

## Ratio S

Group: 1231

### Application

Suitable for installing pipe systems required for all M&E services. For connection options without adapter, see drawing. With Adapter: M12, M16, R 1/2", R 3/4", R 1".

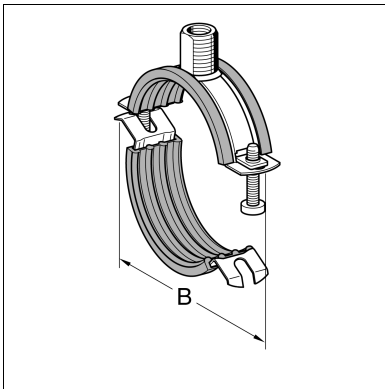
Designed for soundproof ceiling, floor and wall mounting also for the sound insulation requirements according DIN 4109

With stuck interlocking lining, which prevents from accidental loss of lining and allows easy turning and slipping of the pipe during assembly.

### Scope of delivery

Two-piece pipe clamp pre-assembled on one side.

With patented quick-set clip on its open side. With 3G triple thread nut. Sizes 1/4" - 1" also available with 2G nut as per drawing.



### Technical Data

Size [mm]	Max. perm. working load (tension)	Tightening torque [Nm]
12 - 35	0,8 kN	2
38 - 90	1,3 kN	2
108 - 135	1,9 kN	3
140 - 170	2,2 kN	3

The recommended load is calculated using specific statistical methods relating to break load and is designed to restrict deflection to 1.5 mm or 2 % of the maximum applicable clamping diameter.

Perm. load  $FZ_{perm,fi}$  in case of fire

Size range [mm]	FWD 30 [N]	FWD 60 [N]	FWD 90 [N]	FWD 120 [N]	Deformation $\delta_{max}$ [mm]	Thread $\geq$
12 - 35	280	120	70	40	42	M10
38 - 56	220	100	60	30	43	M10
57 - 80	380	180	110	70	41	M10
83 - 90	470	220	130	80	45	M10
108 - 170	560	310	210	150	62	M10

Material:

Clamp:

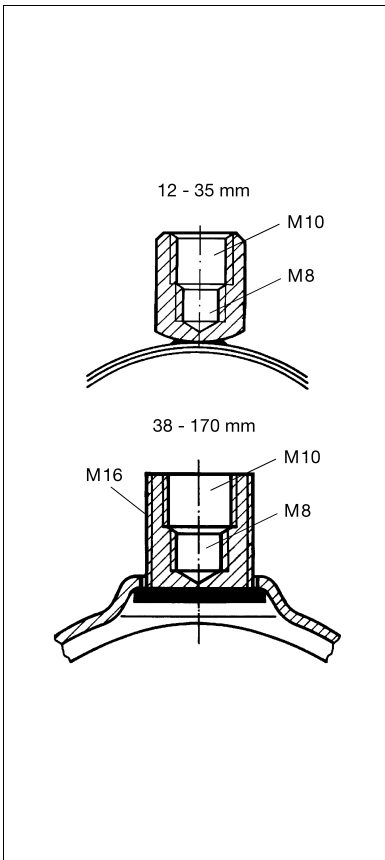
Cold-worked steel, electro-galvanised

Sound absorption lining:

SBR/EPDM, black (see chapter "Sound Absorption Products")

Sound Absorption:

up to 18 dB(A)



### Approvals / Conformity



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

Size range [mm]	NB	Material [mm]	B [mm]	W [kg]	Quantity [pack]	Part number
12 - 20	1/4" - 3/8"	20 x 1.5	55	0.06	100	<b>154804</b>
21 - 27	1/2" - 3/4"	20 x 1.5	61	0.07	100	<b>154813</b>
28 - 35	1"	20 x 1.5	71	0.07	100	<b>154822</b>
38 - 45	1 1/4"	20 x 1.5	82	0.09	50	<b>154831</b>
48 - 56	1 1/2"	20 x 1.5	93	0.09	50	<b>154840</b>
57 - 63	2"	20 x 1.5	104	0.11	50	<b>154859</b>
64 - 71		20 x 1.5	112	0.12	25	<b>154868</b>
73 - 80	2 1/2"	20 x 1.5	121	0.13	25	<b>154877</b>
83 - 90	3"	25 x 2.0	141	0.22	25	<b>154886</b>
108 - 114	4"	30 x 2.0	170	0.33	25	<b>154895</b>
116 - 125		30 x 2.0	179	0.36	25	<b>154901</b>
127 - 135		30 x 2.0	190	0.38	25	<b>154910</b>
140 - 146	5"	30 x 2.0	205	0.40	25	<b>154929</b>
159 - 170	6"	30 x 2.0	230	0.46	25	<b>154938</b>