



## DI GROOVED MECHANICAL TEE-THREADED OUTLET

Type: MT3 Doc No:DS-400-MT3-01-E

### 1.0 PRODUCT OVERVIEW

Threaded outlet mechanical tee is a saddle-shaped joint for connecting one side of a pipe in the middle of a straight pipe, the branch pipe is a threaded connection.



#### Dimensions:

1"(DN25)–10"(DN250)

#### Design Standard:

ISO6182, AWWA C606, GB 5135.11

#### Connection Standard:

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

#### Working Pressure:

175PSI-300PSI

#### Application:

Threaded outlet mechanical tee is suitable for medium and low pressure pipeline systems with nominal pressure 175-300 PSI, nominal size DN25-DN250, 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.

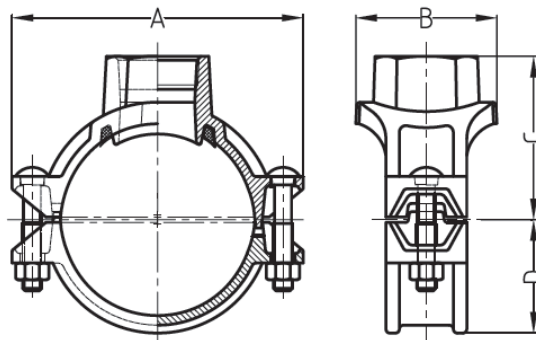
### ANSI Oval Neck Track Bolt

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	Pipe O.D	Working Pressure	Hole Dia. mm/in	Dimensions				Bolt Size
				A	B	C	D	
mm/in	mm/in	PSI/Mpa	+1.6,0/+0.063,0	mm/in	mm/in	mm/in	mm/in	mm/in
25X10 1X3/8	33.7X17.2 1.315X0.677	300 2.07	23.5 0.92	86 3.38	46 1.81	26 1.02	24.5 0.96	M8X30
25X15 1X1/2	33.7X21.3 1.315X0.825	300 2.07	23.5 0.92	86 3.38	46 1.81	26 1.02	24.5 0.96	M8X30
25X20 1X3/4	33.7X26.9 1.315X1.050	300 2.07	23.5 0.92	86 3.38	52 2.05	41 1.61	24.5 0.96	M8X30
25X25 1X1	33.7X33.7 1.315X1.315	300 2.07	23.5 0.92	86 3.38	57 2.24	45 1.77	24.5 0.96	M8X30
32X10 11/4X3/8	42.4X17.2 1.660X0.677	300 2.07	30 1.18	95.5 3.76	53 2.09	32 1.26	29 1.14	M10X35
32X15 11/4X1/2	42.4X21.3 1.660X0.825	300 2.07	30 1.18	95.5 3.76	57 2.24	32 1.26	29 1.14	M10X35
32X20 11/4X3/4	42.4X26.9 1.660X1.050	300 2.07	30 1.18	95.5 3.76	57 2.24	44 1.73	29 1.14	M10X35
32X25 11/4X1	42.4X33.7 1.660X1.315	300 2.07	30 1.18	95.5 3.76	57 2.24	53 2.09	29 1.14	M10X35
40X10 11/2X3/8	48.3X17.2 1.900X0.677	300 2.07	30 1.18	101.5 3.99	53 2.09	34 1.34	32.5 1.28	M10X35
40X15 11/2X1/2	48.3X21.3 1.900X0.825	300 2.07	30 1.18	101.5 3.99	57 2.24	35.5 1.4	32.5 1.28	M10X35
40X20 11/2X3/4	48.3X26.9 1.900X1.050	300 2.07	30 1.18	101.5 3.99	57 2.24	47.5 1.87	32.5 1.28	M10X35
40X25 11/2X1	48.3X33.7 1.900X1.315	300 2.07	30 1.18	101.5 3.99	57 2.24	56 2.2	32.5 1.28	M10X35
50x10 2x3/8	60.3x17.2 2.375x0.677	300 2.07	38 1.5	116 4.57	68 2.68	44 1.73	39 1.54	3/8x55 M10X57
50x15 2x1/2	60.3x21.3 2.375x0.825	300 2.07	38 1.5	116 4.57	68 2.68	60 2.36	39 1.54	3/8x55 M10X57
50x20 2x3/4	60.3x26.9 2.375x1.050	300 2.07	38 1.5	116 4.57	68 2.68	60 2.36	39 1.54	3/8x55 M10X57
50x25 2x1	60.3x33.7 2.375x1.315	300 2.07	38 1.5	116 4.57	68 2.68	60 2.36	39 1.54	3/8x55 M10X57
50x32 2x1 1/4	60.3x42.4 2.375x1.660	300 2.07	45 1.75	116 4.57	76 2.99	65 2.56	39 1.54	3/8x55 M10X57
50x40 2x1 1/2	60.3x48.3 2.375x1.900	300 2.07	45 1.75	116 4.57	76 2.99	65 2.56	39 1.54	3/8x55 M10X57



Nominal Size	Pipe O.D	Working Pressure	Hole Dia mm/in	Dimensions				Bolt Size
				A	B	C	D	
mm/in	mm/in	PSI/Mpa	+1.6,0/+0.063,0	mm/in	mm/in	mm/in	mm/in	mm/in
65x20 2½x¾	73.0x26.9 2.875x1.050	300 2.07	38 1.5	137 5.39	71 2.76	68 2.67	49 1.93	1/2x70 M12X70
65x25 2½x1	73.0x33.7 2.875x1.315	300 2.07	38 1.5	137 5.39	71 2.76	70 2.75	49 1.93	1/2x70 M12X70
65x32 2½x1¼	73.0x42.4 2.875x1.660	300 2.07	51 2	137 5.397	84.5 3.33	73 2.87	49 1.93	1/2x70 M12X70
65x40 2½x1½	73.0x48.3 2.875x1.900	300 2.07	51 2	137 5.39	84.5 3.33	73 2.87	49 1.93	1/2x70 M12X70
65x15 76.1x½	76.1x21.3 3.000x0.825	300 2.07	38 1.5	137 5.39	71 2.8	61.5 2.42	49.5 1.95	1/2x70 M12X70
65x20 76.1x¾	76.1x26.9 3.000x1.050	300 2.07	38 1.5	137 5.39	71 2.8	68 2.67	49.5 1.95	1/2x70 M12X70
65x25 76.1x1	76.1x33.7 3.000x1.315	300 2.07	38 1.5	137 5.39	71 2.8	75 3.05	49.5 1.95	1/2x70 M12X70
65x32 76.1x1¼	76.1x42.4 3.000x1.660	300 2.07	51 2	137 5.39	84.5 3.33	75 3.05	49.5 1.95	1/2x70 M12X70
65x40 76.1x1½	76.1x48.3 3.000x1.900	300 2.07	51 2	137 5.39	84.5 3.33	75 3.05	49.5 1.95	1/2x70 M12X70
80x25 3x½	88.9x21.3 3.500x0.825	300 2.07	38 1.5	152 5.98	72.5 2.85	71.5 2.81	56.5 2.22	1/2x75 M12X76
80x20 3x¾	88.9x26.9 3.500x1.050	300 2.07	38 1.5	152 5.98	72.5 2.85	71.5 2.81	56.5 2.22	1/2x75 M12X76
80x25 3x1	88.9x33.7 3.500x1.315	300 2.07	38 1.5	152 5.98	72.5 2.85	80 3.15	56.5 2.22	1/2x75 M12X76
80x32 3x1¼	88.9x42.4 3.500x1.660	300 2.07	51 2	152 5.98	85.5 3.37	80 3.15	56.5 2.22	1/2x75 M12X76
80x40 3x1½	88.9x48.3 3.500x1.900	300 2.07	51 2	152 5.98	85.5 3.37	80 3.15	56.5 2.22	1/2x75 M12X76
80x50 3x2	88.9x60.3 3.500x2.375	300 2.07	64 2.5	152 5.98	98 3.86	80 3.15	56.5 2.22	1/2x75 M12X76
100x15 108.0x1/2	108.1x21.3 4.250x0.825	300 2.07	38 1.5	172 6.77	78.5 3.09	87 3.43	64.5 2.54	1/2x75 M12X76
100x20 108.0x3/4	108.1x26.9 4.250x1.050	300 2.07	38 1.5	172 6.77	78.5 3.09	87 3.43	64.5 2.54	1/2x75 M12X76
100x25 108.0x1	108.1x33.7 4.250x1.315	300 2.07	38 1.5	172 6.77	78.5 3.09	87 3.43	64.5 2.54	1/2x75 M12X76



Nominal Size	Pipe O.D	Working Pressure	Hole Dia mm/in	Dimensions				Bolt Size
				A	B	C	D	
mm/in	mm/in	PSI/Mpa	+1.6,0/+0.063,0	mm/in	mm/in	mm/in	mm/in	mm/in
100x32 108.0x1¼	108.1x42.4 4.250x1.660	300 2.07	51 2	172 6.77	89 3.5	87 3.43	64.5 2.54	1/2x75 M12X76
100x40 108.0x1½	108.0x48.3 4.250x1.900	300 2.07	51 2	172 6.77	89 3.5	87 3.43	64.5 2.54	1/2x75 M12X76
100x50 108.0x2	108.0x60.3 4.250x2.375	300 2.07	64 2.5	172 6.77	106.5 4.19	92 3.62	64.5 2.54	1/2x75 M12X76
100x65 108.0x76.1	108.0x76.1 4.250x3.000	300 2.07	70 2.75	172 6.77	106.5 4.19	100 3.94	64.5 2.54	1/2x75 M12X76
100x15 4x½	114.3x21.3 4.500x0.825	300 2.07	38 1.5	188 7.4	78.5 3.09	90 3.54	70 2.76	1/2x75 M12X76
100x20 4x¾	114.3x26.9 4.500x1.050	300 2.07	38 1.5	188 7.4	78.5 3.09	90 3.54	70 2.76	1/2x75 M12X76
100x25 4x1	114.3x33.7 4.500x1.315	300 2.07	38 1.5	188 7.4	78.5 3.09	93 3.66	70 2.76	1/2x75 M12X76
100x32 4x1¼	114.3x42.4 4.500x1.660	300 2.07	51 2	188 7.4	89 3.5	95 3.74	70 2.76	1/2x75 M12X76
100x40 4x1½	114.3x48.3 4.500x1.900	300 2.07	51 2	188 7.4	89 3.5	97 3.82	70 2.76	1/2x75 M12X76
100x50 4x2	114.3x60.3 4.500x2.375	300 2.07	64 2.5	188 7.4	104.5 4.11	100 3.94	70 2.76	1/2x75 M12X76
100x65 4x2½	114.3x73.0 4.500x2.875	300 2.07	70 2.75	188 7.4	104.5 4.11	102 4.02	70 2.76	1/2x7 M12X76 <sup>5</sup>
100x65 4x76.1	114.3x76.1 4.500x3.000	300 2.07	70 2.75	188 7.4	104.5 4.11	102 4.02	70 2.76	1/2x75 M12X76
100x80 4x3	114.3x88.9 4.500x3.500	300 2.07	89 3.5	188 7.4	128 5.039	102 4.02	70 2.76	1/2x75 M12X76
125x32 133.0x1.25	133.0x42.4 5.250x1.660	300 2.07	51 2	209 8.23	93 3.66	105 4.13	77 3.03	5/8x85 M16X85
125x40 133.0x1½	133.0x48.3 5.250x1.900	300 2.07	51 2	209 8.23	93 3.66	105 4.13	77 3.03	5/8x85 M16X85
125x50 133.0x2	133.0x60.3 5.250x2.375	300 2.07	64 2.5	209 8.23	112.5 4.43	110 4.33	77 3.03	5/8x85 M16X85
125x15 139.7x1/2	139.7x21.3 5.500x0.825	300 2.07	38 1.5	221.5 8.72	78 3.07	110 4.33	84 3.31	5/8x85 M16X85
125x20 139.7x3/4	139.7x26.9 5.500x1.050	300 2.07	38 1.5	221.5 8.72	78 3.07	110 4.33	84 3.31	5/8x85 M16X85



Nominal Size	Pipe O.D	Working Pressure	Hole Dia mm/in	Dimensions				Bolt Size
				A	B	C	D	
mm/in	mm/in	PSI/Mpa	+1.6,0/+0.063,0	mm/in	mm/in	mm/in	mm/in	mm/in
125x25 139.7x1	139.7x33.7 5.500x1.315	300 2.07	38 1.5	221.5 8.72	78 3.07	110 4.33	84 3.31	5/8x85 M16X85
125x32 139.7x1¼	139.7x42.4 5.500x1.660	300 2.07	51 2	221.5 8.72	95 3.74	112 4.41	84 3.31	5/8x85 M16X85
125x40 139.7x1½	139.7x48.3 5.500x1.900	300 2.07	51 2	221.5 8.72	95 3.74	112 4.41	84 3.31	5/8x85 M16X85
125x50 139.7x2	139.7x60.3 5.500x2.375	300 2.07	64 2.5	221.5 8.72	112.5 4.43	115 4.53	84 3.31	5/8x85 M16X85
125x65 139.7x76.1	139.7x76.1 5.500x3.000	300 2.07	70 2.75	221.5 8.72	112.5 4.43	115 4.53	84 3.31	5/8x85 M16X85
125x80 139.7x3	139.7x88.9 5.500x3.500	300 2.07	89 3.5	221.5 8.72	132 5.2	120 4.72	84 3.31	5/8x85 M16X85
125x100 139.7x4	139.7x114.3 5.500x4.500	300 2.07	114 4.5	221.5 8.72	156 6.3	125 4.92	84 3.31	5/8x85 M16X85
150x15 159.0x1/2	159.0x21.3 6.250x0.825	300 2.07	38 1.5	244 9.6	78 3.07	116 4.57	94 3.7	5/8x105 M16X108
150x25 159.0x1	159.0x33.7 6.250x1.315	300 2.07	38 1.5	244 9.6	78 3.07	116 4.57	94 3.7	5/8x105 M16X108
150x32 159.0x1¼	159.0x42.4 6.250x1.660	300 2.07	51 2	244 9.6	93 3.66	118 4.65	94 3.7	5/8x105 M16X108
150x40 159.0x1½	159.0x48.3 6.250x1.900	300 2.07	51 2	244 9.6	93 3.66	118 4.65	94 3.7	5/8x105 M16X108
150x50 159.0x2	159.0x60.3 6.250x2.375	300 2.07	64 2.5	244 9.6	112.5 4.43	125 4.92	94 3.7	5/8x105 M16X108
150x65 159.0x76.1	159.0x76.1 6.250x3.000	300 2.07	70 2.75	244 9.6	112.5 4.43	125 4.92	94 3.7	5/8x105 M16X108
150x80 159.0x3	159.0x88.9 6.250x3.500	300 2.07	89 3.5	244 9.6	133 5.2	125 4.92	94 3.7	5/8x105 M16X108
150x100 159.0x4	159.1x114.3 6.250x4.500	175 1.2	114 4.5	244 9.6	156.5 6.16	130 5.12	94 3.7	5/8x105 M16X108
150x15 165.1x½	165.1x21.3 6.500x0.825	300 2.07	38 1.5	244 9.6	78 3.07	110 4.33	97.5 3.84	5/8x105 M16X108
125x20 165.1x¾	165.1x26.9 6.500x1.050	300 2.07	38 1.5	244 9.6	78 3.07	110 4.33	97.5 3.84	5/8x105 M16X108
150x25 165.1x1	165.1x33.7 6.500x1.315	300 2.07	38 1.5	244 9.6	78 3.07	118 4.65	97.5 3.84	5/8x105 M16X108



Nominal Size	Pipe O.D	Working Pressure	Hole Dia mm/in	Dimensions				Bolt Size
				A	B	C	D	
mm/in	mm/in	PSI/Mpa	+1.6,0/+0.063,0	mm/in	mm/in	mm/in	mm/in	mm/in
150x32 165.1x1¼	165.1x42.4 6.500x1.660	300 2.07	51 2	244 9.6	93 3.66	118 4.65	97.5 3.84	5/8x105 M16X108
150x40 165.1x1½	165.1x48.3 6.500x1.900	300 2.07	51 2	244 9.6	93 3.66	118 4.65	97.5 3.84	5/8x105 M16X108
150x50 165.1x2	165.1x60.3 6.500x2.375	300 2.07	64 2.5	244 9.6	112.5 4.43	128.5 5.43	97.5 3.84	5/8x105 M16X108
150x65 165.1x76.1	165.1x76.1 6.500x3.000	300 2.07	70 2.75	244 9.6	112.5 4.43	128.5 5.43	97.5 3.84	5/8x105 M16X108
150x80 165.1x3	165.1x88.9 6.500x3.500	300 2.07	89 3.5	244 9.6	132 5.2	128.5 5.06	97.5 3.84	5/8x105 M16X108
150x100 165.1x4	165.1x114.3 6.500x4.500	225 1.6	114 4.5	244 9.6	154 6.18	135 5.32	97.5 3.84	5/8x105 M16X108
150x32 6x1¼	168.3x42.4 6.500x1.660	300 2.07	51 2	247 9.72	95 3.74	122 4.8	98.5 3.88	5/8x105 M16X108
150x40 6x1½	168.3x48.3 6.500x1.900	300 2.07	51 2	247 9.72	95 3.74	122 4.8	98.5 3.88	5/8x105 M16X108
150x50 6x2	168.3x60.3 6.625x2.375	300 2.07	64 2.5	247 9.72	112.5 4.43	132 5.2	98.5 3.88	5/8x105 M16X108
150x65 6x2½	168.3x73.0 6.625x2.875	300 2.07	70 2.75	247 9.72	112.5 4.43	132 5.2	98.5 3.88	5/8x105 M16X108
150x65 6x76.1	168.3x76.1 6.625x3.000	300 2.07	70 2.75	247 9.72	112.5 4.43	132 5.2	98.5 3.88	5/8x105 M16X108
150x80 6x3	168.3x88.9 6.625x3.500	300 2.07	89 3.5	247 9.72	132 5.2	140 5.51	98.5 3.88	5/8x105 M16X108
150x100 6x4	168.3x114.3 6.625x4.500	300 2.07	114 4.5	247 9.72	160 6.3	140 5.51	98.5 3.88	5/8x105 M16X108
200x25 8x1	219.0x33.7 8.625x1.315	300 2.07	38 1.5	320 12.6	79.5 3.13	150 5.91	125 4.92	3/4x115 M20X115
200x32 8x1¼	219.1x42.4 8.625x1.660	300 2.07	51 2	320 12.6	96.5 3.8	150 5.91	125 4.92	3/4x115 M20X115
200x40 8x1½	219.1x48.3 8.625x1.900	300 2.07	51 2	320 12.6	96.5 3.8	150 5.91	125 4.92	3/4x115 M20X115
200x50 8x2	219.1x60.3 8.625x2.375	300 2.07	64 2.5	320 12.6	117 4.61	160 6.3	125 4.92	3/4x115 M20X115
200x65 8x2½	219.1x73.0 8.625x2.875	300 2.07	70 2.75	320 12.6	118 4.65	160 6.3	125 4.92	3/4x115 M20X115



Nominal Size	Pipe O.D	Working Pressure	Hole Dia mm/in	Dimensions				Bolt Size
				A	B	C	D	
mm/in	mm/in	PSI/Mpa	+1.6,0/+0.063,0	mm/in	mm/in	mm/in	mm/in	mm/in
200x65 8x76.1	219.1x76.1 8.625x3.000	300 2.07	70 2.75	320 12.6	118 4.65	160 6.3	125 4.92	3/4x115 M20X115
200x80 8x3	219.1x88.9 8.625x3.500	300 2.07	89 3.5	320 12.6	136.5 5.37	160 6.3	125 4.92	3/4x115 M20X115
200x100 8x4	219.1x114.3 8.625x4.500	300 2.07	114 4.5	320 12.6	164 6.46	160 6.3	125 4.92	3/4x115 M20X115
250x40 10x1½	273.0x48.3 10.750x1.900	300 2.07	51 2	376 14.8	95.5 3.76	180 7.09	155 6.1	3/4x120 M20X115
250x50 10x2	273.0x60.3 10.750x2.375	300 2.07	64 2.5	376 14.8	118 4.65	185 7.28	155 6.1	3/4x120 M20X115
250x65 10x76.1	273.0x76.1 10.750x3.000	300 2.07	70 2.75	376 14.8	118 4.65	190 7.48	155 6.1	3/4x120 M20X115
250x80 10x3	273.0x88.9 10.750x3.500	300 2.07	89 3.5	376 14.8	136.5 5.37	190 7.48	155 6.1	3/4x120 M20X115
250x100 10x4	273.0x114.3 10.750x4.500	300 2.07	114 4.5	376 14.8	164 6.46	190 7.48	155 6.1	3/4x120 M20X115

## 5.0 REFERENCE MATERIALS

Approved certification for Grooved Fittings and Couplings

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