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Contact us for a training session

Modular Steelwork Solutions

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:

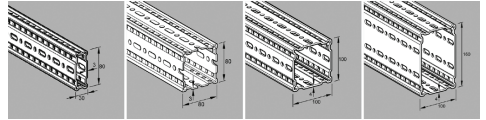
- CAD & Structural Design
- Customised Components
- Pre-assembly
- Simplified logistics

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.

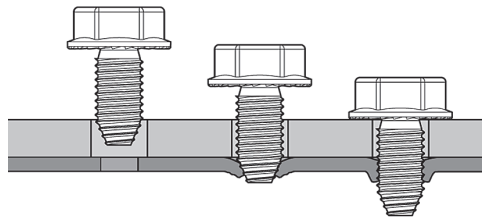


Sikla products offer these four key benefits:

- 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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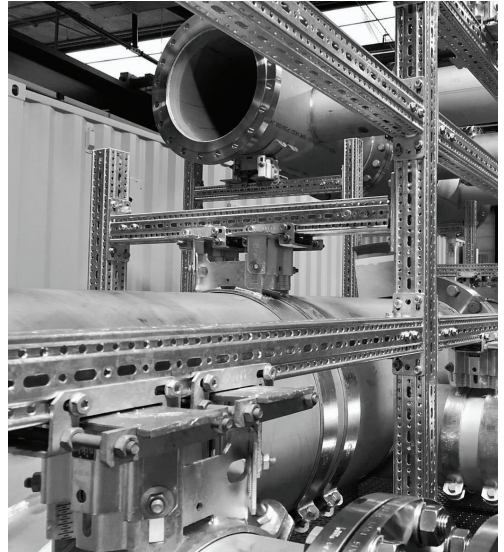
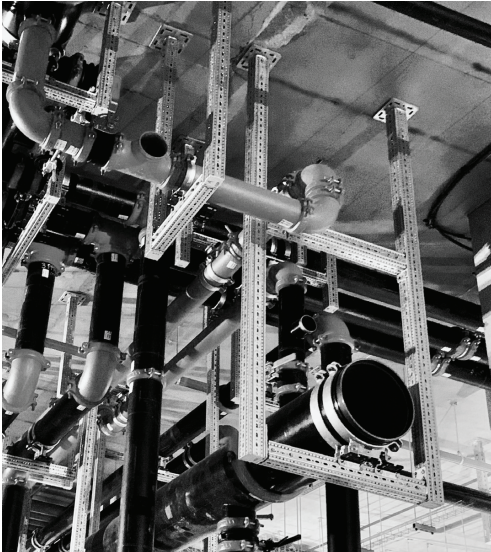
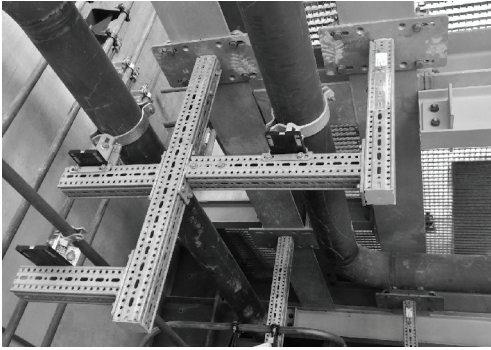
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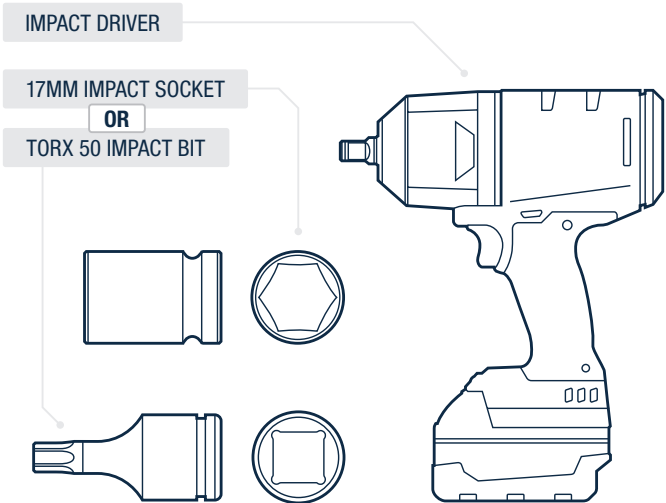
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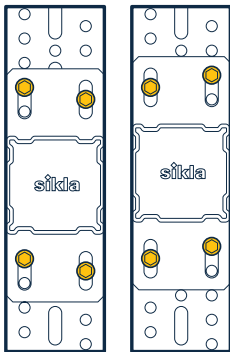


What you need...

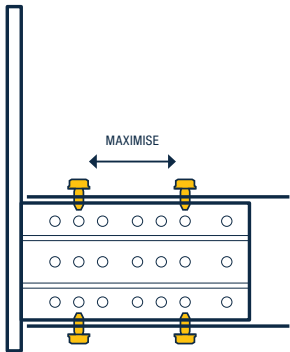


TRAINING INCLUDED!

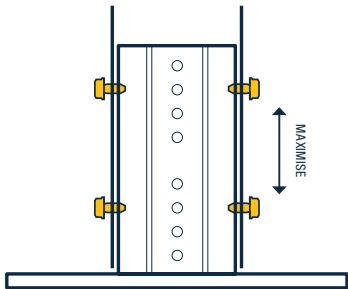
Claim your on-site or remote installation induction. You will receive a certificate that validates the warranty on your frame installation.



STA

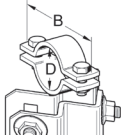


STA



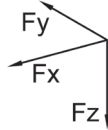
WBD

Measurements



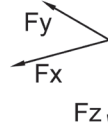
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Working loads for Sliding Supports LA, LC and LD - HV



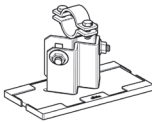
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Working loads for Supports with insulation insert and suspension



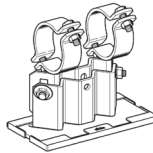
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Pipe Shoe LA - HV



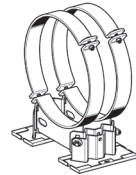
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Pipe Shoe LC - HV



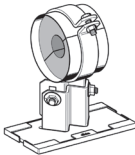
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Pipe Shoe LD - HV



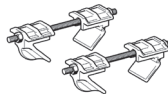
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Pre-Insulated Pipe Shoe LK-HV



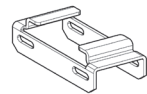
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Guiding Set FS



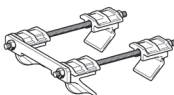
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Guiding Bracket FW F



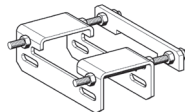
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Fixed Point Set XS



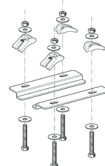
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Fixed Point Bracket XW F



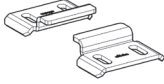
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Guiding Set FS Z



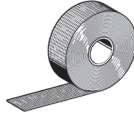
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Guiding Bracket FW F L/Z

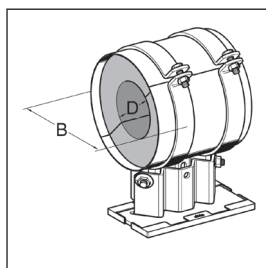
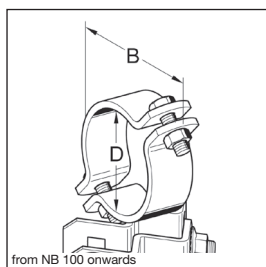
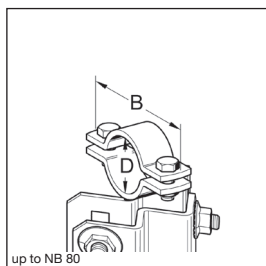


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Glass Fabric Tape GSK



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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

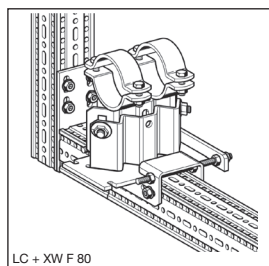
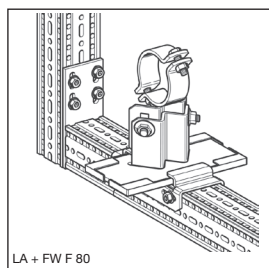
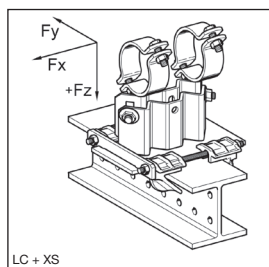
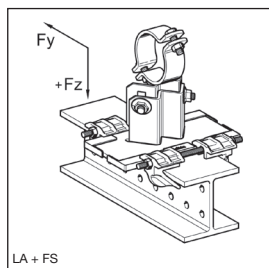
Pipe NB	Pipe D	Insulation Thickness [mm]	Insulation Length [mm]	Pipe Clamp B [mm]	Pipe Clamp Material [mm]	Hex. bolts
25	33.7	50	100	180	50 x 5	M12 x 50
32	42.4	50	100	187	50 x 5	M12 x 50
40	48.3	50	100	190	50 x 5	M12 x 50
50	60.3	50	100	199	50 x 5	M12 x 50
65	76.1	60	100	237	50 x 8	M12 x 55
80	88.9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

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

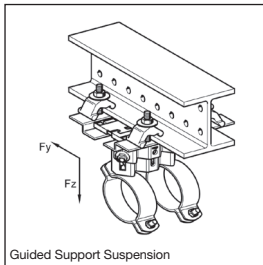
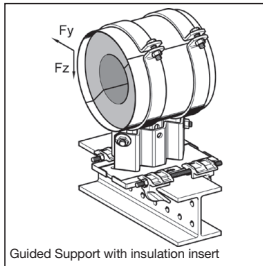
Height	DN	Fx * [kN] X-Supports only	Fy [kN]	+ Fz [kN]	- Fz FS 80/120 [kN]	- Fz FW F 80 [kN]	- Fz XS 80/120 [kN]	- Fz XW F 80 [kN]
90	≤ 25	14.3	6.3	17.0	14	6.1	17	17
90	32	14.1	6.2	17.0	14	6.1	17	17
90	40	14.0	6.1	17.0	14	6.1	17	17
90	50	13.9	5.9	17.0	14	6.1	17	17
90	65	13.6	5.6	17.0	14	6.1	17	17
90	80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

Further statical product datas are available on request.



Working loads for Supports with insulation insert and suspension

Basis of assessment EC 3, working loads for Supports in delivery status
Sliding Supports LK - HV + Guiding Set FS

Height	DN	Fy [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 :

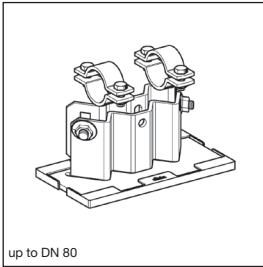
-20°C to +300°C (if $t_f > 270^\circ\text{C}$, remove
slide plate)

Approvals / Compliance

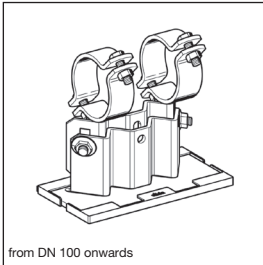


Note: HV 200 - minimum quantity and delivery time on request

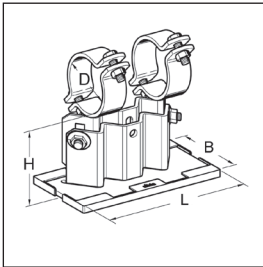
Type	D (pipe) [mm]	W [kg]	Quantity [pack]	Part number
LA - HV 90 DN 15	21.3	2.8	1	112386
LA - HV 90 DN 20	26.9	2.8	1	112387
LA - HV 90 DN 25	33.7	2.9	1	110035
LA - HV 90 DN 32	42.4	2.9	1	110036
LA - HV 90 DN 40	48.3	3.0	1	110037
LA - HV 90 DN 50	60.3	3.1	1	110038
LA - HV 90 DN 65	76.1	3.2	1	110039
LA - 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 $t_f > 270^\circ\text{C}$, 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 :

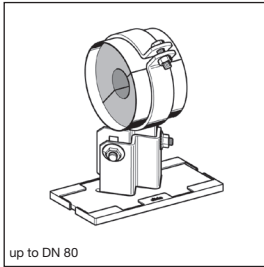
-20°C to +300°C (if $t_f > 270^\circ\text{C}$, remove slide plate)

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



Pre-Insulated Pipe Shoe LK-HV

Application

Pipe Shoe with insulation

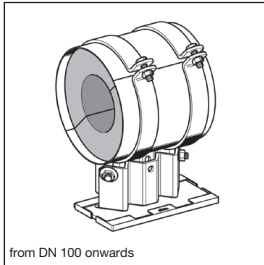
With PUR insulation insert for pipes on suitable surfaces. Height-adjustable in steps of 2.5 mm. When resting on steel beams, a minimum flange width of 80 mm is recommended.

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

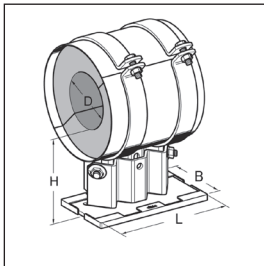


Tightening torque screw connections:

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/m³

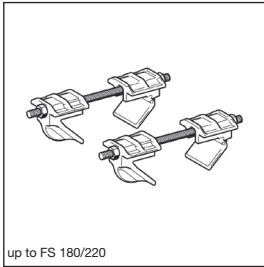
Load spread sheet: Aluminium (on request: Steel, galvanised, stainless steel)

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



Guiding Set FS

Application

Element for completing Guided Pipe Shoes based on Sliding Pipe Shoes.
Max. beam flange width $t \leq 30$ mm

Scope of delivery

Pre-assembled Guiding Set containing:

4 Clamping hooks

2 Grub screws

Lift-off preventions:

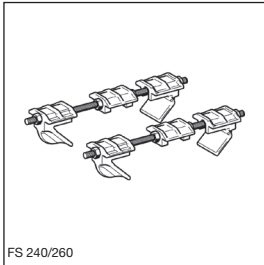
2 for FS 240/260

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

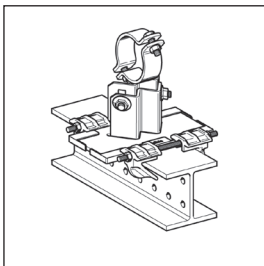
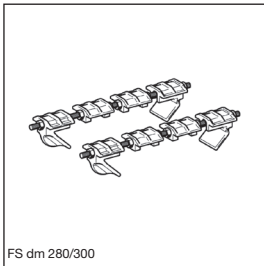
Grub screws, nuts:

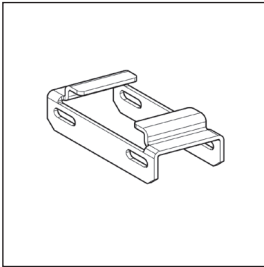
Steel, HCP

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.

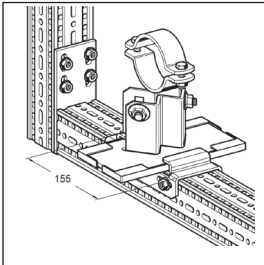
Installation

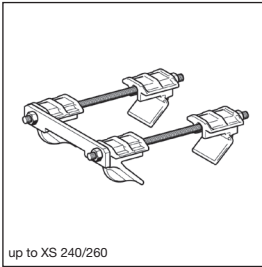
Connection to Beam Section F 80 or F 100 by means of 4 Self-Forming Screws FLS F.

Technical Data

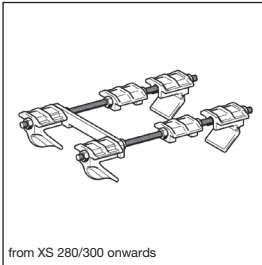
Material: Steel, hot-dipped galvanised

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

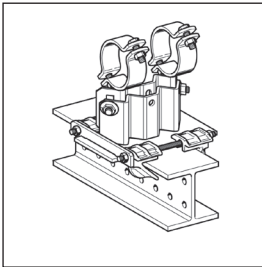




up to XS 240/260



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 $t \leq 30$ 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 responsibility of the piping manufacturer.

Technical Data

Material:

Metal parts: Steel, HCP

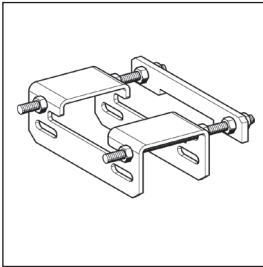
Grub screws, nuts: Steel, HCP

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.

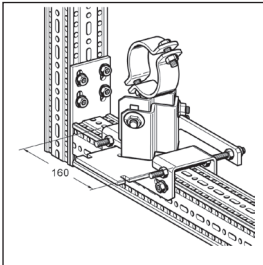
Axial fixed point forces can only be attained by the professional use of anti-slip protections (e.g. cleats, stoppers). Those have to be planned during the design of the piping and are on the responsibility of the piping manufacturer.

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 $t \leq 33$ 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:

Grub screws, nuts:

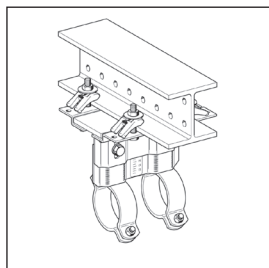
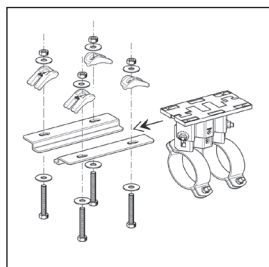
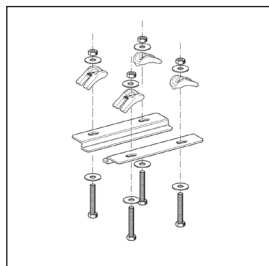
Steel, HCP

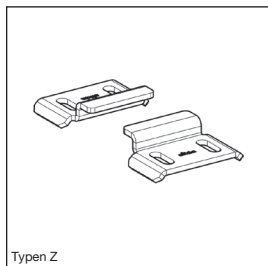
Steel, HCP

Approvals / Compliance

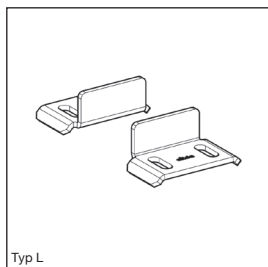


Type	For flange width [mm]	W [kg]	Qty. [set]	Part number
FS Z 80/120	80 - 120	2.7	1	110398





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 respectively 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 siFrame 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 F_y [kN]	perm. torque via F_y^* [kNm]	perm. load F_z [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	-	-

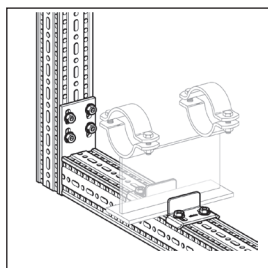
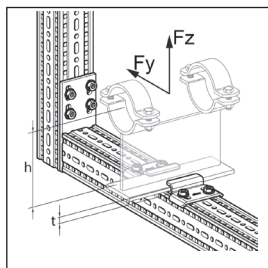
* the torque is calculated by $M = F_y \times h$, whereas the perm. load for F_y may not be exceeded. Dimension h refers from the middle of the pipe to the top of the base plate.

The perm. loads have been determined by load tests following DIN EN 13480-3 annex J.

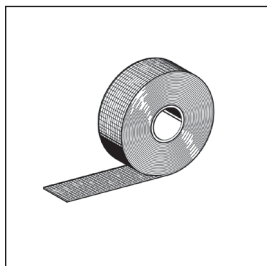
The used Pipe Shoe has to be verified separately.

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

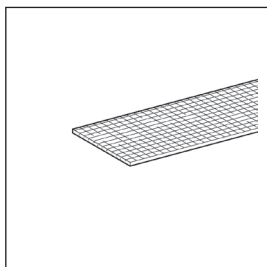
Einlage für Rohrschellen zur thermischen und galvanischen Trennung (Vermeidung von Kontaktkorrosion). The Glass Fabric Tape is classified in the hydrolytic class I (best class) according to DIN 12111 regarding resistance to water. So it has an excellent resistance to acid and neutral solutions.

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.



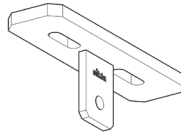
Type	Width [mm]	Thickness [mm]	Roll [m]	Part number
30 x 2	30	2.0	10	114865
40 x 2	40	2.0	10	114866
50 x 2	50	2.0	10	114867
60 x 2	60	2.0	10	114868
70 x 2	70	2.0	10	114869

Weld-on Eye-Plate HPA



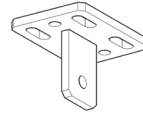
Page 29

Beam System Eye-Plate HP 80/99



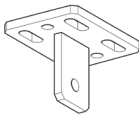
Page 30

siFramo Eye-Plate HP F 80



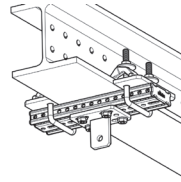
Page 31

siFramo Eye-Plate HP F 100



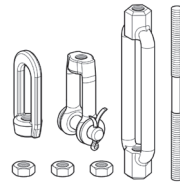
Page 32

Beam Connection LKA



Page 33

Rod Hanger Load Chain Assembly LKV



Page 34

Threaded Rod GST HCP



Page 35

Threaded Stud GST HCP



Rod Coupling AD IG/IG HCP



Page 36

Stabil Form C LK



Page 37

Stabil D-3G HCP



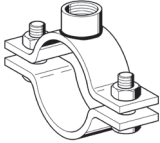
Page 38

Stabil D-3G w/ Lining



Page 40

Pipe Clamp Stabil I-1/2" HCP



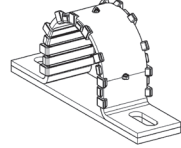
Page 42

Pipe Clamp Stabil RB-A HCP



Page 43

U Clamp RUC I



Page 45

U Bolt RUB 3570 A HCP



Page 46

**Rubber Profile SAL
SBR/EPDM**



Page 47

Rubber Profile SAL Silicone

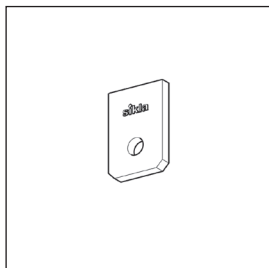


Page 48

Cellular Rubber MSK



Page 49



Weld-on Eye-Plate HPA

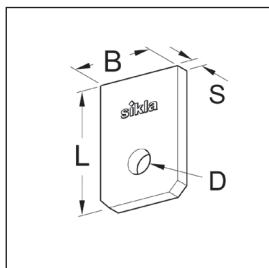
Group: A299

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)



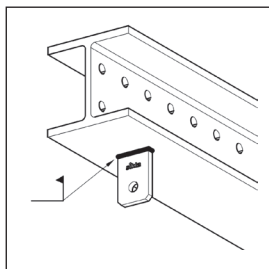
Technical Data

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

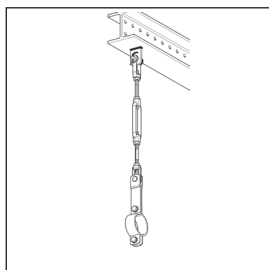
The implementation and construction requirements of the components, their design as well as their verifications and load tests were carried out following the standards VGB R 510 L part I, KTA 3205.3 and DIN EN 13480-3.

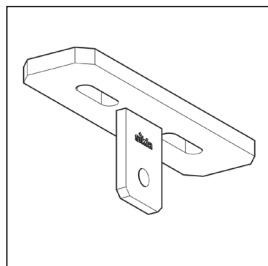
Type	L [mm]	B [mm]	S [mm]	D [mm]
M10	65	45	8	11
M12	65	45	8	13
M16	65	45	8	17

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





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

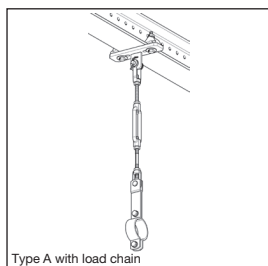
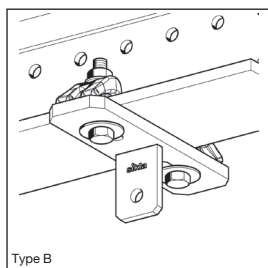
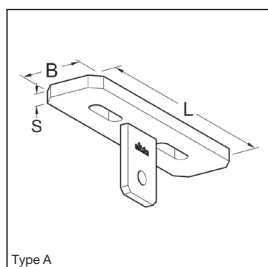
The implementation and construction requirements of the components, their design as well as their verifications and load tests were carried out following the standards VGB R 510 L part I, KTA 3205.3 and DIN EN 13480-3.

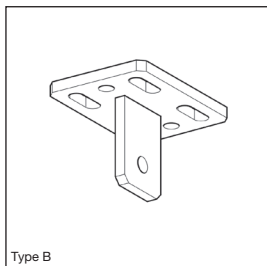
L [mm]	B [mm]	S [mm]
200	60	12

Material: Steel, HCP

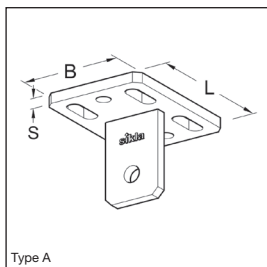
Hinweis: Delivery time on request

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

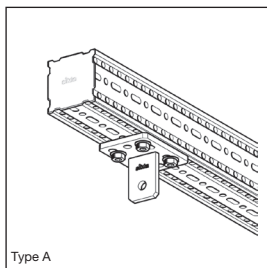




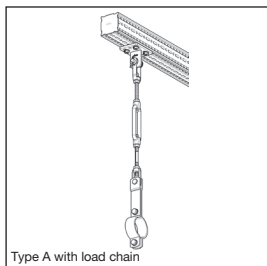
Type B



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

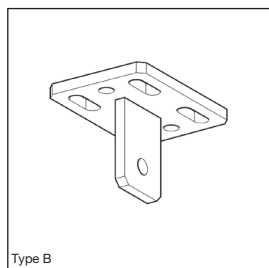
Type	max. perm. tensile load [kN]
M10	11.2
M12	12.1
M16	12.5

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.

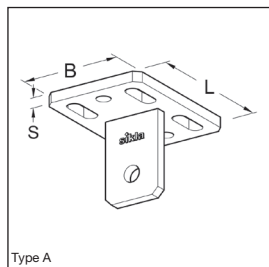
L [mm]	B [mm]	S [mm]
110	80	8

Material: Steel, HCP

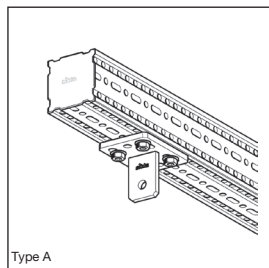
Type	W [kg]	Quantity [pack]	Part number
HP F 80 - A M10	0.6	10	113023
HP F 80 - A M12	0.6	10	113024
HP F 80 - A M16	0.6	10	113025
HP F 80 - B M10	0.6	10	113020
HP F 80 - B M12	0.6	10	113021
HP F 80 - B M16	0.6	10	113022



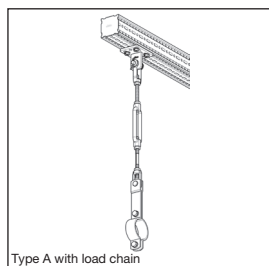
Type B



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

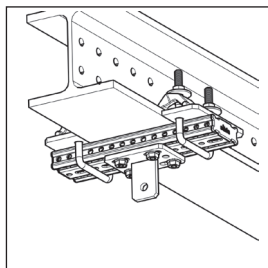
Type	max. perm. tensile load [kN]
M10	11.2
M12	12.1
M16	12.5

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



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

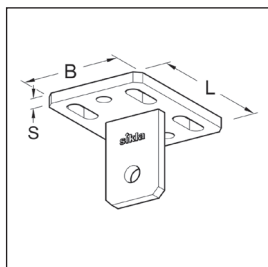
Installation

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.

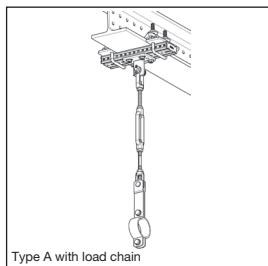
siFramo Eye-Plate HP F 80:

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

siFramo 80/30:

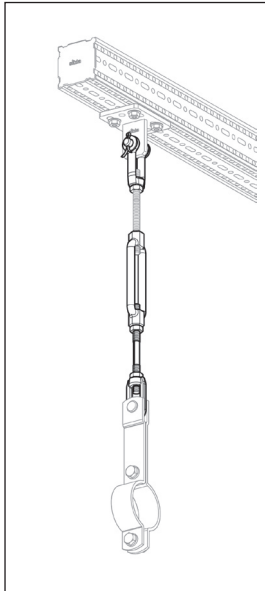
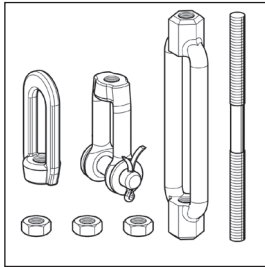
Beam width [mm]	L [mm]	B [mm]	H [mm]
100 - 160	300	80	30
161 - 310	440	80	30

Material: Steel, HCP



Type A with load chain

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

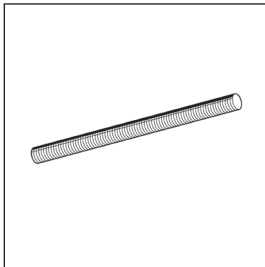
Type	max. perm. tensile load [kN]
M10	11.2
M12	12.1
M16	14.0

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



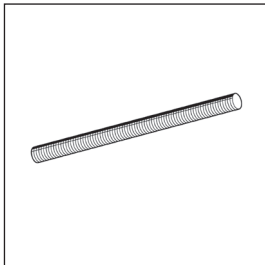
Threaded Rod GST HCP

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



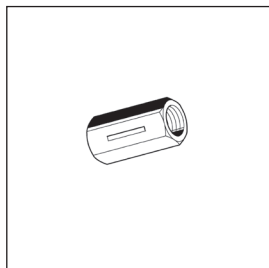
Threaded Stud GST HCP

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

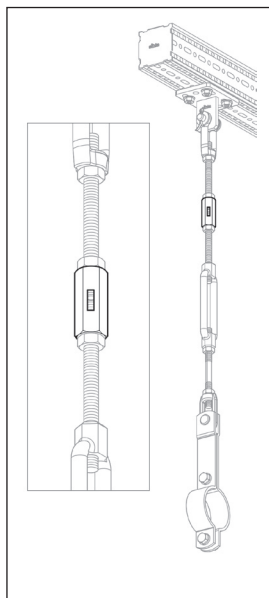
Connection element to extend threaded rods for suspension heights of Sikla Load Chains of more than 3 meters effective length of thread. With slot for visual check of screw depth of both ends of the threaded rods. The HCP-surface of the Rod Coupling in combination with other HCP-components guarantees 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).

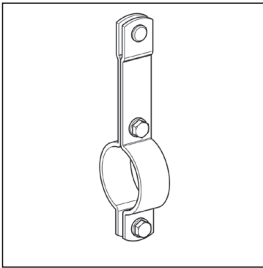
Technical Data

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





Stabil Form C LK

Group: A299

Application

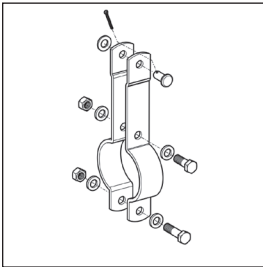
Industrial pipe clamp following VGB-R 510 L for standard industrial pipe supports. The pipe clamp Stabil Form C LK can be used as pendulum suspension or as part of a rod hanger.

Scope of delivery

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

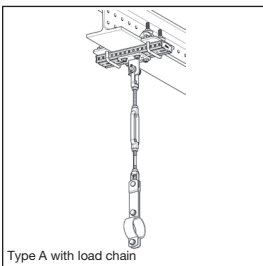
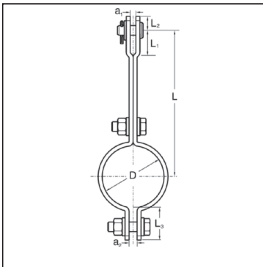
Technical Data

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



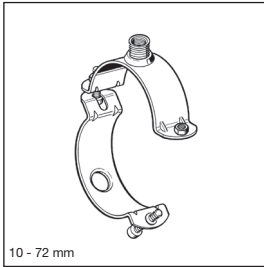
Type	D [mm]	a1 [mm]	a2 [mm]	L [mm]	L1 [mm]	L2 [mm]	L3 [mm]	B x S [mm]
22	22	7	10	90	29	12	33	30 x 5
27	27	7	10	93	29	12	34	30 x 5
34	34	7	10	107	29	12	35	30 x 5
44	44	7	10	113	29	12	36	30 x 5
49	49	7	10	126	29	12	36	30 x 5
61	61	7	10	144	28	18	40	40 x 5
77	77	7	10	183	28	18	41	40 x 5
89	89	7	10	189	28	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 A with load chain

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



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.

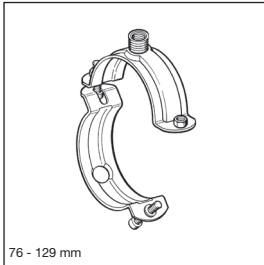
With welded in 3G triple thread nut; without sound absorption lining. For further adapter-based connection options via the external thread of the 3G triple thread nut, see product "Adapter AD f/f" (this chapter).

Installation

FM size range 1" to 4" is approved with \geq M10 only.

For FM applications use M10 only.

For VdS applications use M10 only if size is $>2"$ to $4"$.



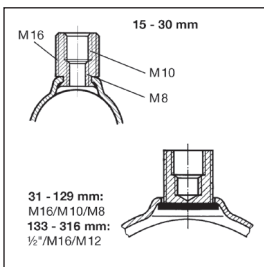
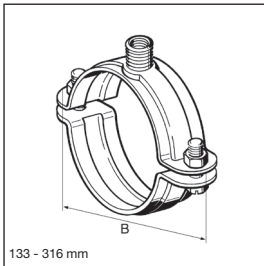
Technical Data

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

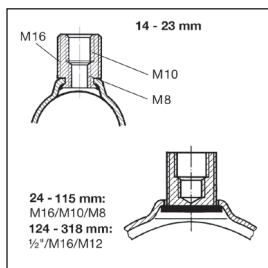
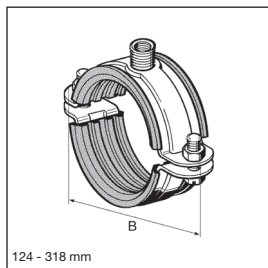
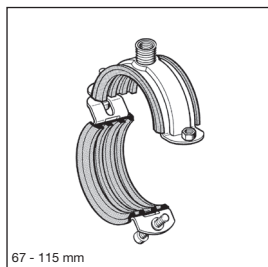
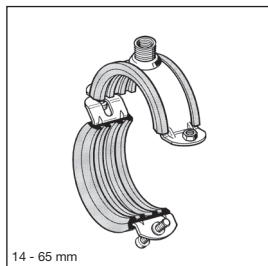
Material: Steel, HCP

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



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 $F_{Z,perm,fi}$ in case of fire

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

Material:

Metal components:

Sound absorption lining:

Steel, electro-galvanised

SBR/EPDM stuck in (black) - (see chapter "Sound Absorption Products")

Approvals / Compliance

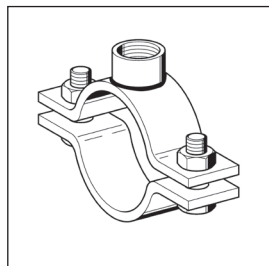


This product has been awarded the RAL quality mark "pipe supports" and "fire-tested pipe supports" and is subject to continuous external monitoring according to RAL GZ-655.

* = 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 [pac k]	Part number
14 - 18	$\frac{3}{8}$ "	25 x 2.0	M16/M10/M8	63	0.08	50	107680
19 - 23	$\frac{1}{2}$ "	25 x 2.0	M16/M10/M8	69	0.09	50	107699
24 - 28	$\frac{3}{4}$ "	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	$1\frac{1}{4}$ "	30 x 2.5	M16/M10/M8	94	0.17	50	107282
47 - 52	$1\frac{1}{2}$ "	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	$2\frac{1}{2}$ "	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	$\frac{1}{2}$ "/M16/M12	210	0.89	10	107389
131 - 137		40 x 4.0	$\frac{1}{2}$ "/M16/M12	218	0.93	10	107398
138 - 144	5"	40 x 4.0	$\frac{1}{2}$ "/M16/M12	225	0.96	10	107404
148 - 154		40 x 4.0	$\frac{1}{2}$ "/M16/M12	235	1.00	10	107413
156 - 162		40 x 4.0	$\frac{1}{2}$ "/M16/M12	243	1.05	10	107422
165 - 171	6"	40 x 4.0	$\frac{1}{2}$ "/M16/M12	255	1.18	10	107431
177 - 183		40 x 4.0	$\frac{1}{2}$ "/M16/M12	265	1.23	10	107440
188 - 194		40 x 4.0	$\frac{1}{2}$ "/M16/M12	276	1.25	10	107459
196 - 203		40 x 4.0	$\frac{1}{2}$ "/M16/M12	287	1.32	10	148911
205 - 214		40 x 4.0	$\frac{1}{2}$ "/M16/M12	296	1.35	10	148920
219 - 225	8"	40 x 4.0	$\frac{1}{2}$ "/M16/M12	307	1.41	10	107468
244 - 250		40 x 4.0	$\frac{1}{2}$ "/M16/M12	332	1.55	10	107477
267 - 273	10"	40 x 4.0	$\frac{1}{2}$ "/M16/M12	355	1.62	10	107486
278 - 284		40 x 4.0	$\frac{1}{2}$ "/M16/M12	366	1.67	10	112718
299 - 305		40 x 4.0	$\frac{1}{2}$ "/M16/M12	387	1.80	10	107495
307 - 318 *		40 x 4.0	$\frac{1}{2}$ "/M16/M12	400	1.95	10	189974



Pipe Clamp Stabil I-1/2" HCP

Group: A022

Application

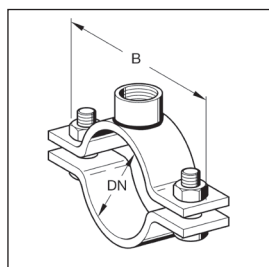
Heavy pipe clamp for industrial application.

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:

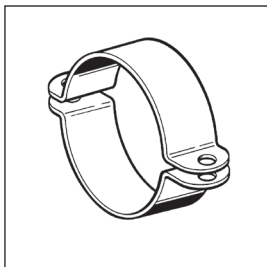
Clamp: Steel, HCP

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

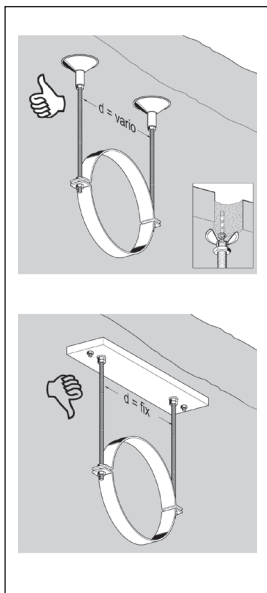
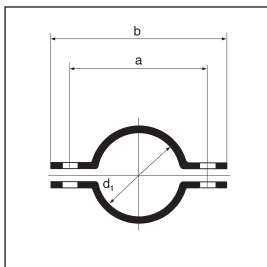
Adm. load valid with fixation on both sides

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

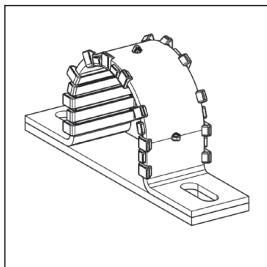
The max. perm. load capacity of connected parts (e.g. anchors) shall be considered.

The max. adm. load capacity is determined by the application of statistical methods, resulting from the breaking loads, under observance 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 t h [mm]	Recommend d 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:

- On top of siFramo Beam Sections with Self Forming Screws FLS
- On top of Channels 41 with bolts M10 and suitable Channel Nut
- 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:

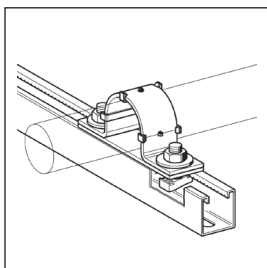
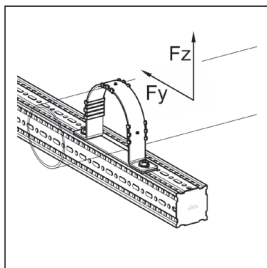
Steel, HCP

Layer and sliding plate:

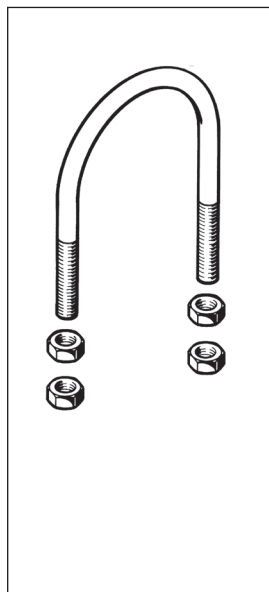
Thermoplastic resins

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.

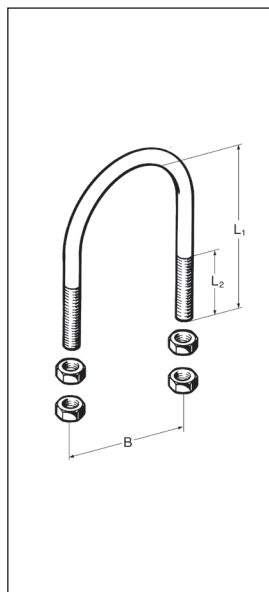
Installation

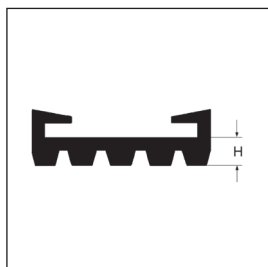
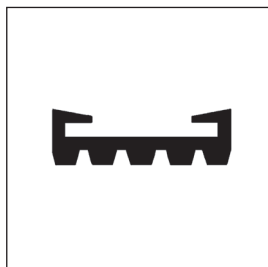
When used as Guided Support, nuts have to be arranged and fixed on both sides, at the top and at the bottom of the profile. Thereby the pipe should remain flexible. When used as Fixed Point the admissible loads of the connecting elements shouldn't exceed the bending loads of the U-bolt.

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

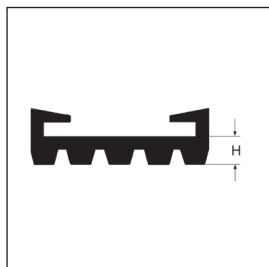
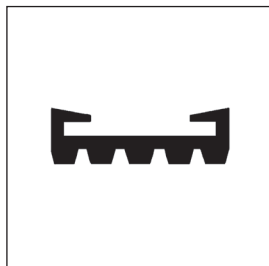
Sound absorption lining for steel straps and pipe clamps (also according to DIN 4109).

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 to 18 dB(A) (from height 4.5 mm on)
Surface resistance:	2×10^{13} Ohm
Volume resistance:	2×10^{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).

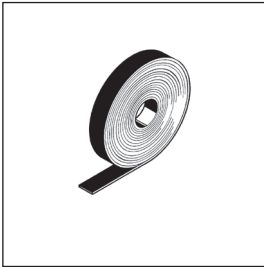
Technical Data

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

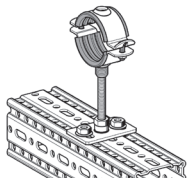
In rolls, self-adhesive on one side, coated with peel-off foil on the adhesive side.

Technical Data

Sound absorption value:	12 dB(A)
Temperature range:	-40°C up to +90°C
Ozone and weather resistance:	Good
Cell structure:	Closed
Resistant 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

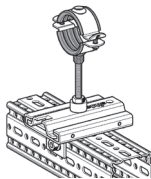
Type	Width [mm]	Thickness [mm]	Roll [m]	Qty. [m]	Part number
20 x 3.0	20	3.0	10	150	137616
20 x 4.0	20	4.0	10	150	137412
20 x 6.0	20	6.0	10	150	143590
25 x 3.0	25	3.0	10	120	137722
30 x 3.0	30	3.0	10	100	137607

Assembly Group BG14 F80-M10



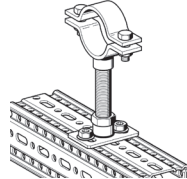
Page 53

Assembly Group BG15 F80-M10



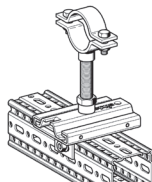
Page 54

Assembly Group BG14 F80-1/2"



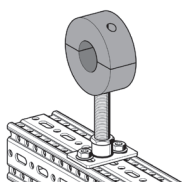
Page 55

Assembly Group BG15 F80-1/2"



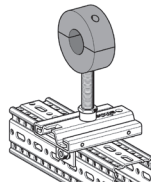
Page 56

Assembly Group BG44 F80-1/2"



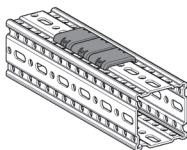
Page 57

Assembly Group BG45 F80-1/2"



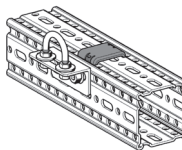
Page 58

Assembly Group BG51 F80



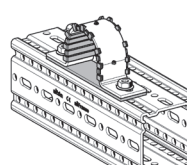
Page 59

Assembly Group BG22 F80



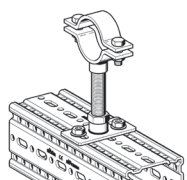
Page 60

Assembly Group BG52 F80/100



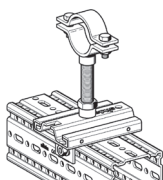
Page 61

Assembly Group BG16 F100-1/2"



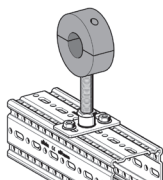
Page 62

Assembly Group BG17 F100-1/2"



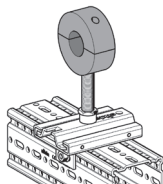
Page 63

Assembly Group BG49 F100-1/2"



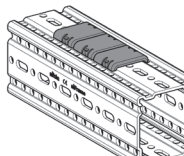
Page 64

Assembly Group BG50 F100-1/2"



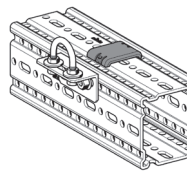
Page 65

Assembly Group BG54 F100



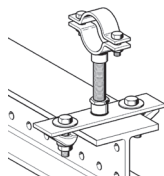
Page 66

Assembly Group BG22 F100



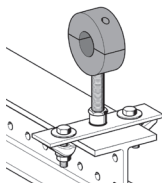
Page 67

Assembly Group BG60 T100-1/2"



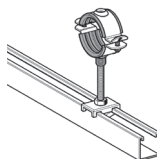
Page 68

Assembly Group BG61 T100-1/2"



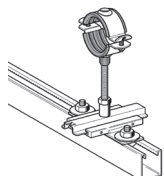
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Assembly Group BG11 MS41-M10



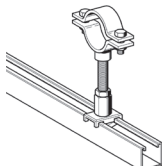
Page 70

Assembly Group BG13 MS41-M10



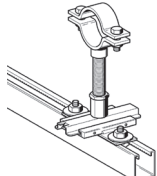
Page 71

Assembly Group BG11 MS41-1/2"



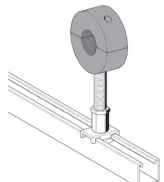
Page 72

Assembly Group BG13 MS41-1/2"



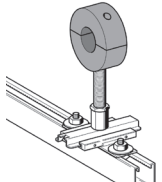
Page 73

Assembly Group BG48 MS41-1/2"



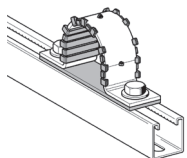
Page 74

Assembly Group BG42 MS41-1/2"

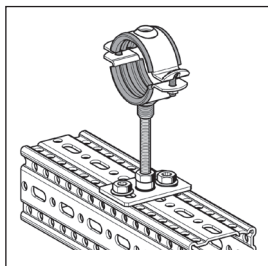


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Assembly Group BG57 MS41



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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

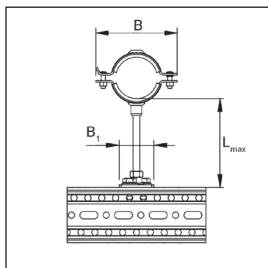
$L_{\max, \text{vertical}} = 150 \text{ mm}$

$L_{\max, \text{horizontal}} = \text{not recommended}$

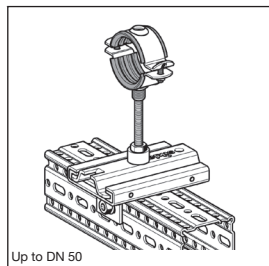
Material:

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

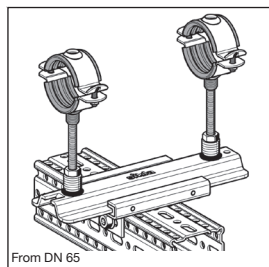
Note: pre-assembly on request!



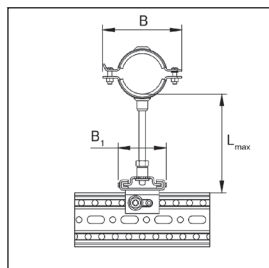
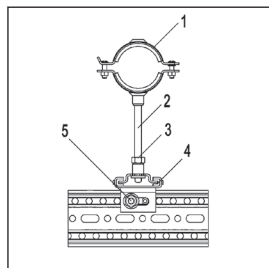
Type	Size range [mm]	B ₁ [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
DN 15	19 - 23	50	68	0.35	1	110200
DN 20	24 - 28	50	75	0.38	1	110201
DN 25	33 - 37	50	81	0.40	1	110202
DN 32	40 - 45	50	93	0.42	1	110203
DN 40	47 - 52	50	104	0.44	1	110204
DN 50	60 - 65	50	117	0.46	1	110205
DN 65	73 - 78	50	150	0.56	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

$L_{\max, \text{vertical}} = 150 \text{ mm}$

$L_{\max, \text{horizontal}} = \text{not recommended}$

Material:

Pipe clamp and connecting parts:

Steel, HCP

Bolts and nuts:

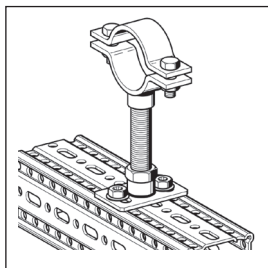
Steel, HCP

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- $\frac{1}{2}$ "

Group: 1102

Application

An Assembly Group containing components to make up a permanent pipe connection with the heavy Pipe Clamp Stabil I- $\frac{1}{2}$ ". 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 $\frac{1}{2}$ ".

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- $\frac{1}{2}$ "
- Item 2 Threaded Tube GR 2 m $\frac{1}{2}$ "
- Item 3 Locking Nut NT G $\frac{1}{2}$ "
- Item 4 Mounting Plate GPL F80- $\frac{1}{2}$ "
- 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

$L_{\text{max, vertical}} = 300 \text{ mm}$

$L_{\text{max, horizontal}} = 150 \text{ mm}$

Material:

Pipe clamp and connecting parts:

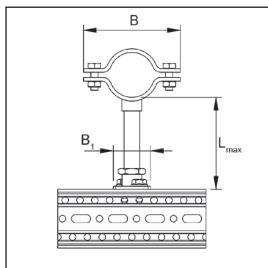
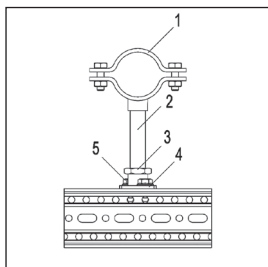
Steel, HCP

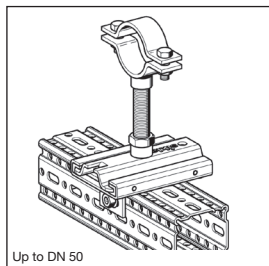
Bolts and nuts:

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





Assembly Group BG15 F80- $\frac{1}{2}$ "

Group: 1102

Application

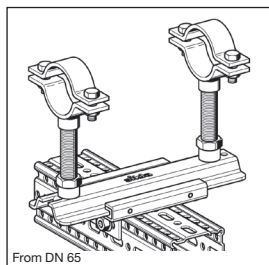
An Assembly Group for use as a guided support with the heavy Pipe Clamp Stabil I- $\frac{1}{2}$ ". The Assembly Group is designed for use with the Beam Section TP F 80. It is connected using the Self Forming Screw FLS F, and the height is adjusted via the Threaded Tube $\frac{1}{2}$ ".

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- $\frac{1}{2}$ "
- Item 2 Threaded Tube GR 2 m $\frac{1}{2}$ "
- Item 3 Locking Nut NT G $\frac{1}{2}$ "
- 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.

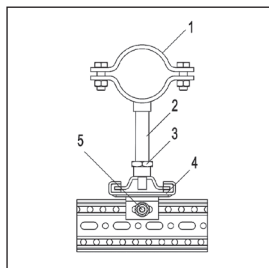
Technical Data

$L_{\text{max, vertical}} = 200 \text{ mm}$

$L_{\text{max, horizontal}} = \text{not recommended}$

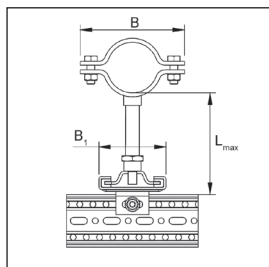
Material:

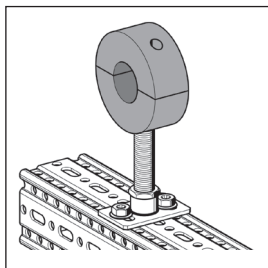
Pipe clamp and connecting parts: Steel, HCP
Bolts and nuts: Steel, HCP



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:

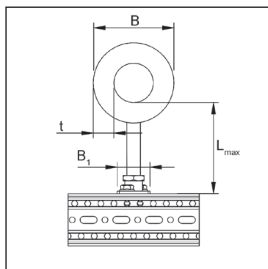
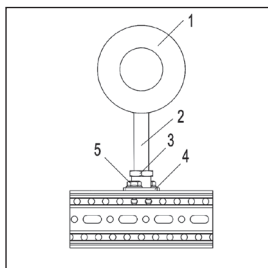
Connecting parts: Steel, HCP

Bolts and nuts: Steel, HCP

Insulating body: PUR foam (250 kg/m³, B2), μ = 1200

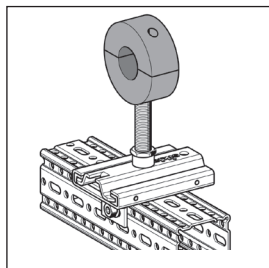
λ = 0,045 W/mK (0°C)

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	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

$L_{\text{max, vertical}} = 200 \text{ mm}$

$L_{\text{max, horizontal}} = \text{not recommended}$

Material:

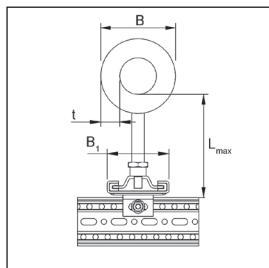
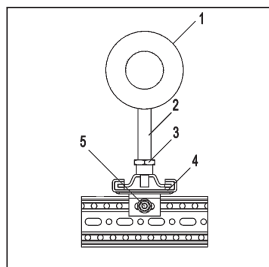
Connecting parts: Steel, HCP

Bolts and nuts: Steel, HCP

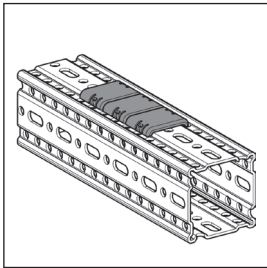
Insulating body: PUR foam (250 kg/m³, B2), $\mu = 1200$
 $\lambda = 0,045 \text{ W/mK (0°C)}$

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

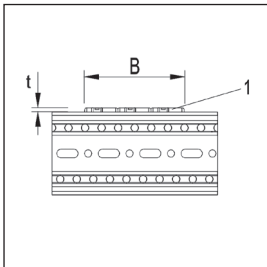
The components are grouped together by type and are delivered separately according to the individual components. An Assembly Group comprises 3 U-UB pads.

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.

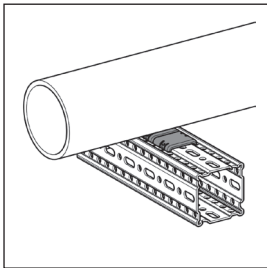


Number U-UB pad	Width B [mm]	t [mm]
1	40	5
2	80	5
3	120	5

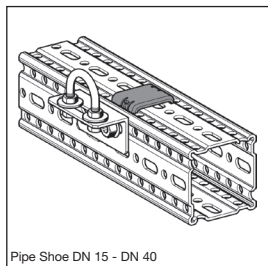
Technical Data

Material: Polyamide PA 6.0

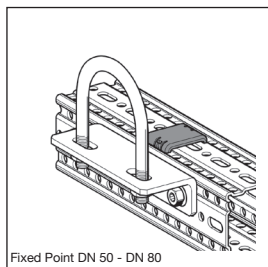
Area of use: -20°C to +130°C



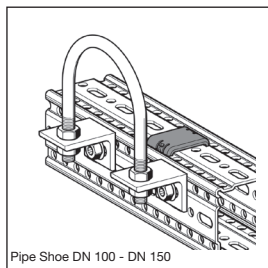
Type	Nominal widths [DN]	W [kg]	Quantity [pack]	Part number
F 80	15 - 150	0.03	1	112742



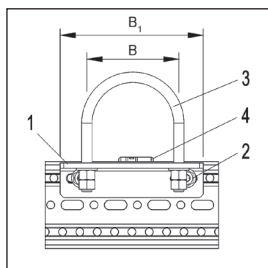
Pipe Shoe DN 15 - DN 40



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:

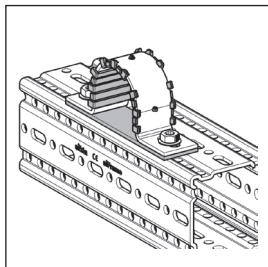
Steel, HCP

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

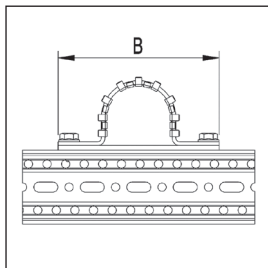
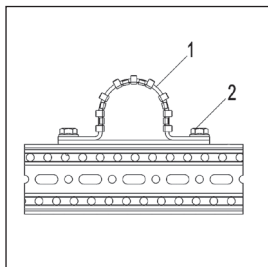
Lining and slide plate:

Thermoplastic resins

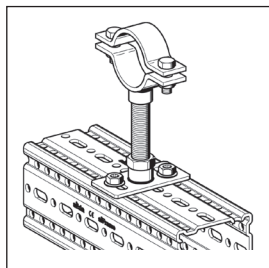
Area of use:

-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

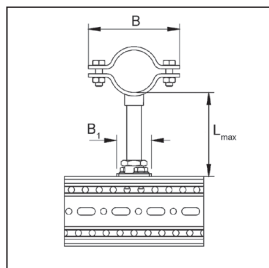
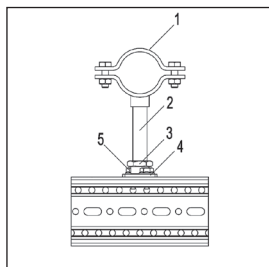
$L_{\max, \text{vertical}} = 300 \text{ mm}$
 $L_{\max, \text{horizontal}} = 150 \text{ mm}$

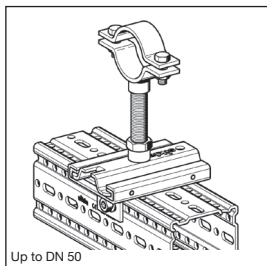
Material:

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

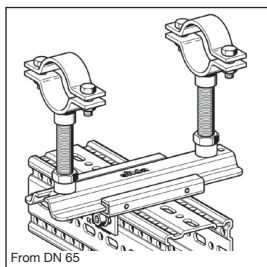
Note: pre-assembly on request!

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

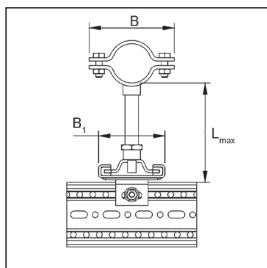
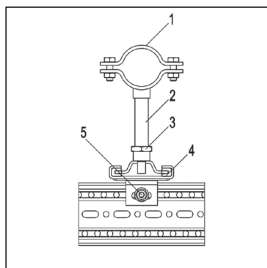




Up to DN 50



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

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

Material:

Pipe clamp and connecting parts:

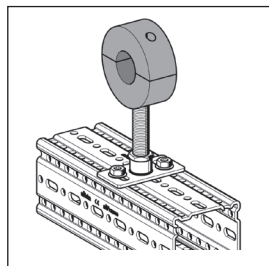
Steel, HCP

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:

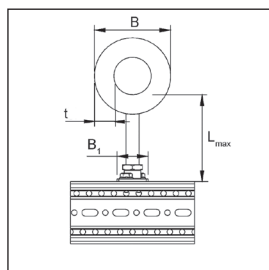
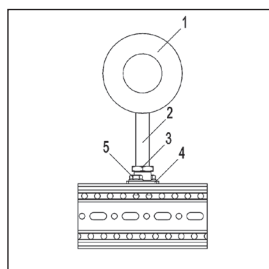
Assembly parts: Steel, HCP

Bolts and nuts: Steel, HCP

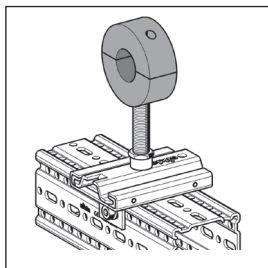
Insulating body: PUR foam (250 kg/m³, B2) μ = 1200,
λ = 0,045 W/mK (0°C)

Area of use: -50°C to +105°C

Note: pre-assembly on request!



Type	Nominal widths [DN]	B _i [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

$L_{\max, \text{vertical}} = 200 \text{ mm}$

$L_{\max, \text{horizontal}} = \text{not recommended}$

Material:

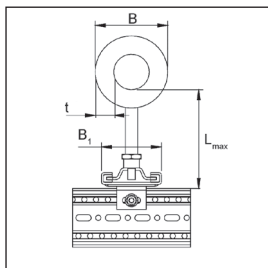
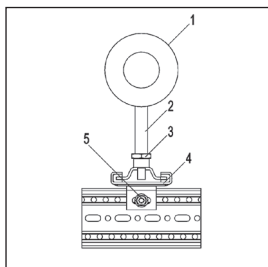
Assembly parts: Steel, HCP

Bolts and nuts: Steel, HCP

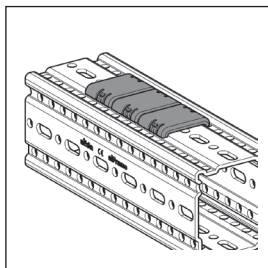
Insulating body: PUR foam (250 kg/m³, B2) $\mu = 1200$,
 $\lambda = 0,045 \text{ W/mK (0°C)}$

Area of use: -50°C to +105°C

Note: pre-assembly on request!



Type	Nominal widths [DN]	B _i [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

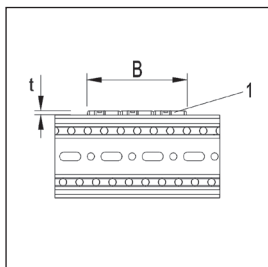
The components are grouped together by type and are delivered separately according to the individual components. An Assembly Group comprises 3 U-UB pads.

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.



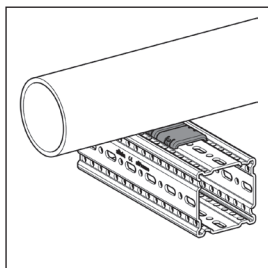
Number U-UB pad	Width B [mm]	t [mm]
1	40	5
2	80	5
3	120	5

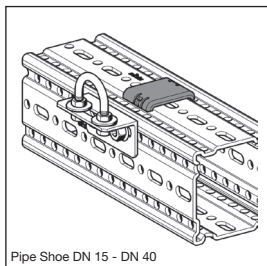
Technical Data

Material: Polyamide PA 6.0

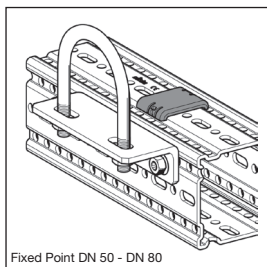
Area of use: -20°C to +130°C

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

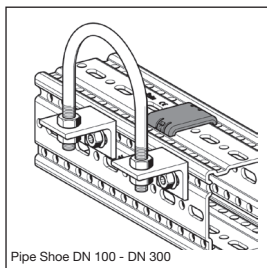




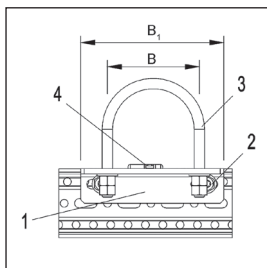
Pipe Shoe DN 15 - DN 40



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:

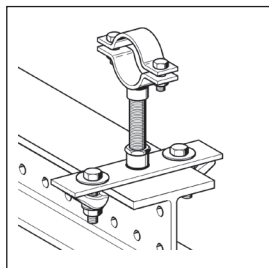
Steel, HCP

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 R1/2"-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:

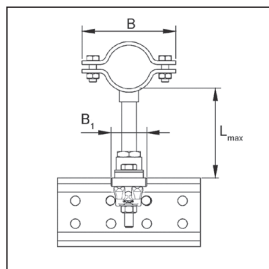
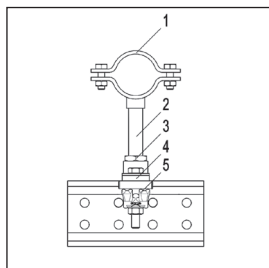
Pipe clamp and connecting parts:

Steel, HCP

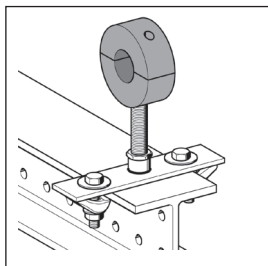
Bolts and nuts:

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 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 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:

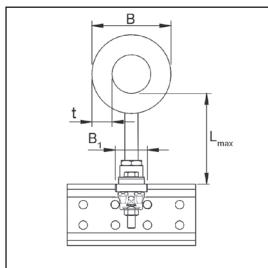
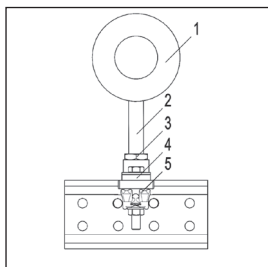
Connecting parts: Steel, HCP

Bolts and nuts: Steel, HCP

Insulating body: PUR foam (250 kg/m³, B2), $\mu = 1200$

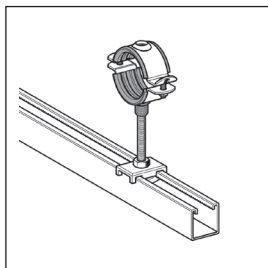
$\lambda = 0,045 \text{ W/mK (0°C)}$

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:

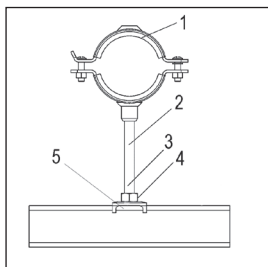
Item 1 Pipe Clamp Stabil D-3G with lining

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

$L_{\max, \text{vertical}} = 150 \text{ mm}$

$L_{\max, \text{horizontal}} = \text{not recommended}$

Material:

Pipe clamp and connecting parts:

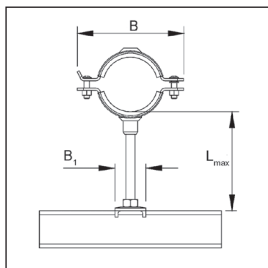
Steel, HCP

Bolts and nuts:

Steel, HCP

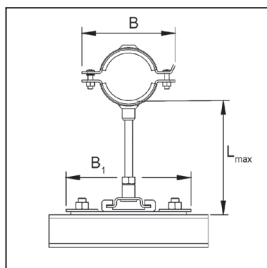
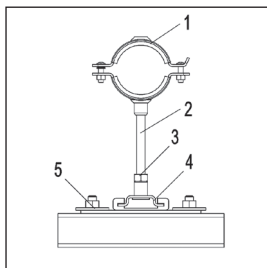
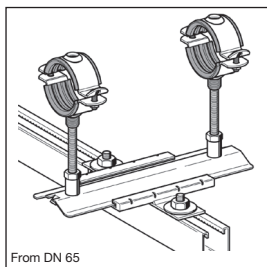
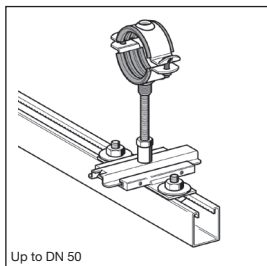
Sound absorption lining:

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



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

$L_{\max, \text{vertical}} = 150 \text{ mm}$

$L_{\max, \text{horizontal}} = \text{not recommended}$

Material:

Pipe clamp and connecting parts:

Steel, HCP

Bolts and nuts:

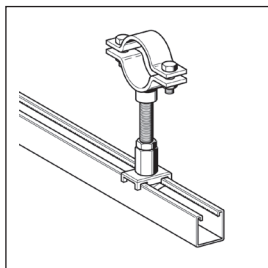
Steel, HCP

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

$L_{\max, \text{vertical}} = 300 \text{ mm}$

$L_{\max, \text{horizontal}} = 150 \text{ mm}$

Material:

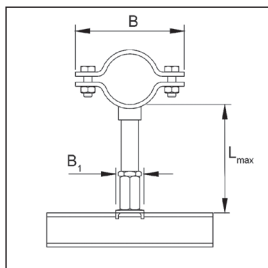
Pipe clamp and connecting parts:

Steel, HCP

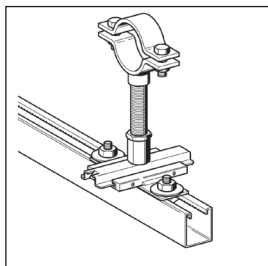
Bolts and nuts:

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

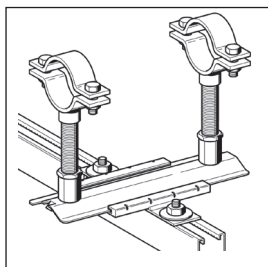
An Assembly Group for use as a guided support with the heavy Pipe Clamp Stabil I-1/2". The Assembly Group is designed for use with the Sikla 41 channel system. The height is adjusted via the Threaded Tube 1/2".

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 1/2" / 1/2"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

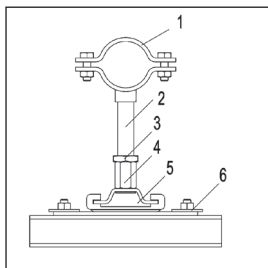
Material:

Pipe clamp and connecting parts:

Steel, HCP

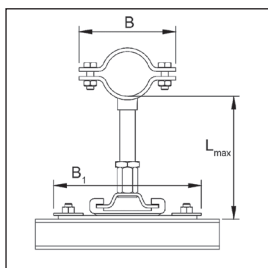
Bolts and nuts:

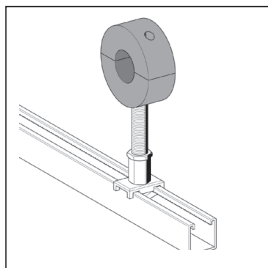
Steel, HCP



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

$L_{\max, \text{vertical}} = 200 \text{ mm}$

$L_{\max, \text{horizontal}} = \text{not recommended}$

Material:

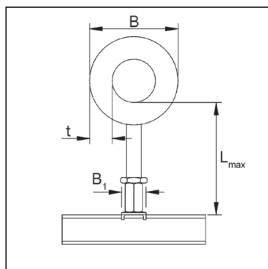
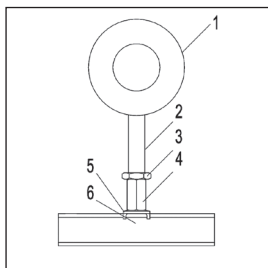
Connecting parts: Steel, HCP

Bolts and nuts: Steel, HCP

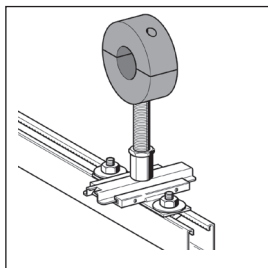
Insulating body: PUR foam (250 kg/m³, B2), $\mu = 1200$
 $\lambda = 0,045 \text{ W/mK (0°C)}$

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

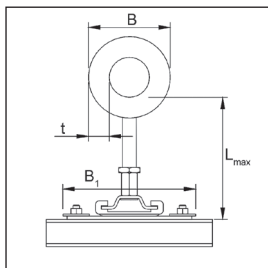
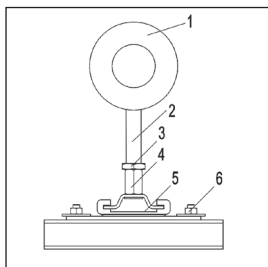
Bolts and nuts: Steel, HCP

Insulating body: PUR foam (250 kg/m³, B2), μ = 1200

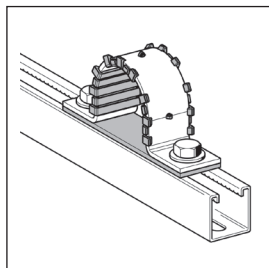
λ = 0,045 W/mK (0°C)

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	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

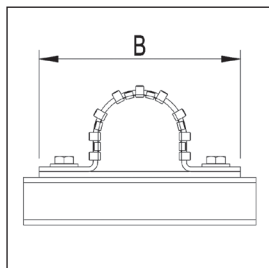
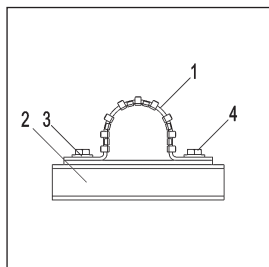
Material:

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!



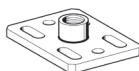
Type	Nominal widths [DN]	B [mm]	W [kg]	Quantity [pack]	Part number
27	15	134	0.34	1	114670
33	20	140	0.35	1	114671
40	25	147	0.38	1	114672
48	32	155	0.40	1	114673
55	40	161	0.42	1	114674
67	50	173	0.47	1	114675
83	65	189	0.54	1	114676
95	80	202	0.58	1	114677
121	100	227	0.67	1	114678

Mounting Plate GPL F



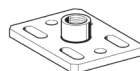
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Mounting Plate GPL F 80 Stabil



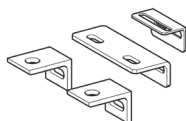
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Mounting Plate GPL F Stabil HCP



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U Bolt Docking Bracket F



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Pad U-UB F



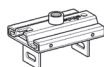
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Slide Set GS F 80 2G

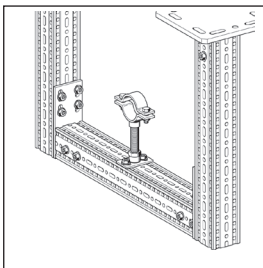
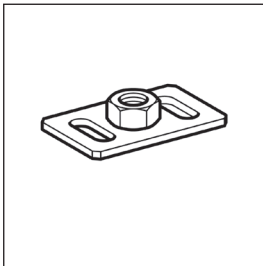
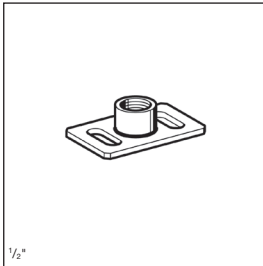


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Slide Set GS F 1G



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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- $\frac{1}{2}$ "	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- $\frac{1}{2}$ "	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:

Dimensions of base plate GPL F 100:

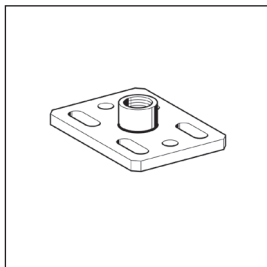
Material:

80 x 50 x 4 mm

100 x 50 x 4 mm

Steel, HCP

Type	W [kg]	Quantity [pack]	Part number
GPL F 80- $\frac{1}{2}$ "	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- $\frac{1}{2}$ "	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

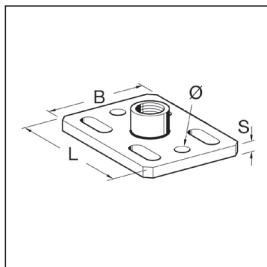
Adapter plate for installing pipe clamps to Beam Section TP F80 or Channel System by means of threaded tube $\frac{1}{2}$ ".

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

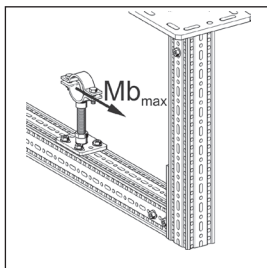
Permissible bending moment of the Threaded Tube $\frac{1}{2}$ " MB_{max} , should not be exceeded. Any lateral loads on the pipe clamp also need to be considered.

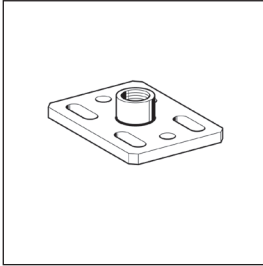


Type	Tension [kN]	Lateral force [kN]	Perm. bending moment [Nm]
GPL F 80 ST- $\frac{1}{2}$ "	18.0	13.0	53
GPL F 80 ST- $\frac{3}{4}$ "	18.0	13.0	138
GPL F 80 ST-1"	18.0	13.0	277

Material: Steel, electro-galvanised

Type	Dimension L x W x Th [mm]	Elongated hole d x a [mm]	W [mm]	W [kg]	Qt [pack]	Part number
GPL F 80 ST- $\frac{1}{2}$ "	110 x 80 x 8	11 x 31	11	0.50	25	451280
GPL F 80 ST- $\frac{3}{4}$ "	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

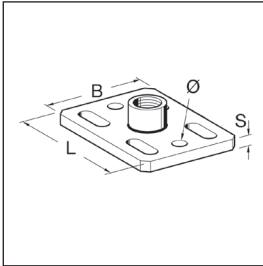
Application

Adapter plate for installing pipe clamps to Beam Section TP F80 or Channel System by means of threaded tube $\frac{1}{2}$ " 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 $\frac{1}{2}$ " $M_{b_{max}}$, should not be exceeded. Any lateral loads on the pipe clamp also need to be considered.

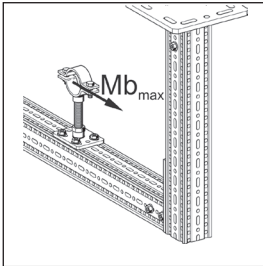


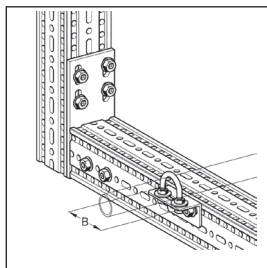
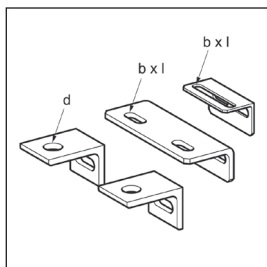
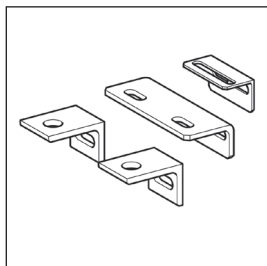
Technical Data

Type	Tension [kN]	Lateral force [kN]	Perm. bending moment [Nm]
GPL F 80 ST- $\frac{1}{2}$ "	18.0	13.0	53
GPL F 100 ST- $\frac{1}{2}$ "	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]	W [m]	W [kg]	Quantit y [pack]	Part number
GPL F 80 ST- $\frac{1}{2}$ "	110 x 80 x 8	11 x 20	11	0.50	25	112719
GPL F 100 ST- $\frac{1}{2}$ "	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

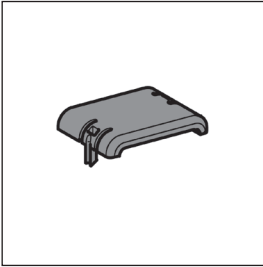
For U-bolts $\geq 4"$ always 2 U-bolt fastenings F are needed.

Technical Data

Typ	d [mm]	b x l [mm]	B [mm]
UB F $1\frac{1}{2}" - 1\frac{1}{2}"$	-	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 $1\frac{1}{2}" - 1\frac{1}{2}"$	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

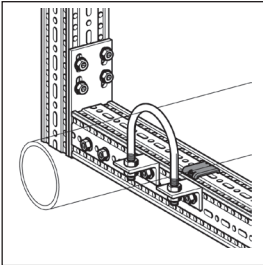
Material:

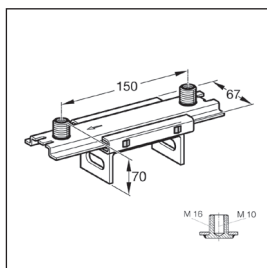
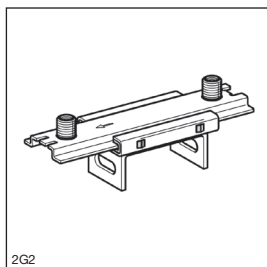
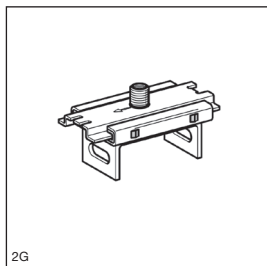
Polyamide PA 6.0

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





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:

Slide bar:

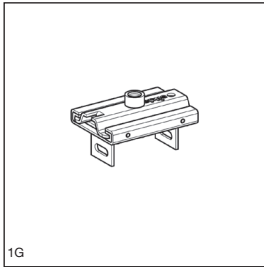
Retaining plate:

Steel, HCP

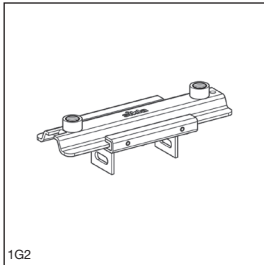
Polyamide (glass-fibre reinforced)

Steel, HCP

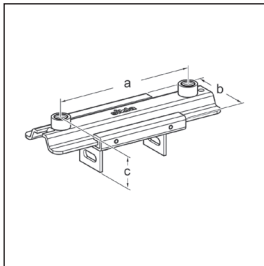
Type	W [kg]	Quantity [pack]	Part number
GS F 80 2G	0.6	10	196700
GS F 80 2G2	0.7	10	196717



1G



1G2



Slide Set GS F 1G

Group: A436

Application

Slide Set in solid construction for installation on top of siFrame Beam Sections TP F. $\frac{1}{2}$ " thread connection allows direct connection to pipe clamp Stabil I $\frac{1}{2}$ " by means of threaded tube without further adaption parts.

Installation

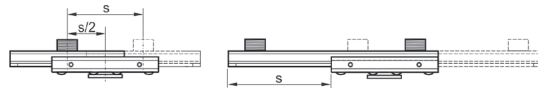
Installation on top of Beam Section TP F with two Self Forming Screws FLS F. Not suitable for side mounting in the horizontal orientation.

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 $\frac{1}{2}$ " threaded tube have to be verified separately.



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:

Slide bar:

Steel, HCP

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

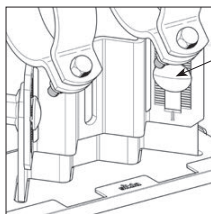
The Sikla height- adjustable Supports (Pipe Shoes; HV 90, HV 150, HV 200) can be used as a Skid, a Guide or as a Fixed Point. The testing process of the individual Support types and the determination of the direction dependent permissible loads was carried out by the independent testing house TÜV Rheinland (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.

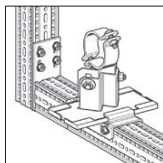
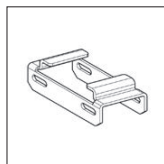
Installation



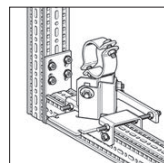
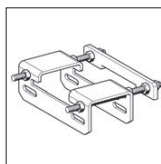
Special bolts for height- adjustable connection of lower and upper Pipe Shoe components.
Tightening torque: 80 Nm

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:

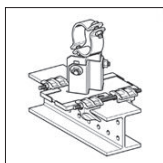
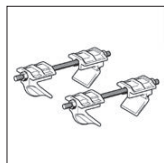
Guiding Support on siFramo
+ **Guiding Bracket FW F ...**



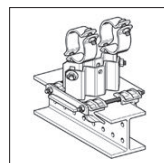
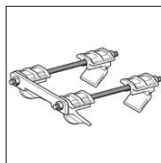
Fixed Point Support on siFramo
+ **Fixed Point Bracket XW F ...**



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.

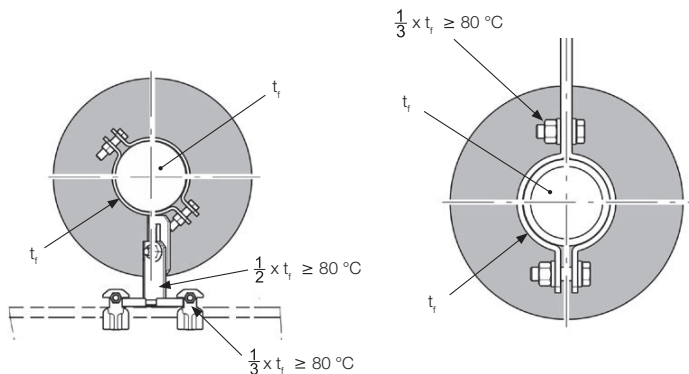
For all components being placed inside of an insulation the following values apply²:

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	$t = t_f - 20\text{ °C}$
Bolts, nuts, etc.	$t = t_f - 30\text{ °C}$

For all components being placed outside of the insulation the following values apply³:

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

For clarification of the tables see the graphical illustration⁴:



¹Compare EN 13480-3:2014-12, Table 13.3.1

² Compare EN 13480-3:2014-12, Chapter 13.3.2.2-1

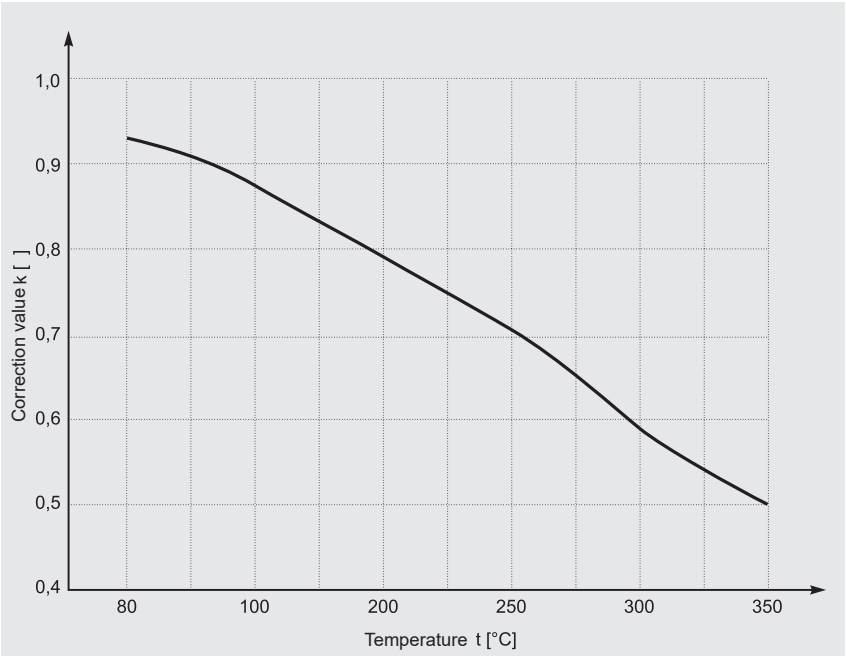
³Compare EN 13480-3:2014-12, Table 13.3.2-2

⁴Compare 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

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

$$(F_{perm} = F_{R,20^{\circ}C} \cdot k) \geq F_{exist}$$

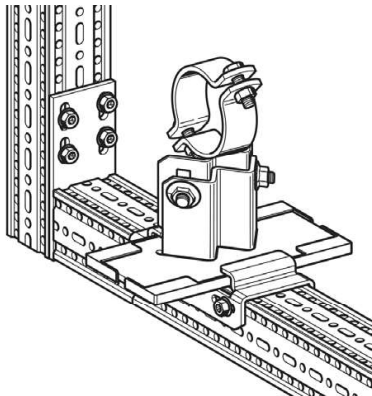
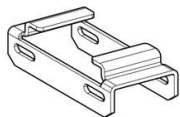
- F_{perm} permissible load of Sikla pipe shoe at temperature t_x [°C]
- F_{exist} pipe load according to structural analysis
- $F_{R,20^{\circ}C}$ permissible load of Sikla pipe shoe at 20°C
- k correction value

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

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

FW F

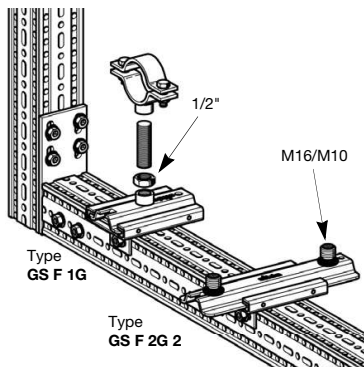
is need to create a guided pipe shoe



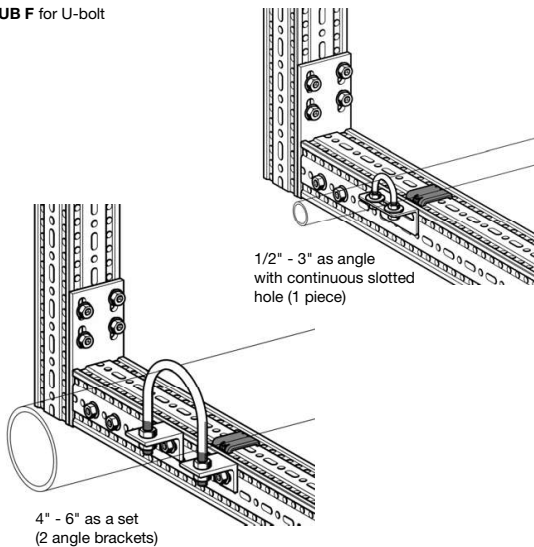
GS F 1G (slide plate included),
GS F 2G (base plate with guide bars and slider included)
 for direct assembly to the Beam Section F 80.

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.



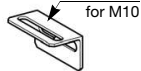
UB F for U-bolt



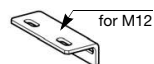
Note:

► U-bolts preferably should be used as Guiding Supports!

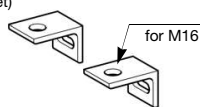
Type **UB F** 1/2" - 1 1/2"
 (1 piece)



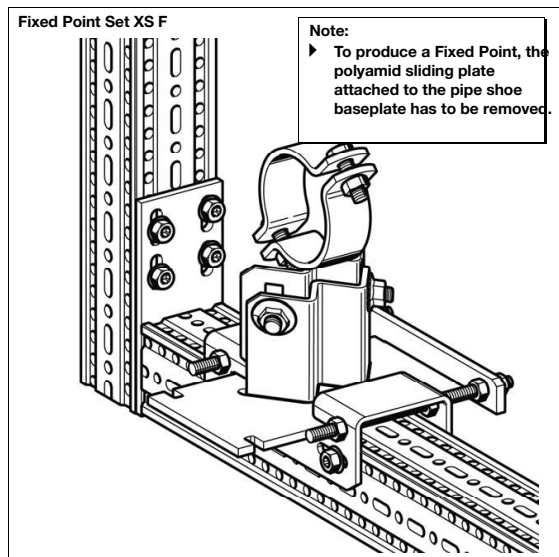
Type **UB F** 2" - 3"
 (1 piece)



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

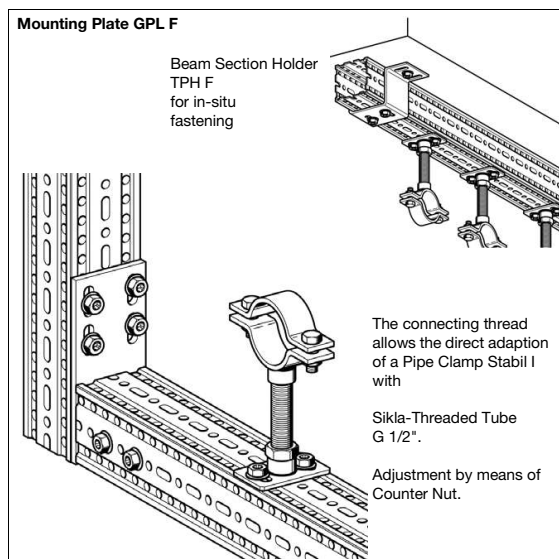
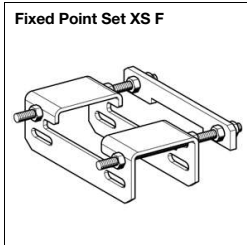


siFramo: Fixed Point Bracket XW F and Mounting Plate GPL F



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.

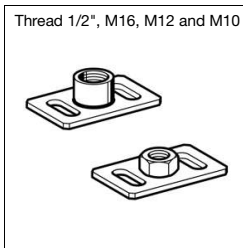
Threaded Studs and Nuts are included in the scope of delivery.



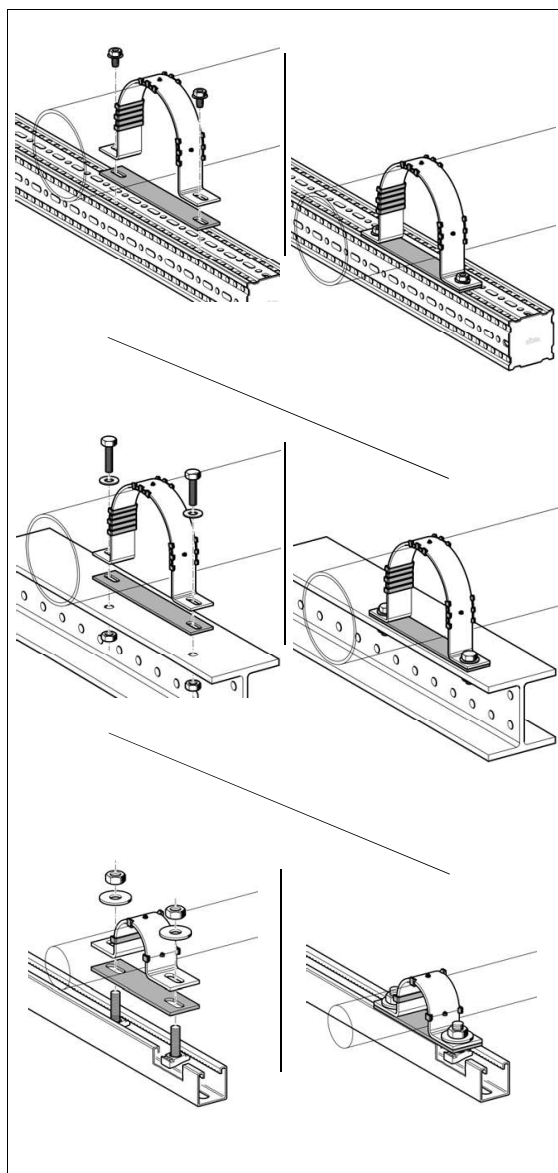
Mounting Plate GPL F

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!



U Clamp RUC I



Mounting options of U Clamp RUC I by means of:

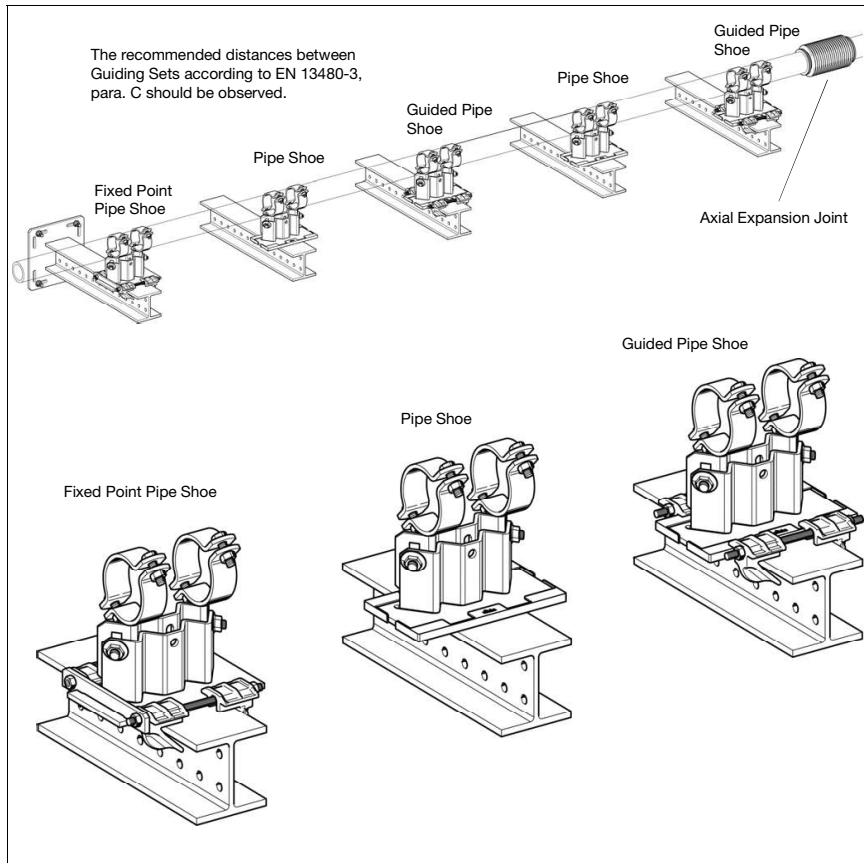
- ◆ Self Forming Screws FLS F for installation on Beam Section TP F.
- ◆ M10 screws and locknuts for installation on girder flange.
- ◆ M10 screws with Channel Nuts for installation on Channel MS 41.

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



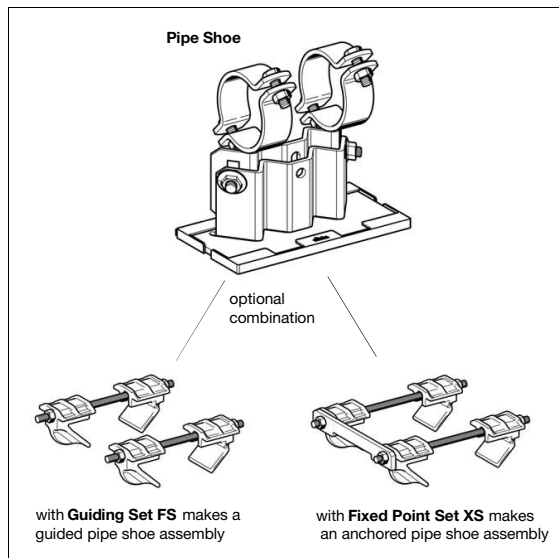
Example for pipe installation:

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

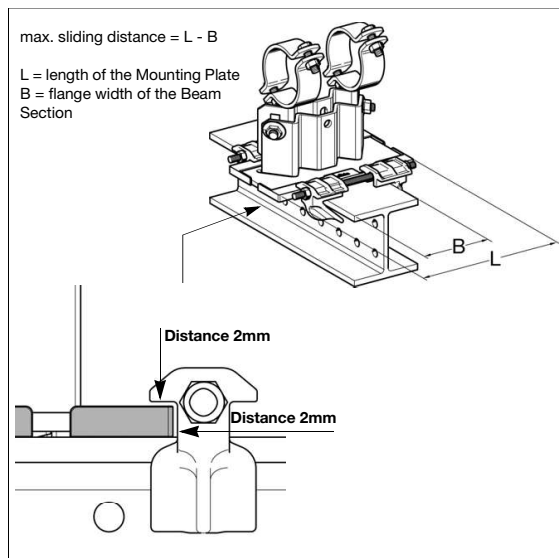


Delivery option:

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:

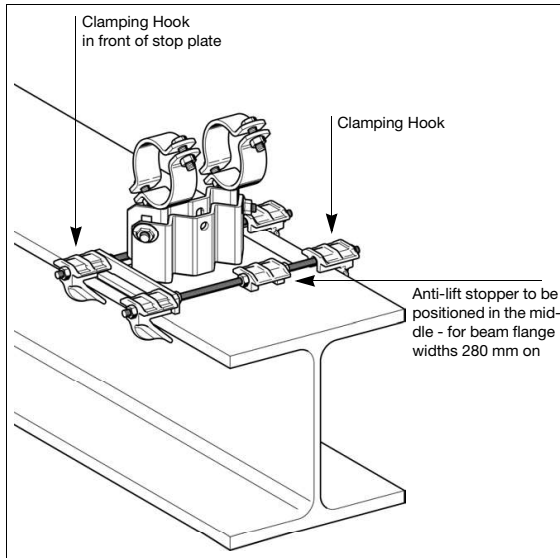
To allow movement of the pipe shoe base plate on the supporting Beam, all 4 Clamping Hooks have to be mounted such that a 2mm clearance to the pipe shoe base plate is maintained.

Frictional force with Sliding and Guiding Supports:

The coefficient of static friction μ_0 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

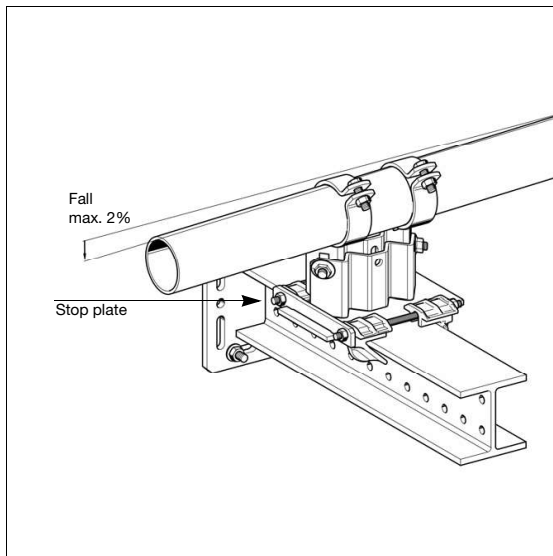


Wide Flange Beams:

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.

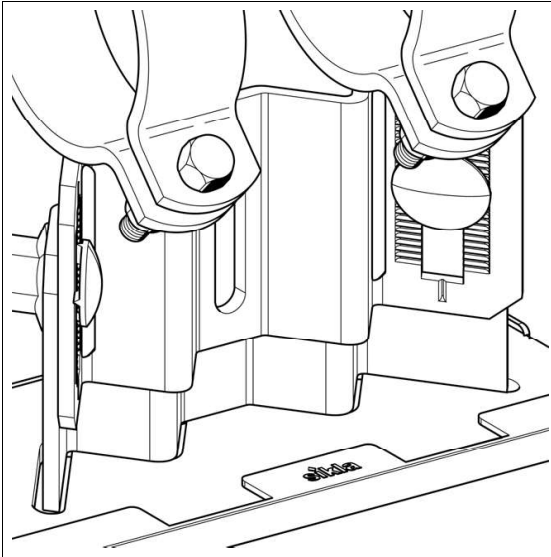
For Beams with a flange width from 280mm, the anti-lift stoppers are additionally installed to the centre-section of the beam on both outer edges of the Pipe Shoe base plate.



Assemblies with a pipe gradient:

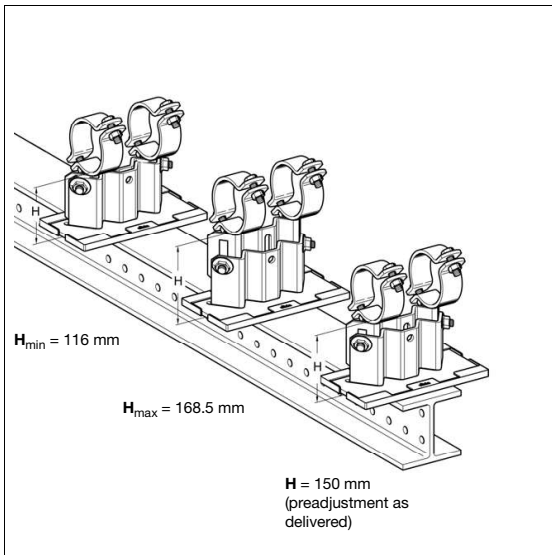
Fixed Point Pipe Shoe must be installed with the front stopper plate section on the lower pipe-fall side required of the Pipe Shoe base plate.

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).

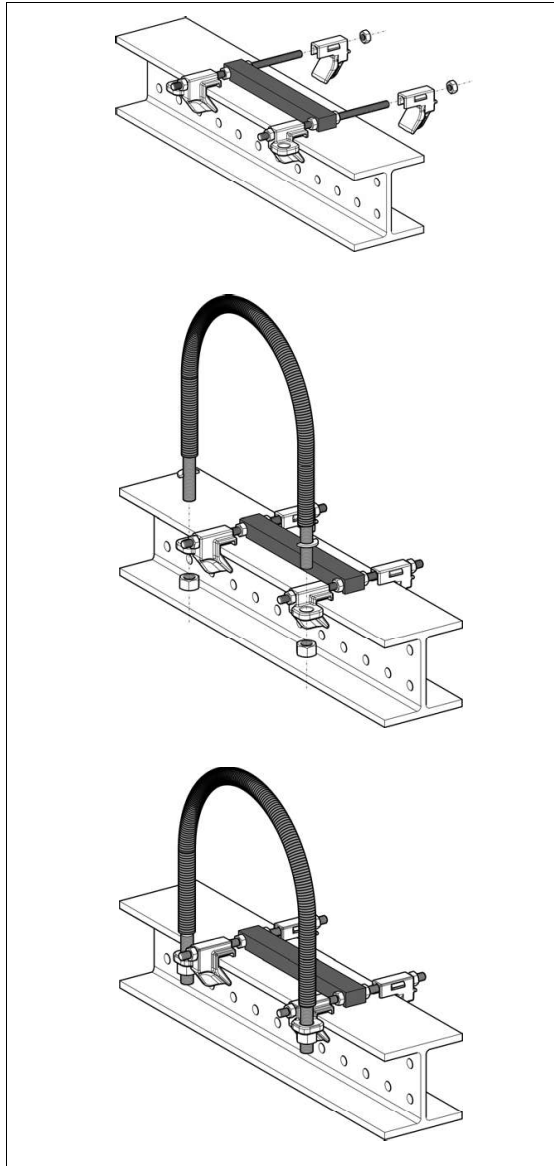
Setting range

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.

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