

TOPFLEX

SUPER-FLEX RUBBER EXPANSION JOINT

With Floating Flanges (For Vacuum and Underground Service)

TOPFLEX Series STT are designed for tough demanding industrial applications. As found in :
Air Conditioning-Heating and Vantilating Systems, Chemical-Petrochemical and Industrial Process Piping Systems, Power Generating Systems, Marine Service, Pulp&Paper Systems, Water-Wastewater Sewage and Pollution Control Systems. Installed next to mechanical equipment or between the anchor points of piping system, specify the TOPFLEX SERIES STT to :

- (1) Absorb Pipe/Movement/Stress.
- (2) Decrease Systems Noise.
- (3) Isolate Vibration.
- (4) Compensate alignment/offset.
- (5) Eliminate Electrolysis.
- (6) Protect Against Start up/Surge Forces.

MATERIALS

| ITEM NO. | DESCRIPTION | MATERIAL |
|----------|--------------------|------------------------------|
| 1 | Outer Cover | Synthetic Rubber (EPDM) |
| 2 | Inner Tube | Synthetic Rubber (EPDM) |
| 3 | Reinforcing Fabric | Synthetic Fiber |
| 4 | Wire | Carbon Steel wire |
| 5 | Flange | Mild Steel / Stainless Steel |
| 6 | Reinforcing Ring | Carbon Steel |

* Optional Material : Flange = Stainless Steel and Elastomer Outer & Inner = NBR

TECHNICAL CONDITION

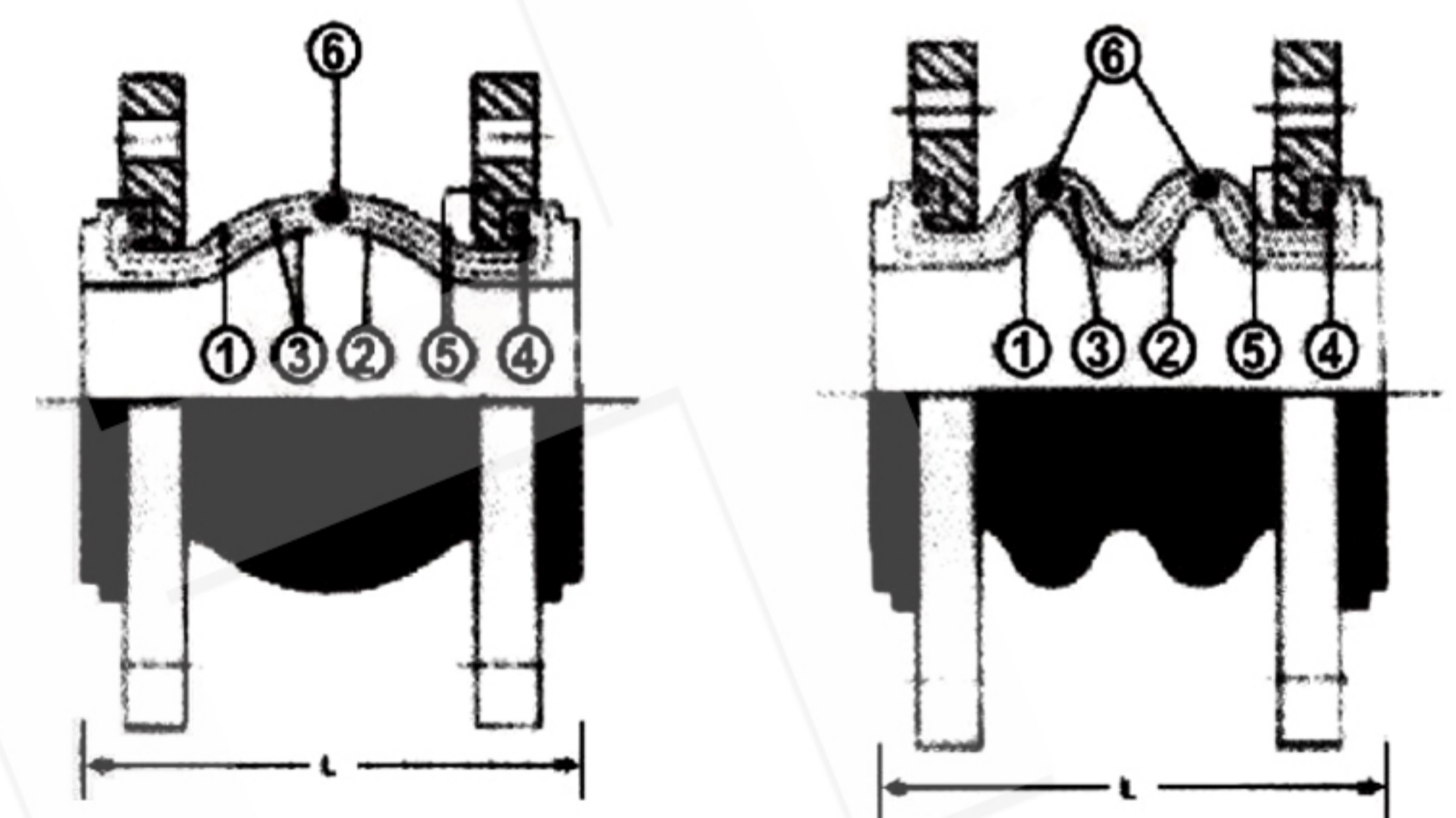
| Model | STT | |
|------------------|-----------------|-----------|
| Size I.D. | 1.1/2" - 12" | 14" - 24" |
| Working Pressure | 300 psi | 150 psi |
| Burst Pressure | 854 psi | 342 psi |
| Vacuum Rating | 750 mm/Hg | |
| Temperature | - 20°C to 100°C | |

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

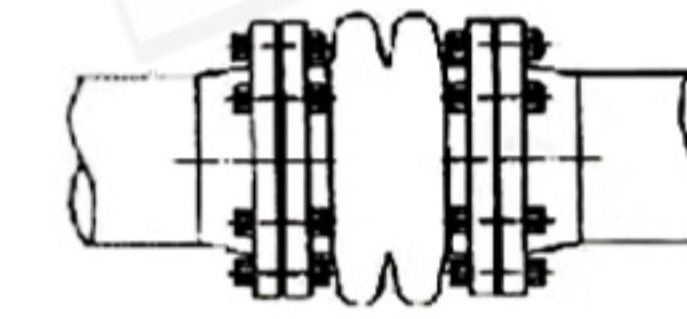
| Normal core diameter | | Single-Sphere | | | | | Twin-Sphere | | | | |
|----------------------|---------|---------------|-------------|-----------|---------|---------|-------------|-------------|-----------|---------|---------|
| (mm) | (inch.) | Length | Compression | Extension | Lateral | Angular | Length | Compression | Extension | Lateral | Angular |
| 25 | (1) | 95 | 8 | 4 | 8 | 15° | - | - | - | - | - |
| 32 | (1.1/4) | 95 | 8 | 4 | 8 | 15° | - | - | - | - | - |
| 40 | (1.1/2) | 95 | 8 | 4 | 8 | 15° | 175 | 50 | 30 | 50 | 35° |
| 50 | (2) | 105 | 8 | 5 | 8 | 15° | 175 | 50 | 30 | 50 | 35° |
| 65 | (2.1/2) | 115 | 12 | 6 | 10 | 15° | 175 | 50 | 30 | 50 | 35° |
| 80 | (3) | 130 | 12 | 6 | 10 | 15° | 175 | 50 | 30 | 50 | 35° |
| 100 | (4) | 135 | 20 | 20 | 20 | 15° | 225 | 50 | 30 | 50 | 35° |
| 125 | (5) | 170 | 20 | 20 | 20 | 15° | 225 | 50 | 30 | 50 | 35° |
| 150 | (6) | 180 | 20 | 20 | 20 | 15° | 225 | 50 | 30 | 50 | 35° |
| 200 | (8) | 205 | 20 | 20 | 20 | 15° | 325 | 60 | 30 | 50 | 30° |
| 250 | (10) | 240 | 20 | 20 | 20 | 15° | 325 | 60 | 30 | 50 | 30° |
| 300 | (12) | 260 | 20 | 20 | 20 | 15° | 325 | 60 | 30 | 50 | 30° |
| 350 | (14) | 265 | 30 | 25 | 20 | 15° | 350 | 50 | 40 | 50 | 20° |
| 400 | (16) | 265 | 30 | 25 | 20 | 15° | 350 | 50 | 40 | 50 | 20° |
| 450 | (18) | 265 | 30 | 25 | 20 | 15° | 350 | 50 | 40 | 50 | 20° |
| 500 | (20) | 265 | 30 | 25 | 20 | 15° | 350 | 50 | 40 | 50 | 20° |
| 600 | (24) | 254 | 30 | 25 | 20 | 15° | 350 | 50 | 40 | 50 | 20° |

- NOTE :**
- Standard material is EPDM. The products are not applicable to oil. Other kinds of rubber material are optional.
 - Standard rated working pressure is 20 bars (up to 300 mm.) to 10 bars (for larger size than 300 mm.)
 - Applicable fluids : Air, Compressed air, water, sea water, hot water, weak acid, alkalis, etc.
 - Flange drilling : JIS, DIN, ANSI, BS and other standard drilling for your specification.
 - Tolerances for installation should not over 30% of Allowable movements.

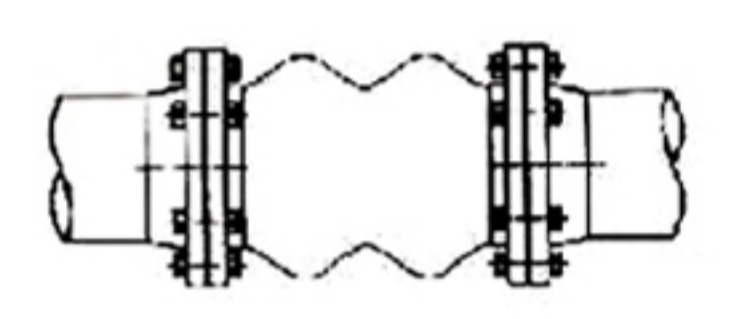
Fig.STT



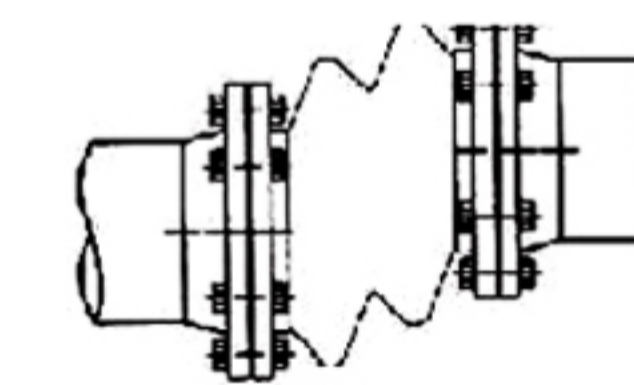
The arch reinforcing ring is incorporated for the buried or vacuum services.



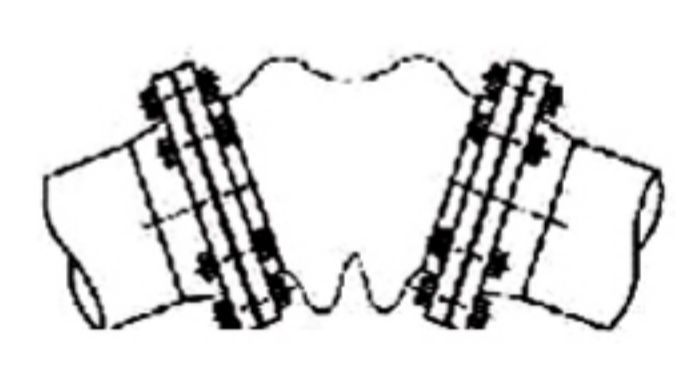
Axial Compression



Axial Extension



Lateral Movement



Angular Deflection