

# **TWINFLEX-25**

TWIN-SPHERE RUBBER JOINT with floating flanges



## **FEATURES**

#### Reliability

Unparalleled reliability is guaranteed by the distinctive TOZEN design with more than 40 years experience in rubber flexible joints.

#### Quality

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

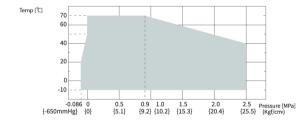
#### **Durability**

Reciprocating pressure test for 20,000 cycles or above.

### **APPLICATION**

- This product is designed for the application of piping systems in commercial buildings and industrial factories and plants.
- Applicable fluids are exclusively water including cold water, warm water, cooled water, sea water, etc.
- This product is not designed for chlorine water, pool water, oil, or boiled water.

# **OPERATING CONDITIONS AND PERFORM**



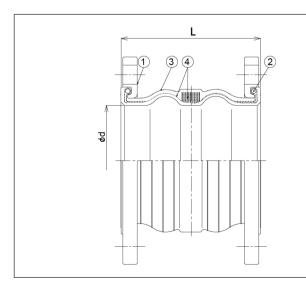
## **Operating Condition**

Max. Working Pressure: 2.5 Mpa
Working Temperature: -10 to 70 °C.

\* For high temp. application, please consult us. \*

• Bursting Pressure: 3 time or more of W/P at normal temp.

## **STRUCTURE**



No.	Parts	Materials		
1	Flange	Mild Steel		
2	Reinforcing Ring	Carbon Steel (SWRH)		
3	Shell Rubber	Synthetic Rubber		
4	Reinforcing Cord	Synthetic Fiber		

- Flange with mild steel in JIS20K, ANSI300, PN25 are standard.
- For other materials can be changed to SUS304, SUS316
- Standard material is EPDM



## **DIMENSIONS AND ALLOWABLE MOVEMENTS**

Nominal Dia	Dimensi	on (mm)	Mass Allowable Movement (mm)			Installation Tolerances (mm)					
	L	Ød	Kgs	TM	AE	AC	AM	TM	AE	AC	AM
32mm (1 1/4")	175	40	3.7	20	10	20	20°	8	3	3	7.5°
40mm (1 1/2")	175	40	4.4	20	10	20	20°	8	3	3	7.5°
50mm (2 <sup>"</sup> )	175	50	5.5	20	10	20	20°	8	3	3	7.5°
65mm (2 1/2")	175	65	7.3	20	10	20	20°	8	3	3	7.5°
80mm (3 <sup>"</sup> )	175	75	8.9	20	10	20	20°	8	3	3	7.5°
100mm (4 <sup>"</sup> )	225	100	12	20	15	20	20°	8	3	3	7.5°
125mm (5")	225	125	16	20	15	20	20°	8	3	3	7.5°
150mm (6")	225	150	20	20	15	20	20°	8	3	3	7.5°
200mm (8")	250	200	28	25	15	20	20°	10	3	3	7.5°
250mm (10")	250	250	39	25	15	20	20°	10	3	3	7.5°
300mm (12")	250	300	51	25	15	20	20°	10	3	3	7.5°

- 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 refer to the table.), please also install a control unit.

# REACTION FORCE N { kgf }

Nominal	Pressure MPa{kgf/cm²}				
Dia	0.5 {5.1}	1.0 {10.2}	1.5 {15.3}	2.0 {20.4}	2.5 {25.5}
32/40 mm (1 1/4")	25 {3}	51 {5}	76 {8}	102 {10}	127 {13}
50 mm (2")	355 {36}	710 {72}	1065 {109}	1420 {145}	1775 {181}
65 mm (2 1/2")	755 {79}	1549 {158}	2324 {237}	3099 {316}	3874 {395}
80 mm (3")	1204 {123}	2409 {246}	3613 {368}	4817 {491}	6021 {614}
100 mm (4")	1393 {142}	2785 {284}	4178 {426}	5570 {568}	6963 {710}
125 mm (5")	1614 {165}	3228 {329}	4843 {494}	6457 {658}	8071 {823}
150 mm (6")	422 {43}	843 {86}	1265 {129}	1687 {172}	2108 {215}
200 mm (8")	2654 {271}	5307 {541}	7961 {812}	10615 {1082}	13268 {1353}
250 mm (10")	11466 {1169}	22932 {2338}	34398 {3508}	45864 {4677}	57330 {5846}
300 mm (12")	19447 {1983}	38893 {3966}	58340 {5949}	77764 {7932}	97233 {9915}

2 TWF25-0123