# N-FLEX Low reactive force type Rubber Flexible Tube

# **N-FLEX**

Flexible tube for low reactive force type The reactive force during deflection is about half of K-Flex.



#### Feature

The low reactive force during deflection does not damage pipes.

### Usage

Pipes that require low reactive force

Resin pipes, such as PVC

#### Kind

For 100mm eccentricity (Ground & Under-ground) 3-mound For 200mm eccentricity (Ground & Under-ground) 4-mound

## Standard issue

- Max. operating pressure: Please see the maximum operating pressure in the chart on the right. Please use a structure designed for underground installation when the operating negative pressure exceeds the chart on the right. The structure designed for underground installation is operable under the pressure up to -90 kPa.
- Max. operating temperature :  $-10^{\circ}$ C $\sim$ 60°C
- When applying for under-ground use, please install the joint in depth of  $1M \sim 3M$ , Maximum Car weight is 25 Ton.
- Please contact us if gas is flowing through the pipe because the highest operating pressure becomes different.
- Solid type tube with straight inner surface is also available to prevent fluids such as filthy water or powder from settling.
- Please use a model with a control unit (tie rod bolt type) to regulate the thrust in the axial direction that is generated by the internal pressure and to prevent excessive deflection.

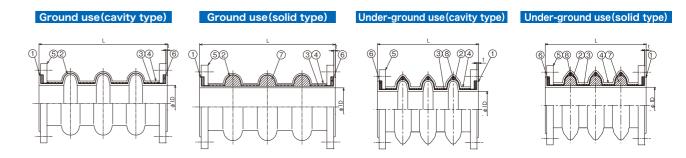
Also, please use a model with a control unit (set bolt type) to adjust the face-to-face dimension during installation. (Please see P25.)

- (1) 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.
- (2) This product cannot be used with fluids or areas of installation that might lower the elasticity of rubber. Please contact us because use of this product in such conditions needs to be examined.

#### 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.

#### Structure



No.	Name	Material	No.	Name	Material		
1	Inner rubber	Synthetic rubber	5	Flange	SS400、SUS304 etc.		
2	Reinforcement layer	Synthetic fiber	6	End-ring	SS400		
3	Reinforcement layer	Steel wire or synthetic fiber	7	Fill-up rubber	Synthetic rubber		
4	Outer rubber	Synthetic rubber	8	Reinforcing ring	SS400		

Please see "Rubber selection guide" in p.25 for selecting the material of inner rubber.

- 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 and S25C.
- Hot-dip galvanization (Zn plating) is the standard for SS400 flange to be used above the ground, and paint consisting of black epoxy resin for underground installation. Painted materials are also available.

#### Size

	φID [mm]	t [mm]	For 100mm eccentricity(3-mound)			For 200mm eccentricity(4-mound)			Max. operating pressure			
NB			L[mm]	expansion [mm]	contraction [mm]	mass [kg]	L[mm]	expansion [mm]	contraction [mm]	mass [kg]	inner pressure [Mpa]	vacuum pressure [kPa]
50A	51	3	350	30	45	4.9	450	30	45	5.2	0.50	-40
65A	64	3	350	30	45	7.0	450	30	45	7.5	0.50	-40
80A	76	3	350	30	45	7.3	450	30	45	7.9	0.50	-40
100A	102	3	350	45	60	9.0	450	45	60	9.8	0.50	-40
125A	127	3	350	45	60	12.9	450	45	60	14.0	0.50	-40
150A	152	3	500	60	60	18.5	600	60	60	19.8	0.50	-40
200A	203	3	500	60	60	22.6	600	60	60	24.2	0.50	-40
250A	254	3	500	60	60	31.7	600	60	60	33.8	0.50	-40
300A	305	3	550	60	60	38.2	650	60	60	40.8	0.25	-30
350A	350	3	550	60	60	47.7	650	60	60	50.7	0.25	-30
400A	400	3	550	60	60	64.0	650	60	60	67.6	0.25	-30
450A	450	3	550	60	60	78.6	650	60	60	82.7	0.25	-30
500A	500	3	550	60	60	89.2	650	60	60	94.0	0.25	-30

The deflection is the value when the arch structure is the cavity-type. Please obtain the deflection for the solid type by multiplying the value in the chart above by 0.5 for compression or 0.6 for extension. (The value of the eccentricity remains the same.)

20

Please contact us for details of individual deflection when using diagonal pipes, since they differ from the above values.

Please make sure that deflections remain within permissible deflections during operation.

The deflections in the chart indicate individual deflections. Corrections are necessary for combined deflections. Please see p. 26 for the method of correction.