

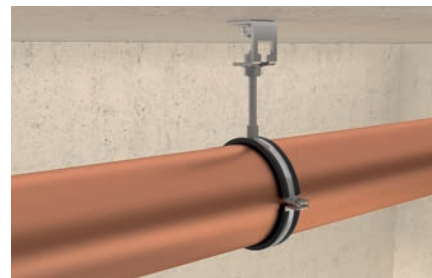
Pipe clamp FRS

The two-screw pipe clamp with combination connecting thread

2



Pipe assembly



Height adjustable pipe installation

Applications

- Secure fixing for pipes with threaded rods or stud screws (also when there are fire protection requirements).
- For use in dry interior areas.

Certificates



ETA-21/0253



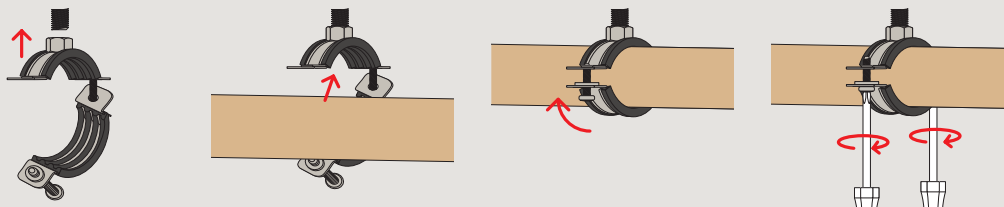
Advantages

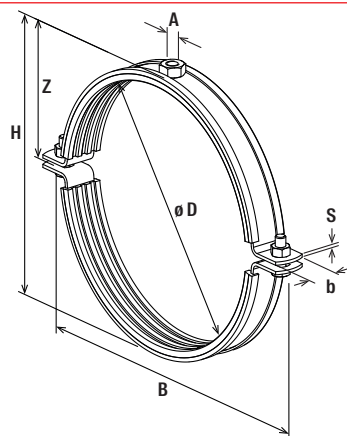
- The fire test report guarantees independently tested functional safety.
- The two screws allow an easy adjustment to suit the outer pipe diameter.
- The combination connecting nut with thread M8/M10 enables optimised mounting choices.
- The sound insulation insert offers noise protection and prevents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

Properties

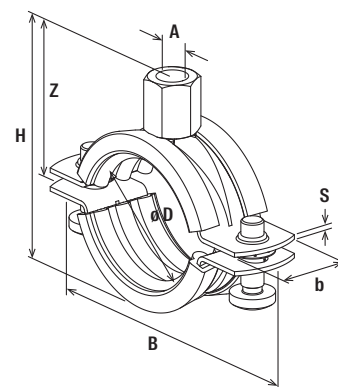
- Material: steel DC01 (material no. 1.0330) acc. to DIN EN 10130
- Zinc plating: electro zinc-plated
- Connecting nut: resistance welded, M8 / M10, SW 13
- Locking screw: flat head screw with combination recessed head
- Material sound insulation insert: EPDM; chlorine-free; silicone-free
- Sound insulation: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

Installation FRS





FRS (>6" or 168 mm)



FRS

Technical data

		Ap- pro- val	Fire test report	Thread	Size	Clamping range	Width	Height	Height	Width x thickness clamp band	Locking screw	Instal- lation torque	Max. recom. static load (centr. tension)	Sales unit
Item	Item no.	ETA		A	[in]	D [mm]	B [mm]	H [mm]	Z [mm]	b x s [mm]		T _{inst} [Nm]	N _{rec} [kN]	[pcs]
FRS 12 - 15 M8/M10	510969	●	Yes	M8 / M10	1/4	12 - 15	55	39	31	20 x 1.25	M6	2	1.00	100
FRS 15 - 19 M8/M10	042535	●	Yes	M8 / M10	3/8	15 - 19	59	43	29	20 x 1.25	M6	2	1.00	100
FRS 20 - 24 M8/M10	042536	●	Yes	M8 / M10	1/2	20 - 24	65	48	32	20 x 1.25	M6	2	1.00	100
FRS 25 - 30 M8/M10	042537	●	Yes	M8 / M10	3/4	25 - 30	72	54	35	20 x 1.25	M6	2	1.00	100
FRS 32 - 37 M8/M10	042538	●	Yes	M8 / M10	1	32 - 37	77	61	38	20 x 1.25	M6	2	1.00	100
FRS 40 - 45 M8/M10	042554	●	Yes	M8 / M10	1 1/4	40 - 45	89	69	42	20 x 1.25	M6	2	1.00	50
FRS 48 - 54 M8/M10	510970	●	Yes	M8 / M10	1 1/2	48 - 54	99	78	46	20 x 1.25	M6	2	1.00	50
FRS 55 - 61 M8/M10	042555	●	Yes	M8 / M10	2	55 - 61	105	85	50	20 x 1.25	M6	2	1.00	50
FRS 60 - 64 M8/M10	091488	●	Yes	M8 / M10	2	63 - 67	111	91	53	20 x 1.25	M6	2	1.00	50
FRS 72 - 78 M8/M10	091489	●	Yes	M8 / M10	2 1/2	72 - 80	125	104	60	20 x 2.0	M6	2	1.50	25
FRS 87 - 92 M8/M10	091505	●	Yes	M8 / M10	3	87 - 92	137	116	66	20 x 2.0	M6	2	1.50	25
FRS 95 - 103 M8/M10	545649	●	Yes	M8 / M10	–	95 - 103	149	130	73	25 x 2.0	M6	2	2.00	25
FRS 102 - 116 M8/M10	091506	●	Yes	M8 / M10	4	108 - 116	164	140	78	25 x 2.0	M6	2	2.00	20
FRS 121 - 127 M8/M10	079456	●	Yes	M8 / M10	–	121 - 128	176	152	84	25 x 2.5	M6	2	2.50	10
FRS 133 - 141 M8/M10	079457	●	Yes	M8 / M10	5	133 - 141	187	165	90	25 x 2.5	M6	2	2.50	10
FRS 159 - 162 M8/M10	079458	●	Yes	M8 / M10	–	159 - 165	211	198	102	25 x 2.5	M6	2	2.50	8
FRS 165 - 168 M8/M10	079459	●	Yes	M8 / M10	6	165 - 168	225	192	104	25 x 2.5	M6	2	2.50	8
FRS 200 - 206 M10	539660	–	–	M10	–	200 - 206	256	227	118	25 x 2.5	M8	3	2.75	15
FRS 210 - 219 M10	558335	–	–	M10	8	210 - 219	262	240	124	25 x 2.5	M8	3	2.75	15

For load information under fire exposure, see chapter Basic knowledge.

Pipe clamp FRS zl

FRS zl pipe clamp with high corrosion protection



Pipe assembly



Heavy pipe on cantilever

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Applications

- Secure fixing for pipes with threaded rods or stud screws (also when there are fire protection requirements)
- For indoor and outdoor application.

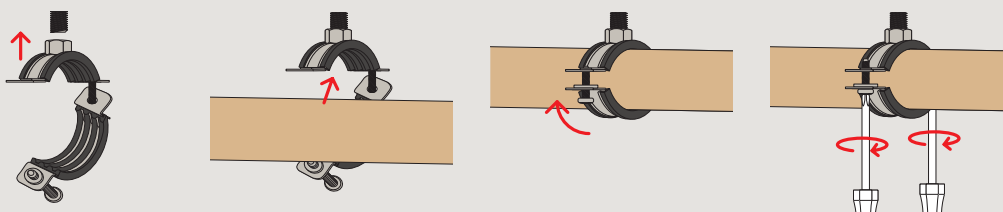
Advantages

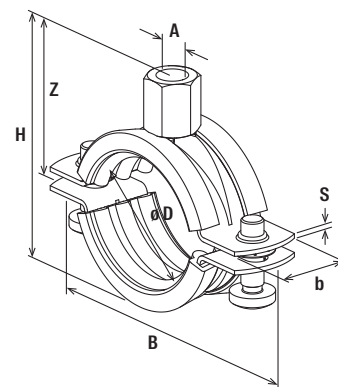
- The two screws allow an easy adjustment to suit the outer pipe diameter.
- The combination connecting nut with thread M8 / M10 enables optimised mounting choices.
- The sound insulation insert offers noise protection and prevents contact corrosion.
- The screw's safety feature ensures trouble-free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

Properties

- Material: steel DC01 (material no. 1.0330) acc. to DIN EN 10130
- Coating: zinclamella
- Connecting nut: resistance welded, M8 / M10 SW13
- 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





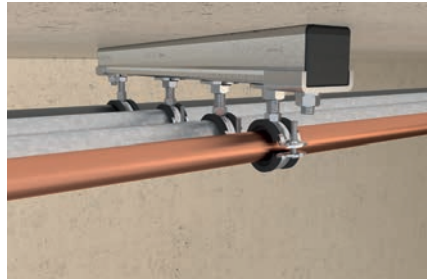
FRS

Technical data

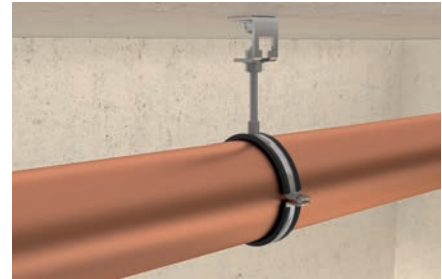
Item	Item no.	Thread	Size	Clamping range	Height	Height	Width x thickness clamp band	Locking screw	Max. recom. static load (centr. tension)	Installation torque	Sales unit
		A	[in]	D [mm]	H [mm]	Z [mm]	b x s [mm]		N _{rec} [kN]	T _{inst} [Nm]	[pcs]
FRS 12 - 15 M8/M10 zl	537981	M8 / M10	1/4	12 - 15	39	31	20 x 1.25	M6	1.00	2	100
FRS 15 - 19 M8/M10 zl	537982	M8 / M10	3/8	15 - 19	43	29	20 x 1.25	M6	1.00	2	100
FRS 20 - 24 M8/M10 zl	537983	M8 / M10	1/2	20 - 24	48	32	20 x 1.25	M6	1.00	2	100
FRS 25 - 30 M8/M10 zl	537984	M8 / M10	3/4	25 - 30	54	35	20 x 1.25	M6	1.00	2	100
FRS 32 - 37 M8/M10 zl	537985	M8 / M10	1	32 - 37	61	38	20 x 1.25	M6	1.00	2	100
FRS 40 - 45 M8/M10 zl	537986	M8 / M10	1 1/4	40 - 45	69	42	20 x 1.25	M6	1.00	2	50
FRS 48 - 54 M8/M10 zl	537987	M8 / M10	1 1/2	48 - 54	78	46	20 x 1.25	M6	1.00	2	50
FRS 55 - 61 M8/M10 zl	537988	M8 / M10	2	55 - 61	85	50	20 x 1.25	M6	1.00	2	50
FRS 60 - 64 M8/M10 zl	537989	M8 / M10	2	63 - 67	91	53	20 x 1.25	M6	1.00	2	50
FRS 72 - 78 M8/M10 zl	537990	M8 / M10	2 1/2	72 - 80	104	60	20 x 2.0	M6	1.50	2	25
FRS 87 - 92 M8/M10 zl	537991	M8 / M10	3	87 - 92	116	66	20 x 2.0	M6	1.50	2	25
FRS 95 - 103 M8/M10 zl	557374	M8 / M10	–	95 - 103	130	73	25 x 2.0	M6	2.00	2	25
FRS 102 - 116 M8/M10 zl	537992	M8 / M10	4	108 - 116	140	78	25 x 2.0	M6	2.00	2	20
FRS 121 - 127 M8/M10 zl	537993	M8 / M10	–	121 - 128	152	84	25 x 2.5	M6	2.50	2	10
FRS 133 - 141 M8/M10 zl	537994	M8 / M10	5	133 - 141	165	90	25 x 2.5	M6	2.50	2	10
FRS 159 - 162 M8/M10 zl	537995	M8 / M10	–	159 - 165	198	102	25 x 2.5	M6	2.50	2	8
FRS 165 - 168 M8/M10 zl	537996	M8 / M10	6	165 - 168	192	104	25 x 2.5	M6	2.50	2	8

Pipe clamp FRS A2/A4

The two-screw pipe clamp with simple connecting thread



Pipe assembly



Height adjustable pipe installation

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Applications

- Secure fixing for pipes with threaded rods or stud screws.
- For indoor and outdoor applications and in environments with high stress to components due to corrosion.
- FRS A2: not suitable for use in environments containing chlorine.

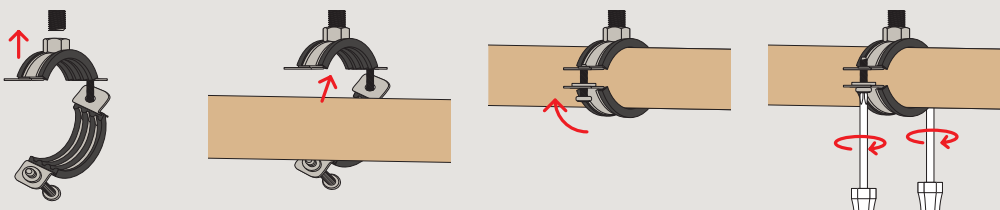
Advantages

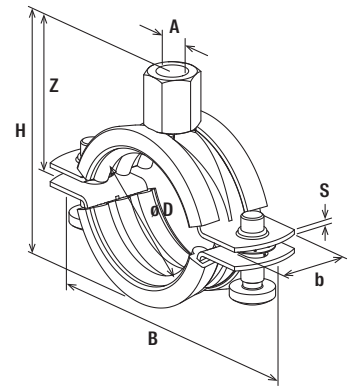
- The fire test report guarantees independently tested functional safety.
- The two screws allow an easy adjustment to suit the outer pipe diameter.
- The combination connecting nut with thread M8/M10 enables optimised mounting choices.
- The sound insulation insert offers noise protection and prevents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

Properties

- Material: stainless steel A2 (material no 1.4301)
- Material: stainless steel A4 (material no 1.4401)
- Material sound insulation insert: EPDM; chlorine-free; silicone-free
- Temperature range: -40 °C to +100 °C
- Hardness: 55 ± 5° Shore A
- Fire behaviour: DIN 4102: Class B2

Installation FRS





FRS

Technical data

		Thread	Size	Clamping range	Width	Height	Height	Width x thickness clamp band	Locking screw	Installation torque	Max. re-com. static load (centr. tension)	Sales unit
	Item no.	A	[in]	D [mm]	B [mm]	H [mm]	Z [mm]	b x s [mm]		T _{inst} [Nm]	N _{rec} [kN]	[pcs]
Item												
FRS 3/8" A2	560576	M8	3/8	15 - 19	62	40	23	20 x 1.2	M6	2	1.00	25
FRS 1/2" A2	560577	M8	1/2	20 - 24	68	45	26	20 x 1.2	M6	2	1.00	25
FRS 3/4" A2	560578	M8	3/4	26 - 30	75	52	29	20 x 1.2	M6	2	1.00	25
FRS 1" A2	560579	M8	1	31 - 38	80	60	32	20 x 1.2	M6	2	1.00	25
FRS 1 1/4" A2	560580	M8	1 1/4	40 - 46	90	67	37	20 x 1.2	M6	2	1.00	25
FRS 1 1/2" A2	560581	M8	1 1/2	48 - 54	97	75	41	20 x 1.2	M6	2	1.00	25
FRS 2" A2	560583	M8	2	60 - 64	110	85	46	20 x 1.2	M6	2	1.00	10
FRS 2 1/2" A2	560585	M10	2 1/2	72 - 78	130	99	53	25 x 1.5	M6	2	1.30	10
FRS 3" A2	560587	M10	3	87 - 92	144	113	60	25 x 1.5	M6	2	1.30	10
FRS 4" A2	560589	M10	4	102 - 116	172	138	73	25 x 2.0	M6	2	2.00	10
FRS 54 - 59 A2	560582	M8	1 1/2	54 - 59	104	80	44	20 x 1.2	M6	2	1.00	25
FRS 67 - 71 A2	560584	M8	–	67 - 71	119	92	49	20 x 1.2	M6	2	1.00	10
FRS 81 - 86 A2	560586	M10	–	81 - 86	132	107	58	25 x 1.5	M6	2	1.30	10
FRS 95 - 103 A2	560588	M10	–	95 - 103	156	124	66	25 x 1.5	M6	2	1.30	10
FRS 121 - 127 A2	560590	M10	–	121 - 127	192	149	79	25 x 2.0	M8	3	2.00	5
FRS 133 - 141 A2	560591	M10	5	133 - 141	198	163	86	25 x 2.0	M8	3	2.00	5
FRS 159 - 168 A2	560592	M10	6	159 - 168	218	191	100	25 x 2.0	M8	3	2.00	5
FRS 3/8" A4	560593	M8	3/8	15 - 19	62	40	23	20 x 1.2	M6	2	1.00	25
FRS 1/2" A4	560594	M8	1/2	20 - 24	68	45	26	20 x 1.2	M6	2	1.00	25
FRS 3/4" A4	560595	M8	3/4	25 - 30	75	52	29	20 x 1.2	M6	2	1.00	25
FRS 1" A4	560596	M8	1	31 - 38	80	60	32	20 x 1.2	M6	2	1.00	25
FRS 1 1/4" A4	560597	M8	1 1/4	40 - 46	90	67	37	20 x 1.2	M6	2	1.00	25
FRS 1 1/2" A4	560598	M8	1 1/2	48 - 54	97	75	41	20 x 1.2	M6	2	1.00	25
FRS 2" A4	560600	M8	2	60 - 64	110	85	46	20 x 1.2	M6	2	1.00	10
FRS 2 1/2" A4	560602	M10	2 1/2	72 - 78	130	99	53	25 x 1.5	M6	2	1.30	10
FRS 3" A4	560604	M10	3	87 - 92	144	113	60	25 x 1.5	M6	2	1.30	10
FRS 4" A4	560606	M10	4	102 - 116	172	138	73	25 x 2.0	M6	2	2.00	10
FRS 54 - 58 A4	560599	M8	1 1/2	54 - 59	104	80	44	20 x 1.2	M6	2	1.00	25
FRS 67 - 71 A4	560601	M8	–	67 - 71	119	92	49	20 x 1.2	M6	2	1.00	10
FRS 81 - 86 A4	560603	M10	–	81 - 86	132	107	58	25 x 1.5	M6	2	1.30	10
FRS 95 - 103 A4	560605	M10	–	95 - 103	156	124	66	25 x 1.5	M6	2	1.30	10
FRS 121 - 127 A4	560607	M10	–	121 - 127	192	149	79	25 x 2.0	M6	2	2.00	5
FRS 133 - 141 A4	560608	M10	5	133 - 141	198	163	86	25 x 2.0	M6	2	2.00	5
FRS 159 - 168 A4	560609	M10	6	159 - 168	218	191	100	25 x 2.0	M6	2	2.00	5