

# TWINFLEX Screwed Type

## FLEXIBLE RUBBER JOINT



### Features

TWINFLEX Screwed Type Rubber Joint can afford large deflection that you can hardly imagine. It has various functions and are highly reliable. Followings are the main features :

- High Efficiency for Vibration and Noise Isolation**  
 The twin sphere makes the spring constant small, decreases the body natural frequency and increases the efficiency of vibration absorption.
- Withstandability**  
 It can withstand a bursting pressure of over 5.39 MPa (55 kgf/cm<sup>2</sup>) and a maximum working pressure of 1.6 MPa (16.3 kgf/cm<sup>2</sup>) with the combination of excellent formative technique and strong chemical fibre.
- Large Displacement Absorption for Eccentricity, Axial Movement and Angular Movement**  
 Since it can absorb large displacement, TWINFLEX screwed type flexible rubber joint is most appropriate for the protection of pipe line system. For example, it can prevent the destruction of connecting pipe due to earthquake and subsidence of ground.
- Applicable for both Suction and Delivery**  
 The joint fits for both suction and delivery.
- Highly Reliable**  
 The packing parts are strengthened with steel reinforcing rings to prevent the rubber body from slipping out of the fitting sides of flanges.
- Convenient to install**  
 When limited space is allowed for installation, the free type sockets can be screwed separately to pipe before fitting in the joint.

### Applications

- Vibration isolation for small pumps and circular pumps.
- Sewage disposal purifier line.
- Vibration isolation for air-conditioners and pipes.

### Structure

No.	Parts	Materials
①	Flange-A	FCD450
②	Flange-B	FCD450
③	Nut	SS400
④	Bolt	SS400
⑤	Rubber	Synthetic Rubber
⑥	Union Edge	FCD450
⑦	Washer	SS400
⑧	Reinforcing Cord	Synthetic Fibre

- The material of No. 1, 2, 6 is changeable to SUS304.
- It is producible for oil application by changing the rubber material. Please consult us.
- Please use U-FLEX for hot water supply.

## • Dimension and Allowable Movement

Nominal Bore	Size (mm)			Allowable Movement (mm)				Installation Allowance (mm)			
	A	L	ℓ	T.M.	A.E.	A.C.	A.M.(°)	T.M.	A.E.	A.C.	A.M.(°)
15mm (1/2")	25	120	30	15	10	15	20	6	3	4	10
20mm (3/4")	25	120	30	15	10	15	20	6	3	4	10
25mm (1")	25	120	30	15	10	15	20	6	3	4	10
32mm (1.1/4")	40	175	35	20	10	20	30	8	3	6	10
40mm (1.1/2")	40	175	35	20	10	20	30	8	3	6	10
50mm (2")	50	175	40	20	10	20	30	8	3	6	10

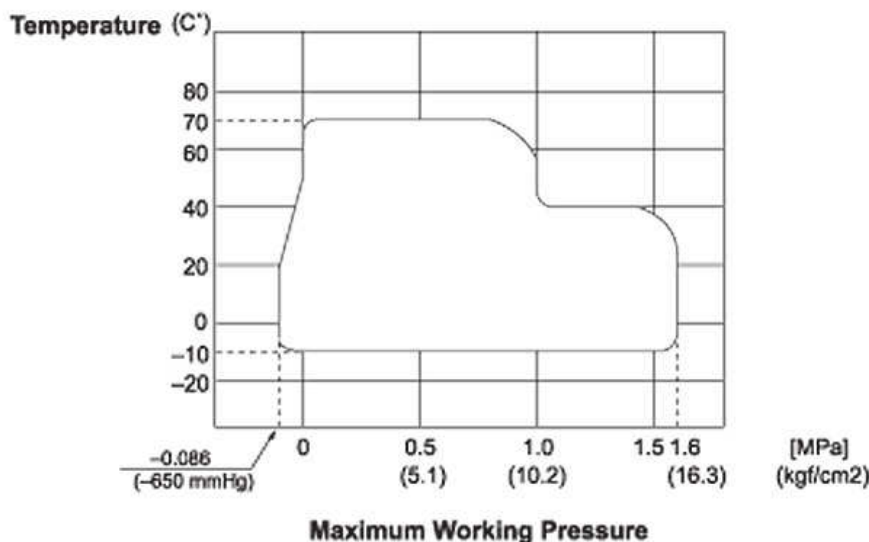
T.M. = Transverse Movement

A.E. = Axial Elongation

A.C. = Axial Compression

A.M. = Angular Movement

## • Operating Condition



## • Notes

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

$$C.EL(C) = A.EL(C) \times \left\{ 1 - \left( \frac{T.M.}{A.T.M.} + \frac{A.M.}{A.A.M.} \right) \right\}$$

C.EL(C) = Correct Elongation (Compression)

A.EL(C) = Allowable Elongation (Compression)

A.T.M. = Allowable Transverse Movement

T.M. = Transverse Movement

A.A.M. = Allowable Angular Movement

A.M. = Angular Movement

- Install the joint according to the above given allowable dimensions.