

**DL-FLEX** Spherical flexible joint produced by coating the outer surface of fluoropolymer with synthetic rubber

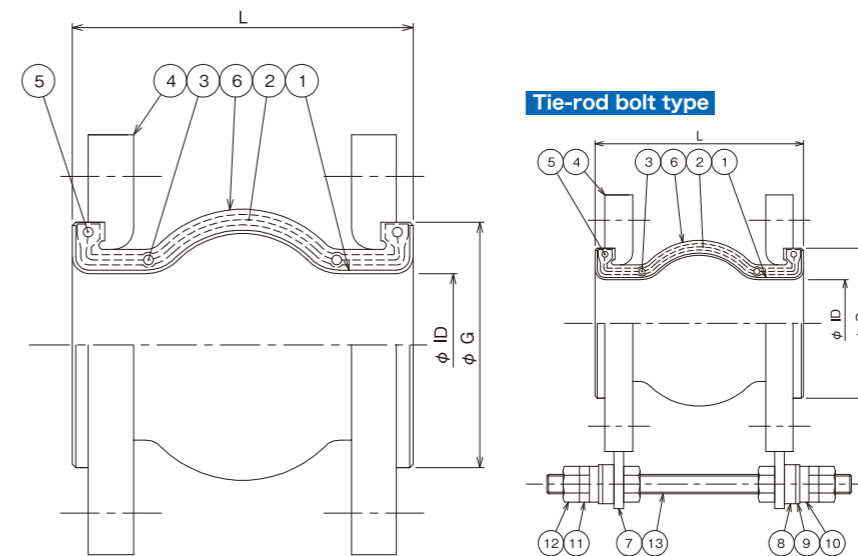
# DL-FLEX

Excellent heat and chemical resistance due to the use of fluoropolymer at fluid contact portion

Other properties include water repellency, oil repellency, and non-stickiness.



## Structure



No	Name	Material
1	Bellows	PTFE
2	Reinforcing cord	Synthetic fiber
3	Reinforcing ring	SWRH
4	Flange	SS400, SUS304 etc.
5	Reinforcing ring	SWRH
6	Outer rubber	Synthetic rubber
7	Tie-rod holder	SUS304 etc.
8	Buffer	Urethane etc.
9	Washer	SS400, SUS304 etc.
10	Spherical seat	SS400, SUS304 etc.
11	Spherical nut	SS400, SUS304 etc.
12	Nut	SS400, SUS304 etc.
13	Tie-rod bolt	SS400, SUS304 etc.

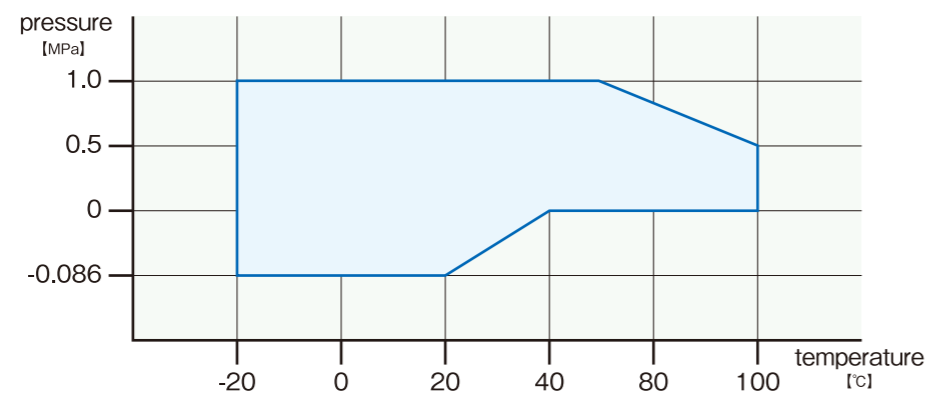
- The standard product uses the JIS10K flange. Flanges with other specification, such as JIS5K, JIS20K, tap water, JPI, ANSI can also be used.
- Besides the standard products SS400 and SUS304, acceptable materials of the flange include SUS316, SUS316L, S25C, and PVC. Unichrome plating, hot-dip galvanized materials (Zn plating), and painted materials are acceptable for the SS400 flange. Please see "Handling precautions" for PVC flanges. (Please see p. 26-28.)
- Products with tie rod bolts can be produced. (Tie rod bolts for D-FLEX come with spherical washers, spherical nuts, and shock-absorbing materials as standard attachments.)

## Size

NB	φD [mm]	φG [mm]	L [mm]	Tolerance of displacement				Dimensional tolerance for installation			
				expansion [mm]	contraction [mm]	eccentricity [mm]	angular rotation	expansion [mm]	contraction [mm]	eccentricity [mm]	angular rotation
15A	20	50	150	10	13	7	10°	2	2	2	2°
20A	25	57		10	13	7	10°	2	2	2	2°
25A	25	65		10	13	7	10°	2	2	2	2°
32A	36	73		10	13	10	10°	2	2	2	2°
40A	36	73		10	13	10	10°	2	2	2	2°
50A	48	87		13	16	10	10°	3	3	3	3°
65A	62	108		13	16	10	10°	3	3	3	3°
80A	72	118		13	16	10	10°	3	3	3	3°
100A	98	150		13	16	10	10°	3	3	3	3°
125A	124	174		13	16	10	10°	3	3	3	3°
150A	149	206		13	16	10	10°	3	3	3	3°

- Please make sure that deflections remain within permissible range during operation.
- Please note that the permissible deflection includes the size tolerance of installation. (Permissible deflection = tolerance of installation + Operating deflection)
- The deflections in the chart indicate independent deflections. Corrections are required when there are multiple deflections. Please see p. 26 for the method of correcting deflections.
- The φG values in the chart indicate the standard sizes when a JIS10K flange is used.

## Pressure / Temperature



- Please make sure that the highest operating pressure and the highest operating temperature are within the operating range before use.
- Max. operating pressure : 1.0MPa (Based on the graph of operating range above)
- Max. operating temperature : 100°C (Based on the graph of operating range above)
- Please contact us if gas is flowing through the pipe because the highest operating pressure becomes different.

- This product cannot be used in areas with repeated and frequent pressure changes, such as the delivery side of pressurizing or pressure boosting water pumps.
- The sealing performance may be lowered due to the characteristics of the material. Please re-tighten the seal or use a gasket in such cases.

## Handling instructions

- This product generates reactive force due to the load of the inner pressure. Thus, fixing points or supports are required for installed pipes. (Please see p. 26-28.)
- Please see p. 26-28 for other cautions.