

TOPFLEX

SINGLE-SPHERE RUBBER EXPANSION JOINT

With Floating Flanges

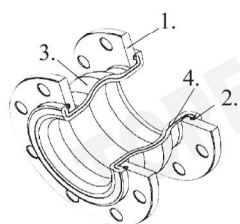


Fig. TS



TOPFLEX Series TS is ideal in heating and air conditioning system. TS Model connectors have EPDM cover, providing excellent resistance to sunlight, ozone, oxidation and resistant to damage from dropping oil. The unit has EPDM tube, which is good for hot & cold water service and mild chemicals. The fully molded Single Sphere design provides greater flexibility, thus protecting mating flanges, especially PVC and fiberglass types. The steel flanges easily rotate on the bellows, which makes it easier to line up the bolt holes during installation when flanges are out of line. With a temperature rating of -20°C to 100°C, the standard sizes range from 1" to 12" I.D. can be with the working pressure at 300 psi and size 14" to 24" have working pressure at 150 psi.

MATERIALS

| ITEM NO. | DESCRIPTION | MATERIAL |
|----------|--------------------|------------------------------|
| 1 | Flange | Mild Steel / Stainless Steel |
| 2 | Wire | Carbon Steel Wire |
| 3 | Elastomer | Synthetic Rubber (EPDM) |
| 4 | Reinforcing Fabric | Nylon Cord Fabric |

* Optional Material : Flange = Stainless Steel and Elastomer = NBR

TECHNICAL CONDITION

| Model | TS | |
|------------------|----------------|-----------|
| Size I.D. | 1" - 12" | 14" - 24" |
| Working Pressure | 300 psi. | 150 psi. |
| Burst Pressure | 854 psi. | 342 psi. |
| Vacuum Rating | 650 mm/Hg | |
| Temperature | -20°C to 100°C | |

The TOPFLEX Series of single-sphere connectors (with flanges) have allowable movements to axial compression, lateral movement & angular deflections (as per the drawing). We also offer Japanese Standard & American Standard for size 1" to 24" and German standard for size 1" to 12"

ALLOWABLE MOVEMENTS

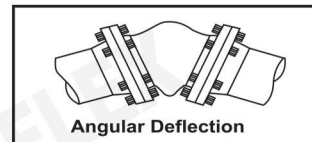
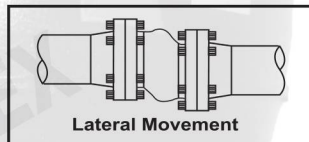
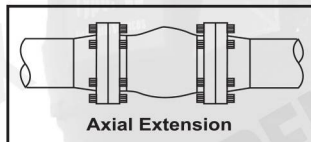
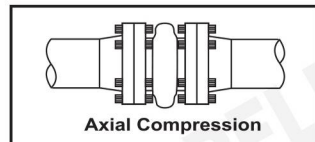


TABLE OF MAIN PARAMETERS OF NORMAL CORE DIAMETER, LENGTH, DISPLACEMENT VALUE

| Normal core diameter DN | | Length (L) (mm.) | | | Axial displacement | | | | | | Lateral (mm) | | | Angular |
|-------------------------|---------|------------------|-------|-----|--------------------|-------|----|----------------|------|---|--------------|-------|----|---------|
| (mm) | (inch.) | J | A | G | Compression (mm) | | | Extension (mm) | | | J | A | G | |
| 25 | (1) | 95 | 152.4 | 130 | 8 | 12.7 | 12 | 4 | 9.52 | 9 | 8 | 12.7 | 12 | 15° |
| 32 | (1.1/4) | 95 | 152.4 | 130 | 8 | 12.7 | 12 | 4 | 9.52 | 9 | 8 | 12.7 | 12 | 15° |
| 40 | (1.1/2) | 95 | 152.4 | 130 | 8 | 12.7 | 12 | 4 | 9.52 | 9 | 8 | 12.7 | 12 | 15° |
| 50 | (2) | 105 | 152.4 | 130 | 8 | 12.7 | 12 | 5 | 9.52 | 9 | 8 | 12.7 | 12 | 15° |
| 65 | (2.1/2) | 115 | 152.4 | 130 | 12 | 12.7 | 12 | 6 | 9.52 | 9 | 10 | 12.7 | 12 | 15° |
| 80 | (3) | 130 | 152.4 | 130 | 12 | 15.87 | 12 | 6 | 9.52 | 9 | 10 | 12.7 | 12 | 15° |
| 100 | (4) | 135 | 152.4 | 130 | 18 | 15.87 | 14 | 10 | 9.52 | 9 | 12 | 12.7 | 14 | 15° |
| 125 | (5) | 170 | 152.4 | 130 | 18 | 15.87 | 14 | 10 | 9.52 | 9 | 12 | 12.7 | 14 | 15° |
| 150 | (6) | 180 | 152.4 | 130 | 18 | 15.87 | 14 | 10 | 9.52 | 9 | 12 | 12.7 | 14 | 15° |
| 200 | (8) | 205 | 152.4 | 130 | 25 | 15.87 | 14 | 14 | 9.52 | 9 | 22 | 12.7 | 14 | 15° |
| 250 | (10) | 240 | 203.2 | 130 | 25 | 15.87 | 14 | 14 | 12.7 | 9 | 22 | 19.05 | 14 | 15° |
| 300 | (12) | 260 | 203.2 | 130 | 25 | 19.05 | 16 | 14 | 12.7 | 9 | 22 | 19.05 | 16 | 15° |
| 350 | (14) | 265 | 203.2 | - | 25 | 19.05 | - | 16 | 12.7 | - | 22 | 19.05 | - | 15° |
| 400 | (16) | 265 | 203.2 | - | 25 | 19.05 | - | 16 | 12.7 | - | 22 | 19.05 | - | 15° |
| 450 | (18) | 265 | 203.2 | - | 25 | 19.05 | - | 16 | 12.7 | - | 22 | 19.05 | - | 15° |
| 500 | (20) | 265 | 203.2 | - | 25 | 19.05 | - | 16 | 12.7 | - | 22 | 19.05 | - | 15° |
| 600 | (24) | 254 | 254.0 | - | 19 | 19.05 | - | 13 | 12.7 | - | 19 | 19.05 | - | 15° |

** J = JAPANESE STANDARD, A = AMERICAN STANDARD, G = GERMAN STANDARD

NOTE : 1. Standard material is EPDM. The products are not applicable to oil. Other kinds of rubber material are optional.

2. Standard rated working pressure is 20 bars (up to 300 mm.) to 10 bars (for larger size than 300 mm.)

3. Applicable fluids : Air, Compressed air, water, sea water, hot water, weak acid, alkalis, etc.

4. Flange drilling : JIS, DIN, ANSI, BS and other standard drilling for your specification.

5. Tolerances for installation should not over 30% of Allowable movements.