

# TOPFLEX

## TWIN-SPHERE RUBBER EXPANSION JOINT WITH RING

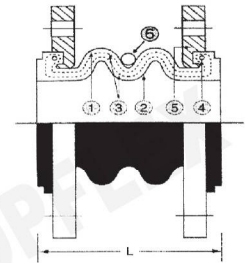
### With Floating Flanges

TOPFLEX Series RTT is ideal in heating and air conditioning system. Series RTT is Twin-Sphere joint with EPDM cover and carbon steel ring 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 Twin-Sphere design not only provides a high pressure rating, also provide 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 mating flanges are out of line. With a temperature rating of -20°C to 100°C. The standard size range from 1.1/2" to 12" I.D. can be with the working pressure at 300 psi. and size 14" to 24" have working pressure at 150 psi.

Fig. RTT



WITH CONTROL RODS



### 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

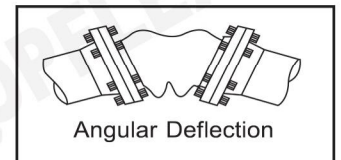
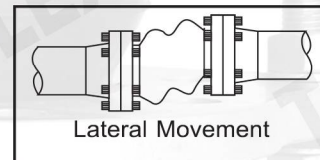
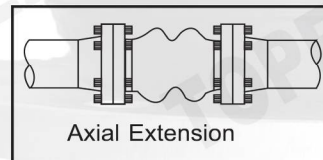
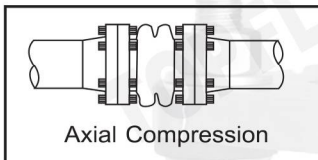
\* Optional Material : Flange = Stainless Steel and Elastomer Outer & Inner = NBR

### TECHNICAL CONDITION

Model	RTT	
Size I.D.	1.1/2" - 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	

Installed with control rods to prevent internal pressure and motion by over limit usage and vacuum dropping. Control rods and reinforcing ring unit must be installed when pressure (test surge, operating, starting a pump, etc.) exceeds the rating.

### Allowable Movements



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

Normal core diameter		Length (L) (mm)	Axial displacement		Lateral (mm)	Angular
(mm)	(inch.)		Compression (mm)	Extension (mm)		
40	(1.1/2)	175	50	30	50	35°
50	(2)	175	50	30	50	35°
65	(2.1/2)	175	50	30	50	35°
80	(3)	175	50	30	50	35°
100	(4)	225	50	30	50	35°
125	(5)	225	50	30	50	35°
150	(6)	225	50	30	50	35°
200	(8)	325	50	30	50	30°
250	(10)	325	50	30	50	30°
300	(12)	325	50	30	50	30°
350	(14)	350	50	40	50	20°
400	(16)	350	50	40	50	20°
450	(18)	350	50	40	50	20°
500	(20)	350	50	40	50	20°
600	(24)	350	50	40	50	20°

- 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.