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fischer 

**Pipe clamps –
compass.**



Application overview

Application - pipe clamps what for and how?

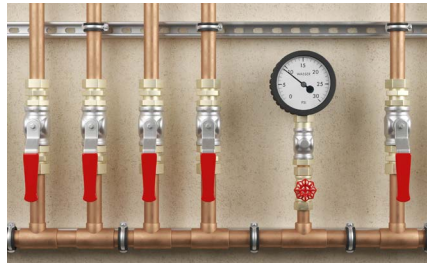
The service pipe systems, used by different trades, around buildings and industrial plants are all held in place with pipe clamps. The mostly used types of pipe materials are steel, stainless steel, copper, or plastic pipes all with different diameters.

Different types of pipe clamps are used for fixing various types and sizes of pipelines. They differ in the loads they take and, in different temperatures. All while abiding by different standards and certain regulations like fire protection or noise insulation.

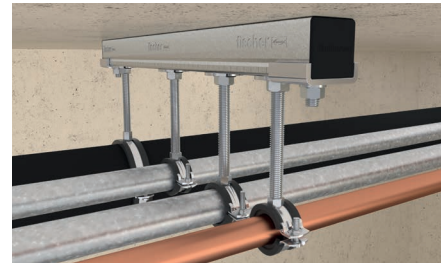
Overview of the most important types of pipelines:



Energy and water supply



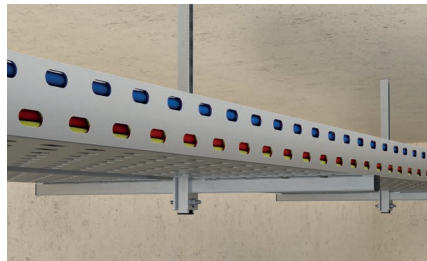
Gas pipeline and compressed air line



heating, cooling, drinking water and
Sprinkler pipes



Ventilation ducts and pipes



Electronic installations
(medium and low voltage)



Wastewater and rain water pipe

Product overview.

The fischer pipe clamps assortment.

Pipe clamp FGRS The one-piece hinged pipe clamp with floating single screw	
	Maximum tensile load: 90 kg (0,9 kN)  0,4 0,6 0,8 1,0 1,5 1,8 2,5 3,0 4,0 5,0 6,0 8,0 11,0 13,0 15,0 17,0 leicht mittelschwer schwer
	Floating single screw allows a simple, one-handed installation Compact construction enables a simple post-installation insulation
	Zinc plating: zinc-plated steel, 5 - 9 µm
Economic secure fixing for pipes up to 2" with threaded rods or stud screws Load range: 0,8 – 0,9 kN Clamping range: 8 mm to 63 mm Sound insulation insert: EPDM; chlorine-free, silicone-free	

Pipe clamp FGRS Plus The one-piece hinged pipe clamp with rapid-locking mechanism	
	Maximum tensile load: 90 kg (0,9 kN)  0,4 0,6 0,8 1,0 1,5 1,8 2,5 3,0 4,0 5,0 6,0 8,0 11,0 13,0 15,0 17,0 leicht mittelschwer schwer
	2 versions: M8 Connecting nut Combination nut with M8/M10 connecting thread Rapid-locking mechanism with crimped edges allows an easy installation Safety lock for pipe adjustment without bursting the clamp
	Zinc plating: zinc-plated steel, 5 - 9 µm
Time-saving secure fixing for pipes up to 2" with threaded rods or stud screws Load range: 0,65 – 0,9 kN Clamping range: 12 mm to 63 mm Sound insulation insert: EPDM; chlorine-free, silicone-free	

Pipe clamp FRS-L Universal The light two-screw pipe clamp with a rapid locking mechanism and combination connection nut	
	Maximum tensile load: 150 kg (1,5 kN)  0,4 0,6 0,8 1,0 1,5 1,8 2,5 3,0 4,0 5,0 6,0 8,0 11,0 13,0 15,0 17,0 leicht mittelschwer schwer
	Fire inspection report and sound insulation report guarantee independently tested function and safety Rapid-locking mechanism with crimped edges allows an easy installation Safety lock for pipe adjustment without bursting the clamp Connecting nut with combination thread M8/M10 ensures fewer stock items
	Zinc plating: zinc-plated steel, 5 - 9 µm
    Easy and slight secure fixing for pipes with threaded rods or stud screws Load range: 0,7 – 1,5 kN Clamping range: 8 mm to 172 mm, gapless! Sound insulation insert: EPDM; chlorine-free, silicone-free	

Note: The load specification of load types applies respectively to the largest size pipe clamps.

Product overview.

The fischer pipe clamps assortment.

Pipe clamp FRS Plus The two-screw pipe clamp with rapid-locking mechanism 	Maximum tensile load: 180 kg (1,8 kN) <table><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>0,4</td><td>0,6</td><td>0,8</td><td>1,0</td><td>1,5</td><td>1,8</td><td>2,5</td><td>3,0</td><td>4,0</td><td>5,0</td><td>6,0</td><td>8,0</td><td>11,0</td><td>13,0</td><td>15,0</td><td>17,0</td></tr><tr><td colspan="6">leicht</td><td colspan="5">mittelschwer</td><td colspan="5">schwer</td></tr></table>																	0,4	0,6	0,8	1,0	1,5	1,8	2,5	3,0	4,0	5,0	6,0	8,0	11,0	13,0	15,0	17,0	leicht						mittelschwer					schwer					 schallschutzgeprüft
0,4	0,6	0,8	1,0	1,5	1,8	2,5	3,0	4,0	5,0	6,0	8,0	11,0	13,0	15,0	17,0																																			
leicht						mittelschwer					schwer																																							
	Rapid-locking mechanism allows an easy installation Safety lock for pipe adjustment without bursting the clamp Combination connecting nut with thread M8/M10 enables optimized mounting choices	Secure fixing for pipes with threaded rods or stud screws																																																
		Load range: 0,8 – 1,8 kN	Clamping range: 12 mm to 116 mm																																															
	Zinc plating: zinc-plated steel, 5 - 9 µm	Sound insulation insert: EPDM; chlorine-free, silicone-free																																																

Pipe clamp FRS / FRS zl / FRS A2 / A4 The two-screw pipe clamp with combination connecting thread																																																			
	Maximum tensile load: 250 kg (2,5 kN)																																																		
	<table><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>0,4</td><td>0,6</td><td>0,8</td><td>1,0</td><td>1,5</td><td>1,8</td><td>2,5</td><td>3,0</td><td>4,0</td><td>5,0</td><td>6,0</td><td>8,0</td><td>11,0</td><td>13,0</td><td>15,0</td><td>17,0</td></tr><tr><td colspan="6">leicht</td><td colspan="5">mittelschwer</td><td colspan="5">schwer</td></tr></table>																	0,4	0,6	0,8	1,0	1,5	1,8	2,5	3,0	4,0	5,0	6,0	8,0	11,0	13,0	15,0	17,0	leicht						mittelschwer					schwer						
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	leicht						mittelschwer					schwer																																							
Fire inspection report and sound insulation report guarantee independently tested safety Two screws allow an easy adjustment to suit the outer pipe diameter Combination connecting nut with thread M8/M10 Approvals are only valid for FRS and FRS zl	Secure fixing for pipes with threaded rods or stud screws (also when there are fire protection requirements)																																																		
Galvanizing variants: zinc-plated steel, 5 - 9 µm Additional zinc flake coating a2 or A4 stainless steel	Load range: 1,0 – 2,5 kN	Clamping range: 12 mm to 168 mm																																																	
	Sound insulation insert: With or without insert, kind of insert (EPDM, silicone,)																																																		

Pipe clamp FRSM - metric / inch																																																																																																	
	The large pipe clamp with sound insulation insert for medium to heavy loads																																																																																																
	Maximum tensile load / metric: 800 kg (8,0 kN) <table><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>0,4</td><td>0,6</td><td>0,8</td><td>1,0</td><td>1,5</td><td>1,8</td><td>2,5</td><td>3,0</td><td>4,0</td><td>5,0</td><td>6,0</td><td>8,0</td><td>11,0</td><td>13,0</td><td>15,0</td><td>17,0</td></tr><tr><td colspan="6">leicht</td><td colspan="6">mittelschwer</td><td colspan="4">schwer</td></tr></table> Maximum tensile load / inch: 315 kg (3,15 kN) <table><tr><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td>0,4</td><td>0,6</td><td>0,8</td><td>1,0</td><td>1,5</td><td>1,8</td><td>2,5</td><td>3,0</td><td>4,0</td><td>5,0</td><td>6,0</td><td>8,0</td><td>11,0</td><td>13,0</td><td>15,0</td><td>17,0</td></tr><tr><td colspan="6">leicht</td><td colspan="6">mittelschwer</td><td colspan="4">schwer</td></tr></table>																	0,4	0,6	0,8	1,0	1,5	1,8	2,5	3,0	4,0	5,0	6,0	8,0	11,0	13,0	15,0	17,0	leicht						mittelschwer						schwer																				0,4	0,6	0,8	1,0	1,5	1,8	2,5	3,0	4,0	5,0	6,0	8,0	11,0	13,0	15,0	17,0	leicht						mittelschwer						schwer			
	0,4	0,6	0,8	1,0	1,5	1,8	2,5	3,0	4,0	5,0	6,0	8,0	11,0	13,0	15,0	17,0																																																																																	
	leicht						mittelschwer						schwer																																																																																				
0,4	0,6	0,8	1,0	1,5	1,8	2,5	3,0	4,0	5,0	6,0	8,0	11,0	13,0	15,0	17,0																																																																																		
leicht						mittelschwer						schwer																																																																																					
High tested loads guarantee safe and secure use Connecting nut metric for M10/M12, M12/M16 or M16 Perforated pipe strip from diameter 124 mm metric Inch connecting nut ½"																																																																																																	
Zinc plating: zinc-plated steel, 5 - 9 µm																																																																																																	
Secure fixing of medium to heavy pipes with threaded rods or stud screws <table><tr><td> Load range: 2,5–8,0 kN/m. 1,5 – 3,15 kN/inch. </td><td> Clamping range: 19mm to 508mm/m. 14mm to 169 mm/inch. </td></tr></table>		Load range: 2,5–8,0 kN/m. 1,5 – 3,15 kN/inch.	Clamping range: 19mm to 508mm/m. 14mm to 169 mm/inch.																																																																																														
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Note: The load specification of load types applies respectively to the largest size pipe clamps.

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Overview of the temperature range and load level.

Overview temperature range

≥ 100 °C / silicone
FRSH pipe clamp



≤ 100 °C / EPDM
All pipe clamps with black inlay



≤ Room temperature / PUR, PIR, FEF, ...
Insulated pipe clamps FRS K, KFT



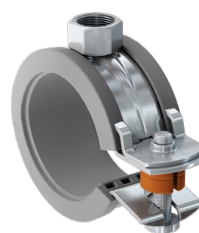
Overview of load level

Line types

Two-screw



Single screw clamps



Two-screw with rapid locking mechanism



Light

–

FGRS / FGRS Plus / FKS Plus

FRS Universal

Medium weight

FRS / FRSM inch

–

FRS Plus

Heavy weight

FRSM metric

–

–

Compass.

Which pipe clamp for which application?

Service pipe systems for light pipe clamps													
Pipe clamps	Heating	Cooling	Steam	Ventilation	Water	Rain water, waste water	Sprinkler	Gases and compressed air	Medical gases	Process lines	Electric cable pipe and ductwork for cables	Water and waste water treatment	Energy and water supply
FGRS Plus	•				•			•	•	•		•	•
FGRS	•				•			•	•	•		•	•
FKS Plus	•				•			•	•	•		•	•
FRS-L Universal	•				•			•	•	•		•	•
FUBD											•		

Service pipe systems for medium weight pipe clamps													
Pipe clamps	Heating	Cooling	Steam	Ventilation	Water	Rain water, waste water	Sprinkler	Gases and compressed air	Medical gases	Process lines	Electric cable pipe and ductwork for cables	Water and waste water treatment	Energy and water supply
FRS Plus	•				•			•	•	•		•	•
FRS Triple	•				•			•	•	•		•	•
FRS	•				•	•		•	•	•		•	•
FRSH	◦		•										
FRSN Triple	•				•	•		•	•	•		•	•
FRSN	•				•	•		•	•	•	◦	•	•
FRSM zoll	•				•	•		•	•	•		•	•
FRS K		•											
KFT		•											
FRSP (FM)							•						
FRSL (VdS)							•						
LGS				•									

◦ Possible • Recommended

Service pipe systems for heavy weight pipe clamps													
Pipe clamps	Heating	Cooling	Steam	Ventilation	Water	Rain water, waste water	Sprinkler	Gases and compressed air	Medical gases	Process lines	Electric cable pipe and ductwork for cables	Water and waste water treatment	Energy and water supply
FRSM metric	•				•	•		•	•	•		•	•

Note: While choosing the clamps, the load per clamp is required.

Loads

Note:

The stated load ranges are a guide and do not correspond with the exact clamping ranges of the pipe clamps.

These are available in the catalogue documents. Load details are in kg.

Overview table of clamping ranges and outside pipe diameters											
Clamping range [mm]	FGRS Plus	FGRS	FKS Plus	FRS Plus	FRS-L Universal	FRS(N) Triple	FRS	FRSH	FRSN	FRSM inch	FRSM metric
< 8											
8											
12											
14											
15											
19	65	80	65	65	70						
37											
38											
40	90	90	90				100	100		150	250
63					100				150		
64				100		100					
65											
66											
67											
68											
72											
73											
83							150				
91								130			
92				180	130						
95											
100											
102							200				
103											
116											
119						150			250		
120								200			
121											
168					150		250				
169											
172											
175											
200											
203							300		250		
205											
206											
210							300		250		
219											
328											
348											
508											800