

DI GROOVED U-BOLT MECHANICAL TEE

Type: 3L

Doc No: DS-400-3L-01-E

1.0 PRODUCT OVERVIEW

The U-bolt mechanical three-way is a saddle-shaped connecting piece for connecting the branch pipe in the middle of the straight pipe and the U-bolt on the lower cover, and the branch pipe is a threaded connection. It can be connected to fire sprinklers, pressure gauges, drains, etc.



Dimensions:

1 1/4"(DN32)– 6"(DN150)

Design Standard:

ISO6182, AWWA C606, GB 5135.11

Connection Standard:

ASME B36.10, ASTM A53-A53M, ISO 4200

Working Pressure:

175PSI-300PSI

Application:

U-bolt mechanical tee is suitable for medium and low pressure pipeline systems with nominal pressure 175-300 PSI, nominal size DN32-DN150, temperature range of - 20 °C-+180°C, which are widely applied in water supply and drainage, fire-fighting, air conditioning, etc.

Pipe Material:

Welded and seamless rolled steel pipes according to ASME B36.10, ASTM A53-A53M, ISO 4200, GB/T 21835

Surface Treatment:

- Electrophoretic painting
- Epoxy power painting
- Hot-dip galvanizing
- Black
- Others would be available upon clients' detailed request

2.0 APPROVALS



3.0 SPECIFICATIONS

Housing:

ASTM A536, Ductile iron 65-45-12

Gasket:

1、EPDM Gasket, code E:

Temperature: $-34^{\circ}\text{C} \sim +110^{\circ}\text{C}$ ($-30 \sim +230^{\circ}\text{F}$) ;

Applicable media: water, gas, diluted acid (base), and other chemicals (excluding hydrocarbons)

Note: Strictly prohibit the use of oil and hydrocarbons.

2、NBR, code D:

Temperature: $-29^{\circ}\text{C} \sim +82^{\circ}\text{C}$ ($-20 \sim +180^{\circ}\text{F}$) ;

Applicable media: Petroleum products, vegetable oils, mineral oils, etc.

Note: strictly prohibit use with high temperature substances.

3、Silicone Rubber, code S:

Temperature: $-40^{\circ}\text{C} \sim +177^{\circ}\text{C}$ ($-40 \sim +350^{\circ}\text{F}$)

Applicable media: High temperature and dry air and some high temperature chemicals, drinking water and so on.

4、Chloroprene Rubber, code LD:

Temperature: $-32^{\circ}\text{C} \sim +82^{\circ}\text{C}$ ($-26 \sim +180^{\circ}\text{F}$)

Applicable media: sea water

5、Fluororubber, code F:

Temperature: $-20^{\circ}\text{C} \sim +180^{\circ}\text{C}$

Applicable media: Hot oil, some chemical products, good oxidation resistance.

Bolts/Nuts:

ANSI Heavy Hex Nut

1. Material: SAE J995 2.

2. Thread: ANSI B 1.1-1982, class 2B.

3. Surface Treatment: Zinc electroplated per ASTM B633 CLASS FE/ZN5 TYPE III , thickness $\geq 5\mu\text{m}$ per class SC1.

Metric Heavy Hex Nut

1. Material: ISO 898-2:1992 \ GB/T3098.2-2000 Class 8.

2. Thread: ISO 261, tolerance 6h for M10& M12, 7h for M16 and above.

3. Surface Treatment: Zinc Electroplated followed by a yellow chromate dip per ISO 2081 FE/ZN5, ISO4520 CLASS 1A.

ANSI Oval Neck Track Bolt

1. Material: SAE J429 5.

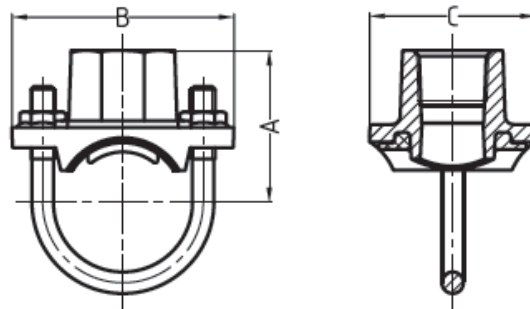
2. Thread: UNC thread per ANSI B 1.1 Class 2A.

3. Surface Treatment: Silver chromate electroplated per ASTM B633 CLASS FE/ZN5 TYPE III, thickness $\geq 5\mu\text{m}$ per class SC1.

Metric Oval Neck Track Bolt

1. Material: ISO 898-1: 1992 \ GB/T3098.1-2000 Class 8.8.
2. Thread: ISO metric thread per ISO 261, tolerance 6h.
3. Surface Treatment: Yellow chromate electroplated per ISO 2081 FE/ZN5 ISO4520 CLASS 1A.

4.0 DIMENSIONS AND PERFORMANCE



Nominal Size	Hole Dia	Working Pressure	Dimensions			U Bolt Size
	+1.6 ,0/+0.063,0		A	B	C	
mm/in	mm/in	PSI/Mpa	mm/in	mm/in	mm/in	mm/in
32X15 1¼X1/2	30 1.18	300 2.07	54.4 2.14	88.9 3.5	57.2 2.25	3/8X73 M10X73
32X20 1¼X3/4	30 1.18	300 2.07	54.4 2.14	88.9 3.5	57.2 2.25	3/8X73 M10X73
32X25 1¼X1	30 1.18	300 2.07	57.7 2.27	88.9 3.5	57.2 2.25	3/8X73 M10X73
40X15 1½X1/2	30 1.18	300 2.07	57.7 2.27	88.9 3.5	57.2 2.25	3/8X73 M10X73
40X20 1½X3/4	30 1.18	300 2.07	57.7 2.27	88.9 3.5	57.2 2.25	3/8X73 M10X73
40X25 1½X1	30 1.18	300 2.07	60.8 2.39	88.9 3.5	57.2 2.25	3/8X73 M10X73
50X15 2X1/2	30 1.18	300 2.07	63.3 2.49	95.3 3.75	57.2 2.25	3/8X90 M10X90
50X20 2X3/4	30 1.18	300 2.07	63.3 2.49	95.3 3.75	57.2 2.25	3/8X90 M10X90
50X25 2X1	30 1.18	300 2.07	66.6 2.62	95.3 3.75	57.2 2.25	3/8X90 M10X90

50X32 2X11/4	45 1.75	300 2.07	66.6 2.62	4.72 120	3 76	1/2X52
65X15 2½X1/2	30 1.18	300 2.07	69.9 2.75	108 4.25	57.2 2.25	3/8X105 M10X105
65X20 2½X3/4	30 1.18	300 2.07	69.9 2.75	108 4.25	57.2 2.25	3/8X105 M10X105
65X25 2½X1	30 1.18	300 2.07	73.2 2.88	108 4.25	57.2 2.25	3/8X105 M10X105
65X15 76.1X1/2	30 1.18	300 2.07	69.9 2.75	108 4.25	57.2 2.25	3/8X105 M10X105
65X20 76.1X3/4	30 1.18	300 2.07	69.9 2.75	108 4.25	57.2 2.25	3/8X105 M10X105
65X25 76.1X1	30 1.18	300 2.07	73.2 2.88	108 4.25	57.2 2.25	3/8X105 M10X105
80X25 88.9X1	38 1.5	300 2.07	79 3.11	145 5.7	73 2.87	1/2X58
100X25 114.3X1	30 1.18	300 2.07	89 3.5	185 7.28	72 2.83	1/2X70 M12X70
150X25 168.3X1	38 1.5	300 2.07	124 4.88	254 10	75 2.95	5/8X102

5.0 REFERENCE MATERIALS

Approved certification for Grooved Fittings and Couplings

I-JM-Grooved fitting: Installation Instructions for grooved fittings and couplings