# PLAS RUBBER FLEX **Series TS** (Single-sphere Connectors with Flanges)

**PLAS RUBBER FLEX** Series TS are designed for tough demanding industrial applications.



### Applications:

- Air Conditioning-Heating and Ventilating System
- Chemical-Petrochemical and Industrial Process Piping System
- Power Generating System
- Material Service
- Pulp & Paper System
- Water-Wastewater Sewage and Pollution Control System

Installed next to mechanical equipment or between the anchor points of piping system, specify the **PLAS** Series TS and TT to

- 1. Absorb Pipe/Movement/Stress.
- 4. Compensate alignment/offset
- 2. Decrease Systems Noise.
- 5. Eliminate Electrolysis

3. Isolate Vibration.

6. Protect Against Start up / Surge Forces

PLAS RUBBER FLEX Series TS are ideal in heating and air conditioning systems, where low initial cost and maximum reliability are a must. The TS connectors have EPDM cover, providing excellent resistance to sunlight, ozone, oxidation and is resistant to damage from dropping oil. The unit has EPDM tube, which is good for hot, and cold-water service & mild chemicals. The fully molded Single Sphere design provides greater flexibility, thus protecting mating flanges, especially PVC and fiberglass types. The steel flanges easily rotate on the bellows, which makes it easier to line up the bolt holes during installation when mating flanges are out of line. Separate retaining rings are never required. With a temperature rating of -20°C to 100° C., the standard sizes range from 1" through 12" I.D. can be with the working pressure at 228 psi, Sizes 14" through 24" have working pressure at 114 psi.

### Flange Connection:

PN10,JIS10K,ANSI150

The configuration of PLAS RUBBER FLEX Series TS

Item Part Material

1. Flanges SS41 (Changeable)

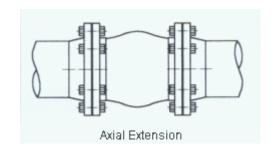
Wire Carbon Steel Wires Strand
Elastomer Special Synthetic Rubber

4. Reinforcing Fabric Synthetic Fiber



### Allowable movements

The **PLAS RUBBER FLEX** Series of single-sphere connectors (with flanges) have allowable movements to axial compression, lateral movements & angular deflections, (as per the drawing on the right side). We also offer Japanese, American and German system for size from 1" to 24".



Plastech Marketing Co., Ltd.

Hotline: 086-345-3385, 063-416-6950

## Japanese size (JIS)

Item no.	Size (JIS)	L	F¢	Compression	Extension	Lateral	Angular
TS-101	1 inch ( 25 mm)	95mm	60 mm	8mm	4mm	8mm	15°
TS-101Q	1¼ Inch ( 32 mm)	95mm	68 mm	8mm	4mm	8mm	15°
TS-101H	1½ inch ( 40 mm)	95mm	68 mm	8mm	4mm	8mm	15°
TS-102	2 inch ( 50 mm)	105mm	86 mm	8mm	5mm	8mm	15°
TS-102H	2½ inch ( 65 mm)	115mm	105 mm	12mm	6mm	10mm	15°
TS-103	3 inch ( 80 mm)	130mm	115 mm	12mm	6mm	10mm	15°
TS-104	4 inch (100 mm)	135mm	150 mm	18mm	10mm	12mm	15°
TS-105	5 inch (125 mm)	170mm	179 mm	18mm	10mm	12mm	15°
TS-106	6 inch (150 mm)	180mm	210 mm	18mm	10mm	12mm	15°
TS-108	8 inch (200 mm)	205mm	260 mm	25mm	14mm	22mm	15°
TS-110	10 inch (250 mm)	240mm	320 mm	25mm	14mm	22mm	15°
TS-112	12 inch (300 mm)	260mm	367 mm	25mm	14mm	22mm	15°
TS-114	14 inch (350 mm)	265mm	408 mm	25mm	16mm	22mm	15°
TS-116	16 inch (400 mm)	265mm	472 mm	25mm	16mm	22mm	15°
TS-118	18 inch (450 mm)	265mm	522 mm	25mm	16mm	22mm	15°
TS-120	20 inch (500 mm)	265mm	570 mm	25mm	16mm	22mm	15°
TS-124	24 inch (600 mm)	254mm	689 mm	19mm	13mm	19mm	15°

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## American size (ANSI)

Item no.	Size I.D.	L	F¢	Compression	Extension	Lateral	Angular
TS-201	1 inch ( 25 mm)	6"	60 mm	1/2"	3/8"	1/2"	15°
TS-201Q	1¼ Inch ( 32 mm)	6"	68 mm	1/2"	3/8"	1/2"	15°
TS-201H	1½ inch ( 40 mm)	6"	68 mm	1/2"	3/8"	1/2"	15°
TS-202	2 inch ( 50 mm)	6"	86 mm	1/2"	3/8"	1/2"	15°
TS-202H	2½ inch ( 65 mm)	6"	105 mm	1/2"	3/8"	1/2"	15°
TS-203	3 inch ( 80 mm)	6"	115 mm	1/2"	3/8"	1/2"	15°
TS-204	4 inch (100 mm)	6"	150 mm	5/8"	3/8"	1/2"	15°
TS-205	5 inch (125 mm)	6"	179 mm	5/8"	3/8"	1/2"	15°
TS-206	6 inch (150 mm)	6"	210 mm	5/8"	3/8"	1/2"	15°
TS-208	8 inch (200 mm)	6"	260 mm	5/8"	3/8"	1/2"	15°
TS-210	10 inch (250 mm)	8"	320 mm	5/8"	1/2"	3/4"	15°
TS-212	12 inch (300 mm)	8	367 mm	3/4"	1/2"	3/4"	15°
TS-214	14 inch (350 mm)	8"	408 mm	3/4"	1/2"	3/4"	15°
TS-216	16 inch (400 mm)	8"	472 mm	3/4"	1/2"	3/4"	15°
TS-218	18 inch (450 mm)	8"	522 mm	3/4"	1/2"	3/4"	15°
TS-220	20 inch (500 mm)	8"	570 mm	3/4"	1/2"	3/4"	15°
TS-224	24 inch (600 mm)	10"	689 mm	3/4"	1/2"	3/4"	15°

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## German size (PN)

Item no.	Size I.D.	L	F¢	Compression	Extension	Lateral	Angular
TS-301	1 inch ( 25 mm)	130 mm	60 mm	12 mm	9 mm	12 mm	15°
TS-301Q	1¼ Inch ( 32 mm)	130 mm	68 mm	12 mm	9 mm	12 mm	15°
TS-301H	1½ inch ( 40 mm)	130 mm	68 mm	12 mm	9 mm	12 mm	15°
TS-302	2 inch ( 50 mm)	130 mm	86 mm	12 mm	9 mm	12 mm	15°
TS-2302H	2½ inch ( 65 mm)	130 mm	105 mm	12 mm	9 mm	12 mm	15°
TS-303	3 inch ( 80 mm)	130 mm	115 mm	12 mm	9 mm	12 mm	15°
TS-304	4 inch (100 mm)	130 mm	150 mm	14 mm	9 mm	14 mm	15°
TS-305	5 inch (125 mm)	130 mm	179 mm	14 mm	9 mm	14 mm	15°
TS-306	6 inch (150 mm)	130 mm	210 mm	14 mm	9 mm	14 mm	15°
TS-308	8 inch (200 mm)	130 mm	260 mm	14 mm	9 mm	14 mm	15°
TS-310	10 inch (250 mm)	130 mm	320 mm	14 mm	9 mm	14 mm	15°
TS-312	12 inch (300 mm)	130 mm	367 mm	16 mm	9 mm	16 mm	15°

	Operating conditions:							
Size I.D.	1 "~ 12" 25mm ~ 300mm	4"~24" 350mm ~ 600mm	TEMP					
	PSIG		100					
Working Pressure	228	114	u-					
Burst Pressure	854	342	40 /					
Vacuum Rating	650 r	nm/Hg	a - /					
Temperature	-20°C ~ 100°C / -4°F ~ 212°F		-20 -40 0 5 10 15 20 kg/ke <sup>2</sup> -650mm/HG WORKING PRES					

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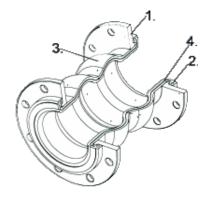
# PLAS RUBBER FLEX Series TT (Twin-sphere Connectors with Flanges)



PLASFLEX Series TT (Twin-Sphere Connectors with flange) is ideal in heating and air conditioning systems where low initial cost and maximum reliability are a must. The TT Connectors are Twin-Sphere joint with EPDM cover and EPDM tube. It provides excellent resistance to ozone and sunlight aging and oxidation. The unit has an EPDM tube, which is good for hot and cold-water and chemicals. . The Twin-Spherical design not only provides a high pressure rating, also provide greater flexibility, thus protecting mating flanges, especially PVC and fiberglass types. The steel flanges easily rotate on the bellows, which makes it easier to line up the bolt holes during installation when mating flanges are out of line. Separate retaining rings are never required. Flanges are of zinc-plated steel with a steel bead (flange retainer). Standard sizes range from 1½" through 12" I.D., with a operating pressures at 228 psi at -20°C ~ 100° C., and 14" I.D. through 20" with operating pressures at 114 psi at -20°C ~ 100° C.

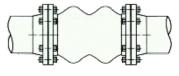
### The material of PLASFLEX series TT Rubber Joint

<u>Item</u>	<u>PART</u>	<u>Material</u>
1.	Flanges	SS41 (Changeable)
2.	Wire	Carbon Steel Wires Strand
3.	Elastomer	Special Synthetic Rubber
4.	Reinforcing Fabric	Synthetic Fiber



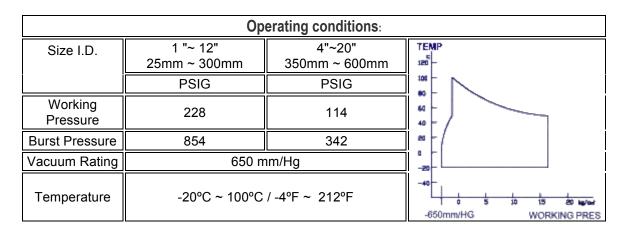
#### Allowable movements

Same as Series of TS (PLAS single sphere), The PLAS Series of Twin-sphere connectors (with flanges) have allowable movements to axial compression, lateral movements & angular deflections, (as per the drawing here in below).



**Axail Extension** 

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Item no.	Size I.D.	L	F¢	Compression	Extension	Lateral	Angular
TT-101H	1½ inch ( 40 mm)	175mm	68 mm	50mm	30mm	45mm	35°
TT-102	2 inch ( 50 mm)	175mm	86 mm	50mm	30mm	45mm	35°
TT-102H	2½ inch ( 65 mm)	175mm	105 mm	50mm	30mm	45mm	35°
TT-103	3 inch ( 80 mm)	175mm	115 mm	50mm	30mm	45mm	35°
TT-104	4 inch (100 mm)	225mm	150 mm	50mm	35mm	40mm	35°
TT-105	5 inch (125 mm)	225mm	179 mm	50mm	35mm	40mm	35°
TT-106	6 inch (150 mm)	225mm	210 mm	50mm	35mm	40mm	35°
TT-108	8 inch (200 mm)	325mm	260 mm	60mm	35mm	35mm	30°
TT-110	10 inch (250 mm)	325mm	320 mm	60mm	35mm	35mm	30°
TT-112	12 inch (300 mm)	325mm	367 mm	60mm	35mm	35mm	30°
TT-114	14 inch (350 mm)	350mm	408 mm	40mm	30mm	30mm	20°
TT-116	16 inch (400 mm)	350mm	472 mm	40mm	30mm	30mm	20°
TT-118	18 inch (450 mm)	350mm	522 mm	40mm	30mm	30mm	20°
TT-120	20 inch (500 mm)	350mm	570 mm	40mm	30mm	30mm	20°

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# PLAS RUBBER FLEX Series TU (Twin-sphere Connectors with union threads



**PLASFLEX** Series TU is designed for supply and distribution pipeline service or to connect piping to specific equipment application such as: Pumps, Chillers, Cooling Towers, Compressors, Blowers, Fans, Absorption Machines, etc. Installed next to mechanical equipment or between the anchor points of piping systems, specify the **PLASFLEX** Series TU to

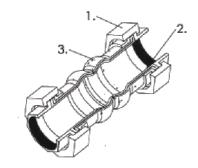
- 1. Absorb Pipe / Movement / Stress
- 2. Decrease Systems Noise
- 3. Isolate Vibration

- 4. Compensate alignment / Offset
- 5. Eliminate Electrolysis
- 6. Protect Against Start up / Surge Forces

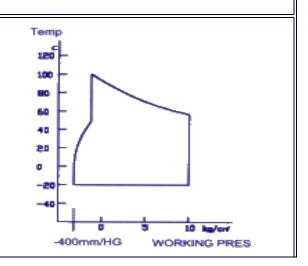
**PLASFLEX** Series TU is engineered for tough, demanding industrial and commercial application, as found in: Air conditioning, Heating and Ventilating systems, Chemical, Petrochemical and Industrial Process Piping systems, Power generating plants, Steel mills, Marine service, Pulp & Paper systems, Water-wastewater sewage and pollution control systems.

#### The material of PLASFLEX Series TU

<u>Item</u>	<u>Part</u>	<u>Material</u>
1.	Union	FB32
2.	Reinforcing Cloth	Nylon Fabric
3.	Elastomer	Synthetic Rubber



Operating conditions:							
Size I.D.	½ "~ 3" 15mm ~ 80mm						
	PSIG	kPa					
Working Pressure	142	982					
Burst Pressure	711	4,905					
Pressure Rating	90	621					
Vacuum Rating	400 mm/Hg						
Temperature Range	-20°C ~ 100°C / -4°F ~ 212°F						



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## **Products list**

Item no.	Size I.D.	L	Compression	Extension	Lateral	Angular
TU ½	½ inch ( 15 mm)	203mm	22mm	6mm	22mm	30°
TU ¾	<sup>3</sup> / <sub>4</sub> inch ( 20 mm)	203mm	22mm	6mm	22mm	30°
TU 1	1 inch ( 25 mm)	203mm	22mm	6mm	22mm	25°
TU 1-1/4	1-¼ inch ( 32 mm)	203mm	22mm	6mm	22mm	25°
TU 1-1/2	1-½ inch (40 mm)	203mm	22mm	6mm	22mm	20°
TU 2	2 inch (50 mm)	203mm	22mm	6mm	22mm	15°
TU 2-1/2	2-½ inch (65 mm)	225mm	22mm	6mm	22mm	12°
TU- 3	3 inch (80 mm)	225mm	22mm	6mm	22mm	10°

Hotline: 086-345-3385, 063-416-6950