TOZEN
A joint reliance

Single-Sphere Flexible Rubber Joint
with Floating Flanges

OFLEX-H

Pursuing the TOZEN spirit,
“A joint reliance”,
TOZEN’s rubber joint
OFLEX-H ensures ease of use.

Feature

Achievements

Having been used in more than 20 countries for over 30 years, TOZEN brand products proudly demonstrate their popularity.

Reliability

Unparalleled durability is guaranteed by the distinctive and strict design standards of TOZEN.

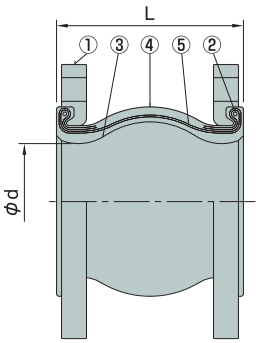
Quality

Manufactured in TOZEN’s own factory under thorough control with ISO9001 quality management system.

Repetitive pressure fluctuation test

Repetitive pressure fluctuation test

Structure

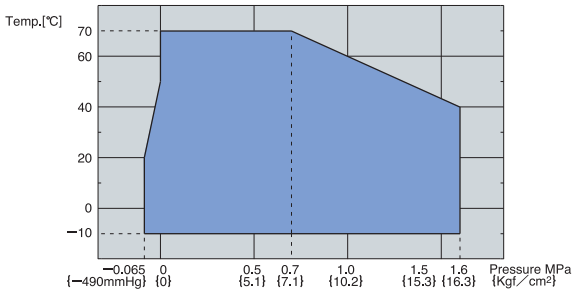


No.	Parts	Material
①	Flange	Mild Steel / Ductile Iron
②	Reinforcing Ring	High Carbon Steel Wire Rods
③	Inner Rubber	Synthetic Rubber
④	Outer Rubber	Synthetic Rubber
⑤	Reinforcing Cord	Synthetic Fiber

- Flanges with SS400 and FCD450 in JIS10K, ANSI150, PN16 are standard. For other flanges, please consult us.
- ANSI flange type for 32mm is not produced.
- Flange material can be changed to SUS304 and SUS316.

Operating Conditions and Performance

- Working Temperature vs. Working Pressure



- Bursting Pressure:
  4.8MPa or above at normal temp.

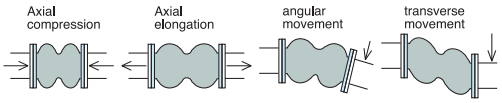
Applications

- This product is mainly applicable for piping systems in commercial and industrial buildings and plants.
- Applicable fluids are exclusively water including cold water, warm water, cooled water, sea water, etc.
- This product can not be used for drinking water, pool water, oil, or boiled water.

Dimensions and Allowable Movements

Nominal Dia.		Dimension [mm]		Mass [Kg]	Allowable Movement [mm]				Installation Tolerances [mm]			
mm	inch	L	φd		T.M	A.E	A.C.	A.M.	T.M.	A.E.	A.C.	A.M.
32	1 1/4	100	40	2.0	10	6	10	10°	4	3	6	5°
40	1 1/2	100	40	2.1	10	6	10	10°	4	3	6	5°
50	2	125	50	2.6	12	7	12	10°	5	3	6	5°
65	2 1/2	125	65	3.6	12	7	12	10°	5	3	6	5°
80	3	125	75	3.8	12	7	12	10°	5	3	6	5°
100	4	150	100	4.7	15	10	15	7°	6	3	6	3°
125	5	150	125	6.9	15	10	15	7°	6	3	6	3°
150	6	175	150	10	18	12	18	5°	7	3	6	2°
200	8	175	200	14	18	12	18	5°	7	3	6	2°
250	10	200	250	22	20	15	20	5°	8	3	6	2°
300	12	200	300	25	20	15	20	5°	8	3	6	2°

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



·Mass indicates only the case with JIS 10K (FCD450) flanges.
·Products should be used within the given allowable movements only.
·Tolerances for installation are included in the allowable movements
(Allowable movements = Tolerances for installation + Operating movements).

·Please note that the information in the above table is for single movement only.
In case of complex movements, please do adjustment by using the following formula.

$$C.A.E.\ (C.A.C.) = A.A.E.(A.A.C.) \times \{1-(\frac{T.M.}{A.T.M} + \frac{A.M.}{A.A.M})\}$$

C.A.E. (C.A.C.): Correct Elongation Movement (Correct Compression Movement)
A.A.E. (A.A.C.): Allowable Elongation Movement (Allowable Compression Movement)
A.T.M.: Allowable Transverse Movement
A.A.M.: Allowable Angular Movement
Example: In case of 100mm joint, if 10mm transverse movement is needed, then the correct elongation should be:

$$C.A.E. = 10 \times \{1-(\frac{10}{15} + \frac{0}{7})\} = 3.3mm$$

Note: The contents of this catalogue are subject to change without notice.

AGENT

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