

RUBBER FLEXIBLE JOINT

SPECIFICATION

WORKING PRESSURE : 10/16/25

FLANGED TO: ISO 7005-2, BS4504 PN10/16/25, JIS 10K/16K

Sluice: cold water, warm water, cooled water, sea water, etc.

MATERIALS

Parts name	Fig. 401	Fig. 402	Fig. 403
Outer Layer	Synthetic Rubber	Synthetic Rubber	Synthetic Rubber
Inter Layer	Synthetic Rubber	Synthetic Rubber	Synthetic Rubber
Reinforcing Fabric	Nylon Fabric	Nylon Fabric	Nylon Fabric
Union//Flanged	FCD450 (Galv'd)	SS400 (Galv'd) SUS304/316	SS400 (Galv'd) SUS304/316
Reinforcing Ring		Cast steel	Cast steel

DIMENSIONS AND ALLOWABLE MOVEMENTS

Fig.401

Size mm	L mm	Allowable Movement (mm)				Installation Allowance (mm)			
		T.M	A.E	A.C	A.M	T.M	A.E	A.C	A.M
15	120	15	10	15	20 [□]	6	3	4	10 [□]
20	120	15	10	15	20 [□]	6	3	4	10 [□]
25	120	15	10	15	20 [□]	6	3	4	10 [□]
32	175	20	10	20	30 [□]	8	3	6	10 [□]
40	175	20	10	20	30 [□]	8	3	6	10 [□]
50	175	20	10	20	30 [□]	8	3	6	10 [□]

Fig.402

Size mm	L mm	Allowable Movement (mm)				Installation Allowance (mm)			
		T.M	A.E	A.C	A.M	T.M	A.E	A.C	A.M
65	125	12	7	12	10 [□]	5	3	6	5 [□]
80	125	12	7	12	10 [□]	5	3	6	5 [□]
100	150	15	10	15	8 [□]	6	3	6	3 [□]
125	150	15	10	15	8 [□]	6	3	6	3 [□]
150	175	18	12	18	6 [□]	7	3	6	2 [□]
200	175	18	12	18	6 [□]	7	3	6	2 [□]
250	200	20	15	20	6 [□]	8	3	6	2 [□]
300	200	20	15	20	6 [□]	8	3	6	2 [□]
350	220	20	15	20	5 [□]	8	3	6	2 [□]
400	220	20	15	20	5 [□]	8	3	6	2 [□]
450	250	20	15	20	5 [□]	8	3	6	2 [□]
500	250	20	15	20	5 [□]	8	3	6	2 [□]
600	250	20	15	20	5 [□]	8	3	6	2 [□]

Fig.403

Size mm	L mm	Allowable Movement (mm)				Installation Allowance (mm)			
		T.M	A.E	A.C	A.M	T.M	A.E	A.C	A.M
65	175	20	10	20	30 [□]	8	3	6	10 [□]
80	175	20	10	20	30 [□]	8	3	6	10 [□]
100	225	25	10	25	30 [□]	10	3	6	10 [□]
125	225	25	10	25	30 [□]	10	3	6	10 [□]
150	225	25	10	25	30 [□]	10	3	6	10 [□]
200	325	25	15	25	30 [□]	12	3	6	10 [□]
250	325	25	15	25	30 [□]	12	3	6	10 [□]
300	325	30	15	30	30 [□]	12	3	6	10 [□]
350	325	30	15	30	30 [□]	15	3	6	10 [□]
400	325	30	15	30	30 [□]	15	3	6	10 [□]
450	375	30	20	30	30 [□]	15	3	6	10 [□]
500	375	30	20	30	30 [□]	15	3	6	10 [□]
600	375	30	20	30	30 [□]	15	3	6	10 [□]

T.M: Transverse Movement, A.E: Axial Elongation, A.C: Axial Compression, A.M: Angular Movement

Fig. 401(screwed)

Fig. 402 (single Sphere)

Fig. 403 (Double Sphere)

PN10/16/25

DN 15-600

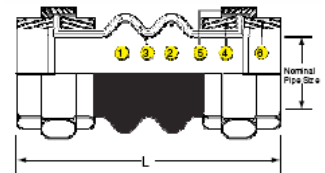


Fig. 401

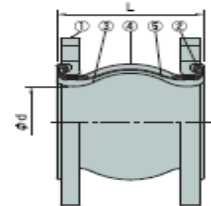


Fig. 402

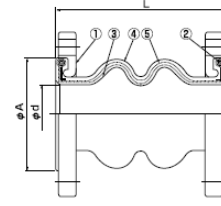
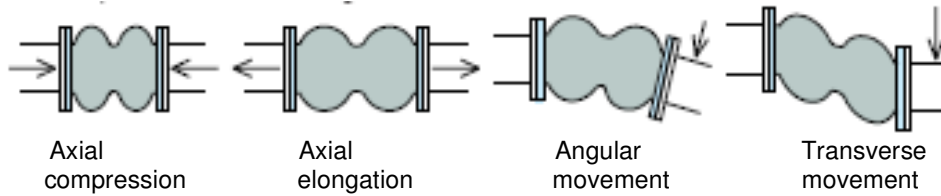
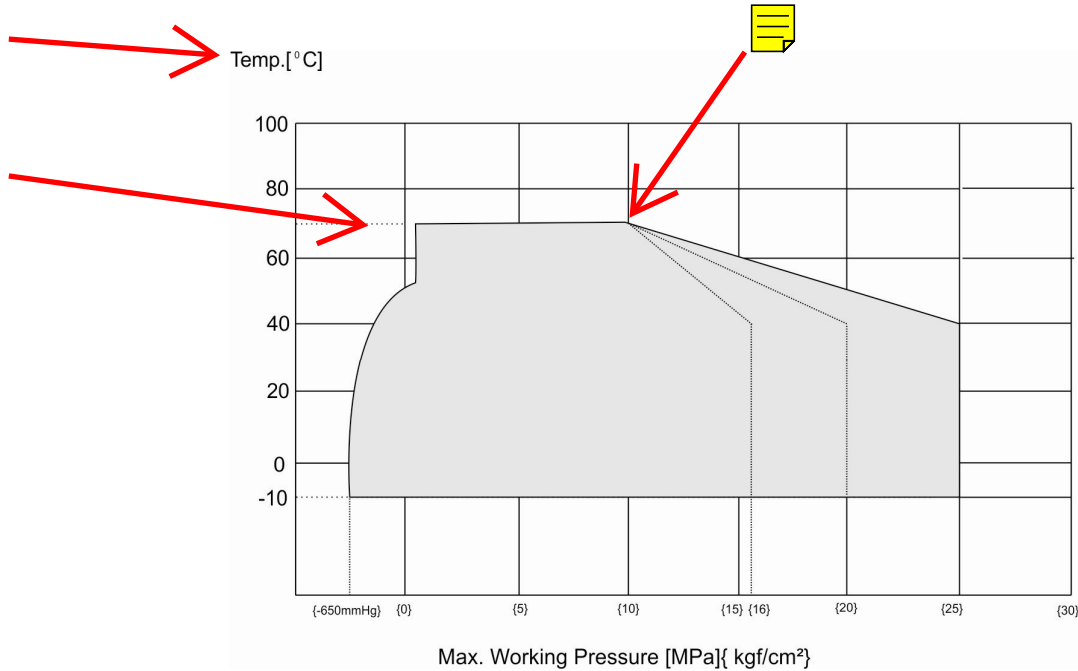


Fig. 403



OPERATING CONDITIONS AND PERFORMANCE



APPLICATIONS

- This product is mainly applicable for piping system in commercial and industrial building and plants.
- Applicable fluids are exclusively water including cold water, warm water, cooled water, sea water, etc.
- This product can not be used for oil, air, gases, hot water and pool water.

NOTES

1. Information in the above table is for single movement. In case of complex movements, follow the below expression.

$$C.EL(C) = A.EL(C) \times \left\{ 1 - \left(\frac{A.T.M - T.M}{A.T.M} \times \frac{A.A.M. - A.M.}{A.A.M.} \right) \right\}$$

- C.EL (C). = Correct Elongation (Compression).
- A.EL (C). = Allowable Elongation (Compression).
- A.T.M. = Allowable Transverse Movement.
- T.M. = Transverse Movement.
- A.A.M. = Allowable Angular Movement.
- A.M. = Angular Movement.

2. Install the joint according to the specified allowable dimensions.
3. Check suitability of joint to operating conditions prior installation.
4. Prior to installation, check for cracks on the rubber body surface, especially after extended storage.
5. If there is movement in the joint, insure that the rubber joint body is not damaged by external objects.
6. Keep joint away from all sources of heat. If necessary, cover the joint with a protective sheet to restrict damage caused by welding sparks, grinding, etc.
7. Avoid contact of the rubber body with oils, fats, organic solvents (thinner, toluene, etc.), acid or alkali. Wipe immediately if rubber is contaminated with these items.
8. Secure piping before and after joint to limit elongation of the joint during operation.