DI GROOVED FITTINGS-RIGID COUPLING

Type: 1G **Doc No: DS-400-1G-01-E**

1.0 PRODUCT OVERVIEW

Rigid couplings are for grooved pipeline connection. At the joint part, the adjacent pipe ends are not allowed to have relative angular displacement and corresponding axial rotation

Dimensions:

1”(DN25)-32”(DN800)

Design Standard:

ISO6182, AWWA C606, GB 5135.11

Connection Standard:

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

Working Pressure:

175PSI-500PSI

Application:

Rigid couplings are mainly suitable for medium and low pressure pipeline systems with nominal pressure 175-500 PSI, nominal size DN25-DN800, temperature range of - 20 ℃-+180℃, 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:

Sign Off:

Owner:_____ Contractor:_____ Engineer: _____

Location:_____ Date:_____ Approved& Date: _____

☐ 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 according to 65-45-12. The nodularity is more than 90%, ensuring excellent physical and mechanical properties.

Gasket:

1、EPDM Gasket，code E：
Temperature：-34℃～+110℃ （-30℉～+230℉）；
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℃～+82℃ （-20℉～+180℉）；
Applicable media: Petroleum products, vegetable oils, mineral oils, etc.
Note: strictly prohibit use with high temperature substances.
3、Silicone Rubber, code S：
Temperature: -40℃～+177℃ （-40℉～+350℉）
Applicable media: High temperature and dry air and some high temperature chemicals, drinking water and so on.
4、Chloroprene Rubber，code LD：
Temperature：-32℃～+82℃ （-26℉～+180℉）
Applicable media: sea water
5、Fluororubber, code F：
Temperature: -20℃～+180℃
Applicable media: Hot oil, some chemical products, good oxidation resistance.

Bolts/Nuts:

Sign Off:
Owner:_____ Contractor:_____ Engineer: _____
Location:_____ Date:_____ Approved& Date: _____

ANSI Heavy Hex Nut

1. Material: SAE J995 2.
2. Thread: ANSI B 1.1-1982.
3. Surface Treatment: Zinc electroplated per ASTM B633 CLASS FE/ZN5 TYPE Ⅲ , thickness per class SC1.

Metric Heavy Hex Nut

1. Material: ISO 898-2:1992 \ GB/T3098.2-2000 Class 8.
2. Thread: ISO 261.
3. Surface Treatment: Zinc Electroplated followed by a yellow chromate dip per ISO 2081 FE/ZN5, ISO4520 CLASS 1A.

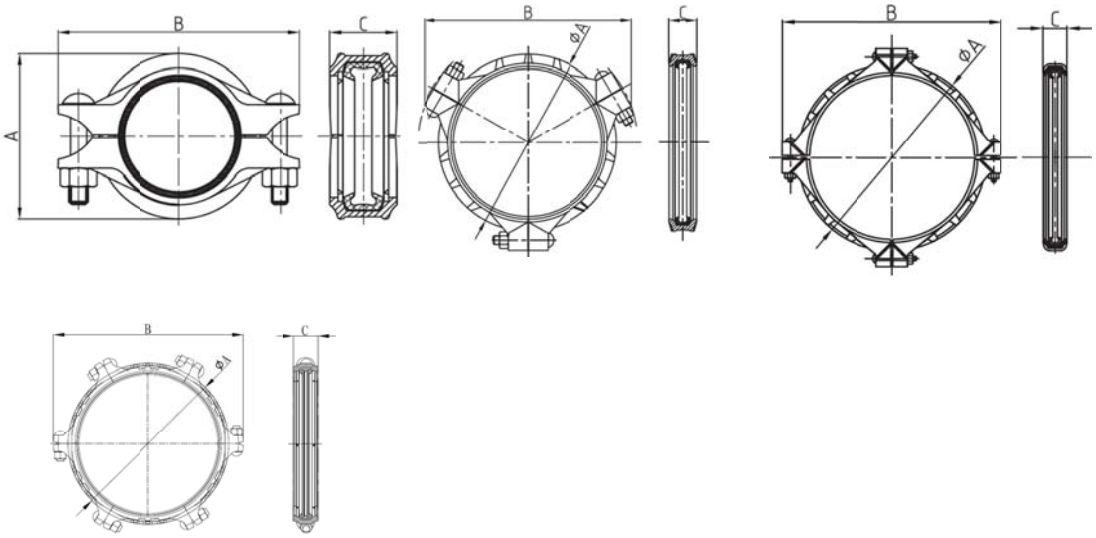
ANSI Oval Neck Track Bolt

1. Material: SAE J429 5.
2. Thread: UNC thread per ANSI B 1.1 Class.
3. Surface Treatment: Silver chromate electroplated per ASTM B633 CLASS FE/ZN5 TYPE Ⅲ, thickness 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.
3. Surface Treatment: Yellow chromate electroplated per ISO 2081 FE/ZN5 ISO4520 CLASS 1A.

4.0 DIMENSIONS AND PERFORMANCE



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玫德集团有限公司

JINAN MEIDE CASTING CO., LTD

Nominal Size	Pipe O.D	Working Pressure	Dimensions			Bolt Size
DN/in	mm/in	PSI/MPa	A mm/in	B mm/in	C mm/in	No.-Size mm
25	33.7	500	59	100	44	2-3/8X55
1	1.327	3.45	2.32	3.94	1.73	2-M10X57
32	42.4	500	66	109.5	45	2-3/8X55
1¼	1.669	3.45	2.60	4.31	1.77	2-M10X57
40	48.3	500	72	115	45	2-3/8X55
1½	1.902	3.45	2.83	4.53	1.77	2-M10X57
50	60.3	500	85	131	45	2-3/8X55
2	2.375	3.45	3.35	5.16	1.77	2-M10X57
65	73	500	98	145	45	2-3/8X55
2½	2.875	3.45	3.86	5.71	1.77	2-M10X57
65	76.1	500	101	147	45	2-3/8X55
2½	2.996	3.45	3.98	5.79	1.77	2-M10X57
80	88.9	500	115	170	46	2-1/2X70
3	3.500	3.45	4.53	6.69	1.81	2-M12X70
100	108	500	140	197	52	2-1/2X70
4	4.252	3.45	5.51	7.76	2.05	2-M12X70
100	114.3	500	146	200	52	2-1/2X70
4	4.500	3.45	5.75	7.87	2.05	2-M12X70
125	133	300	165	232	52	2-5/8X85
5	5.236	2.07	6.50	9.13	2.05	2-M16X85
125	139.7	500	170	238	52	2-5/8X85
5	5.500	3.45	6.69	9.37	2.05	2-M16X85
125	141.3	500	172	236.5	52	2-5/8X85
5	5.563	3.45	6.77	9.31	2.05	2-M16X85
150	159	300	190	258	52	2-5/8X85
6	6.260	2.07	7.48	10.16	2.05	2-M16X85
150	165.1	500	198	266	52	2-5/8X85
6	6.500	3.45	7.80	10.47	2.05	2-M16X85
150	168.3	500	202	270	52	2-5/8X85
6	6.626	3.45	7.95	10.63	2.05	2-M16X85
200	219.1	500	260	346	62	2-3/4X115
8	8.626	3.45	10.24	13.62	2.44	2-M20X115
250A	267.4	300	318	396	63	2-3/4X120
10	10.528	2.07	12.52	15.59	2.48	2-M20X115
250	273	500	327	420	63	2-7/8X125
10	10.748	3.45	12.87	16.54	2.48	2-M22X125

Sign Off:

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300A 12	318.5 12.539	300 2.07	364 14.33	456 17.95	62 2.44	2-7/8X140 2-M22X140
300 12	323.9 12.752	500 3.45	378 14.88	466 18.35	63 2.48	2-7/8X140 2-M22X140
350 14	355.6 14.000	300 2.07	415 16.34	510 20.08	72 2.83	3-7/8X140 3-M22X140
350 14	377 14.843	300 2.07	435 17.13	535 21.06	72 2.83	3-7/8X140 3-M22X140
400 16	406.4 16.000	300 2.07	468 18.43	575 22.64	72 2.83	3-7/8X140 3-M22X140
400 16	426 16.772	300 2.07	482.5 19.00	586 23.07	72 2.83	3-7/8X140 3-M22X140
450 18	457.2 18.000	300 2.07	508 20.00	608 23.94	78 3.07	3-7/8X140 3-M22X140
450 18	480 18.898	225 1.6	533 20.98	630 24.80	78 3.07	3-7/8X140 3-M22X140
500 20	508 20.000	300 2.07	563 22.17	660 25.98	78 3.07	4-7/8X140 4-M22X140
500 20	530 20.866	225 1.6	595 23.43	700 27.56	76 2.99	4-7/8X140 4-M22X140
600 24	609.6 24.000	300 2.07	668 26.30	772 30.39	78 3.07	4-1X140
600 24	630 24.803	225 1.6	692 27.24	796 31.34	78 3.07	4-1X140
700 28	711.2 28.000	225 1.6	798 31.42	960 37.80	133 5.24	6-11/2X53/4
800 32	812.8 32.000	225 1.6	900 35.43	1058 41.65	133 5.24	6-11/2X53/4

5.0 REFERENCE MATERIALS

Approved certification for Grooved Fittings and Couplings

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

Sign Off:

Owner:_____ Contractor:_____ Engineer: _____

Location:_____ Date:_____ Approved& Date: _____