W [kg]	Quantity [pack]	Part number
U-UB F 80	0.01	50	**198797**
U-UB F 100	0.01	50	**113094**


2G


2G2



Slide Set GS F 80 2G

Group: A436

Application

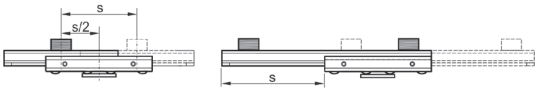
Pipe guide for twin-clamp connection designed to clutch the Beam Section F80 fixed by 2 x Self Forming Screws FLS.

Installation

Pipe clamp connection points “2G” receive M10 studs or M16 by adapter connection.

Technical Data

Type	a [mm]	b [mm]	c [mm]
GS F 80 2G2	150	67	70,0

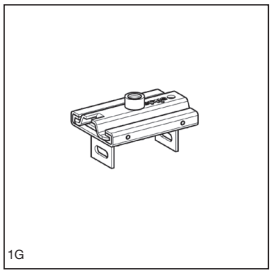


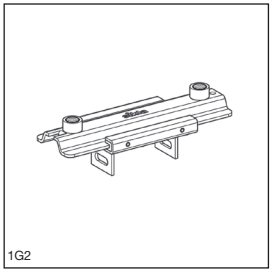
Type	Max. lever arm [mm]	Max. travel s [mm]
GS F 80 2G	150	100
GS F 80 2G2	150	135

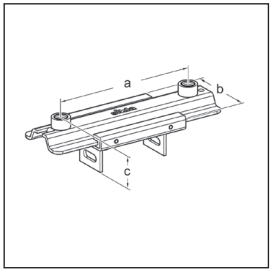
Perm. load elevated position:	1,2 kN
Perm. load suspended position:	0,6 kN
Permanent temperature range:	130° C
Static friction coefficient μ_0:	0,20
Sliding friction coefficient μ:	0,15

Material:	
Slide element:	Steel, HCP
Slide bar:	Polyamide (glass-fibre reinforced)
Retaining plate:	Steel, HCP

Type	W [kg]	Quantity [pack]	Part number
GS F 80 2G	0.6	10	**196700**
GS F 80 2G2	0.7	10	**196717**


1G


1G2



Slide Set GS F 1G

Group: A436

Application

Slide Set in solid construction for installation on top of siFramo Beam Sections TP F. $^1/_2$" thread connection allows direct connection to pipe clamp Stabil I -$^1/_2$" by means of threaded tube without further adaption parts.

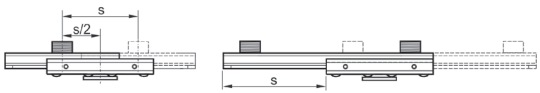
Installation

Installation on top of Beam Section TP F with two Self Forming Screws FLS F. Not suitable for side mounting in the horizontal orientation.

Technical Data

Type	a [mm]	b [mm]	c [mm]	perm. load support [kN]	perm. load suspended [kN]
GS F 80 1G	-	102	80.5	17.0	5.4
GS F 80 1G2	210	102	80.5	12.0	8.4
GS F 100 1G	-	102	85.5	17.0	5.7
GS F 100 1G2	210	102	85.5	12.0	8.7

The perm. loads have been determined by load tests following DIN EN 13480-3 annex J.
The pipe clamp and the possibly used $^1/_2$" threaded tube have to be verified seperately.



Type	Max. lever arm [mm]	Max. travel s [mm]
GS F 80 1G	200	100
GS F 80 1G2	300	135
GS F 100 1G	200	100
GS F 100 1G2	300	135

Temperature range (permanent exposure): 130°C
Static friction coefficient μ_0: 0.20
Sliding friction coefficient μ: 0.15

Material:
Metal components: Steel, HCP
Slide bar: Polyamide, glass fibre reinforced

Type	W [kg]	Quantity [pack]	Part number
GS F 80 1G	1.3	10	**113885**
GS F 80 1G2	1.7	10	**113886**
GS F 100 1G	1.4	10	**113091**
GS F 100 1G2	1.8	10	**113092**

Supports (Pipe Shoes)

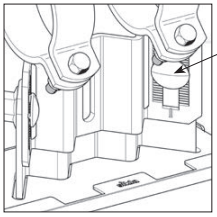
Application

The Sikla height- adjustable Supports (Pipe Shoes; HV 90, HV 150, HV 200) can be used as a Skid, a Guide or as a Fixed Point. The testing process of the individual Support types and the determination of the direction dependent permissible loads was carried out by the independent testing house TÜV Rheinland (Report No. 69617494/01).

Conformity

The Sikla Simotec Supports (Pipe Shoes) therefore fulfill DIN EN 13480-3 : 2012-11, where particularly in section 13.3.6.1 it is highlighted that the design of Pipe Support components is in accordance with DIN EN 1993.
For every Pipe Support type (incl. required connection kit) a declaration of conformity could be issued in accordance with ISO / IEC 17050.

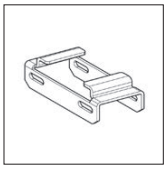
Installation

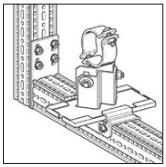


Special bolts for height- adjustable connection of lower and upper Pipe Shoe components.
Tightening torque: 80 Nm

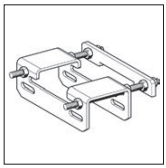
By combining ***Pipe Shoe LA or LC*** with the steel supporting structure and connecting parts below, it is possible to create a guided pipe shoe or a fixed point pipe shoe:

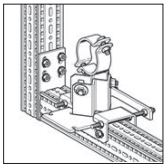
Guiding Support on siFramo
+ Guiding Bracket FW F ...



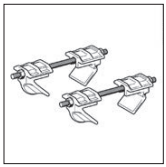


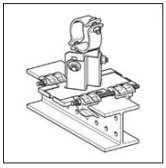
Fixed Point Support on siFramo
+ Fixed Point Bracket XW F ...



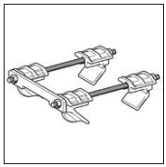


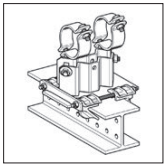
Guiding Support on steel beam section
+ Guiding Set FS ...





Fixed Point Support on steel beam section
+ Fixed Point Set XS ...





The dimension of the existing steel beam determines the required type of connection kit.
Can be installed on steel beams with flange width ≤ 300 mm and flange thickness ≤ 30 mm.

Design temperatures of pipe support components

The media temperature t_f has an influence on the system of the pipe support components. Acc. to DIN EN 13480-3 *„all components of the pipe support have to be designed based on a range of temperature from 0°C to 80°C. If the operational temperatures of the piping system are outside of this range, the corresponding values have to be specified.“*

During the design of pipe supports, components are basically assigned into 2 groups: inside and outside of insulation.

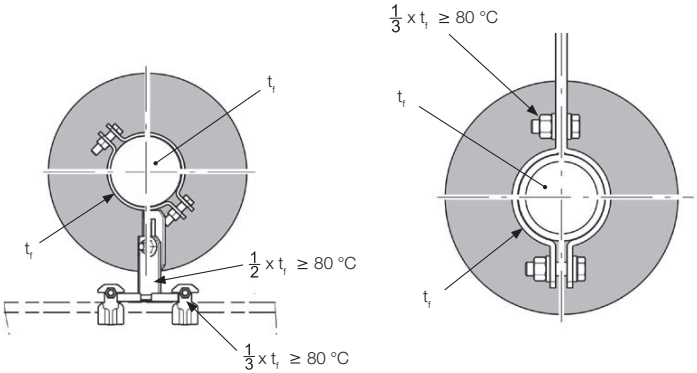
For all components beeing placed inside of an insulation the following values apply[2]:

Kind of component	Design temperature t of the pipe support (depending on the media temperature t_f)
Straps, pipe clamps and welded components with extensive contact to the piping system	$t = t_f$
Components not in contact with the piping system	$t = t_f$ - 20 °C
Bolts, nuts, etc.	$t = t_f$ - 30 °C

For all components beeing placed outside of the insulation the following values apply[3]:

Kind of component	Media temperature t_f	Design temperature t of the pipe support
Components in direct contact with the pipe	$t_f > 80$ °C	$t = \frac{1}{2} \times t_f$ (min. 80°C)
	$t_f \leq 80$ °C	t = 80 °C
Bolts, nuts, etc.	$t_f > 80$ °C	$t = \frac{1}{3} \times t_f$ (min. 80 °C)
	$t_f \leq 80$ °C	t = 80 °C

For clarification of the tables see the graphical illustration[4]:

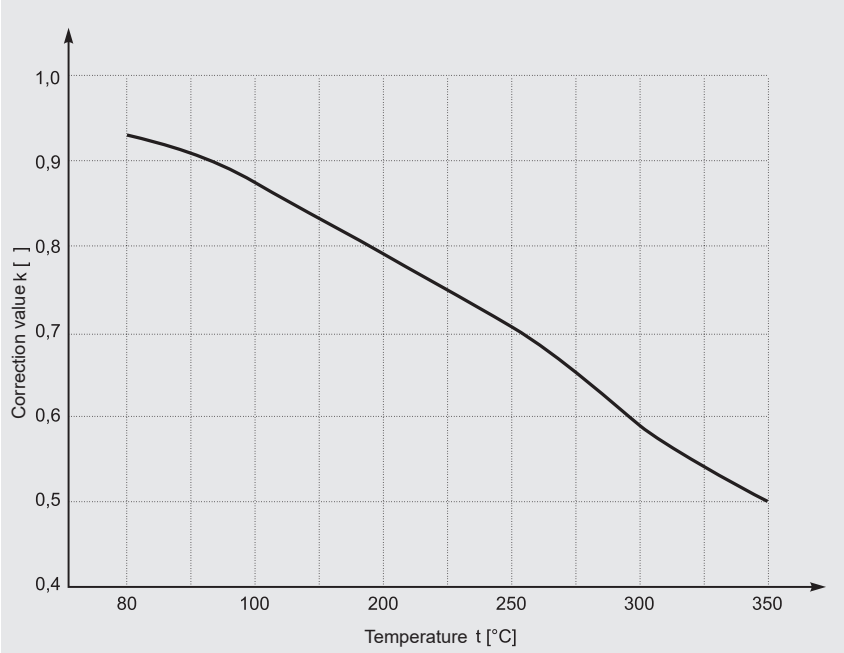


[1]Compare EN 13480-3:2014-12, Table 13.3.1
[2] Compare EN 13480-3:2014-12, Chapter 13.3.2.2-1
[3]Compare EN 13480-3:2014-12, Table 13.3.2-2
[4]Compare EN 13480-3:2014-12, Image 13.3.2-1

Correction values for pipe support components

The working loads of the SIKLA pipe shoes LA, LC and LD as well as for the rod hangers are valid for component temperatures up to 80°C. If components are getting warmer than 80°C in service, the stated working loads have to be added with the correction value k to reduce the working loads. Because SIKLA pipe support components are manufactured with steel grade S235JR (or higher), the appropriate correction value has to be applied.

Correction val k for S235JR depending on the temperature:



Correction values and practical application

$F_{perm} \geq F_{exist}$

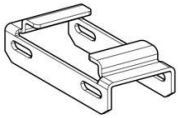
$(F_{perm} = F_{R,20°C} * k) \geq F_{exist}$

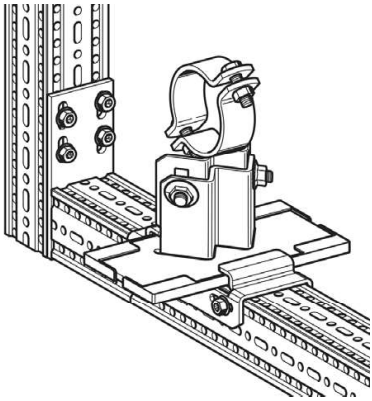
Temperature t [°C}	Correction value k [ ]
80	0.93
100	0.88
200	0.79
250	0.71
300	0.58
350	0.50

F_{perm}	permissible load of Sikla pipe shoe at temperature t_x [°C]
F_{exist}	pipe load according to structural analysis
$F_{R,20°C}$	permissible load of Sikla pipe shoe at 20°C
k	correction value

siFramo: Guiding Bracket FW F, Slide Set GS F and U Bolt Fastening UB

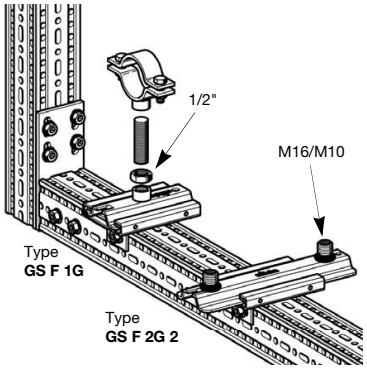
FW F
is need to create a guided pipe shoe



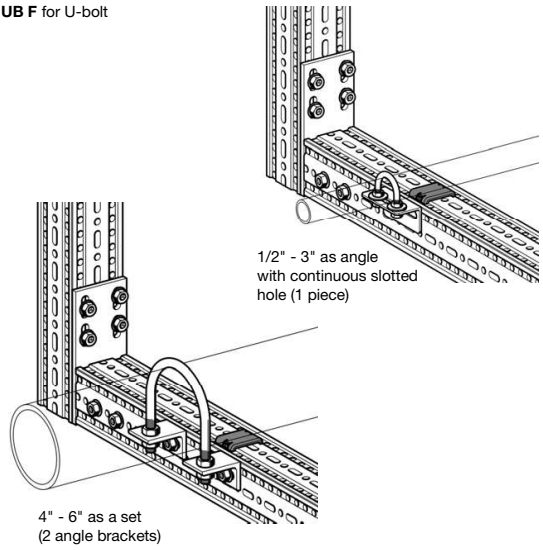


GS F 1G (slide plate included),
GS F 2G (base plate with guide bars and slider included)
for direct assembly to the Beam Section F 80.

With Sikla Threaded Tube G 1/2", the pipe clamp Stabil I can be mounted directly into the connecting thread.
Adjustment by means of Counter Nut.

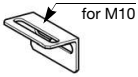


UB F for U-bolt

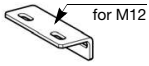


Note:
- **U-bolts preferably should be used as Guiding Supports!**

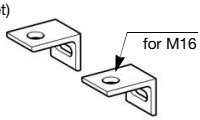
Type **UB F** 1/2" - 1 1/2"
(1 piece)



Type **UB F** 2" - 3"
(1 piece)



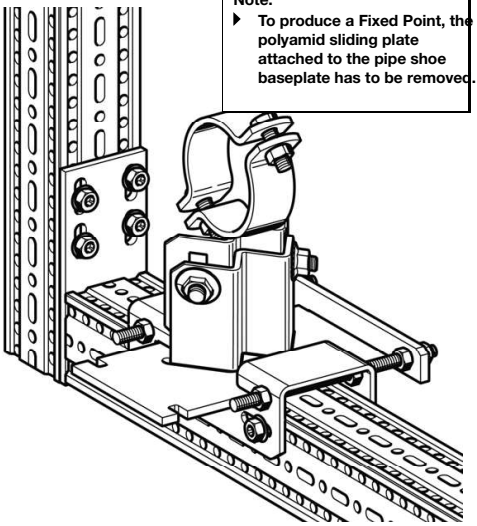
Type **UB F** 4" - 6"
(1 set)



siFramo: Fixed Point Bracket XW F and Mounting Plate GPL F

Fixed Point Set XS F

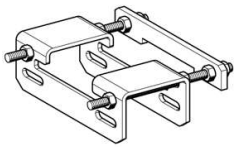
Note:
- **To produce a Fixed Point, the polyamid sliding plate attached to the pipe shoe baseplate has to be removed.**



To create modular Anchor Points for the Pipe Shoe range, the **Fixed Point Set XS F** is mounted onto the Beam Section F, and the front plate of the assembly locks into the pre-notched base plate of the Pipe Shoe.

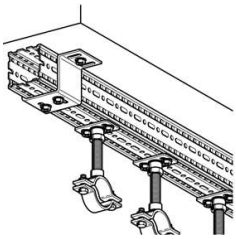
Threaded Studs and Nuts are included in the scope of delivery.

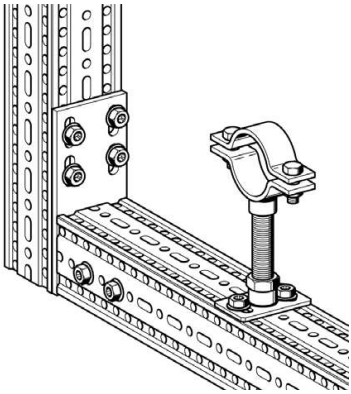
Fixed Point Set XS F



Mounting Plate GPL F

Beam Section Holder
TPH F
for in-situ
fastening





The connecting thread allows the direct adaption of a Pipe Clamp Stabil I with

Sikla-Threaded Tube G 1/2".

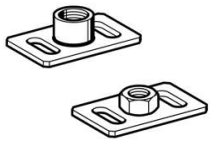
Adjustment by means of Counter Nut.

Mounting Plate GPL F

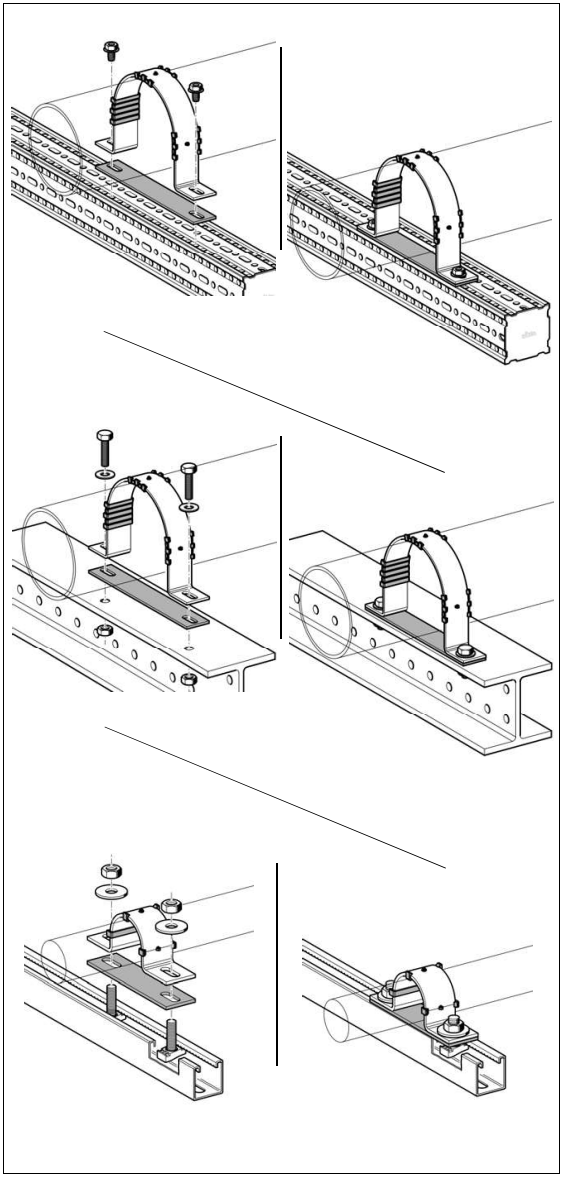
Mounting Plate GPL F is fixed cross-wise to the Beam Section F by means of 2 Self Forming Screws.

Caution!
- **Note the permissible bending moment of the threaded tube!**

Thread 1/2", M16, M12 and M10



U Clamp RUC I



Mounting options of U Clamp RUC I by means of:

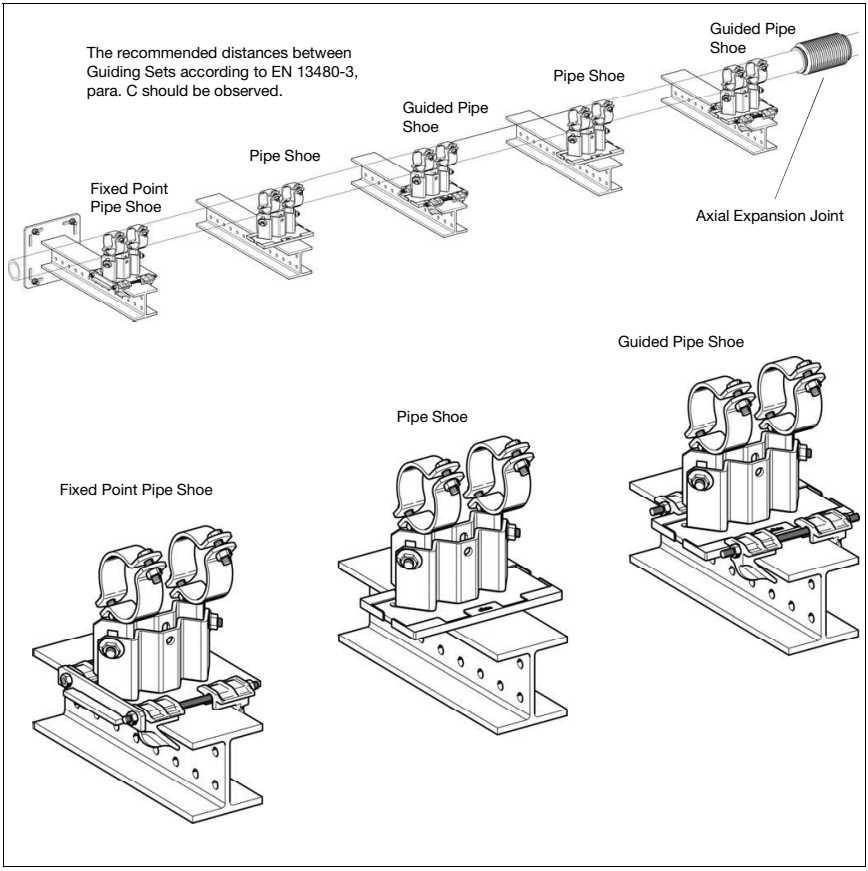
- Self Forming Screws FLS F for installation on Beam Section TP F.
- M10 screws and locknuts for installation on girder flange.
- M10 screws with Channel Nuts for installation on Channel MS 41.

U Clamp RUC I installed on Beam Section TD F.

U Clamp RUC I installed on girder flange.

U Clamp RUC I installed on Channel MS 41.

Pipe Shoes: Arrangement of Guided Pipe Shoe Supports



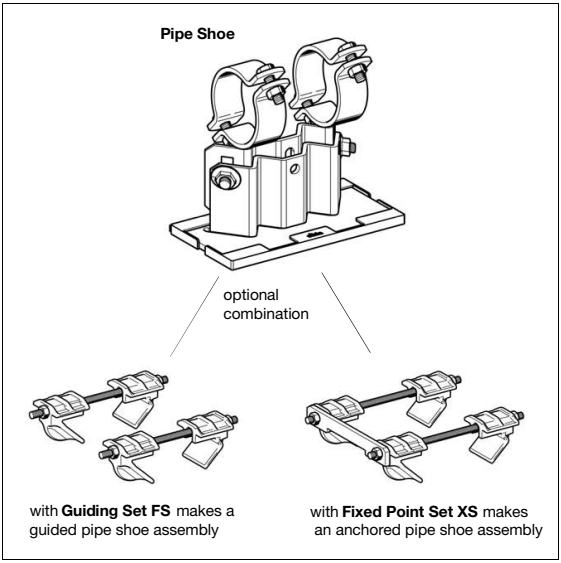
Example for pipe installation:

For the pipe support
- 1 Fixed Point
- 2 Sliding Supports
- 2 Guiding Supports

are used.

An axial compensator has to be used to adjust the linear expansion of the pipe due to a change in temperature. Guiding Sets have to be installed directly before and after an axial compensator is attached. Observe the installation instructions of the expansion joint manufacturer.

Pipe Shoes: Delivery option and assembly

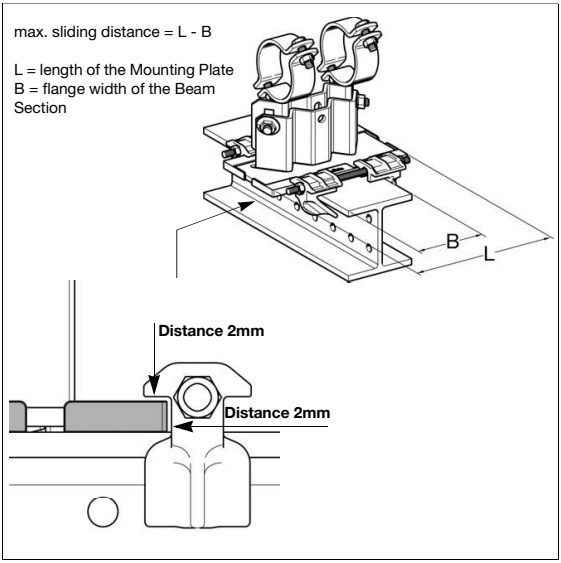


Delivery option:

Combine the Pipe Shoe with a **Guiding Set FS** or **Fixed Point Set XS**; either a guided pipe shoe or anchored pipe shoe can be assembled.

Caution!

- **Depending on the flange width, the correct type of either Fixed Point Set FS or XS should be attached.**



Assembly of Clamping Hooks with Guided Pipe Shoes:

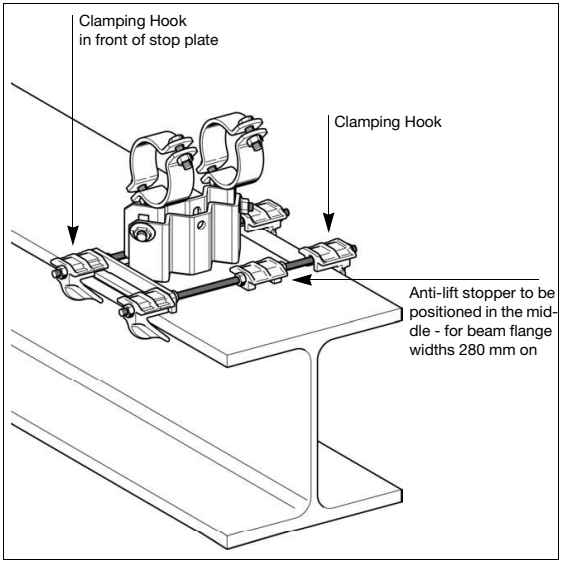
To allow movement of the pipe shoe base plate on the supporting Beam, all 4 Clamping Hooks have to be mounted such that a 2mm clearance to the pipe shoe base plate is maintained.

Frictional force with Sliding and Guiding Supports:

The coefficient of static friction μ0 depends on the consistence of the surface consistency.

For Simotec Supports with Sliding Plates PA on hot-dipped galvanised Beams $\mu_0 = 0.2$.

Pipe Shoes: Assembly on wide flange Beams and sloping pipes

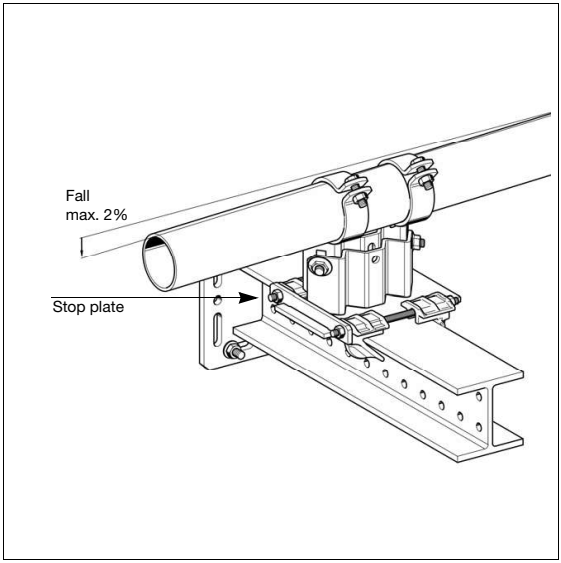


Wide Flange Beams:

When assembling Fixed Point Pipe Shoes to Beams with a flange width 200 mm and wider, the front Clamping Hooks have to mounted in front of the stop plate and to the outside edge of the Pipe Shoe base plate.

This means that the opposing Clamping Hook is then also still arranged above, and to the outer edges of the Pipe Shoe base plate, for beams with a flange width up to 220 mm.

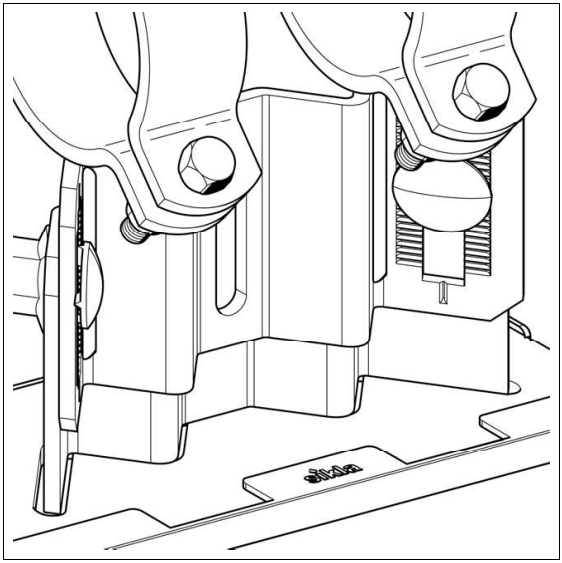
For Beams with a flange width from 280mm, the anti-lift stoppers are additionally installed to the centre-section of the beam on both outer edges of the Pipe Shoe base plate.



Assemblies with a pipe gradient:

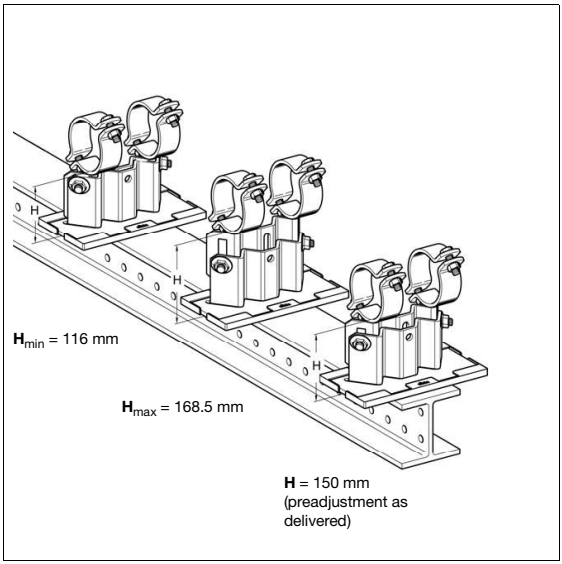
Fixed Point Pipe Shoe must be installed with the front stopper plate section on the lower pipe-fall side required of the Pipe Shoe base plate.

Pipe Shoes: Adjustable Height



HV-Supports:

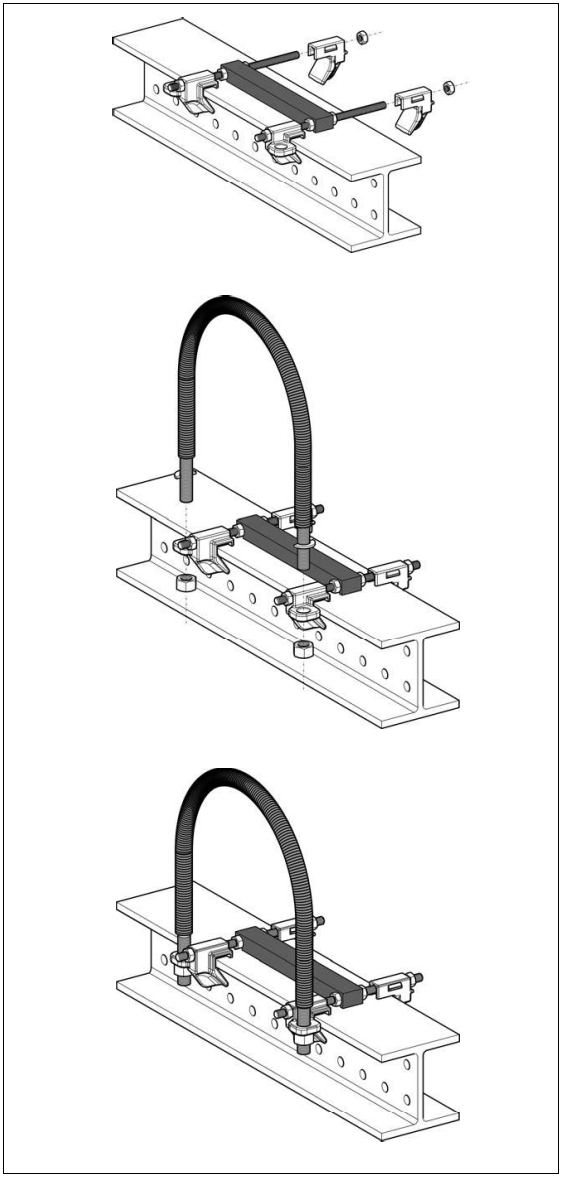
These pipe shoes allow fine height adjustment based on 3 basic height settings



Height **H** is always measured from TOS (Top of Steel) to BOP (Bottom of Pipe).

Setting range
HV 090: 88.5 ... 113.5 mm
HV 150: 116 ... 168.5 mm (pict.)
HV 200: 171 ... 223.5 mm

Supports: Assembly process



Mounting example
Guided Support FR - H 020:

First put the pre-assembled unit (delivery state) consisting of 2 clamping hooks, 2 threaded rods, 6 hexagon nuts and bearing block on the beam. Depending on the beam width it is possible to adapt the position of the bearing block by adjusting the 4 hexagon nuts.

Fix the support by mounting the 2 clamping hooks and 2 hexagon nuts now (also belonging to delivery state).

After installation of the pipe the U-bolt with pre-assembled sheath is to be screwed into the both anterior clamping hooks. The sinusoidal split sheath ensures an electro-chemical separation at any time.

In case of linear expansion the pipe slides directly on the PA bearing block.

Interested in more details about Sikla Product Range?

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