

1. Applications and Features

Purpose	Absorption of axial expansion / contraction and lateral movement
Location	Pump, marine plant, sewage water treatment plant, utility pipe line
Features	The outer arch structure provides excellent absorption of large lateral movement and expansion/contraction even with short product length. The elastic rubber material used for the main body absorbs vibration from rotating equipment such as pumps.

2. Structure and Parts

Figure 1 shows the structure, and Table 1 shows the part names and materials.

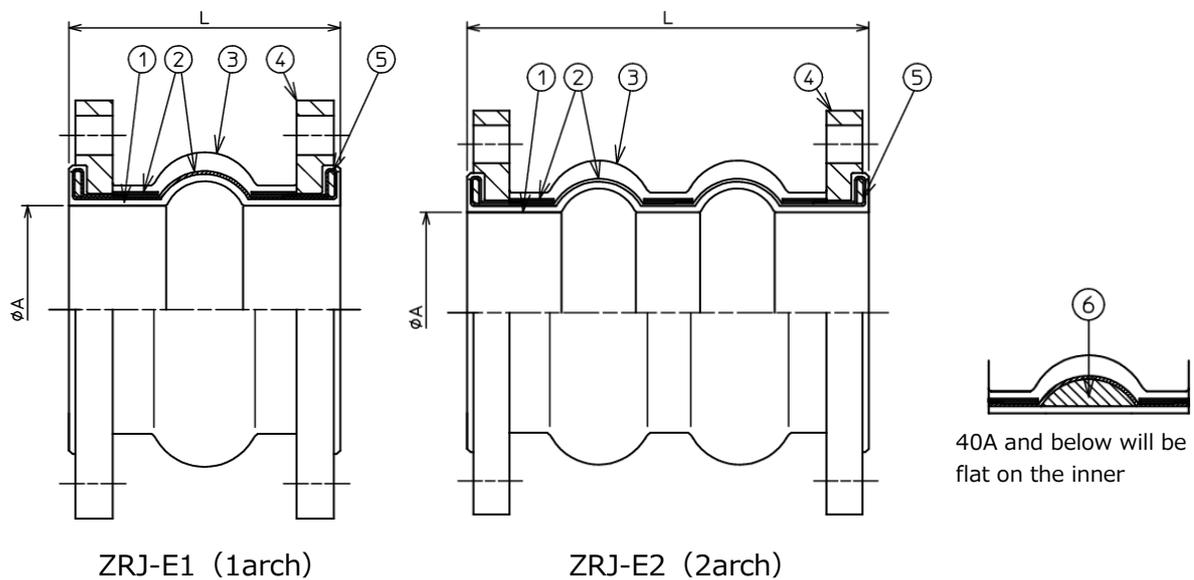


Figure 1 . Structure

Table1. Parts List

No.	Name	Material (Option)
1	Inner layer rubber	Synthetic rubber
2	Reinforcement fiber	Nylon fiber
3	Outer layer rubber	Synthetic rubber
4	Flange	Carbon steel (Stainless steel)
5	Solid ring	Carbon steel
6	Filling Rubber	Synthetic rubber

※Flange rating : JIS 10K (Standard) , 5K, 上水, JPI150lb

※Product size : 20A~300A(Standard)、350A~1000A is also available

※When the flange material is SS400, the surface treatment is hot dip galvanizing.

3. Dimensions and maximum working pressure

Table 2 shows dimensions and maximum working pressure.

Table2. Dimensions and maximum working pressure

• ZRJ-E1 (1arch)

Unit : mm

Size	φ A	Length L	Max. working pressure (MPa)
20A	20	150	1.0
25A	25	150	1.0
32A	32	150	1.0
40A	40	150	1.0
50A	50	150	1.0
65A	65	150	1.0
80A	75	150	1.0
100A	100	150	1.0
125A	125	150	1.0
150A	150	200	1.0
200A	200	200	1.0
250A	250	200	1.0
300A	300	200	1.0

• ZRJ-E2 (2arch)

Unit : mm

Size	φ A	Length L	Max. working pressure (MPa)
20A	20	250	1.0
25A	25	250	1.0
32A	32	250	1.0
40A	40	250	1.0
50A	50	250	1.0
65A	65	250	1.0
80A	75	300	1.0
100A	100	300	1.0
125A	125	300	1.0
150A	150	300	1.0
200A	200	300	1.0
250A	250	300	1.0
300A	300	300	1.0

※Maximum working pressure is at normal temperature.

4. Allowable operating movement

Table 3 shows allowable operating movement.

Table3. allowable operating movement

• ZRJ-E1 (1arch)

Unit : mm

Size	Allowable operating movement		
	Compression	Elongation	Lateral movement
20A	7	6	20
25A	7	6	20
32A	7	6	20
40A	7	6	20
50A	15	10	20
65A	15	10	20
80A	15	10	20
100A	20	15	30
125A	20	15	30
150A	20	20	30
200A	20	20	30
250A	25	25	30
300A	25	25	30

• ZRJ-E2 (2arch)

Unit : mm

Size	Allowable operating movement		
	Compression	Elongation	Lateral movement
20A	21	18	50
25A	21	18	50
32A	21	18	50
40A	21	18	50
50A	45	30	50
65A	45	30	50
80A	45	30	50
100A	45	30	50
125A	45	30	50
150A	45	30	50
200A	45	30	50
250A	45	30	50
300A	45	30	50

※Displacements are individual maximum permissible amounts and are not guaranteed for loads acting simultaneously.

5. Applicable temperature range  
-10°C~80°C

6. Mounting bolt length and bolt tightening torque (recommended value)

Table 4 shows the length of the mounting bolt.

Table 5 shows the tightening torque of the bolt.

Table 4. Mounting bolt length (JIS10K)

Size	Mounting bolt length		
	Bolt size	Length (Below Neck)	Quantity
20A	M12	50	8
25A	M16	55	8
32A	M16	55	8
40A	M16	55	8
50A	M16	65	8
65A	M16	65	8
80A	M16	65	16
100A	M16	65	16
125A	M20	70	16
150A	M20	75	16
200A	M20	75	24
250A	M22	80	24
300A	M22	80	32

Table 5. Torque of the bolt

Size	Torque (N·m)
20A	25
25A~100A	30
125A~150A	40
200A~300A	45

※Mounting bolt length does not include the thickness of flat washers and spring washers.

7. Inspection

Inspection items : Visual inspection, Dimensional inspection (overall length),  
pressure resistance inspection

Frequency : Visual inspection are all products.

Dimensional and pressure resistance inspections are sampling inspections.

8. Notes

- Insert mounting bolt from product side and tighten bolts evenly in diagonal line order.
- The service life of rubber fittings may be reduced depending on the conditions of use.  
For details, please refer to the precautions in the catalog.
- Please refer to the "Installation Instructions" for installation procedures.