

Twin-Sphere Rubber Joint with Floating Flanges

TWINFLEX

Excellent performance for vibration absorption, displacement absorption and high-pressure resistance.



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.

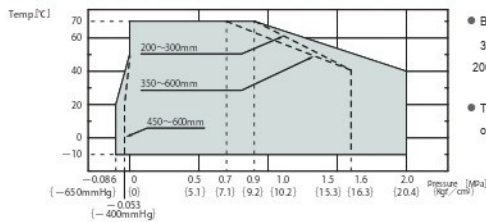
Durability

Reciprocating pressure test for 20,000 cycles or above.

Applications

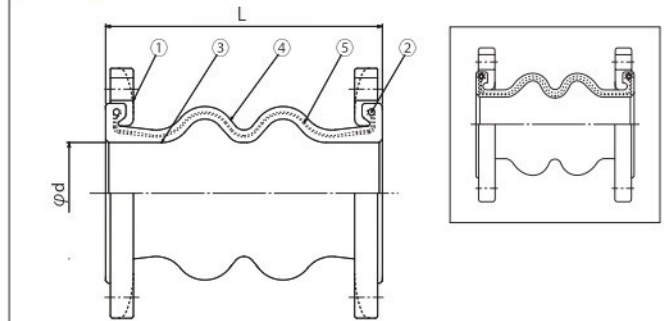
- This product is mainly applicable for piping systems in commercial and industrial buildings and plants.
- Applicable fluids are exclusively water including cold water, warm water, cooled water, sea water, etc.
- This product can not be used for pool water, oil, or boiled water.

Operating Conditions and Performance



- Bursting Pressure
32~150mm: 8.0MPa or above at normal temp.
200~600mm: 4.8MPa or above at normal temp.
- The range of operating conditions depends on the flange standard.

Structure



No.	Parts	Material
①	Flange	Stainless steel 304
②	Reinforcing Ring	Carbon Steel
③	Inner Rubber	Synthetic Rubber
④	Outer Rubber	Synthetic Rubber
⑤	Reinforcing Cord	Synthetic Fiber

Flange compatible dimension	Standard	JIS10K / ANSI150 / PN16	
	Other	Please consult us.	
Material	Standard	Ductile Iron (For 350mm~600mm and ANSI150 32mm is mild steel)	
	Can be changed	☐ mild steel	
		☐ SUS304	
		☐ SUS316	

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	175	35	1.9	20	10	20	20°	8	3	6	7.5°
40	1 1/2	175	35	2.2	20	10	20	20°	8	3	6	7.5°
50	2	175	45	2.6	20	10	20	20°	8	3	6	7.5°
65	2 1/2	175	60	3.2	20	10	20	20°	8	3	6	7.5°
80	3	175	70	3.9	20	10	20	20°	8	3	6	7.5°
100	4	225	95	4.7	25	15	30	20°	10	3	6	7.5°
125	5	225	120	6.7	25	15	30	20°	10	3	6	7.5°
150	6	225	145	9.0	25	15	30	20°	10	3	6	7.5°
200※	8	325	195	15	30	20	40	20°	12	3	6	7.5°
250※	10	325	245	21	30	20	40	20°	12	3	6	7.5°
300	12	325	290	25	30	20	40	20°	12	3	6	7.5°
350	14	250	340	56	15	15	20	15°	6	3	6	7.5°
400	16	250	390	66	15	15	20	15°	6	3	6	7.5°
450	18	275	440	67	15	15	20	15°	6	3	6	7.5°
500	20	275	490	83	15	15	20	15°	6	3	6	7.5°
600	24	300	590	123	15	15	20	15°	6	3	6	7.5°

- Mass indicates only the case with PN16 (Ductile Iron) flanges.
- Please use within allowable displacement range.
- The installation allowance is included in the allowable displacement.
(allowable displacement = installation displacement + operation displacement)
- As shown in chart are data of non-concurrent displacement, please make correction for concurrent displacements.
For correction method, refer to "Attention for handling or TOZEN HP" (<http://www.tozen.com>)

※ 2.0MPa is available for 200A and 250A.

The working pressure is over 1.6MPa, please install a control unit.

In addition, even in case of less 1.6MPa, due to the reaction force from trial operation and during operation, if it is difficult to support the reaction force, please also install a control unit.

Note: The content of this catalog is subject to change without prior notice.

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