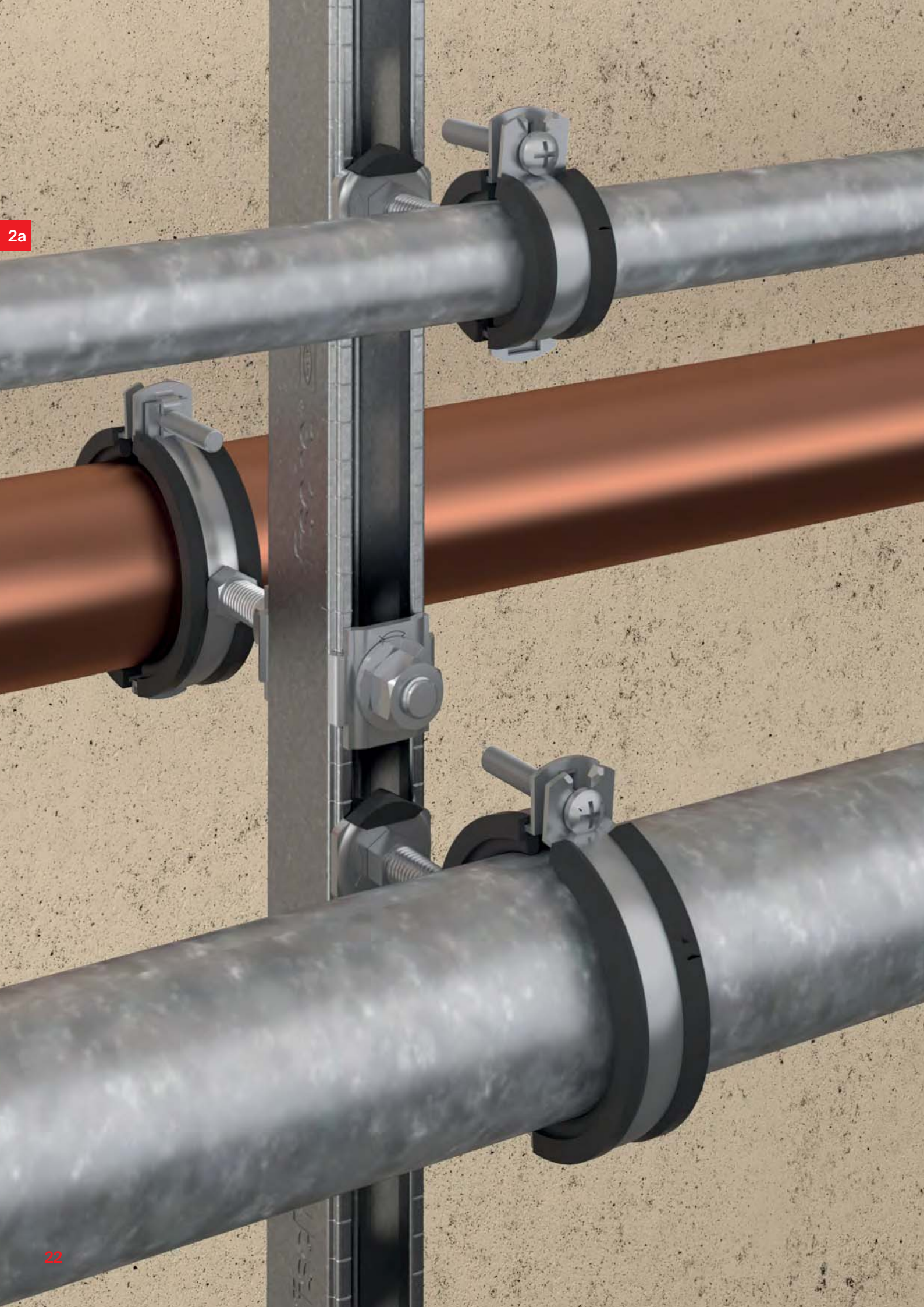




2a

2a

Pipe clamps

2a

SINGLE SCREW PIPE CLAMPS

Hinged pipe clamp FGRS Plus	24	
Hinged pipe clamp FGRS	26	
Hinged pipe clamp FKS Plus for plastic pipes	28	

TWO SCREW PIPE CLAMPS

Pipe clamp FRS Plus	30	
Pipe clamp FRS-L Universal	32	
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Hinged pipe clamp FGRS Plus

The one-piece hinged pipe clamp with rapid-locking mechanism

2a



Light, suspended pipelines



Pipelines on cantilevers

Applications

- Time-saving fixing for pipes up to Ø2" using threaded rods or stud screws

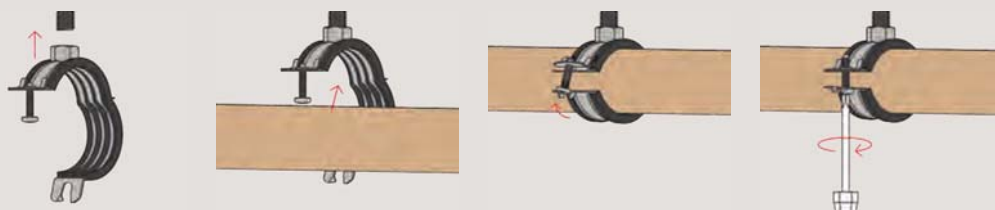
Advantages/benefits

- The rapid-locking mechanism allows a fast and time-saving installation.
- The tight fit of the sound insulation insert prevents it from falling out when inserting the pipe.
- The safety latch fastening guarantees pipe installation without the clamp springing open.
- The combination connecting nut with M8/M10 thread on the FGRS Plus M8/M10 allows optimised mounting choices.
- The screw's combination cross-drive thread allows flexibility during the installation process.
- The compact construction of the pipe clamp enables a simple post-installation insulation.

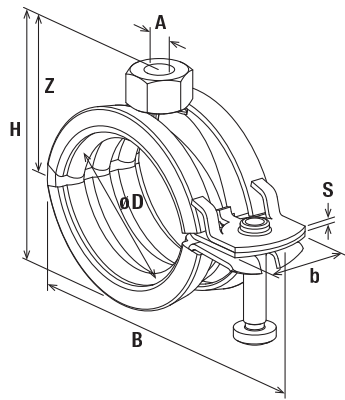
Properties

- Material: steel DC01 (material no. 1.0330) acc. to DIN EN 10130
- Zinc plating: electro zinc-plated, 5 - 9 µm
- Connecting nut: resistance welded, SW 13
- Locking screw: flat head screw with combination recessed head
- Material sound insulation insert: SBR/EPDM; chlorine-free; silicone-free
- Sound insulation: for DIN 4109
- Temperature range: -40 °C to +100 °C
- Hardness: 55 ± 5° Shore A
- Fire behaviour: DIN 4102: Class B2

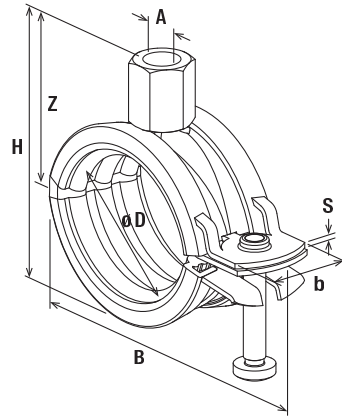
Installation FGRS Plus



Technical data



FGRS Plus



FGRS Plus M8/M10

Item	Item No.	Thread A	Size [inch]	Clamping range D [mm]	Width B [mm]	Height H [mm]	Width x thickness clamp band b x s [mm]	Height Z Z [mm]	Locking screw	Max. recom. static load (centr. tension) N _{recom.} [kN]	Sales unit [pcs]
FGRS Plus 12 - 14	079400	M 8	1/4"	12 - 14	48	35	20 x 1.25	21	M 5	0.65	100
FGRS Plus 15 - 19	079401	M 8	3/8"	15 - 19	52	40	20 x 1.25	24	M 5	0.65	100
FGRS Plus 20 - 24	079402	M 8	1/2"	20 - 24	58	45	20 x 1.25	26	M 5	0.65	100
FGRS Plus 25 - 30	079403	M 8	3/4"	25 - 30	63	49	20 x 1.25	28	M 5	0.65	100
FGRS Plus 32 - 37	079404	M 8	1"	32 - 37	72	57	20 x 1.25	32	M 5	0.65	100
FGRS Plus 40 - 44	079405	M 8	1 1/4"	40 - 44	79	66	20 x 1,5	37	M 5	0.90	50
FGRS Plus 45 - 50	079406	M 8	1 1/2"	45 - 50	88	76	20 x 1,5	42	M 5	0.90	50
FGRS Plus 50 - 55	079407	M 8	—	50 - 55	94	82	20 x 1,5	45	M 5	0.90	50
FGRS Plus 56 - 63	079408	M 8	2"	56 - 63	99	85	20 x 1,5	46	M 5	0.90	50

Technical data

Item	Item No.	Thread A	Size [inch]	Clamping range D [mm]	Width B [mm]	Height H [mm]	Width x thickness clamp band b x s [mm]	Height Z Z [mm]	Locking screw	Max. recom. static load (centr. tension) N _{recom.} [kN]	Sales unit [pcs]
FGRS Plus 12 - 14 M8/M10	079430	M 8 / M 10	1/4"	12 - 14	48	46	20 x 1.25	31	M 5	0.65	100
FGRS Plus 15 - 19 M8/M10	079431	M 8 / M 10	3/8"	15 - 19	52	51	20 x 1.25	34	M 5	0.65	100
FGRS Plus 20 - 24 M8/M10	079432	M 8 / M 10	1/2"	20 - 24	58	56	20 x 1.25	36	M 5	0.65	100
FGRS Plus 25 - 30 M8/M10	079433	M 8 / M 10	3/4"	25 - 30	63	60	20 x 1.25	38	M 5	0.65	100
FGRS Plus 32 - 37 M8/M10	079434	M 8 / M 10	1"	32 - 37	72	68	20 x 1.25	42	M 5	0.65	100
FGRS Plus 40 - 44 M8/M10	079435	M 8 / M 10	1 1/4"	40 - 44	79	76	20 x 1,5	47	M 5	0.90	50
FGRS Plus 45 - 50 M8/M10	079436	M 8 / M 10	1 1/2"	45 - 50	88	86	20 x 1,5	52	M 5	0.90	50
FGRS Plus 50 - 55 M8/M10	079437	M 8 / M 10	—	50 - 55	94	92	20 x 1,5	55	M 5	0.90	50
FGRS Plus 56 - 63 M8/M10	079438	M 8 / M 10	2"	56 - 63	99	95	20 x 1,5	56	M 5	0.90	50

Hinged pipe clamp FGRS

The one-piece hinged pipe clamp with floating single screw

2a



Fixation with multi-connector



Leightweight installation on cantilever

Applications

- For economical fixing of pipes up to Ø2" with threaded rods or stud screws

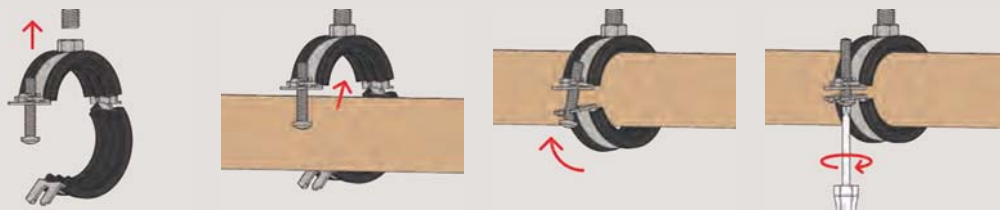
Advantages/benefits

- The floating single screw allows a simple, one-handed installation.
- The safety latch fastening guarantees secure pipe installation without the clamp springing open.
- The compact construction of the pipe clamp enables a simple post-installation insulation.
- The screw's design stops it falling out during the installation.

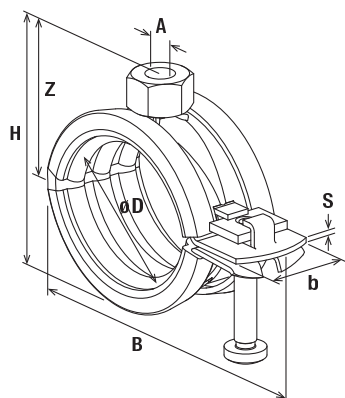
Properties

- Material: steel DD11 (material no. 1.0332) acc. to DIN EN 10111
- Zinc plating: electro zinc-plated, 5 - 9 µm
- Connecting nut: resistance welded, M8, SW 13
- Locking screw: flat head screw with combination recessed head
- Material sound insulation insert: EPDM; chlorine-free; silicone-free
- Sound insulation: for DIN 4109
- Temperature range: -40 °C to +100 °C
- Hardness: 55 ± 5° Shore A
- Fire behaviour: DIN 4102: Class B2

Installation FGRS



Technical data



FGRS

Item	Item No.	Thread	Size	Clamping range	Width	Height	Width x thickness clamp band	Height Z	Locking screw	Max. recom. static load (centr. tension) N _{recom.} [kN]	Sales unit
		A	[inch]	D [mm]	B [mm]	H [mm]	b x s [mm]	Z [mm]			[pcs]
FGRS 8 - 11	537212	M 8	—	8 - 11	45	29	20 x 1.25	17	M 5	0.80	100
FGRS 12 - 14	079420	M 8	1/4"	12 - 14	48	31	20 x 1.25	21	M 5	0.80	100
FGRS 15 - 19	079421	M 8	3/8"	15 - 19	52	36	20 x 1.25	24	M 5	0.80	100
FGRS 20 - 24	079422	M 8	1/2"	20 - 24	58	41	20 x 1.25	26	M 5	0.80	100
FGRS 25 - 30	079423	M 8	3/4"	25 - 30	63	47	20 x 1.25	28	M 5	0.80	100
FGRS 32 - 37	079424	M 8	1"	32 - 37	72	54	20 x 1.25	32	M 5	0.80	100
FGRS 40 - 44	079425	M 8	1 1/4"	40 - 44	79	61	20 x 1,5	37	M 5	0.90	50
FGRS 45 - 50	079426	M 8	1 1/2"	45 - 50	88	67	20 x 1,5	42	M 5	0.90	50
FGRS 50 - 55	079427	M 8	—	50 - 55	94	72	20 x 1,5	45	M 5	0.90	50
FGRS 56 - 63	079428	M 8	2"	56 - 63	99	80	20 x 1,5	46	M 5	0.90	50

Hinged pipe clamp FKS Plus for plastic pipes

The one-screw hinged pipe clamp with quick-release fastener for plastic and metal composite pipes

2a



Pipelines

Applications

- Time-saving fixing for plastic and metal composite pipes using threaded rods or stud screws
- Can be used as a slide bracket with spacers or as a fixed point clamp by removing the spacers

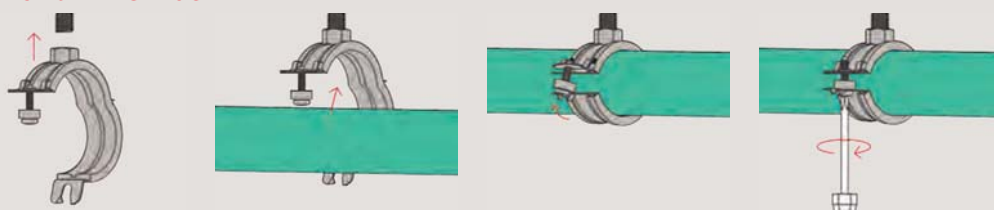
Advantages/benefits

- The quick-release fastener allows a fast and time-saving installation.
- The spacing sleeves on the locking screw stops over tightening of the pipes.
- The tight fit of the sound insulation insert prevents it from falling out when inserting the pipe.
- The latch fastening guarantees pipe installation without the clamp springing open.
- The compact construction of the hinged pipe clamp enables a simple post-installation insulation.
- The screw's design stops it falling out during the installation.

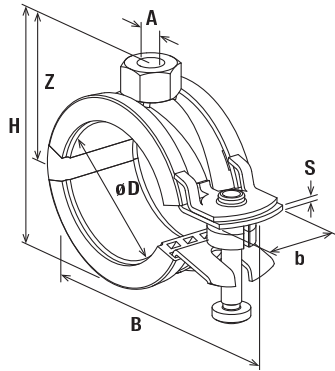
Properties

- Material: steel DD11 (material no. 1.0332) acc. to DIN EN 10111
- Zinc plating: electro zinc-plated, 5 - 9 µm
- Connecting nut: resistance welded, M8, SW 13
- Locking screw: flat head screw with combination recessed head
- Material sound insulation insert: NR/SBR/EPDM; chlorine-free; silicone-free
- Sound insulation: for DIN 4109
- Temperature range: -40 °C to +110 °C
- Hardness: 60 ± 5° Shore A
- Fire behaviour: DIN 4102: Class B2

Installation FKS Plus



Technical data



FKS Plus

Item	Item No.	Thread A	Size [inch]	Clamping range D [mm]	Width B [mm]	Height H [mm]	Width x thickness clamp band b x s [mm]	Height Z Z [mm]	Locking screw	Max. recom. static load (centr. tension) N _{recom.} [kN]	Sales unit [pcs]
FKS Plus 15 - 19	079470	M 8	3/8"	15 - 19	52	40	20 x 1.25	24	M 5	0.65	100
FKS Plus 20 - 24	079471	M 8	1/2"	20 - 24	58	45	20 x 1.25	26	M 5	0.65	100
FKS Plus 25 - 30	079472	M 8	3/4"	25 - 30	63	49	20 x 1.25	28	M 5	0.65	100
FKS Plus 32 - 37	079473	M 8	1"	32 - 37	72	57	20 x 1.25	32	M 5	0.65	100
FKS Plus 40 - 44	079474	M 8	1 1/4"	40 - 44	79	66	20 x 1,5	37	M 5	0.90	50
FKS Plus 45 - 50	079475	M 8	1 1/2"	45 - 50	88	76	20 x 1,5	42	M 5	0.90	50
FKS Plus 50 - 55	079476	M 8	—	50 - 55	94	82	20 x 1,5	45	M 5	0.90	50
FKS Plus 56 - 63	079477	M 8	2"	56 - 63	99	85	20 x 1,5	46	M 5	0.90	50

Pipe clamp FRS Plus

The two-screw pipe clamp with rapid-locking mechanism

2a



Suspended pipe under angle bracket

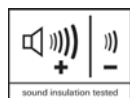


Screwed fixing of insulation boards

Applications

- For simple and easy fixing of pipes using threaded rods or stud screws

Certificates



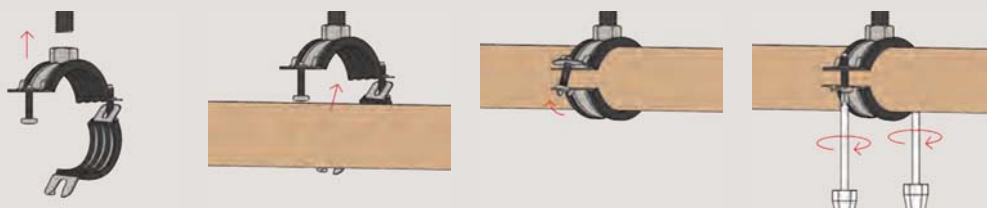
Advantages/benefits

- The rapid-locking mechanism allows for fast and time-saving installation.
- The safety latch fastening guarantees pipe installation without the clamp springing open.
- The tight fit of the sound insulation insert prevents it from falling out when aligning the pipe.
- The combination connecting nut with M8/M10 thread enables optimised mounting choices.
- The two screws allow an easy adjustment to suit the outer pipe diameter.
- The screw's safety feature ensures trouble-free installation.

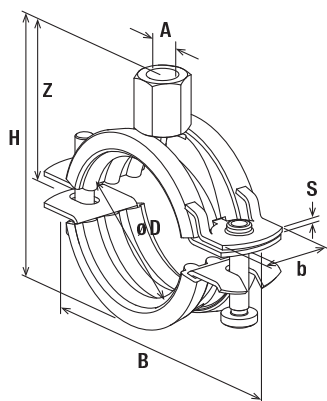
Properties

- Material: steel DC01 (material no. 1.0330) acc. to DIN EN 10130
- Zinc plating: electro zinc-plated, 5 - 9 µm
- Connecting nut: resistance welded, M8 / M10, SW 13
- Locking screw: flat head screw with combination recessed head
- Material sound insulation insert: EPDM; chlorine-free; silicone-free
- Sound insulation: for DIN 4109
- Temperature range: -40 °C to +100 °C
- Hardness: 55 ± 5° Shore A
- Fire behaviour: DIN 4102: Class B2

Installation FRS Plus



Technical data



FRS Plus

Item	Item No.	Thread A	Size [inch]	Clamping range D [mm]	Width B [mm]	Height H [mm]	Width x thickness clamp band b x s [mm]	Height Z Z [mm]	Locking screw	Max. recom. static load (centr. tension) N _{recom.} [kN]	Sales unit [pcs]
FRS Plus 12 - 15	079440	M 8 / M 10	1/4"	12 - 15	59	41	20 x 1,25	28	M 5	0.80	100
FRS Plus 15 - 19	079441	M 8 / M 10	3/8"	15 - 19	63	45	20 x 1,25	30	M 5	0.80	100
FRS Plus 20 - 24	079442	M 8 / M 10	1/2"	20 - 24	68	50	20 x 1,25	32	M 5	0.80	100
FRS Plus 25 - 30	079443	M 8 / M 10	3/4"	25 - 30	74	56	20 x 1,25	35	M 5	0.80	100
FRS Plus 32 - 37	079444	M 8 / M 10	1"	32 - 37	81	63	20 x 1,25	39	M 5	0.80	100
FRS Plus 40 - 45	079445	M 8 / M 10	1 1/4"	40 - 45	90	71	20 x 1,5	43	M 5	1.00	50
FRS Plus 48 - 54	079446	M 8 / M 10	1 1/2"	48 - 54	98	80	20 x 1,5	48	M 5	1.00	50
FRS Plus 55 - 61	079447	M 8 / M 10	2"	55 - 61	100	87	20 x 1,5	51	M 5	1.00	50
FRS Plus 63 - 67	079449	M 8 / M 10	—	63 - 67	114	93	20 x 1,5	54	M 5	1.00	25
FRS Plus 68 - 73	079450	M 8 / M 10	—	68 - 73	117	100	20 x 2,0	58	M 6	1.80	25
FRS Plus 72 - 80	079451	M 8 / M 10	2 1/2"	72 - 80	125	107	20 x 2,0	61	M 6	1.80	25
FRS Plus 80 - 86	079452	M 8 / M 10	—	80 - 86	132	113	20 x 2,0	64	M 6	1.80	25
FRS Plus 87 - 92	079453	M 8 / M 10	3"	87 - 92	139	119	20 x 2,0	67	M 6	1.80	25
FRS Plus 95 - 103	079454	M 8 / M 10	—	95 - 103	151	130	20 x 2,0	73	M 6	1.80	25
FRS Plus 108 - 116	079455	M 8 / M 10	4"	108 - 116	163	143	20 x 2,0	79	M 6	1.80	20

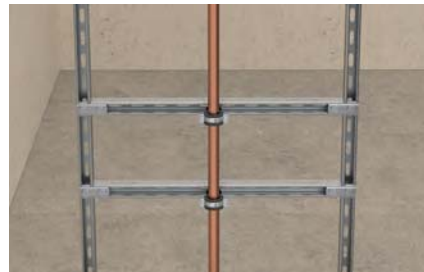
Pipe clamp FRS-L Universal

The light two-screw pipe clamp with rapid-locking mechanism and combination connecting nut

2a



Cantilever construction with channel



Vertical installation

Applications

- For simple and easy fixing for pipes using threaded rods or stud screws

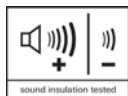
Certificates



Fire resistance classification
R120



MLAR R30



sound insulation tested

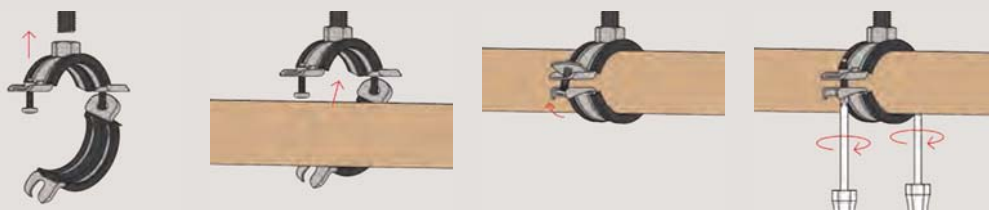
Advantage/Benefits

- The fire inspection report and the sound insulation report guarantee objectively tested functional safety.
- The unique rapid-locking mechanism with crimped edges allows a secure and time-saving installation.
- The clamp band with crimped edges gives a tight fit of the sound insulation insert and prevents it from slipping out when aligning the pipe.
- The two screws allow a perfect adaptation of the pipe clamp to suit every outer pipe diameter.
- The connecting nut with combination thread M8/M10 enables an optimised warehousing.
- The screw's loss protection guarantees an easy installation.

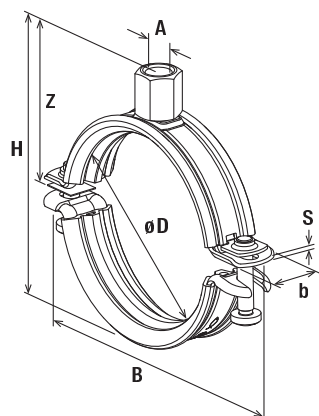
Properties

- Material: steel DD11 (material no. 1.0332) acc. to DIN EN 10111
- Zinc plating: electro zinc-plated, min. 5 µm acc. DIN EN ISO 4042
- Connecting nut: resistance welded, M8 / M10, SW 13
- Locking screw: flat head screw with combination recessed head
- Material sound insulation insert: SBR/EPDM; chlorine-free; silicone-free
- Sound insulation: for DIN 4109
- Temperature range: -40 °C to +100 °C
- Hardness: 55 ± 5° Shore A
- Fire behaviour: DIN 4102: Class B2

Installation FRS-L Universal



Technical data



FRS - L Universal

Item	Item No.	Fire test report	Thread	Size	Clamp- ing range	Width	Height	Width x thickness clamp band	Height Z	Locking screw	Max. recom. static load (centr. tension) N _{recom.} [kN]	Sales unit [pcs]
			A	[inch]	D [mm]	B [mm]	H [mm]	b x s [mm]	Z [mm]			
FRS-L 8 - 11 Universal	539443	X	M 8 / M 10	—	8 - 11	47	35	18 x 1,0	25	M 5	0.70	25
FRS-L 12 - 15 Universal	539444	X	M 8 / M 10	1/4"	12 - 15	52	39	18 x 1,0	27	M 5	0.70	25
FRS-L 16 - 19 Universal	539445	X	M 8 / M 10	3/8"	16 - 19	56	43	18 x 1,0	29	M 5	0.70	25
FRS-L 20 - 24 Universal	539446	X	M 8 / M 10	1/2"	20 - 24	61	48	18 x 1,0	31	M 5	0.70	25
FRS-L 25 - 30 Universal	539447	X	M 8 / M 10	3/4"	25 - 30	67	53	18 x 1,0	34	M 5	0.70	25
FRS-L 31 - 37 Universal	539448	X	M 8 / M 10	1"	31 - 37	74	61	18 x 1,0	38	M 5	0.70	25
FRS-L 38 - 45 Universal	539449	X	M 8 / M 10	1 1/4"	38 - 45	83	69	18 x 1,2	42	M 5	1.00	25
FRS-L 46 - 52 Universal	539450	X	M 8 / M 10	1 1/2"	46 - 52	90	76	18 x 1,2	45	M 5	1.00	25
FRS-L 53 - 59 Universal	539451	X	M 8 / M 10	—	53 - 59	97	83	18 x 1,2	49	M 5	1.00	25
FRS-L 60 - 66 Universal	539452	X	M 8 / M 10	2"	60 - 66	104	90	18 x 1,2	52	M 5	1.00	10
FRS-L 67 - 75 Universal	539453	X	M 8 / M 10	—	67 - 75	120	100	20 x 1,8	57	M 6	1.30	10
FRS-L 76 - 84 Universal	539454	X	M 8 / M 10	2 1/2"	76 - 84	130	109	20 x 1,8	62	M 6	1.30	10
FRS-L 85 - 93 Universal	539455	X	M 8 / M 10	3"	85 - 93	139	118	20 x 1,8	66	M 6	1.30	10
FRS-L 94 - 100 Universal	539456	X	M 8 / M 10	—	94 - 100	146	125	20 x 1,8	70	M 6	1.30	10
FRS-L 101 - 110 Universal	539457	X	M 8 / M 10	—	101 - 110	156	135	20 x 1,8	75	M 6	1.30	10
FRS-L 110 - 119 Universal	539459	X	M 8 / M 10	4"	110 - 119	165	144	20 x 1,8	79	M 6	1.30	10
FRS-L 120 - 129 Universal	544905	X	M 8 / M 10	—	120 - 129	176	156	25 x 2,0	86	M 6	1.50	5
FRS-L 130 - 137 Universal	544906	X	M 8 / M 10	—	130 - 137	184	164	25 x 2,0	90	M 6	1.50	5
FRS-L 138 - 145 Universal	544907	X	M 8 / M 10	5"	138 - 145	192	172	25 x 2,0	94	M 6	1.50	5
FRS-L 146 - 155 Universal	544908	X	M 8 / M 10	—	146 - 155	202	182	25 x 2,0	99	M 6	1.50	5
FRS-L 156 - 163 Universal	544909	X	M 8 / M 10	—	156 - 163	211	190	25 x 2,0	103	M 6	1.50	5
FRS-L 164 - 172 Universal	544910	X	M 8 / M 10	6"	164 - 172	219	199	25 x 2,0	106	M 6	1.50	5

Pipe clamp FRS Triple

The two-screw pipe clamp with rapid-locking mechanism and triple connecting nut

2a



Height adjustable pipe installation



Drainage pipe assembly

Applications

- For simple and easy fixing of pipelines with threaded rods or hanger bolts

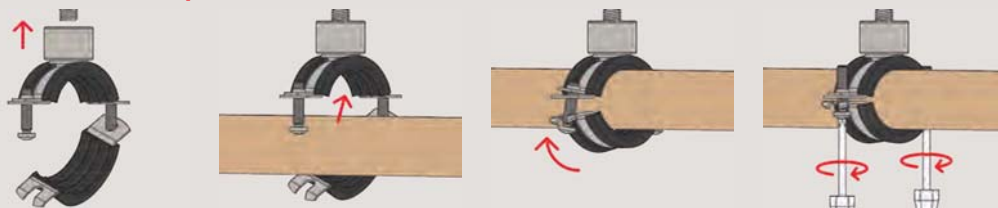
Advantages/Benefits

- The connecting nut with combination thread M8 / M10 / 1/2" allows for optimised mounting positioning.
- The rapid-locking mechanism allows for fast and time-saving installation.
- The tight fit of the sound insulation insert prevents it from falling out when aligning the pipe.
- The two screws allow for ideal adaptation to suit the outer pipe diameter.

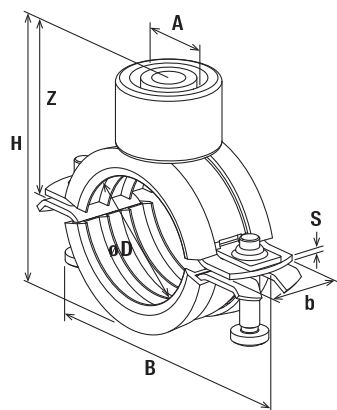
Properties

- Material: steel DD11 (material no. 1.0332) acc. to DIN EN 10111
- Zinc plating: electro zinc-plated, min. 5 µm
- Connecting nut: resistance welded, M8 / M10 / 1/2"
- Locking screw: flat head screw with combination recessed head
- Material sound insulation insert: SBR/EPDM; chlorine-free; silicone-free
- Sound insulation: for DIN 4109
- Temperature range: -50 °C to +110 °C
- Hardness: 45 ± 5° Shore A
- Fire behaviour: DIN 4102: Class B2

Installation FRS Triple



Technical data



FRS Triple

Item	Item No.	Thread A	Size [inch]	Clamp- ing range D [mm]	Width B [mm]	Height H [mm]	Width x thickness clamp band b x s [mm]	Height Z Z [mm]	Locking screw	Max. recom. static load (centr. tension) N _{recom.} [kN]	Sales unit [pcs]
FRS Triple 15 - 19	500698	M 8 / M 10 / 1/2"	3/8"	15 - 19	61	53	20 x 1,5	36	M 5	1.00	100
FRS Triple 21 - 23	500699	M 8 / M 10 / 1/2"	1/2"	21 - 23	65	57	20 x 1,5	38	M 5	1.00	100
FRS Triple 26 - 28	500700	M 8 / M 10 / 1/2"	3/4"	26 - 28	70	62	20 x 1,5	40	M 5	1.00	100
FRS Triple 32 - 35	500701	M 8 / M 10 / 1/2"	1"	32 - 35	77	69	20 x 1,5	44	M 5	1.00	100
FRS Triple 40 - 43	500702	M 8 / M 10 / 1/2"	1 1/4"	40 - 43	85	77	20 x 1,5	48	M 5	1.00	50
FRS Triple 48 - 56	500703	M 8 / M 10 / 1/2"	1 1/2"	48 - 56	98	90	20 x 1,5	54	M 5	1.00	50
FRS Triple 57 - 62	500704	M 8 / M 10 / 1/2"	2"	57 - 63	104	96	20 x 1,5	57	M 5	1.00	50
FRS Triple 63 - 70	500705	M 8 / M 10 / 1/2"	—	63 - 70	112	104	20 x 1,5	61	M 5	1.00	25
FRS Triple 74 - 80	500706	M 8 / M 10 / 1/2"	2 1/2"	74 - 80	122	114	20 x 1,5	66	M 5	1.00	25
FRS Triple 83 - 91	500707	M 8 / M 10 / 1/2"	3"	83 - 91	133	125	20 x 1,5	72	M 5	1.00	25
FRS Triple 100 - 105	500708	M 8 / M 10 / 1/2"	—	100 - 105	155	139	23 x 2,0	79	M 6	1.50	10
FRS Triple 108 - 114	500709	M 8 / M 10 / 1/2"	4"	108 - 114	164	148	23 x 2,0	83	M 6	1.50	10
FRS Triple 115 - 125	500710	M 8 / M 10 / 1/2"	—	115 - 125	175	159	23 x 2,0	89	M 6	1.50	10
FRS Triple 127 - 135	500711	M 8 / M 10 / 1/2"	—	127 - 135	185	169	23 x 2,0	94	M 6	1.50	10
FRS Triple 135 - 140	500712	M 8 / M 10 / 1/2"	5"	135 - 140	190	174	23 x 2,0	96	M 6	1.50	10
FRS Triple 159 - 169	500713	M 8 / M 10 / 1/2"	6"	159 - 169	219	203	23 x 2,0	111	M 6	1.50	10

2a

Pipe clamp FRS

The two-screw pipe clamp with combination connecting thread

2a



Height adjustable pipe installation



Drainage pipe assembly

Applications

- Secure fixing for pipes with threaded rods or stud screws (also when there are fire protection requirements)

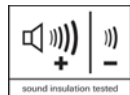
Certificates



Fire resistance classification
R120



MLAR R30



sound insulation tested

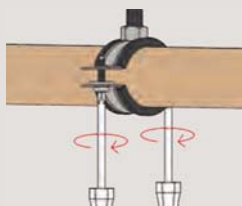
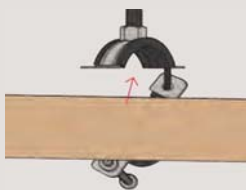
Advantages/benefits

- The fire test report guarantees independently tested functional safety.
- The two screws allow an easy adjustment to suit the outer pipe diameter.
- The combination connecting nut with thread M8/M10 enables optimised mounting choices.
- The sound insulation insert offers noise protection and prevents contact corrosion.
- The screw's safety feature ensures trouble-free installation.

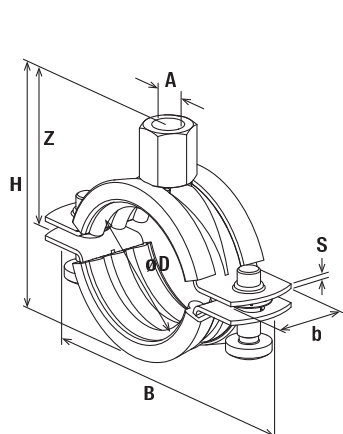
Properties

- Material: steel DC01 (material no. 1.0330) acc. to DIN EN 10130
- Zinc plating: electro zinc-plated, 5 - 9 µm
- Connecting nut: resistance welded, M8 / M10, SW 13
- Locking screw: flat head screw with combination recessed head
- Material sound insulation insert: EPDM; chlorine-free; silicone-free
- Sound insulation: for DIN 4109
- Temperature range: -40 °C to +100 °C
- Hardness: 55 ± 5° Shore A
- Fire behaviour: DIN 4102: Class B2

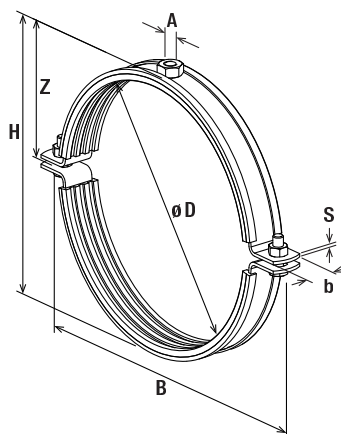
Installation FRS



Technical data



FRS M8/M10



FRS

		Fire test report	Thread	Size	Clamping range	Width	Height	Width x thickness clamp band	Height Z	Locking screw	Max. recom. static load (centr. tension) N _{recom.} [kN]	Sales unit
Item	Item No.		A	[inch]	D [mm]	B [mm]	H [mm]	b x s [mm]	Z [mm]			[pcs]
FRS 12 - 15 M8/M10	510969	X	M 8 / M 10	1/4"	12 - 15	55	39	20 x 1.25	31	M 6	1.00	100
FRS 15 - 19 M8/M10	042535	X	M 8 / M 10	3/8"	15 - 19	59	43	20 x 1.25	29	M 6	1.00	100
FRS 20 - 24 M8/M10	042536	X	M 8 / M 10	1/2"	20 - 24	65	48	20 x 1.25	32	M 6	1.00	100
FRS 25 - 30 M8/M10	042537	X	M 8 / M 10	3/4"	25 - 30	72	54	20 x 1.25	35	M 6	1.00	100
FRS 32 - 37 M8/M10	042538	X	M 8 / M 10	1"	32 - 37	77	61	20 x 1.25	38	M 6	1.00	100
FRS 40 - 45 M8/M10	042554	X	M 8 / M 10	1 1/4"	40 - 45	89	69	20 x 1.25	42	M 6	1.00	50
FRS 48 - 54 M8/M10	510970	X	M 8 / M 10	1 1/2"	48 - 54	99	78	20 x 1.25	46	M 6	1.00	50
FRS 55 - 61 M8/M10	042555	X	M 8 / M 10	2"	55 - 61	105	85	20 x 1.25	50	M 6	1.00	50
FRS 63 - 67 M8/M10	091488	X	M 8 / M 10	—	63 - 67	111	91	20 x 1.25	53	M 6	1.00	50
FRS 72 - 80 M8/M10	091489	X	M 8 / M 10	2 1/2"	72 - 80	125	104	20 x 2.0	60	M 6	1.50	25
FRS 87 - 92 M8/M10	091505	X	M 8 / M 10	3"	87 - 92	137	116	20 x 2.0	66	M 6	1.50	25
FRS 95 - 103 M8/M10	545649	X	M 8 / M 10	—	95 - 103	149	130	25 x 2.0	73	M 6	2.00	25
FRS 108 - 116 M8/M10	091506	X	M 8 / M 10	4"	108 - 116	164	140	25 x 2.0	78	M 6	2.0	20
FRS 121 - 128 M8/M10	079456	X	M 8 / M 10	—	121 - 128	176	152	25 x 2.5	84	M 6	2.50	10
FRS 133 - 141 M8/M10	079457	X	M 8 / M 10	5"	133 - 141	187	165	25 x 2.5	90	M 6	2.50	10
FRS 159 - 165 M8/M10	079458	X	M 8 / M 10	—	159 - 165	211	198	25 x 2.5	102	M 6	2.50	8
FRS 165 - 168 M8/M10	079459	X	M 8 / M 10	6"	165 - 168	225	192	25 x 2.5	104	M 6	2.50	8
FRS 200-206 M10	539660	—	M 10	—	200 - 206	256	227	25 x 2.5	118	M 8	2.75	15
FRS 210-219 M10	558335	—	M 10	—	210 - 219	262	240	25 x 2.5	124	M 8	2.75	15

Silicone pipe clamp FRSH

The two-screw pipe clamp with a sound insulation insert with resistance to high temperatures

2a



Sliding element on cantilever

Applications

- Fixing of high-temperature pipelines with threaded rods or stud screws (e.g. steam pipes)

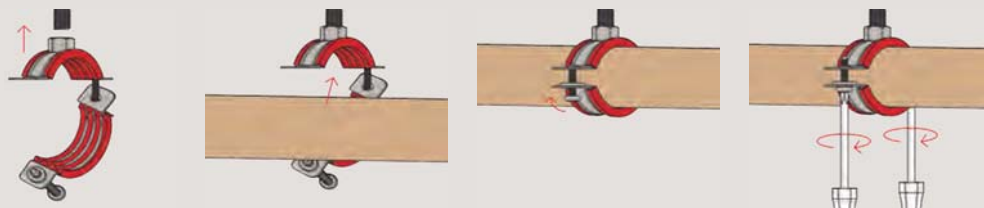
Advantages/benefits

- The special silicone sound insulation insert allows a use with average temperatures of up to +220 °C.
- The two screws enable an easy adjustment to suit the outer pipe diameter.
- The screw's safety feature ensures trouble-free installation.

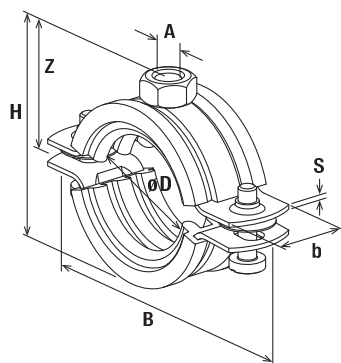
Properties

- Material: steel DD11 (material no. 1.0332) acc. to DIN EN 10111
- Zinc plating: electro zinc-plated, 5 - 9 µm
- Connecting nut: (up to FRSH 59 - 63) resistance welded, M8 and M8 / M10 SW 13, M10 SW 17
- Locking screw: flat head screw with combination recessed head
- Material sound insulation insert: silicone
- Sound insulation: for DIN 4109
- Temperature range: -40 °C to +220 °C
- Hardness: 60 ± 5° Shore A
- Fire behaviour: DIN 4102: Class B2

Installation FRSH



Technical data



FRSH

Item	Item No.	Thread A	Size [inch]	Clamping range D [mm]	Width B [mm]	Height H [mm]	Width x thickness clamp band b x s [mm]	Height Z Z [mm]	Locking screw	Max. recom. static load (centr. tension) N _{recom.} [kN]	Sales unit [pcs]
FRSH 15 - 19	063490	M 8	3/8"	15 - 19	62	41	20 x 1.25	24	M 5	1.00	100
FRSH 20 - 24	063492	M 8	1/2"	20 - 24	68	46	20 x 1.25	26	M 5	1.00	100
FRSH 25 - 30	063494	M 8	3/4"	25 - 30	75	52	20 x 1.25	29	M 5	1.00	100
FRSH 32 - 37	063495	M 8	1"	32 - 37	80	59	20 x 1.25	33	M 5	1.00	100
FRSH 40 - 45	063498	M 8	1 1/4"	40 - 45	90	67	20 x 1.25	37	M 5	1.00	50
FRSH 48 - 53	063499	M 8	1 1/2"	48 - 53	97	75	20 x 1.25	41	M 5	1.00	50
FRSH 54 - 59	063500	M 8	—	54 - 59	104	81	20 x 1.25	44	M 5	1.00	50
FRSH 60 - 64	063502	M 8	2"	60 - 64	110	86	20 x 1.25	46	M 5	1.00	50
FRSH 68 - 73	063504	M 10	—	68 - 73	122	95	25 x 1,5	51	M 6	1.30	25
FRSH 74 - 78	063505	M 10	2 1/2"	74 - 78	130	100	25 x 1,5	55	M 6	1.30	25
FRSH 80 - 86	063511	M 10	—	80 - 86	130	108	25 x 1,5	58	M 6	1.30	25
FRSH 87 - 92	063513	M 10	3"	87 - 92	141	114	25 x 1,5	61	M 6	1.30	25
FRSH 95 - 103	063518	M 10	—	95 - 103	156	125	25 x 1,5	67	M 6	1.30	25
FRSH 102 - 116	063520	M 10	4"	102 - 116	172	140	25 x 2,0	74	M 6	2.00	20
FRSH 133 - 141	063537	M 8 / M 10	5"	133 - 141	198	174	25 x 2.5	95	M 8	2.00	10
FRSH 159 - 168	091507	M 8 / M 10	—	159 - 168	226	201	25 x 2.5	109	M 8	2.00	8

Pipe clamp FRSN Triple

The two-screw pipe clamp with rapid-locking mechanism and triple connecting nut

2a



Waste water pipe

Applications

- For simple and easy fixing of pipelines with threaded rods or hanger bolts

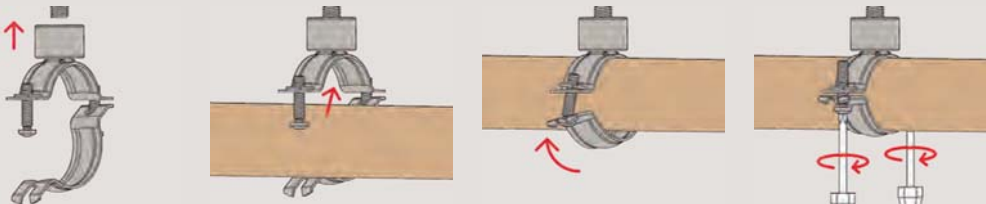
Advantages/benefits

- The connecting nut with combination thread M8 / M10 / 1/2" allows for optimised mounting positioning.
- The rapid-locking mechanism allows for fast and time-saving installation.
- The two screws allow for ideal adaptation to suit the outer pipe diameter.

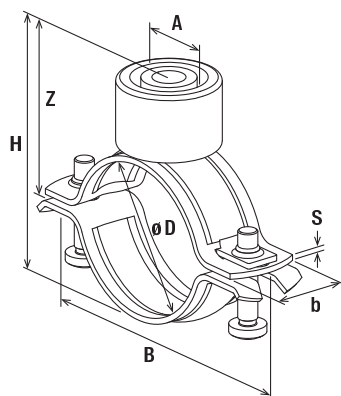
Properties

- Material: steel DD11 (material no. 1.0332) acc. to DIN EN 10111
- Zinc plating: electro zinc-plated, min. 5 µm
- Connecting nut: resistance welded, M8 / M10 / 1/2"
- Locking screw: flat head screw with combination recessed head

Installation FRSN Triple



Technical data



FRSN Triple

Item	Item No.	Thread A	Size [inch]	Clamping range D [mm]	Width B [mm]	Height H [mm]	Width x thickness clamp band b x s [mm]	Height Z Z [mm]	Locking screw	Max. recom. static load (centr. tension) N _{recom.} [kN]	Sales unit [pcs]
FRSN Triple 15 - 19	500714	M 8 / M 10 / 1/2"	3/8"	15 - 19	54	44	20 x 1,5	32	M 5	1.00	100
FRSN Triple 21 - 23	500715	M 8 / M 10 / 1/2"	1/2"	21 - 23	58	48	20 x 1,5	34	M 5	1.00	100
FRSN Triple 26 - 28	500716	M 8 / M 10 / 1/2"	3/4"	26 - 28	63	53	20 x 1,5	36	M 5	1.00	100
FRSN Triple 32 - 35	500717	M 8 / M 10 / 1/2"	1"	32 - 35	70	60	20 x 1,5	40	M 5	1.00	100
FRSN Triple 40 - 43	500718	M 8 / M 10 / 1/2"	1 1/4"	40 - 43	78	68	20 x 1,5	44	M 5	1.00	50
FRSN Triple 48 - 56	500719	M 8 / M 10 / 1/2"	1 1/2"	48 - 56	91	81	20 x 1,5	50	M 5	1.00	50
FRSN Triple 57 - 62	500720	M 8 / M 10 / 1/2"	2"	57 - 63	97	87	20 x 1,5	53	M 5	1.00	50
FRSN Triple 63 - 70	500721	M 8 / M 10 / 1/2"	—	63 - 70	105	95	20 x 1,5	57	M 5	1.00	50
FRSN Triple 74 - 80	500722	M 8 / M 10 / 1/2"	2 1/2"	74 - 80	115	105	20 x 1,5	62	M 5	1.00	25
FRSN Triple 83 - 91	500723	M 8 / M 10 / 1/2"	3"	83 - 91	126	116	20 x 1,5	68	M 5	1.00	25
FRSN Triple 100 - 105	500724	M 8 / M 10 / 1/2"	—	100 - 105	148	130	23 x 2,0	74	M 6	1.50	10
FRSN Triple 108 - 114	500725	M 8 / M 10 / 1/2"	4"	108 - 114	157	139	23 x 2,0	78	M 6	1.50	10

2a

Pipe clamp FRSN

The two-screw pipe clamp without sound insulation insert

2a



Waste water pipe

Applications

- Fixing of metal or plastic pipes without sound insulation requirements with threaded rods or stud screws (e.g. in industrial constructions)

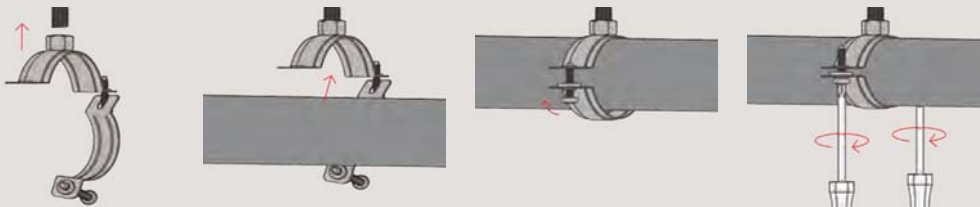
Advantages/benefits

- The FRSN without the sound insulation insert is ideal for use in industrial applications and plastic pipes.
- The combination connecting nut with thread M8/M10 allows for optimised mounting choices.
- The two screws enable ideal adaptation to suit the outer pipe diameter.
- The screw's safety feature ensures trouble-free installation.

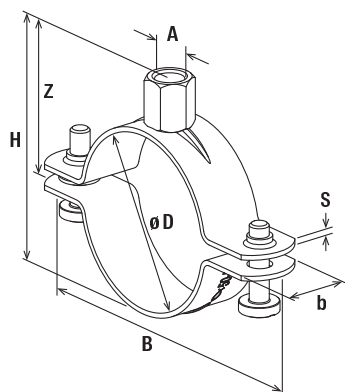
Properties

- Material: steel DD11 (material no. 1.0332) acc. to DIN EN 10111
- Zinc plating: electro zinc-plated, 5 - 9 µm
- Connecting nut: resistance welded M8 / M10, SW 13, M10 / M12, SW 17
- Locking screw: flat head screw with combination recessed head

Installation FRSN



Technical data



FRSN

Item	Item No.	Thread A	Size [inch]	Clamping range D [mm]	Width B [mm]	Height H [mm]	Width x thickness clamp band b x s [mm]	Height Z Z [mm]	Locking screw	Max. recom. static load (centr. tension) N _{recom.} [kN]	Sales unit [pcs]
FRSN 15 - 19 M8/M10	049459	M 8 / M 10	3/8"	15 - 19	56	37	20 x 1,5	27	M 6	1.50	100
FRSN 21 - 23 M8/M10	049789	M 8 / M 10	1/2"	21 - 23	60	41	20 x 1,5	28	M 6	1.50	100
FRSN 25 - 28 M8/M10	049790	M 8 / M 10	3/4"	25 - 28	67	46	20 x 1,5	30	M 6	1.50	100
FRSN 32 - 36 M8/M10	049793	M 8 / M 10	1"	32 - 36	74	54	20 x 1,5	34	M 6	1.50	100
FRSN 38 - 43 M8/M10	049794	M 8 / M 10	1 1/4"	38 - 43	78	61	20 x 1,5	38	M 6	1.50	50
FRSN 44 - 49 M8/M10	049902	M 8 / M 10	1 1/2"	44 - 49	88	67	20 x 1,5	41	M 6	1.50	50
FRSN 50 - 56 M8/M10	049922	M 8 / M 10	—	50 - 56	92	74	20 x 1,5	43	M 6 x 16	1.50	50
FRSN 57 - 61 M8/M10	049944	M 8 / M 10	2"	57 - 61	98	79	20 x 1,5	47	M 6	1.50	50
FRSN 63 - 70 M8/M10	049945	M 8 / M 10	—	63 - 70	105	88	20 x 1,5	54	M 6	1.50	50
FRSN 70 - 77 M8/M10	049947	M 8 / M 10	2 1/2"	70 - 77	112	95	20 x 1,5	55	M 6	1.50	25
FRSN 80 - 83 M8/M10	049948	M 8 / M 10	—	80 - 83	116	101	20 x 1,5	58	M 6	1.50	25
FRSN 83 - 91 M8/M10	049979	M 8 / M 10	3"	83 - 91	128	111	20 x 2.0	63	M 6	2.50	25
FRSN 100 - 106 M8/M10	050006	M 8 / M 10	—	100 - 106	143	126	20 x 2.0	70	M 6	2.50	25
FRSN 108 - 114 M8/M10	050008	M 8 / M 10	4"	108 - 114	156	134	20 x 2.0	75	M 6	2.50	25
FRSN 123 - 128 M8/M10	050009	M 8 / M 10	—	123 - 128	173	149	25 x 2.5	82	M 6	2.50	25
FRSN 131 - 136 M8/M10	050010	M 8 / M 10	—	131 - 136	176	157	25 x 2.5	86	M 6	2.50	25
FRSN 137 - 146 M8/M10	050023	M 8 / M 10	5"	137 - 146	180	167	25 x 2.5	91	M 6	2.50	25
FRSN 118 - 122 M8/M10	500744	M 8 / M 10	—	118 - 122	160	142	20 x 2.0	78	M 6	2.50	25
FRSN 146 - 156 M8/M10	500746	M 8 / M 10	—	146 - 156	195	177	25 x 2.5	96	M 6	2.50	25
FRSN 159 - 165 M10/M12	500747	M 10 / M 12	—	159 - 165	203	191	25 x 2.5	106	M 6	2.50	25
FRSN 166 - 175 M10/M12	500748 ¹⁾	M 10 / M 12	—	166 - 175	211	201	25 x 2.5	110	M 8	2.50	20
FRSN 200 - 206 M10/M12	500751 ¹⁾	M 10 / M 12	—	200 - 206	248	232	25 x 2.5	126	M 8	2.50	10
FRSN 210 - 219 M10/M12	500752 ¹⁾	M 10 / M 12	8"	210 - 219	261	245	25 x 2.5	133	M 8	2.50	10

1) From diameter 166 mm the steel band is punched and delivered with separate locking screw and nut.

Heavy duty pipe clamp FRSM - inch

The large pipe clamp with sound insulation insert for medium to heavy loads

2a



Upright pipe on cantilever arm



Pipe elongation with sliding element and suspended pipe

Applications

- Fixing of medium to heavy pipes with threaded rods (hanger bolts)

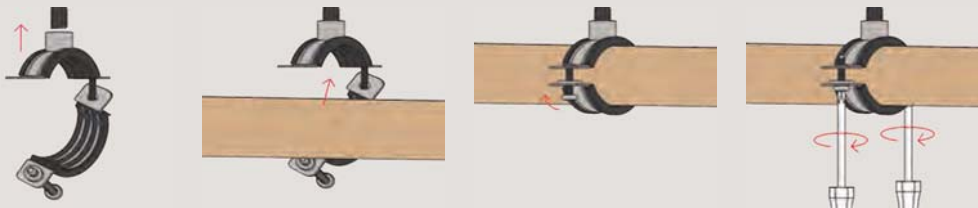
Advantages/benefits

- The inch threaded connecting nut allows for a pipe fixing with increased bending stress.
- High tested loads ensures the secure functioning of the FRSM.
- The sound insulation insert offers noise protection and prevents contact corrosion.
- The two screws allow an easy adjustment to suit the outer pipe diameter.
- The screw's safety feature ensures trouble-free installation.

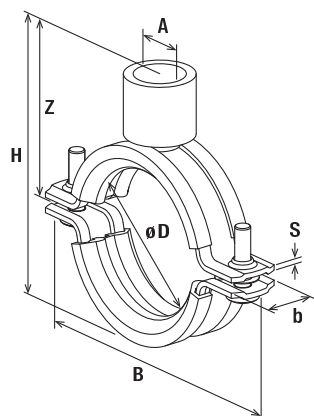
Properties

- Material: steel DD11 (material no. 1.0332) acc. to DIN EN 10111
- Zinc plating: electro zinc-plated, 5 - 9 µm
- Connecting nut: 1/2" resistance welded
- Locking screw: flat head screw with combination recessed head
- Material sound insulation insert: EPDM; chlorine-free; silicone-free
- Temperature range: -50 °C to +110 °C
- Hardness: 45 ± 5° Shore A
- Fire behaviour: DIN 4102: Class B2

Installation FRSM



Technical data



FRSM - Zoll

Item	Item No.	Thread A	Size [inch]	Clamping range D [mm]	Width B [mm]	Height H [mm]	Width x thickness clamp band b x s [mm]	Height Z Z [mm]	Locking screw	Max. recom. static load (centr. tension) N _{recom.} [kN]	Sales unit [pcs]
FRSM 3/8"	535494	1/2"	3/8"	14 - 20	64.3	64	20 x 2.0	44.5	M 6	1.50	25
FRSM 1/2"	535497	1/2"	1/2"	21 - 26	70.6	70	20 x 2.0	47.5	M 6	1.50	25
FRSM 3/4"	535498	1/2"	3/4"	26 - 30	74.8	74	20 x 2.0	49.5	M 6	1.50	25
FRSM 1"	535499	1/2"	1"	31 - 38	81	80	20 x 2.0	52.5	M 6	1.50	25
FRSM 1 1/4"	535500	1/2"	1 1/4"	40 - 47	91.2	90	20 x 2.0	57.5	M 6	1.50	25
FRSM 1 1/2"	535501	1/2"	1 1/2"	48 - 54	100	98	20 x 2.0	61.5	M 6	1.50	25
FRSM 2"	535502	1/2"	2"	60 - 66	111.1	109	20 x 2.0	67	M 6	1.50	25
FRSM 2 1/2"	535503	1/2"	2 1/2"	73 - 80	131.4	123	25 x 2.5	74	M 8	3.15	10
FRSM 3"	535504	1/2"	3"	87 - 94	145.5	137	25 x 2.5	81	M 8	3.15	10
FRSM 110 mm	535505	1/2"	—	105 - 112	165.6	157	25 x 2.5	91	M 8	3.15	10
FRSM 4"	535506	1/2"	4"	112 - 118	171.7	163	25 x 2.5	94	M 8	3.15	10
FRSM 133 mm	535507	1/2"	—	132 - 137	190.8	182	25 x 2.5	103.5	M 8	3.15	10
FRSM 5"	535508	1/2"	5"	137 - 142	195.8	187	25 x 2.5	106	M 8	3.15	10
FRSM 160 mm	535509	1/2"	—	159 - 164	217.9	209	25 x 2.5	117	M 8	3.15	8
FRSM 6"	535511	1/2"	6"	164 - 169	222.9	214	25 x 2.5	119.5	M 8	3.15	8

2a

Heavy duty pipe clamp FRSM - metric

The large pipe clamp with sound insulation insert for medium to heavy loads

2a



Heavy pipe on cantilever



Heavy drainage pipe under angle bracket

Applications

- Fixing of medium to heavy pipes with threaded rods (hanger bolts)

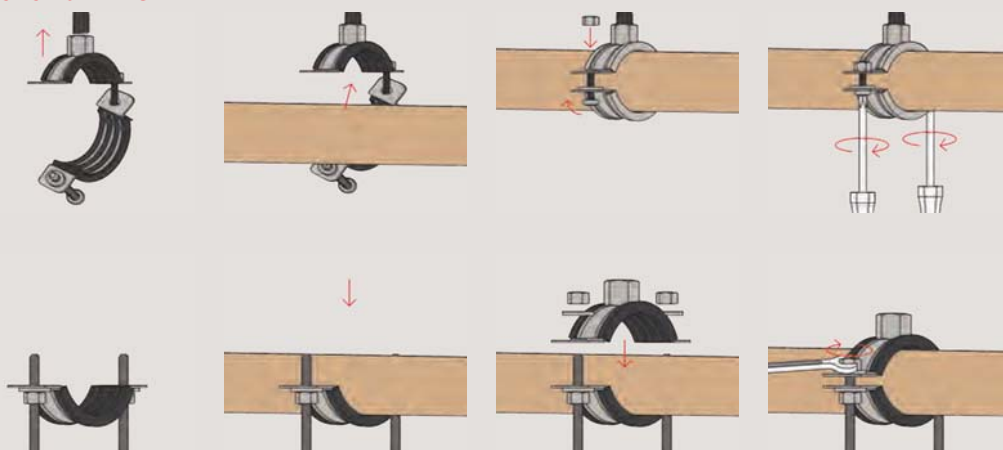
Advantages/benefits

- High tested loads guarantee safe functioning of the FRSM.
- The combination connecting nut with thread M10/M12, M12/M16 or M16 allows for optimised mounting choices.
- From Ø 124 mm it is possible to install with 2 threaded rods, e.g. for the fixing of cast iron roof drainage pipes.
- The two screws allow for easy adjustment to suit the outer pipe diameter.
- The screw's safety features ensures trouble-free installation.

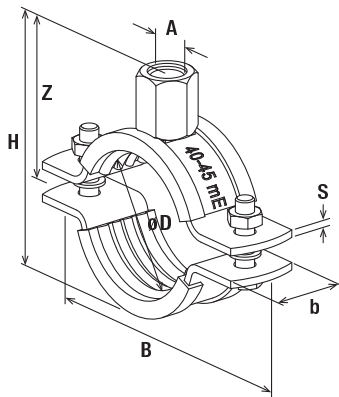
Properties

- Material: steel DD11 (material no. 1.0332) acc. to DIN EN 10111
- Zinc plating: electro zinc-plated, 5 - 9 µm
- Connecting nut: M10 / M12 = SW 17, M12 / M16 = SW 22, M16 = SW 24
- Locking screw: hexagon screw with nut
- Material sound insulation insert: EPDM; chlorine-free; silicone-free
- Temperature range: -50 °C to +110 °C
- Hardness: 45 ± 5° Shore A
- Fire behaviour: DIN 4102: Class B2

Installation FRSM



Technical data



FRSM - metrisch

Item	Item No.	Thread A	Size [inch]	Clamping range D [mm]	Width B [mm]	Height H [mm]	Width x thickness clamp band b x s [mm]	Height Z Z [mm]	Locking screw	Max. recom. static load (centr. tension) N _{recom.} [kN]	Sales unit [pcs]
FRSM 1/2" M10/M12	554243	M 10 / M 12	1/2"	19 - 23	77	56	25 x 2.5	38	M 6	2.50	50
FRSM 3/4" M10/M12	554244	M 10 / M 12	3/4"	24 - 29	83	62	25 x 2.5	41	M 6	2.50	50
FRSM 1" M10/M12	554245	M 10 / M 12	1"	33 - 36	91	69	25 x 2.5	45	M 6	2.50	50
FRSM 1 1/4" M10/M12	554246	M 10 / M 12	1 1/4"	40 - 45	100	78	25 x 2.5	49	M 6	2.50	20
FRSM 1 1/2" M10/M12	554247	M 10 / M 12	1 1/2"	47 - 52	107	85	25 x 2.5	53	M 6	2.50	20
FRSM 53 - 58 M10/M12	554248	M 10 / M 12	—	53 - 58	113	91	25 x 2.5	56	M 6	2.50	20
FRSM 2" M10/M12	554249	M 10 / M 12	2"	60 - 65	120	98	25 x 2.5	59	M 6	2.50	20
FRSM 2 1/2" M10/M12	554250	M 10 / M 12	2 1/2"	73 - 78	138	115	30 x 3,0	68	M 8	3.00	20
FRSM 79 - 85 M10/M12	554251	M 10 / M 12	—	79 - 85	145	122	30 x 3,0	71	M 8	3.00	20
FRSM 3" M10/M12	554252	M 10 / M 12	3"	88 - 93	153	130	30 x 3,0	75	M 8	3.00	20
FRSM 102 M10/M12	554253	M 10 / M 12	—	100 - 106	166	143	30 x 3,0	82	M 8	3.00	20
FRSM 4" M10/M12	554254	M 10 / M 12	4"	108 - 116	176	153	30 x 3,0	87	M 8	3.00	20
FRSM 124 - 129 M10/M12	093709	M 10 / M 12	—	124 - 129	190	164	30 x 3,0	92	M 8	3.00	20
FRSM 131 - 137 M10/M12	093710	M 10 / M 12	—	131 - 137	198	172	30 x 3,0	96	M 8	3.00	20
FRSM 138 - 145 M10/M12	093711	M 10 / M 12	5"	138 - 145	205	180	30 x 3,0	100	M 8	3.00	20
FRSM 156 - 162 M10/M12	093712	M 10 / M 12	—	156 - 162	223	197	30 x 3,0	108	M 8	3.00	20
FRSM 165 - 171 M10/M12	093713	M 10 / M 12	6"	165 - 171	232	206	30 x 3,0	113	M 8	3.00	20
FRSM 177 - 183 M10/M12	558303	M 10 / M 12	—	177 - 183	245	222	30 x 3,0	121	M 8	3.0	20
FRSM 188 - 194 M10/M12	093714	M 10 / M 12	7"	188 - 194	255	229	30 x 3,0	124	M 8	3.00	10
FRSM 196 - 203 M10/M12	093715	M 10 / M 12	—	196 - 203	263	238	30 x 3,0	129	M 8	3.00	10
FRSM 212 M12/M16	505453	M 12 / M 16	—	205 - 214	297	264	40 x 4,0	147	M 12	5.00	10
FRSM 8" M12/M16	505454	M 12 / M 16	8"	219 - 225	308	275	40 x 4,0	153	M 12	5.00	10
FRSM 250 M12/M16	505455	M 12 / M 16	—	244 - 250	333	300	40 x 4,0	165	M 12	5.00	10
FRSM 10" M12/M16	505456	M 12 / M 16	10"	267 - 273	356	323	40 x 4,0	177	M 12	5.00	10
FRSM 277 - 283 M12/M16	558304	M 12 / M 16	—	277 - 283	367	334	—	180	M 12	5.00	10
FRSM 300 M12/M16	505457	M 12 / M 16	—	297 - 304	387	354	40 x 4,0	192	M 12	5.00	10
FRSM 305 - 316 M12/M16	552858	M 12 / M 16	—	305 - 316	397	366	40 x 4,0	198	M 12	5.00	10
FRSM 12" M12/M16	505458	M 12 / M 16	12"	320 - 328	411	378	40 x 4,0	204	M 12	5.00	10
FRSM 348 - 356 M16	504594	M 16	—	348 - 356	480	403	50 x 5,0	213	M 16	8.00	1
FRSM 364 - 372 M16	504595	M 16	—	364 - 372	496	419	50 x 5,0	221	M 16	8.00	1
FRSM 400 - 409 M16	504596	M 16	—	400 - 409	533	456	50 x 5,0	240	M 16	8.00	1
FRSM 454 - 462 M16	504597	M 16	—	454 - 462	586	509	50 x 5,0	266	M 16	8.00	1
FRSM 500 - 508 M16	504598	M 16	—	500 - 508	632	555	50 x 5,0	290	M 16	8.00	1

Refrigeration pipe clamp FRS K

The two-screw refrigeration pipe clamp with integrated insulation

2a



Refrigerant pipe clamps

Applications

- Installation of pipes in refrigeration and air-conditioning applications

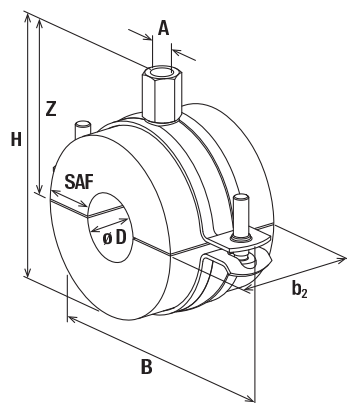
Advantages/benefits

- The self-adhesive material ensures easy installation of the refrigeration pipe clamp.
- Age-resistant material ensures a long life of the FRS-K.
- The double-threaded connection nut allows for flexibility during the installation.
- The screw's safety feature ensures trouble-free installation.
- The integrated load distribution sheet guarantees the load transmission and allows higher loads.

Properties

- Material: polyurethan-foam, silicone-free
- Diffusion resistance: 7000 μ
- Density: 80 kg/m³
- Compressive strength: 0,67-0,75 mPa
- Heat conductivity (at 0 °C): 0,024-0,026 W/mK
- Locking screw: flat head screw with combination recessed head
- Temperature range: -45 °C to +105 °C
- Fire behaviour: DIN 4102: Class B2

Technical data



FRS K

Item	Item No.	Size [inch]	Thread A	Insulation thickness S _{AF} [mm]	Width B [mm]	Height H [mm]	Height Z Z [mm]	Locking screw	Length of insulation material b2 [mm]	Max. recom. static load (centr. tension) N _{recom.} [kN]	Sales unit [pcs]
FRS K 12/13	506486	—	M 8 / M 10	13	77	59	33	M 6	50	0.10	1
FRS K 15/13	506487	1/4"	M 8 / M 10	13	85	64	37	M 6	50	0.11	1
FRS K 17-18/13	506488	3/8"	M 8 / M 10	13	86	64	37	M 6	50	0.12	1
FRS K 21-22/13	506489	1/2"	M 8 / M 10	13	90.5	69	40	M 6	50	0.13	1
FRS K 27-28/13	506490	3/4"	M 8 / M 10	13	98.5	78	46	M 6	50	0.15	1
FRS K 34-35/13	506491	1"	M 8 / M 10	13	105	83	49	M 6	50	0.17	1
FRS K 48-49/13	506493	1 1/2"	M 8 / M 10	13	118	102	56	M 6	50	0.39	1
FRS K 42/13	506492	1 1/4"	M 8 / M 10	13	115	96	53	M 6	50	0.36	1
FRS K 54/13	507699	—	M 8 / M 10	13	125	107	59	M 8	50	0.42	1
FRS K 60/13	506494	2"	M 8 / M 10	13	132	115	63	M 6	50	0.45	1
FRS K 12/19	506495	—	M 8 / M 10	19	90	71	41	M 6	50	0.14	1
FRS K 15/19	506496	1/4"	M 8 / M 10	19	90.5	74	42	M 6	50	0.15	1
FRS K 17-18/19	506497	3/8"	M 8 / M 10	19	99	77	44	M 6	50	0.15	1
FRS K 21-22/19	506498	1/2"	M 8 / M 10	19	99	77	44	M 6	50	0.16	1
FRS K 27-28/19	506499	3/4"	M 8 / M 10	19	106	90	50	M 6	50	0.18	1
FRS K 34-35/19	506500	1"	M 8 / M 10	19	115	97	53	M 6	50	0.20	1
FRS K 42/19	506501	1 1/4"	M 8 / M 10	19	125	109	59	M 6	50	0.42	1
FRS K 48-49/19	506502	1 1/2"	M 8 / M 10	19	132	116	62.5	M 6	50	0.45	1
FRS K 54/19	507700	—	M 8 / M 10	19	143	123	65.5	M 8	50	0.48	1
FRS K 60/19	506503	2"	M 8 / M 10	19	147	129	69	M 6	50	0.51	1
FRS K 64/19	506504	—	M 8 / M 10	19	149	134	71	M 6	50	0.53	1
FRS K 70/19	506505	—	M 8 / M 10	19	161	142	75	M 6	50	0.56	1
FRS K 76/19	506506	2 1/2"	M 8 / M 10	19	162.5	147	77	M 6	50	0.60	1
FRS K 89/19	506508	3"	M 8 / M 10	19	188	165	86.5	M 8	50	0.66	1
FRS K 102/19	506509	—	M 8 / M 10	19	199	180	94.5	M 8	100	1.69	1
FRS K 108/19	506510	—	M 8 / M 10	19	204	185	97	M 8	100	1.77	1
FRS K 114/19	506511	4"	M 12 / M 16	19	241	201	112	M 12	100	1.84	1
FRS K 133/19	507786	—	M 12 / M 16	19	270	221	122	M 12	100	2.07	1
FRS K 139/19	507787	5"	M 12 / M 16	19	270	227	125	M 12	100	2.14	1
FRS K 168/19	507788	6"	M 12 / M 16	19	281	256	139	M 12	100	2.49	1
FRS K 219/19	539477	8"	M 12 / M 16	19	346	290	156.6	M 12	100	2.94	1

2a

Refrigeration pipe clamp KFT

The two-screw refrigeration pipe clamp made from closed PUR foam

2a



Refrigerant pipe clamps



Refrigerant pipe clamp on sliding element

Applications

- Installation of pipes in refrigeration and air-conditioning applications with high loads

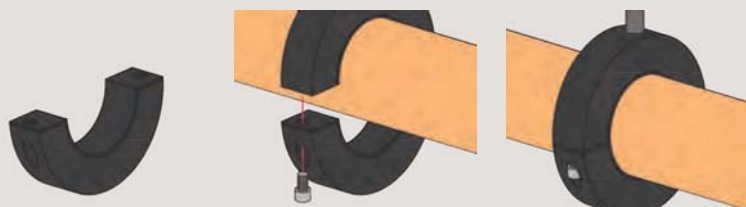
Advantages/benefits

- The refrigeration pipe clamp KFT made from closed PUR foam can be used with all standard insulation materials.
- The glued rubber overlay makes the installation easier.
- The triple-threaded connection nut M8 / M10 / 1/2" allows for flexibility during the installation.
- Age-resistant material ensures the long-term functionality of the KFT.
- The two screws allow an easy adjustment to suit the outer pipe diameter.

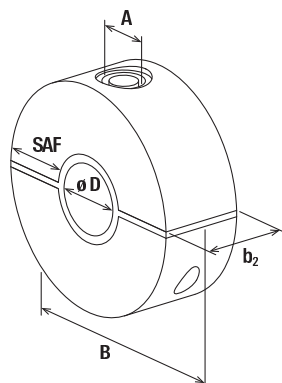
Properties

- Material: closed-cell polyurethane foam, silicone-free
- Diffusion resistance: 1000 μ
- Density: 250 kg/m³
- Compression strength: 3,96 mPa at 23 °C
- Heat conductivity (at 0 °C): 0,049 W/(m*K)
- Temperature range: -160 °C to +130 °C
- Fire behaviour: DIN 4102: Class B2

Installation KFT



Technical data



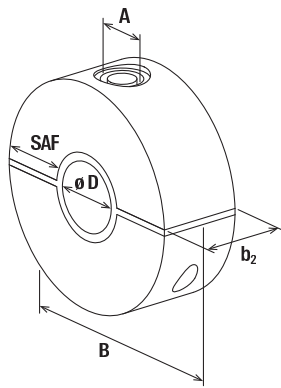
KFT

Item	Item No.	Thread A	Internal diameter D [mm]	Width B [mm]	Locking screw	Insulation thickness S _{AF} [mm]	Length of insulation material b ₂ [mm]	Max. recom. static load (centr. tension) N _{recom.} [kN]	Sales unit [pcs]
KFT 9,5	505576	1) M 8 / M 10 / 1/2"	9,5	88	M 6	30	40	0.15	1
KFT 12,7	505577	M 8 / M 10 / 1/2"	12,7	88	M 6	30	40	0.20	1
KFT 15,8	505578	M 8 / M 10 / 1/2"	15,8	88	M 6	30	40	0.21	1
KFT 17,2	505579	1) M 8 / M 10 / 1/2"	17,2	88	M 6	30	40	0.21	1
KFT 18,0	505580	M 8 / M 10 / 1/2"	18,0	88	M 6	30	40	0.21	1
KFT 19,5	505581	1) M 8 / M 10 / 1/2"	19,5	88	M 6	30	40	0.21	1
KFT 21,3	505582	M 8 / M 10 / 1/2"	21,3	88	M 6	30	40	0.26	1
KFT 22,0	505583	M 8 / M 10 / 1/2"	22,0	88	M 6	30	40	0.26	1
KFT 26,9	505584	M 8 / M 10 / 1/2"	26,9	88	M 6	30	40	0.32	1
KFT 28,0	505585	M 8 / M 10 / 1/2"	28,0	88	M 6	30	40	0.32	1
KFT 33,7	505587	M 8 / M 10 / 1/2"	33,7	96	M 6	30	40	0.40	1
KFT 35,0	505588	M 8 / M 10 / 1/2"	35,0	96	M 6	30	40	0.42	1
KFT 40,0	505589	1) M 8 / M 10 / 1/2"	40,0	100	M 6	30	40	0.42	1
KFT 41,2	505591	1) M 8 / M 10 / 1/2"	41,2	100	M 6	30	40	0.51	1
KFT 42,4	505592	M 8 / M 10 / 1/2"	42,4	103	M 6	30	40	0.51	1
KFT 44,5	505593	1) M 8 / M 10 / 1/2"	44,5	103	M 6	30	40	0.51	1
KFT 48,3	505594	M 8 / M 10 / 1/2"	48,3	102	M 6	30	40	0.58	1
KFT 50,0	505595	1) M 8 / M 10 / 1/2"	50,0	112	M 6	30	40	0.60	1
KFT 54,0	505596	M 8 / M 10 / 1/2"	54,0	116	M 6	30	40	0.62	1
KFT 57,0	505597	M 8 / M 10 / 1/2"	57,0	116	M 6	30	40	0.65	1
KFT 60,3	505598	M 8 / M 10 / 1/2"	60,3	123	M 6	30	50	0.72	1
KFT 64,0	505599	M 8 / M 10 / 1/2"	64,0	123	M 6	30	50	0.77	1
KFT 70,0	505901	M 8 / M 10 / 1/2"	70,0	132	M 8	30	50	1.26	1
KFT 74,0	505902	1) M 8 / M 10 / 1/2"	74,0	132	M 8	30	50	1.26	1
KFT 76,1	505903	M 8 / M 10 / 1/2"	76,1	132	M 8	30	50	1.37	1
KFT 80,0	505904	1) M 8 / M 10 / 1/2"	80,0	132	M 8	30	50	1.37	1
KFT 84,0	505905	1) M 8 / M 10 / 1/2"	84,0	150	M 8	30	50	1.60	1
KFT 88,9	505906	M 8 / M 10 / 1/2"	88,0	150	M 8	30	50	1.60	1
KFT 92,1	505907	1) M 8 / M 10 / 1/2"	92,1	150	M 8	30	50	1.60	1
KFT 101,0	505908	1) M 8 / M 10 / 1/2"	101,0	188	M 8	40	60	2.59	1
KFT 104,0	505909	1) M 8 / M 10 / 1/2"	104,0	188	M 8	40	60	2.59	1
KFT 108,0	505910	M 8 / M 10 / 1/2"	108,0	188	M 8	40	60	2.59	1
KFT 114,3	505911	M 8 / M 10 / 1/2"	114,3	195	M 8	40	60	2.74	1
KFT 129,0	505914	1) M 8 / M 10 / 1/2"	129,0	220	M 8	40	60	3.19	1
KFT 133,0	505915	M 8 / M 10 / 1/2"	133,0	220	M 8	40	60	3.19	1
KFT 139,7	505916	M 8 / M 10 / 1/2"	139,7	220	M 8	40	60	3.35	1
KFT 154,0	505917	1) M 12 / 1/2"	154,0	239	M 10	40	60	3.83	1
KFT 159,0	505918	M 12 / 1/2"	159,0	239	M 10	40	60	3.83	1
KFT 168,3	505919	M 12 / 1/2"	168,3	250	M 10	40	60	4.04	1
KFT 193,7	505920	1) M 16 / 1/2"	193,7	340	M 10	60	100	5.26	1

1) delivery on request

Technical data

2a



KFT

Item	Item No.	Thread	Internal diameter	Width	Locking screw	Insulation thickness	Length of insulation material	Max. recom. static load (centr. tension)	Sales unit
		A	D [mm]	B [mm]		S _{AF} [mm]	b ₂ [mm]	N _{recom.} [kN]	[pcs]
KFT 204,0	505921 ¹⁾	M 16 / 1/2"	204,0	340	M 10	60	100	5.20	1
KFT 219,1	505922	M 16 / 1/2"	219,1	340	M 10	60	100	5.26	1
KFT 273	552859	M20 / 3/4"	273	393	M 16	60	100	7.00	1
KFT 323,9	552860	M20 / 3/4"	323,9	444	M 16	60	100	7.00	1

1) delivery on request

Sprinkler clamp FRSP

The flexible sprinkler loop with FM and UL approval



Sprinkler pipe installation

2a

Applications

- Installation of sprinkler pipes
- Used for the suspension of stationary, non-insulated pipelines

Certificates



from M10

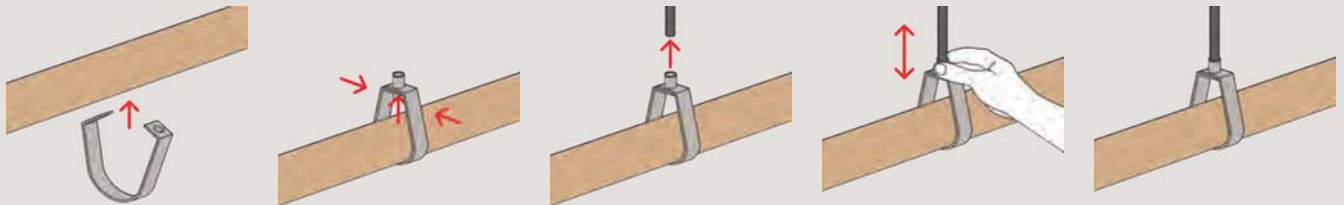
Advantages/benefits

- For easy installation of sprinkler pipes from 1/2" to 8" for a wide range of applications.
- Simple assembly by inserting, hanging and adjusting the pipes. Saves time during installation.
- Simple height adjustment by means of a height-adjustable connecting nut.
- The sprinkler clamp has FM and UL approval ensuring safe application.

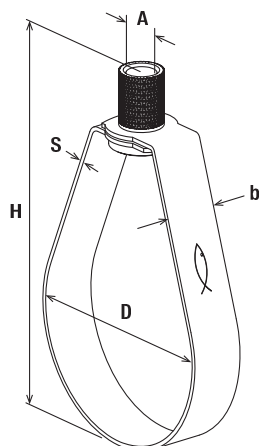
Properties

- Material: steel Q235B
- Zinc plating: electro zinc-plated, min. 5 µm

Installation FRS P



Technical data



FRSP

Item	Item No.	FM approved	UL approved	Size [inch]	Thread Ø x length [mm]	Height H [mm]	Width x thick- ness clamp band b x s [mm]	Max. recom. static load (centr. tension) N _{recom.} [kN]	Sales unit [pcs]
FRSP 1/2"	516662	—	X	1/2"	M 10 x 22,5	55	16 x 1,2	1.50	100
FRSP 3/4"	516663	X	X	3/4"	M 10 x 22,5	62	16 x 1,2	1.50	100
FRSP 1"	516664	X	X	1"	M 10 x 22,5	70	16 x 1,2	1.50	100
FRSP 1-1/4"	516665	X	X	1 1/4"	M 10 x 22,5	78	16 x 1,2	1.50	100
FRSP 1-1/2"	516666	X	X	1 1/2"	M 10 x 22,5	83	16 x 1,2	1.50	100
FRSP 2"	516667	X	X	2"	M 10 x 22,5	93	16 x 1,2	1.50	100
FRSP 2-1/2"	516668	X	X	2 1/2"	M 10 x 22,5	126	19 x 2,2	5.50	60
FRSP 3"	516669	X	X	3"	M 10 x 22,5	147	19 x 2,2	5.50	60
FRSP 4"	516670	X	X	4"	M 10 x 22,5	180	19 x 2,2	5.50	24
FRSP 5"	532356	X	X	5"	M 12 x 26,8	210	19 x 2,5	6.50	24
FRSP 6"	516671	X	X	6"	M 12 x 26,8	251	19 x 3,0	6.50	24
FRSP 8"	516672	X	X	8"	M 12 x 26,8	301	19 x 3,0	6.50	12

Sprinkler clamp FRSL

The premium sprinkler loop with separable band and height adjustment, VdS approved



Sprinkler pipe installation

2a

Applications

- Installation of sprinkler pipes according VdS

Certificates



G 410037 / G 410034

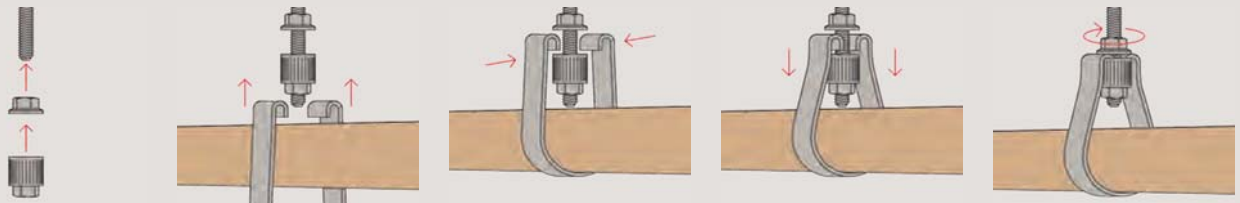
Advantages/benefits

- The VdS approval guarantees independently tested safety for the use in sprinkler systems.
- The adjustment nut enables a simple, post-installation height adjustment of the pipes.

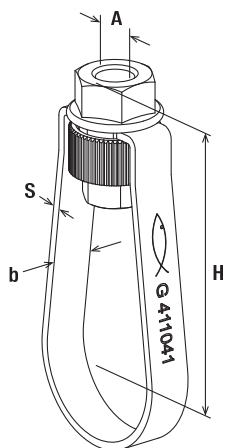
Properties

- Material pipe loop: steel DX51D acc. to DIN EN 10346, material no. 1.0226 (Z140 N-A-C)
- Material adjustment nut: steel 11 SMn-Pb 30 acc. to DIN EN 10087, material no. 1.0718
- Zinc plating: sendzimir-galvanised, min. 8 µm

Installation FRSL



Technical data



FRSL

Item	Item No.	VdS approved	Size [inch]	Thread A	Height H [mm]	Width x thick- ness clamp band b x s [mm]	Max. recom. static load (centr. tension) N _{recom.} [kN]	Sales unit [pcs]
FRSL 34 M8	538082	X	1"	M 8	67	10 x 1,8	2.0	50
FRSL 43 M8	538083	X	1 1/4"	M 8	67	10 x 1,8	2.0	50
FRSL 49 M8	538084	X	1 1/2"	M 8	72	10 x 1,8	2.0	50
FRSL 60 M8	538085	X	2"	M 8	81	10 x 1,8	2.0	50
FRSL 34	513302	X	1"	M 10	67	10 x 1,8	2.0	50
FRSL 43	513303	X	1 1/4"	M 10	67	10 x 1,8	2.0	50
FRSL 49	513304	X	1 1/2"	M 10	72	10 x 1,8	2.0	50
FRSL 60	513307	X	2"	M 10	81	10 x 1,8	2.0	50
FRSL 76	513308	X	2 1/2"	M 10	98	10 x 2,5	3.5	25
FRSL 90	513309	X	3"	M 10	113	10 x 2,5	3.5	25
FRSL 115	513310	X	4"	M 10	143	10 x 2,5	3.5	25
FRSL 140	513311	X	5"	M 12	157	13 x 2.5	5.0	25
FRSL 170	513312	X	6"	M 12	187	13 x 2.5	5.0	25

Sprinkler clamp FCHS

The universal sprinkler loop with FM and UL approval



Sprinkler pipe installation

2a

Applications

- Installation of sprinkler pipes
- Used for the suspension of stationary, non-insulated pipelines

Certificates



from M10

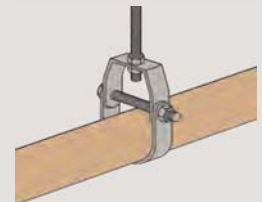
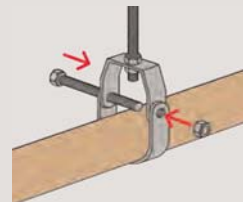
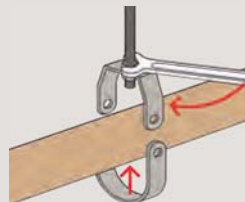
Advantages/benefits

- For easy installation of sprinkler lines from 1/2" to 12" for a wide range of applications.
- Swivel clamp band to absorb movements sprinkler system.
- The sprinkler clamp has FM and UL approval ensuring safe application.

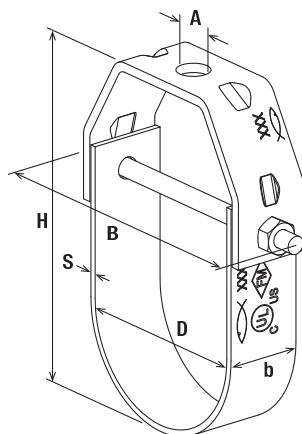
Properties

- Material: steel Q235B
- Zinc plating: electro zinc-plated, min. 5 µm

Installation FCHS



Technical data



FCHS

Item	Item No.	FM ap- proved	UL ap- proved	Size [inch]	Hole-Ø		Clamping range D [mm]	Height H [mm]	Width B [mm]	Width x thickness clamp band b x s [mm]	Max. recom. static load (centr. tension) N _{recom.} [kN]	Sales unit [pcs]
					D [mm]							
FCHS 1/2"	532187	X	X	1/2"	10.5		19 - 23	51	49	19 x 2,0	3.00	100
FCHS 3/4"	532190	X	X	3/4"	10.5		24 - 29	58	55	19 x 2,0	3.00	100
FCHS 1"	532195	X	X	1"	10.5		33 - 37	70	61	19 x 2,0	3.00	100
FCHS 1-1/4"	532197	X	X	1 1/4"	10.5		40 - 45	84	74	25 x 2,0	3.00	100
FCHS 1-1/2"	532198	X	X	1 1/2"	10.5		47 - 52	100	80	25 x 2,0	3.00	50
FCHS 2"	516695	X	X	2"	10.5		60 - 65	114	93	25 x 2,0	3.00	50
FCHS 2-1/2"	516696	X	X	2 1/2"	13.5		73 - 78	133	107	30 x 2,5	5.00	50
FCHS 3"	516697	X	X	3"	13.5		88 - 93	153	126	30 x 2,5	5.00	25
FCHS 4"	516699	X	X	4"	16.8		108 - 116	192	158	30 x 3,0	5.00	25
FCHS 5"	516700	X	X	5"	16.8		138 - 145	238	213	30 x 4,0	6.00	15
FCHS 6"	516701	X	X	6"	20.5		165 - 172	272	248	38 x 5,0	9.00	10
FCHS 8"	516702	X	X	8"	20.5		219 - 225	333	305	38 x 5,0	9.00	6
FCHS 10"	516703	—	—	10"	24		267 - 273	400	372	50 x 6,0	16.00	2
FCHS 12"	516704	—	—	12"	24		320 - 328	479	426	50 x 6,0	16.00	2

Riser clamp RCWR

RCWR riser pipe clamps for secure fixing of vertical riser pipes with UL certification.



Floorcrossing Downpipe

2a

Applications

- Secure fixing of vertical pipelines
- For use in dry interior areas

Certificates



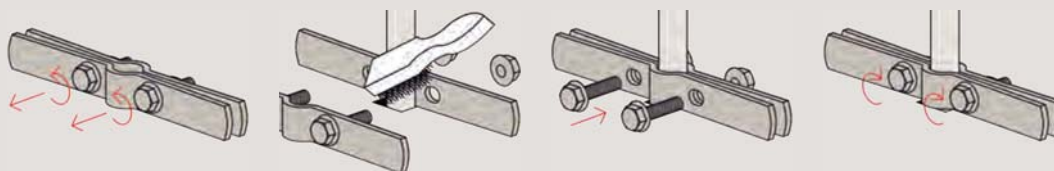
Advantages/benefits

- Usable for all kinds of pipes
- Suitable sizes for pipe diameters of 1/2" to 8"
- Easy installation using hexagonal screws and nuts
- Safe for use thanks to UL certification

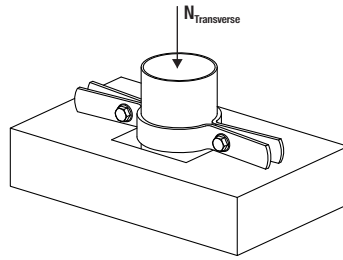
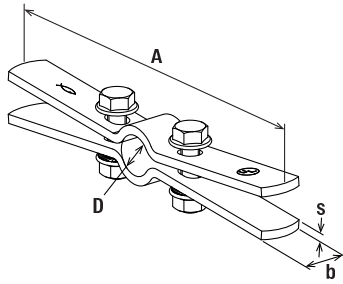
Properties

- Material: steel Q235B
- Zinc plating: electro zinc-plated, min. 5 µm

Installation RCWR



Technical data



RCWR

		UL approved	Clamping range	Width A	Width x thick- ness clamp band	Max. recom. transverse tensile load	Tightening torque screw	Sales unit
Item	Item No.		D [mm]	A [mm]	b x s [mm]	$N_{\text{transverse}}$ [kN]	[Nm]	[pcs]
RCWR 1/2"	516673	X	22	215	25 x 5,0	3.30	25	35
RCWR 3/4"	516674	X	28	229	25 x 5,0	3.30	25	30
RCWR 1"	516675	X	34	230	25 x 5,0	3.30	25	25
RCWR 1 1/4"	516676	X	43	241	25 x 5,0	3.30	25	25
RCWR 1 1/2"	516677	X	49	251	25 x 3,0	3.30	25	25
RCWR 2"	516678	X	62	262	30 x 5,0	3.30	25	25
RCWR 2 1/2"	532380	X	75	281	30 x 5,0	3.70	25	25
RCWR 3"	516679	X	91	299	30 x 5,0	4.60	25	20
RCWR 4"	516680	X	116	329	38 x 6,0	6.60	60	12
RCWR 5"	516681	X	144	362	38 x 6,0	8.90	60	12
RCWR 5"	516682	X	171	394	50 x 6,0	11.50	60	8
RCWR 8"	516683	X	223	464	50 x 9,5	18.00	100	4

U-Clamp FUBD

The easy handling pipe and cable clamp for direct attachment of lines to FUS mounting rails



Supply lines fixed to FUS channel

2a

Applications

- Fast installation of metal and plastic pipes, flexible plastic pipes or cables without sound insulation requirements directly to FUS installation channels
- Fits to FUS channels FUS 21, FUS 41, FUS 62, FUS 21D, FUS 41D, FUS 62D

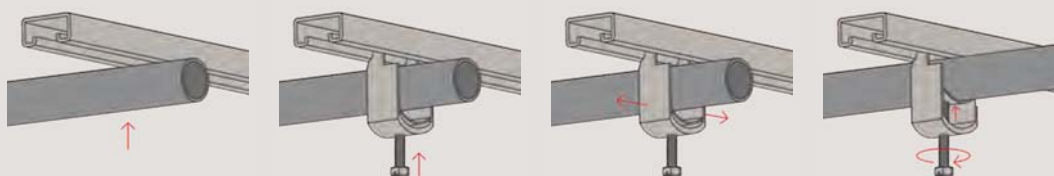
Advantages/benefits

- The FUBD without soundproofing is ideal for use in industrial applications, for example, for fixing lightweight flexible supply lines in the immediate area of production machines.
- Locking screw with hexagonal and slot drive.
- Quick adaptation to the desired outside pipe diameter by fastening the pressure pan.
- No loss of parts due to preassembled parts.
- Time- and cost-saving installation without the need of accessories like threaded rods or sliding nuts.

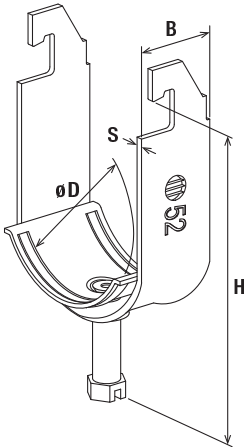
Properties

- Material U-Strap: steel S235JRC (Werkstoff-Nr.: 1.0122) acc. to EN 10025
- Zinc plating U-Strap: hot-dip galvanised min. 35 µm acc. to DIN EN ISO 1461
- Material Pressure pan: steel DX51D acc. to DIN EN 10346
- Zinc plating Pressure pan: electro zinc plated, min. 5 µm acc. to DIN EN ISO 4042
- Material Locking screw: steel 4.6 acc. to EN 20898-1
- Locking screw: with hexagonal SW10 and slot head

Installation FUBD



Technical data



FUDB

Item	Item No.	Clamping range	Height	Width x thickness clamp band	Locking screw	Sales unit
		D [mm]	H [mm]	b x s [mm]		[pcs]
FUBD 40	539564 ¹⁾	36 - 40	71	25 x 1,75	M 6 x 24	100
FUDB 48	558148	44 - 48	85	25 x 2,0	M 8 x 30	50
FUBD 52	539566	48 - 52	90	25 x 2,0	M 8 x 30	50
FUBD 60	539567 ¹⁾	56 - 60	98	30 x 2,25	M 8 x 30	50
FUBD 76	539568 ¹⁾	70 - 76	113	30 x 2,75	M 8 x 30	25
FUBD 94	539569 ¹⁾	88 - 94	141	30 x 2,75	M8 x 40	20
FUBD 100	539570 ¹⁾	94 - 100	147	30 x 2,75	M8 x 40	10

1) Delivery time on request.

U-bolt ETR

The U-bolt with metric thread



Applications

- Installation of standing or hanging pipes
- Pipe routing on profiles and consoles

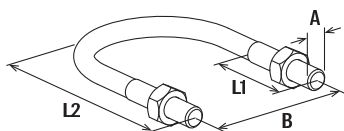
Advantages/benefits

- The U-bolt's two screws allow an ideal adaptation to suit the outer pipe diameter.

Properties

- Material: steel with min. tensile strength of 360 N/mm²
- Zinc plating: electro zinc-plated

Technical data



ETR

Item	Item No.	Thread A	Length L ₁ [mm]	Length L ₂ [mm]	Size [inch]	Width B [mm]	Sales unit [pcs]
ETR 8 - 13	024415	M 6	30	20	1/4"	20	10
ETR 12 - 17	024416	M 6	35	20	3/8"	24	10
ETR 15 - 21	024417	M 6	40	25	1/2"	28	10
ETR 20 - 27	024418	M 8	50	32	3/4"	36	10
ETR 26 - 34	024419	M 8	55	32	1"	43	10
ETR 33 - 42	024420	M 8	68	38	1 1/4"	51	10
ETR 40 - 49	024421	M 8	70	38	1 1/2"	58	10
ETR 50 - 60	024422	M 8	80	40	2"	69	10
ETR 60 - 70	024423	M 10	100	43	—	82	10
ETR 66 - 76	024424	M 10	110	50	2 1/2"	88	10
ETR 70 - 82	024425	M 10	115	50	—	94	10
ETR 80 - 90	024426	M 10	115	50	3"	102	10
ETR 90 - 102	024427	M 12	145	55	3 1/2"	116	5
ETR 100 - 108	024428	M 12	150	50	—	122	5
ETR 102 - 114	024429	M 12	156	60	4"	128	5
ETR 121 - 127	024430	M 12	170	60	—	141	5
ETR 126 - 133	024431	M 12	180	70	—	147	5
ETR 131 - 140	024432	M 14	185	70	5"	156	5
ETR 143 - 153	024433	M 14	193	70	—	169	5
ETR 150 - 159	024434	M 14	200	70	—	175	5
ETR 168	024435	M 14	210	70	6"	184	5
ETR 193,7	024436	M 14	232	70	—	209	5
ETR 219	024437	M 14	270	70	8"	236	5

Hose clamp SGS

The hose clamp for large hoses, pipe or ducting

2a



Applications

- Sealing of hoses
- Fixing hoses to adapters

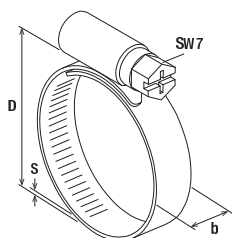
Advantages/benefits

- The crimped band edges offer protection against damage to the hose.
- The short base of the hosing allows an ideal adjustment and high, radial forces on the hose diameter.
- The screw's combination cross-drive thread enables installation flexibility.

Properties

- Material class: W 2
- Worm: CQ 15 (material no. 1.1132) acc. to DIN EN 10263
- Housing and band: chromium steel (material no. 1.4016) acc. to DIN EN 10088 or equivalent corrosion-resistant steel

Technical data



SGS

Item	Item No.	Clamping range D [mm]	Width x thickness clamp band b x s [mm]	Sales unit [pcs]
SGS 9 W2 8 - 12	045517	8 - 12	9,0 x 0,6	100
SGS 9 W2 10 - 16	045518	10 - 16	9,0 x 0,6	100
SGS 9 W2 12 - 20	045519	12 - 20	9,0 x 0,6	100
SGS 9 W2 16 - 27	045520	16 - 27	9,0 x 0,6	100
SGS 9 W2 20 - 32	045521	20 - 32	9,0 x 0,6	100
SGS 9 W2 25 - 40	045522	25 - 40	9,0 x 0,6	100
SGS 9 W2 32 - 50	045523	32 - 50	9,0 x 0,6	100
SGS 9 W2 40 - 60	045524	40 - 60	9,0 x 0,6	25
SGS 9 W2 50 - 70	045525	50 - 70	9,0 x 0,6	25
SGS 9 W2 60 - 80	045526	60 - 80	9,0 x 0,6	25
SGS 9 W2 70 - 90	045527	70 - 90	9,0 x 0,6	25
SGS 9 W2 80 - 100	045528	80 - 100	9,0 x 0,6	25
SGS 9 W2 90 - 110	045529	90 - 110	9,0 x 0,6	25
SGS 9 W2 100 - 120	045530	100 - 120	9,0 x 0,6	25
SGS 9 W2 110 - 130	045531	110 - 130	9,0 x 0,6	25
SGS 9 W2 120 - 140	045532	120 - 140	9,0 x 0,6	25

