

Insulation clamps type 170 EX galvanised

Application

- Thermal decoupled pipe attachment in the field of refrigeration
- Specially suitable for attachments in ventilation, air-conditioning, heating, refrigeration installations as well as for hot and chilled water pipes
- Stable insulating element for high impacts

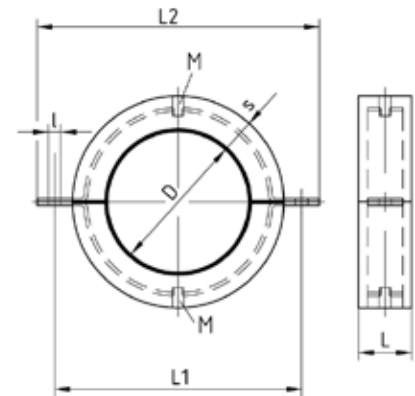
Your advantages

- Exterior connection joints (without screws)
- With dual-side metric connection thread
- High vapour diffusion resistance
- With caoutchouc lining on the pipe side and on the separation surfaces of the insulating clamp, no PU-Sealer necessary
- Ideal for separating individual pipe sections when using open diffusion insulating materials (mineral fibre)



Features

| | |
|-----------------------------------|---|
| Material | Polyurethane, black |
| Fire classification | B2 acc. to DIN 4102 (normally flammable) |
| Effective density [kg/m³] | 250 |
| Thermal conductivity | $\lambda = 0.029 \text{ W/mK at } -180 \text{ }^\circ\text{C}$, $\lambda = 0.032 \text{ W/mK at } -150 \text{ }^\circ\text{C}$, $\lambda = 0.038 \text{ W/mK at } -100 \text{ }^\circ\text{C}$, $\lambda = 0.044 \text{ W/mK at } -50 \text{ }^\circ\text{C}$, $\lambda = 0.047 \text{ W/mK at } -20 \text{ }^\circ\text{C}$, $\lambda = 0.049 \text{ W/mK at } 0 \text{ }^\circ\text{C}$, $\lambda = 0.052 \text{ W/mK at } +20 \text{ }^\circ\text{C}$, $\lambda = 0.054 \text{ W/mK at } +40 \text{ }^\circ\text{C}$ |
| Temperature range | -50 °C to +105 °C |
| Water vapour diffusion resistance | $\mu = 1,430$ |
| Compression strength | 8.11 N/mm² at -180 °C, 9.62 N/mm² at -80 °C, 4.91 N/mm² at 0 °C, 3.96 N/mm² at +23 °C |



| Pipe outer Ø D [mm] | Connecting thread M | Insulation thickness s [mm] | Shell length L [mm] | Strip perforation for l | Permanent load-bearing capacity [N] | Dimensions [mm] | | Part no. | Sales unit | Pack unit |
|---------------------------|---------------------------|--------------------------------------|---------------------------|-------------------------------|--|--------------------|-----|----------|------------|-----------|
| | | | | | | L1 | L2 | | | |
| 114.3 | M10 | 40 | 60 | M12 | 2,740 | 238 | 274 | 111173 | 1 | Pieces |
| 133 | | | | | 3,190 | 264 | 300 | 111175 | | |
| 139.7 | | | | | 3,350 | | | 111177 | | |
| 159 | M12 | | | | 3,830 | 279 | 319 | 111179 | | |
| 168.3 | | | | | 4,040 | 288 | 328 | 111181 | | |
| 219.1 | M16 | | 100 | | 5,260 | 359 | 399 | 111183 | | |
| 273 | | | | | 8,190 | 413 | 453 | 111187 | | |
| 323.9 | M20 | | | | 11,600 | 464 | 504 | 111191 | | |
| 406.4 | M24 | | | | 19,500 | 556 | 606 | 111199 | | |
| 219.1 | M16 | 60 | 100 | M12 | 5,260 | 399 | 439 | 111185 | | |
| 273 | | | | | M16 | 8,190 | 453 | 493 | | |
| 323.9 | M20 | | | | 11,600 | 504 | 544 | 111193 | | |
| 355.6 | | | | | 12,000 | 536 | 576 | 111195 | | |
| 368 | M24 | | 120 | | 13,250 | 548 | 588 | 111197 | | |
| 406.4 | | | | | 19,500 | 596 | 646 | 111201 | | |
| 457.2 | | | | | 21,900 | 647 | 697 | 111203 | | |
| 508 | | | | | 24,300 | 698 | 748 | 111205 | | |
| 609.6 | | | | | 29,200 | 798 | 848 | 111207 | | |

! According to the AGI Working Sheet Q 11 ("Arbeitsgemeinschaft Industriebau", an association for industrial construction works) the insulation of refrigeration lines must be made diffusion tight. The connection with the outer pipe insulation is made by using a complying adhesive for the insulation material (use adhesive suitable for PU).