

Rubber-metal pipe connector - Type GRV

Vibration and noise damper DN 20 – DN 200



TÜV type approved
for use in hot water heating systems
up to +100°C and max. 10 bar g
(TÜV Bayern, test no. 0101141)

Structure type GRV

- Rubber-metal pipe connector consisting of a cylindrical rubber body with fully embedded steel flanges
- Steel flanges with threaded holes
- Absolute metallic separation of the steel flanges
- From DN 50 elastic embedded spacing control bolts

Rubber body PN 6 / PN 10

- Cylindrical rubber body made of elastic synthetic rubber
- Smooth rubber core therefore no contact between medium and flange
- Self-sealing rubber raised face
- Electrical impedance 10^3 to 10^6 Ohm (DIN IEC 93, DIN 53 482)

| Rubber grade* | Possible uses |
|---------------|------------------------------------|
| CR | Hot water, cold water, acids, lyes |

*Check or inquire about the resistance of the rubber grade to temperature and medium.

| DN | DN 20-200 | DN 20-200 | Temperature |
|-------------------------------|---------------|-----------|--|
| Pressure rate | PN 6 | PN 10 | |
| Max. perm. operating pressure | 6 bar | 10 bar | -30 °C to +100 °C to +110 °C for brief periods* |
| Bursting pressure | ≥ 48 bar | ≥ 48 bar | |
| Vacuum | 0.05 bar abs. | | |

* For temps. exceeding +100 °C, the manufacturer's approval must be obtained for the corresponding operating conditions.

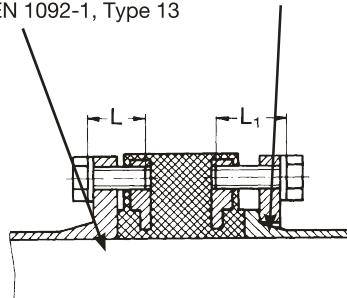
Flanges / screw lengths

Do not choose the screws to be too long; overlong screws damage the rubber body.

Please note the recommended screw length L and L₁ (see table).

Detailed installation instructions indicating the necessary torques are included with every pipe connector.

Flange EN 1092-1, Type 11 Flange EN 1092-1, Type 04
EN 1092-1, Type 13



Recommended screw lengths L and L₁

Applications

- for interrupting unwanted sound and noise transmission
 - in pipeline systems
 - in heating systems
 - at pumps
 - at control fittings
 - at machines
 - at fittings and appliances
- in domestic industry
 - in residential properties
 - in hospitals
 - in schools
 - in public buildings
- in industrial applications

Certificates

- Suitability approval for warm water and heating systems



STENFLEX® type GRV at pumps in a heating system

Dimensions **PN 6** **standard program**

| DN | BL* mm | ø di inner ø mm | ø C Raised face ø mm | ø D Outer ø mm | G Thread- ø mm | L Threaded length mm | PN Flange connection EN 1092 | Screws DIN 933 | | Washer DIN 125 | Weight approx. kg |
|-----|-----------|-----------------------|-------------------------------|----------------------|-------------------------|-------------------------------|---------------------------------------|----------------|---------|-------------------|-------------------------|
| | | | | | | | | Thread | L mm | | |
| 20 | 76 | 23 | 50 | 94 | 4 x M 10 | 14 | 6 | M 10 | 25 | 10.5 | 1.4 |
| 25 | 76 | 29 | 60 | 104 | 4 x M 10 | 16 | 6 | M 10 | 25 | 10.5 | 1.9 |
| 32 | 76 | 38 | 70 | 124 | 4 x M 12 | 16 | 6 | M 12 | 30 | 13.0 | 2.5 |
| 40 | 76 | 44 | 80 | 134 | 4 x M 12 | 16 | 6 | M 12 | 30 | 13.0 | 3.0 |
| 50 | 76 | 55 | 88 | 144 | 4 x M 12 | 16 | 6 | M 12 | 30 | 13.0 | 3.1 |
| 65 | 76 | 71 | 108 | 164 | 4 x M 12 | 16 | 6 | M 12 | 30 | 13.0 | 3.8 |
| 80 | 76 | 81 | 128 | 194 | 4 x M 16 | 18 | 6 | M 16 | 35 | 17.0 | 6.0 |
| 100 | 76 | 108 | 148 | 214 | 4 x M 16 | 18 | 6 | M 16 | 35 | 17.0 | 6.3 |
| 125 | 76 | 133 | 178 | 244 | 8 x M 16 | 18 | 6 | M 16 | 35 | 17.0 | 7.8 |
| 150 | 76 | 160 | 202 | 270 | 8 x M 16 | 18 | 6 | M 16 | 35 | 17.0 | 8.5 |
| 200 | 96 | 209 | 258 | 325 | 8 x M 16 | 20 | 6 | M 16 | 40 | 17.0 | 13.2 |

*The measure BL (length) is approx. 6 mm shorter when fitted.

Dimensions **PN 10** **standard program**

| DN | BL* mm | ø di inner ø mm | ø C Raised face ø mm | ø D Outer ø mm | G Thread- ø mm | L Threaded length mm | PN Flange connection EN 1092 | Screws DIN 933 | | | Washer DIN 125 | Weight approx. kg |
|-----|-----------|-----------------------|-------------------------------|----------------------|-------------------------|-------------------------------|---------------------------------------|----------------|---------|----------------------|-------------------|-------------------------|
| | | | | | | | | Thread | L mm | L ₁ mm | | |
| 20 | 76 | 23 | 60 | 109 | 4 x M 12 | 14 | 10 | M 12 | 30 | 40 | 13 | 2.0 |
| 25 | 76 | 29 | 70 | 119 | 4 x M 12 | 16 | 10 | M 12 | 30 | 45 | 13 | 2.5 |
| 32 | 76 | 38 | 80 | 144 | 4 x M 16 | 16 | 10 | M 16 | 35 | 45 | 17 | 3.8 |
| 40 | 76 | 44 | 90 | 154 | 4 x M 16 | 16 | 10 | M 16 | 35 | 45 | 17 | 4.3 |
| 50 | 76 | 55 | 100 | 169 | 4 x M 16 | 16 | 10 | M 16 | 35 | 50 | 17 | 4.7 |
| 65 | 76 | 71 | 115 | 189 | 4 x M 16 | 16 | 10 | M 16 | 35 | 50 | 17 | 5.8 |
| 80 | 76 | 81 | 130 | 204 | 8 x M 16 | 18 | 10 | M 16 | 40 | 55 | 17 | 6.8 |
| 100 | 76 | 108 | 158 | 224 | 8 x M 16 | 18 | 10 | M 16 | 40 | 55 | 17 | 7.2 |
| 125 | 76 | 133 | 180 | 255 | 8 x M 16 | 18 | 10 | M 16 | 40 | 55 | 17 | 9.0 |
| 150 | 76 | 160 | 210 | 291 | 8 x M 20 | 18 | 10 | M 20 | 45 | 60 | 21 | 11.0 |
| 200 | 96 | 209 | 265 | 345 | 8 x M 20 | 20 | 10 | M 20 | 45 | 65 | 21 | 16.8 |

*The measure BL (length) is approx. 6 mm shorter when fitted.

Note

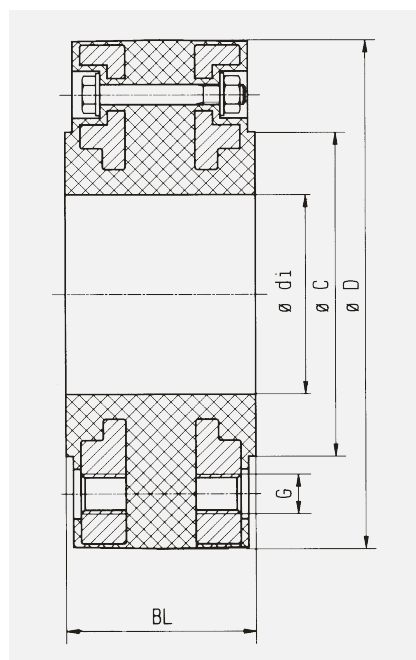
Do not use to absorb tensile force, expansion, tension; depending on temperature, STENFLEX® expansion joints made of rubber or steel should be used for this purpose.

Elastic elements in pipelines separate the rigid system and release the reaction force, produced by pipeline inner pressure. For the rubber-metal pipe connectors to work safely and reliably, it is presumed that the pipes are routed properly and the fixed points (HFP) are adequately rated to the reaction force.

Chemicals used for water treatment (particularly in heating systems and coolant systems) can corrode the materials of pipe connector. According to VDI Directive 2035, DIN 4809 part 1 and VGB R 455P, the manufacturer of the chemicals must state that the materials used in the pipe connector will not be damaged by the chemicals.

Please comply with the general technical instructions. Subject to technical alterations and deviations resulting from the manufacturing process.

Versions



Type GRV
Rubber-metal pipe connector with elastic embedded spacing control bolt