

# TOPFLEX

## SUPER-FLEX RUBBER EXPANSION JOINT

With Floating Flanges (For Vacuum and Underground Service)

Fig. STS



TOPFLEX Series STS are designed for tough demanding industrial applications. As found in :  
Air Conditioning-Heating and Ventilating 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 STS 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.

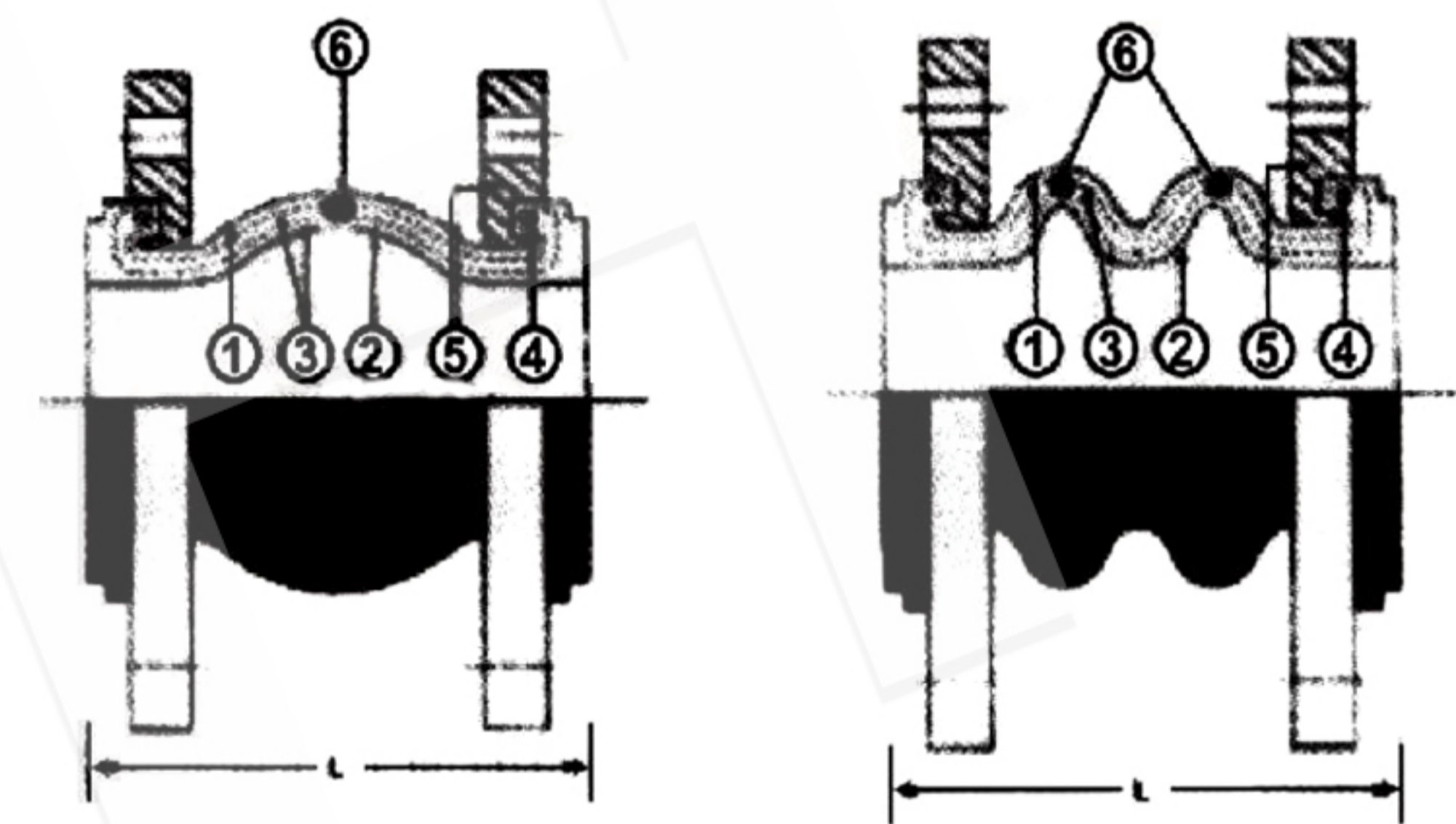
### MATERIALS

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

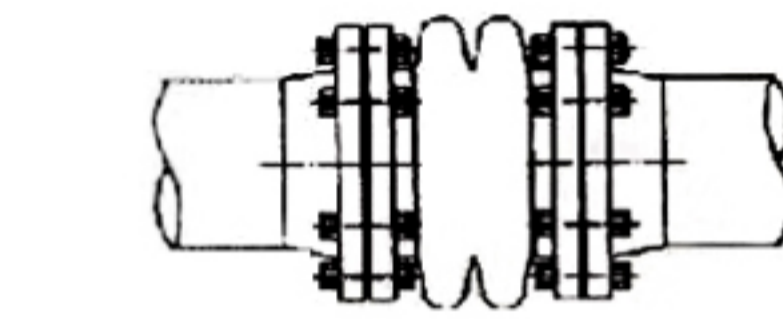
\* Optional Material : Flange = Stainless Steel and Elastomer Outer & Inner = NBR

### TECHNICAL CONDITION

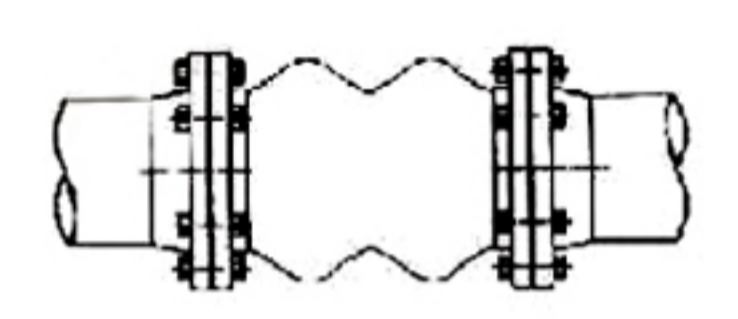
Model	STS	
Size I.D.	1" - 12"	14" - 24"
Working Pressure	300 psi	150 psi
Burst Pressure	854 psi	342 psi
Vacuum Rating	750 mm/Hg	
Temperature	- 20°C to 100°C	



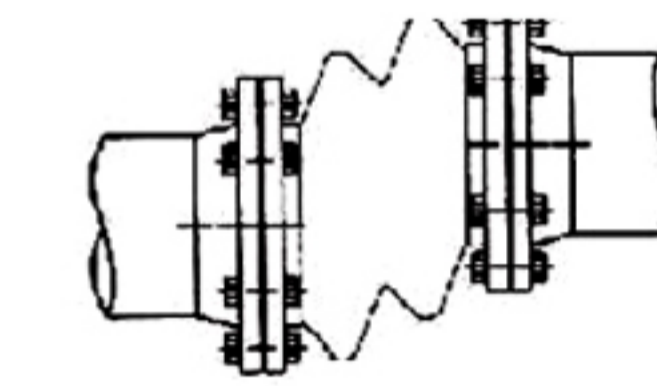
The arch reinforcing ring is incorporated for the buried or vacuum services.



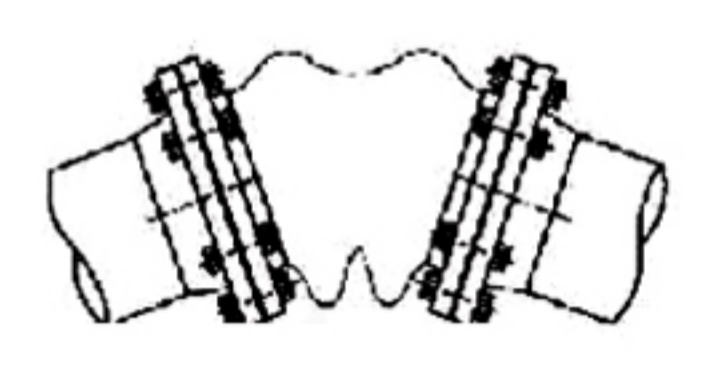
Axial Compression



Axial Extension



Lateral Movement



Angular Deflection

### 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.