TOZEN
A joint reliance

DYNAFLEX

FLEXIBLE SINGLE-SPHERE RUBBER JOINT with Floating Flange

FEATURES

- Quality Products
  All joints are manufactured under a strict quality assurance system of IS09002 certified factory.
- Withstand high pressure
  An excellent moulding technique combined with tough chemical fibres gives DYNAFLEX an outstanding pressure withstandability. It can withstand a bursting pressure of over 4.90MPa {50kgf/cm²} and a maximum operating pressure of 1.47MPa {15kgf/cm²}.
- Fit for suction and delivery (discharge)
- Highly effective to eliminate sound and vibration.
- Excellent in resisting the effects of heat, water and weathering, etc.



OTHER ADVANTAGES

(1) Neither gasket nor packing is needed.
(2) Mass production makes lower prices possible.
(3) Fit for uses in both expansion and flexible joint.
(4) A good insulator.



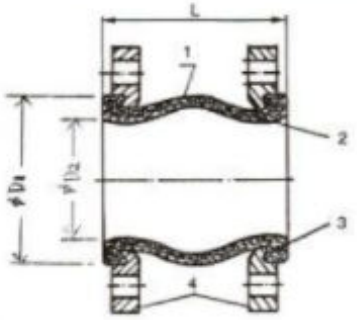
TYPICAL APPLICATIONS

(1) Water piping systems of building equipment in industrial plants.
(2) Pump lines and turbine lines used in power generating plants, shipbuilding yards, industrial machinery and universal pump blowers, etc.
(3) Feed water and drainage lines for water works, sewerage and sanitary system, etc.

Others : This connector has a wide range of applications in waste water disposal plants, mines and chemical plants, etc.

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STRUCTURE



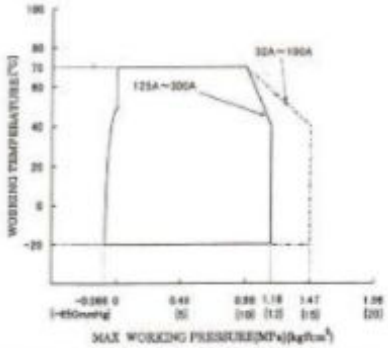
No.	Part	Material
1	Flange	Mild Steel
2	Reinforcing Ring	Carbon Steel
3	Inner Rubber	Synthetic Rubber
4	Outer Rubber	Synthetic Rubber
5	Reinforcing Cord	Synthetic Fibre

DIMENSIONS

	mm / in.	32 (1.1/4)	40 (1.1/2)	50 (2)	65 (2.1/2)	80 (3)	100 (4)	125 (5)	150 (6)	200 (8)	250 (10)	300 (12)
BODY	PLY	3	3	3	4	4	4	5	6	6	8	8
	L	95	95	105	115	135	150	165	180	190	230	245
	øD1	76	76	86.5	106	118	146	182	212	264	324	372
	øD2	40	40	50	60	72	100	125	150	200	250	300

OPERATING CONDITIONS

Use DYNAFLEX under conditions specified in the below graph.



- Normal operating pressure :
  32~100 : Max. 1.47MPa {15kgf/cm² } in normal temperature
  125~300 : Max. 1.18MPa {12kgf/cm²} in normal temperature
- Operating temperature :
  -20 to +70°C
- Bursting pressure :
  32~100 : over 4.90MPa {50kgf/cm²} in normal temperature
  125~300 : over 3.43MPa {35kgf/cm²} in normal temperature
- Applicable fluids : water, warm water, sea water, weak acids, alkalines, etc.

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ALLOWABLE MOVEMENTS IN OPERATION

Nominal Bore		T.M.	A.E.	A.C.	A.M.
mm	in.	(mm)	(mm)	(mm)	(°)
32	1.1/4	8	5	8	15
40	1.1/2	8	5	8	15
50	2	9	6	10	15
65	2.1/2	10	7	13	15
80	3	11	8	14	15
100	4	12	10	18	15
125	5	12	11	19	15
150	6	14	12	19	15
200	8	22	14	25	15
250	10	22	14	25	15
300	12	22	16	25	15

1) T.M. = Transverse Movement A.C. = Axial Compression
   A.E. = Axial Elongation A.M. = Angular Movement
2) Although allowable movements are given, no allowance for elongation is recommended when installing joint.
3) Install joint following the given allowable dimensions.

NOTES

Information in the above table are for single displacement only.
In case of complex displacement, follow the below expression.

$$C.\ EL\ (C) = \{A.EL(C)\} \times \frac{A.E. - E.}{A.E.} \times \frac{A.A.M. - A.M.}{A.A.M.}$$

C. EL (C) = Correct Elongation (Compression)
A. EL (C) = Allowable Elongation (Compression)
A.E. = Allowable Eccentricity
E. = Eccentricity
A.A.M. = Allowable Angular Movement
A.M. = Angular Movement

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NOTES

1. Always check for the suitability of operating conditions when install joints.
2. When install joints, check for cracks on the rubber part, especially after a long period of storage.
3. Do not install joints at full limits of all allowable movements simultaneously.
4. In case of joint displacement, be awared of external objects (especially those with sharp edges) which may damage the rubber body.
5. Keep away from heating source when install. Cover joints with protection sheet to free from any harm of spark resulted from welding, pre-arcing and grinding near the spot of joint installation.
6. If oils, fats, organic solvent, acid or alkali are adhered, wipe them off quickly.
7. Avoid direct exposure of sunlight in case of outdoor piping to prevent aging and deterioration of rubber.
8. During joint installation, fix pipes before and behind joints to avoid elongation to joints due to water pressure.
   In case fixing of pipes is not possible, control unit is required to prevent the joints from elongation.

Specification and design are subject to change without notice.