

Fluoropolymer flexible joint Rubber Covered type U-FLEX

Rubber covered Fluoropolymer flexible joint with superb feature of composite material structure



Feature

Multiple feature

Composite material complement the feature of each other. Fluoropolymer liner for chemical and heat resistance, and rubber cover for vibration absorption.

Pressure Resistance

Besides the fluoropolymer liner, the tire cord withstanding internal pressure. Maximum design pressure is up to 1.6MPa, (16.3kgf/cm²), and a negative-pressure of minus 0.086MPa, (minus 650mmHg).

Safety

The exterior rubber absorbs unexpected impacts and protection cover is not required for exposed applications.

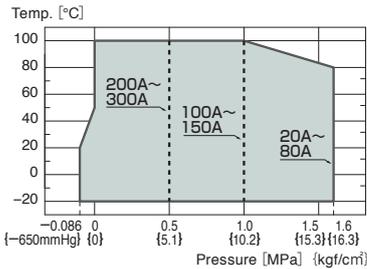
Hot-water supply line

Fluoropolymer liner with a maximum operating temperature of up to 100°C. U-FLEX is suitable for hot-water supply application without any contamination.

Installation

- Pump installation, such as hot-water supply lines, chemical lines, and pure water lines.

Operating Conditions and Performance

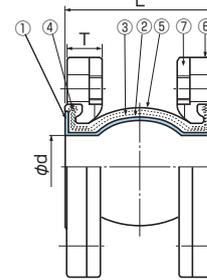


- Use after confirmation that maximum operation pressure and maximum service temperature is within the operation range.
- When using outside the operation range, a control unit is necessary. Please refer to TOZEN website.

Applications

- Vibration absorption for equipment, such as pumps.

Structure



No.	Parts	Material	No.	Parts	Material
①	Liner	Fluorine resin	⑤	Outer Rubber	EPDM(SK10)
②	Inner Rubber	EPDM(SK10)	⑥	Sprit flange	SS400
③	Reinforcing cord	Aramid fiber	⑦	Reinforcing flange	SS400
④	Reinforcing ring	SWRH			

Flange compatible dimension	Standard	JIS10K		
	Flange standard can be changed to	×	JIS5K	
		○	PN16	
		○	JIS20K	
		○	ANSI	20A-32A can't be manufactured
Material	Standard	SS400		
	Flange material can be changed to	×	FCD450	
		○	SUS304	
		○	SUS316	
		×	Polyvinyl chloride	

Dimensions and Allowable Movements

Nominal Dia.		Dimension [mm]			Mass [Kg]	Allowable Movement [mm]				Installation Tolerances [mm]			
mm	inch	L	φd	T		Eccentricity	Elongation	Compression	Deflection angle	Eccentricity	Elongation	Compression	Deflection angle
20	3/4	74	25	23	2.0	10	10	10	10°	4	3	3	5°
25	1	74	25	23	3.5	10	10	10	10°	4	3	3	5°
32	1 1/4	74	40	25	3.9	10	10	10	10°	4	3	3	5°
40	1 1/2	74	40	25	4.3	10	10	10	10°	4	3	3	5°
50	2	104	53	25	5.1	10	10	10	10°	4	3	3	5°
65	2 1/2	106	65	27	6.9	10	10	10	10°	4	3	3	5°
80	3	106	75	27	6.9	10	10	10	10°	4	3	3	5°
100	4	115	101	27	8.5	10	10	10	10°	4	3	3	5°
125	5	135	122	32	14	10	10	10	10°	4	3	3	5°
150	6	135	145	34	17	10	10	10	10°	4	3	3	5°
200	8	135	195	34	20	10	10	10	10°	4	3	3	5°
250	10	140	250	38	32	10	10	10	10°	4	3	3	5°
300	12	140	305	38	33	10	10	10	10°	4	3	3	5°

- Mass is the data when material is SS400, and flange is JIS10K flange.
- Use a joint within the range of allowable displacement.
- Fixing allowable dimension is included in allowable displacement (allowable displacement = fixing time displacement + operation displacement).
- Each displacement in chart are data of single displacement, so for multiple displacements, correction is necessary. For correction method, refer to "Attention for handling or "TOZEN HP".
- Referring to "fixing bolt dimension table", and use fixing bolt. Nut is not necessary. (When companion flange is JIS 10K, material is SS400, and when plain washer and gasket are not used.)

This brochure may be revised without prior notice. We apologize in advance for any inconvenience this may cause.

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