

Style 104GS

General service elastomeric expansion joint

General service expansion joints must withstand a variety of different operating conditions across multiple industries. The 104GS from Garlock is designed to handle these most common requirements, and more. Although competitively priced, the 104GS has been rigorously tested to insure it provides the same quality and consistency you expect from Garlock products.

Benefits & Design

- The versatility of the neoprene tube **1** and cover **4** make the 104GS ideally suited for most general service industrial applications.
- Reinforcement materials of nylon fabric **5** combined with carbon steel body wire **3** and support rings **2** allow the 104GS to withstand significant operating pressures and 26" Hg vacuum for all sizes.
- The wide, single arch **6** design allows for greater movements and helps to reduce the affects of moderate sediment transfer.
- Available in 2" thru 24" and sold complete **7** with galvanized carbon steel retaining rings simplifying the order process.



Specifications - 200°F Maximum Temperature Rating

| Expansion Joint | | | | Application Data | | | | Movement Ratings | | | | | | | |
|-----------------|-----|--------------|-----|------------------|-----|---------|-------|------------------|----|---------|----|------------|----|-----------------|-------------------|
| Size I.D. | | Face-to-Face | | Pressure | | Vacuum | | Compression | | Lateral | | Elongation | | Angular Degrees | Tortional Degrees |
| Inch | mm | Inch | mm | psi | bar | Inch Hg | mm Hg | Inch | mm | Inch | mm | Inch | mm | | |
| 2 | 50 | 6 | 150 | 195 | 13 | 26 | 660 | 1-1/4 | 32 | 3/4 | 19 | 1/2 | 13 | 10 | 3 |
| 3 | 75 | 6 | 150 | 195 | 13 | 26 | 660 | 1-1/4 | 32 | 3/4 | 19 | 1/2 | 13 | 8 | 3 |
| 4 | 100 | 6 | 150 | 195 | 13 | 26 | 660 | 1-1/4 | 32 | 3/4 | 19 | 1/2 | 13 | 6 | 3 |
| 5 | 125 | 6 | 150 | 165 | 11 | 26 | 660 | 1-3/8 | 35 | 1 | 25 | 5/8 | 16 | 8 | 3 |
| 6 | 150 | 6 | 150 | 165 | 11 | 26 | 660 | 1-3/8 | 35 | 1 | 25 | 5/8 | 16 | 7 | 3 |
| 8 | 200 | 6 | 150 | 165 | 11 | 26 | 660 | 1-3/8 | 35 | 1 | 25 | 5/8 | 16 | 5 | 3 |
| 10 | 250 | 8 | 200 | 165 | 11 | 26 | 660 | 1-3/8 | 35 | 1 | 25 | 5/8 | 16 | 5 | 3 |
| 12 | 300 | 8 | 200 | 165 | 11 | 26 | 660 | 1-1/2 | 38 | 1 | 25 | 3/4 | 19 | 5 | 3 |
| 14 | 350 | 8 | 200 | 100 | 7 | 26 | 660 | 1-1/2 | 38 | 1 | 25 | 3/4 | 19 | 4 | 2 |
| 16 | 400 | 8 | 200 | 75 | 5 | 26 | 660 | 1-1/2 | 38 | 1 | 25 | 3/4 | 19 | 4 | 2 |
| 18 | 450 | 8 | 200 | 75 | 5 | 26 | 660 | 1-1/2 | 38 | 1 | 25 | 3/4 | 19 | 3 | 1 |
| 20 | 500 | 8 | 200 | 75 | 5 | 26 | 660 | 1-1/2 | 38 | 1 | 25 | 3/4 | 19 | 3 | 1 |
| 24 | 600 | 10 | 250 | 75 | 5 | 26 | 660 | 1-3/4 | 44 | 1 | 25 | 1 | 25 | 4 | 1 |

| Expansion Joint Size I.D. | | ANSI Class 150 Flange Drilling | | | | | | No. of Bolt Holes | Spring Rates | | | | | | Bolt Torque |
|---------------------------|-----|--------------------------------|-----|-------------|-----|--------------------|----|-------------------|--------------|-----|---------|-------|------------|-------|-------------|
| | | OD | | Bolt Circle | | Bolt Hole Diameter | | | Compression | | Lateral | | Elongation | | |
| | | Inch | mm | Inch | mm | Inch | mm | | Inch | mm | lb/Inch | kg/mm | lb/Inch | kg/mm | |
| 2 | 50 | 6 | 152 | 4-3/4 | 121 | 3/4 | 19 | 4 | 450 | 18 | 340 | 13 | 560 | 22 | 40 |
| 3 | 75 | 7-1/2 | 191 | 6 | 152 | 3/4 | 19 | 4 | 670 | 26 | 500 | 20 | 828 | 15 | 65 |
| 4 | 100 | 9 | 229 | 7-1/2 | 191 | 3/4 | 19 | 8 | 900 | 35 | 730 | 29 | 1104 | 20 | 45 |
| 5 | 125 | 10 | 254 | 8-1/2 | 216 | 7/8 | 22 | 8 | 1120 | 44 | 900 | 35 | 1376 | 25 | 50 |
| 6 | 150 | 11 | 279 | 9-1/2 | 241 | 7/8 | 22 | 8 | 1400 | 55 | 1060 | 42 | 1652 | 30 | 55 |
| 8 | 200 | 13-1/2 | 343 | 11-3/4 | 298 | 7/8 | 22 | 8 | 1510 | 59 | 1180 | 46 | 1837 | 33 | 85 |
| 10 | 250 | 16 | 406 | 14-1/4 | 362 | 1 | 25 | 12 | 1900 | 75 | 1460 | 57 | 2296 | 41 | 80 |
| 12 | 300 | 19 | 483 | 17 | 432 | 1 | 25 | 12 | 2300 | 91 | 1740 | 69 | 2755 | 50 | 115 |
| 14 | 350 | 21 | 533 | 18-3/4 | 476 | 1-1/8 | 29 | 12 | 2010 | 79 | 1570 | 62 | 2755 | 50 | 145 |
| 16 | 400 | 23-1/2 | 597 | 21-1/4 | 540 | 1-1/8 | 29 | 16 | 2300 | 91 | 1740 | 69 | 2755 | 50 | 135 |
| 18 | 450 | 25 | 635 | 22-3/4 | 578 | 1-1/4 | 32 | 16 | 2570 | 101 | 1960 | 77 | 3101 | 56 | 140 |
| 20 | 500 | 27-1/2 | 699 | 25 | 635 | 1-1/4 | 32 | 20 | 2860 | 113 | 2180 | 86 | 3440 | 62 | 135 |
| 24 | 600 | 32 | 813 | 29-1/2 | 749 | 1-3/8 | 35 | 20 | 3420 | 135 | 2630 | 104 | 4130 | 74 | 190 |

Pressure ratings are based on a minimum 3 to 1 safety factor at maximum design temperature.