

FLEXIBLE COUPLING



Product Photos

S30 Series

Pressure: 0–600 psi

Material: Stainless steel 304/316/316L, duplex 2205, super duplex 2507



Product Photos

S80 Series

Pressure: 0–1200 psi

Material: Stainless steel 304/316/316L, duplex 2205, super duplex 2507



Product Photos S160 Series

Pressure: 0–2322 psi

Material: Stainless steel 304/316/316L, duplex 2205, super duplex 2507



Product Photos HT60 & HT150 Short Pipe, DT150 Blind Plug

Material: Stainless steel 304/316/316L, duplex 2205, super duplex 2507



Product Photos

Sealing Ring

Material: EPDM, NBR, SR, FKM



Recommended media and temperature range for rubber seals are shown in P23.

Product Photos

C Series Cast Iron Couplings Clamp

Pressure: 0–600 psi



Model S30 Stainless Steel

Normal Pressure Flexible Coupling Clamp

0–600 psi



The Model S30 is a flexible coupling clamp designed for low & medium pressure applications including microfiltration, ultrafiltration, nanofiltration and reverse osmosis systems. The S30 is supplied standard in CF8 (304) and CF8M (316) with 304 or 316 bolts and nuts.

Sizes: 3/4" – 12" (DN20 – DN300)

Rated Working Pressure: 600 psi (42 bar), Sch 40S, cut groove only

Model S30 Material Specifications

Housing:

- ☐ Type 304 Stainless steel to ASTM A959-2004
- ☐ Type 316 to ASTM A959-2004
- ☐ Type 316L to ASTM A959-2004
- ☐ Duplex 2205(CD3MN) to ASTM A995/A995M-19 4A
- ☐ Super Duplex 2507 (CE3MN) to ASTM A995/A995M-19 5A

Rubber Gasket:

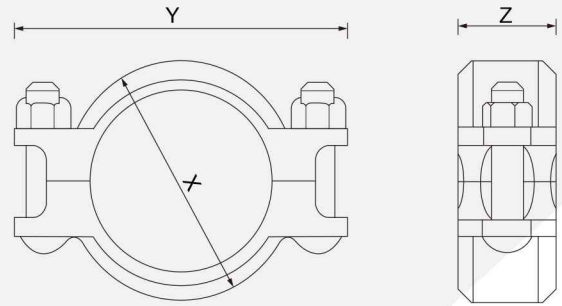
The gasket seals is C-shaped, made of standard gasket EPDM (ethylene propylene diene monomer) for cold water, hot water, rare acid, oil-free air and multiple chemical products (-34 °C to +130 °C). It is not suitable for medium like petroleum. In case of special conditions requiring resistance to high temperature, acid and alkali solutions as well as lubricants and hydraulic oils, FKM is recommended.

Bolts & Nuts:

- ☐ Type 304 stainless steel track bolts and nuts to GB12-88.
- ☐ Type 316 stainless steel track bolts and nuts to GB12-88.

Model S30

Stainless Steel Flexible Coupling



Nominal Size	Pipe O.D.	Working Pressure	Pipe End Separation	Coupling Dimensions			Coupling Bolts	
				X	Y	Z	Qty.	Size
(DN/in)	(mm/in)	(psi/bar)	(mm/in)	mm/in	mm/in	mm/in	pcs	mm
20	26.9 mm	600 psi	0–1.6 mm	47 mm	88 mm	43 mm	2 pcs	M10 mm × 45 mm
3/4"	1.050"	42 bar	0–0.06"	1.850"	3.465"	1.693"		
25	32 mm	600 psi	0–1.6 mm	53 mm	90 mm	43 mm	2 pcs	M10 mm × 45 mm
1"	1.260"	42 bar	0–0.06"	2.087"	3.543"	1.693"		
25	33.7 mm	600 psi	0–1.6 mm	53 mm	90 mm	43 mm	2 pcs	M10 mm × 45 mm
1"	1.315"	42 bar	0–0.06"	2.087"	3.543"	1.693"		
32	38 mm	600 psi	0–1.6 mm	58 mm	94 mm	44 mm	2 pcs	M10 mm × 45 mm
1-1/4"	1.496"	42 bar	0–0.06"	2.283"	3.700"	1.732"		
32	42.4 mm	600 psi	0–1.6 mm	62 mm	102 mm	44 mm	2 pcs	M10 mm × 45 mm
1-1/4"	1.660"	42 bar	0–0.06"	2.441"	4.016"	1.732"		
40	48.3 mm	600 psi	0–1.6 mm	67 mm	107 mm	43 mm	2 pcs	M10 mm × 45 mm
1-1/2"	1.900"	42 bar	0–0.06"	2.638"	4.212"	1.693"		
50	57 mm	600 psi	0–1.6 mm	78 mm	117 mm	43 mm	2 pcs	M10 mm × 50 mm
2"	2.244"	42 bar	0–0.06"	3.071"	4.606"	1.693"		
50	60.3 mm	600 psi	0–1.6 mm	79 mm	118 mm	43 mm	2 pcs	M10 mm × 45 mm
2"	2.375"	42 bar	0–0.06"	3.110"	4.645"	1.693"		
65	73 mm	600 psi	0–1.6 mm	94 mm	135 mm	44 mm	2 pcs	M10 mm × 50 mm
2-1/2"	2.875"	42 bar	0–0.06"	3.700"	5.315"	1.732"		
65	76.1 mm	600 psi	0–1.6 mm	95 mm	135 mm	44 mm	2 pcs	M10 mm × 50 mm
2-1/2"	3.000"	42 bar	0–0.06"	3.740"	5.315"	1.732"		
80	88.9 mm	600 psi	0–1.6 mm	110 mm	151 mm	45 mm	2 pcs	M10 mm × 50 mm
3"	3.500"	42 bar	0–0.06"	4.330"	5.945"	1.771"		
90	101.6 mm	600 psi	0–3.2 mm	129 mm	178 mm	47 mm	2 pcs	M12 mm × 60 mm
3-1/2"	4.000"	42 bar	0–0.13"	5.078"	7.008"	1.850"		
*100	108 mm	600 psi	0–3.2 mm	137 mm	184 mm	47 mm	2 pcs	M12 mm × 60 mm
*4"	4.250"	42 bar	0–0.13"	5.39 4"	7.244"	1.850"		
*100	114.3 mm	600 psi	0–3.2 mm	142 mm	190 mm	48 mm	2 pcs	M12 mm × 60 mm
*4"	4.500"	42 bar	0–0.13"	5.591"	7.480"	1.890"		
*125	133 mm	600 psi	0–3.2 mm	162 mm	216 mm	48 mm	2 pcs	M12 mm × 65 mm
*5"	5.250"	42 bar	0–0.13"	6.378"	8.504"	1.890"		
*125	139.7 mm	600 psi	0–3.2 mm	167 mm	216 mm	48 mm	2 pcs	M12 mm × 65 mm
*5"	5.500"	42 bar	0–0.13"	6.575"	8.504"	1.890"		
*150	159 mm	600 psi	0–3.2 mm	190 mm	240 mm	50 mm	2 pcs	M12 mm × 70 mm
*6"	6.259"	42 bar	0–0.13"	7.480"	9.448"	1.968"		
150	168.3 mm	600 psi	0–3.2 mm	195 mm	247 mm	48 mm	2 pcs	M12 mm × 70 mm
6"	6.625"	42 bar	0–0.13"	7.677"	9.724"	1.889"		
200	219.1 mm	600 psi	0–3.2 mm	253 mm	325 mm	58 mm	2 pcs	M16 mm × 90 mm
8"	8.625"	42 bar	0–0.13"	9.961"	12.795"	2.283"		
*250	273 mm	600 psi	0–3.2 mm	315 mm	396 mm	62 mm	2 pcs	M20 mm × 100 mm
*10"	10.750"	42 bar	0–0.13"	12.401"	15.590"	2.441"		
*300	323.9 mm	600 psi	0–3.2 mm	372 mm	452 mm	65 mm	2 pcs	M24 mm × 130 mm
*12"	12.750"	42 bar	0–0.13"	14.645"	17.795"	2.559"		

Note: 1. The model with "*" are under development.

Model S80 Stainless Steel

High Pressure Flexible Coupling Clamp

600–1200 psi



The Model S80 is a flexible coupling clamp designed for high pressure applications including SWRO, DTRO and STRO systems. The S80 is available in strong and anti-corrosive alloys of 316L, The S80 features 316 bolts and heavy duty nuts help prevent galling during repetitive use.

Size: 3/4" – 12" (DN20 – DN300)

Rated Working Pressure: 1200 psi (83 bar), Sch 40S, cut groove only.

Model S80 Material Specification

Housing:

- ☐ Type 304 Stainless steel to ASTM A959-2004
- ☐ Type 316 to ASTM A959-2004
- ☐ Type 316L to ASTM A959-2004
- ☐ Duplex 2205(CD3MN) to ASTM A995/A995M-19 4A
- ☐ Super Duplex 2507(CE3MN) to ASTM A995/A995M-19 5A

Rubber Gasket:

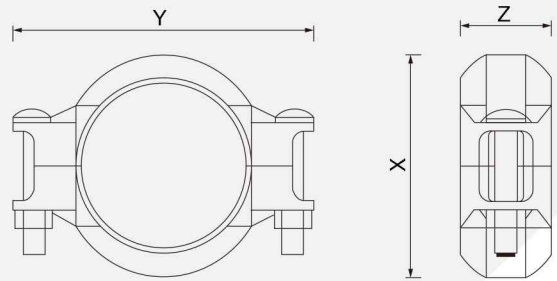
The gasket seals is C-shaped, made of standard gasket EPDM (ethylene propylene diene monomer) for cold water, hot water, rare acid, oil-free air and multiple chemical products (-34 °C to +130 °C). It is not suitable for medium like petroleum. In case of special conditions requiring resistance to high temperature, acid and alkali solutions as well as lubricants and hydraulic oils, FKM is recommended.

Bolts & Nuts:

- ☐ Type 304 stainless steel track bolts and nuts to GB12-88.
- ☐ Type 316 stainless steel track bolts and nuts to GB12-88.

Model S80

Stainless Steel Flexible Coupling



Nominal Size	Pipe O.D.	Working Pressure	Pipe End Separation	Coupling Dimensions			Coupling Bolts	
				X	Y	Z	Qty.	Size
(DN/in)	(mm/in)	(psi/bar)	(mm/in)	mm/in	mm/in	mm/in	pcs	mm
20	26.9 mm	1200 psi	0–1.6 mm	49 mm	89 mm	44 mm	2 pcs	M10 mm × 45 mm
3/4"	1.050"	83 bar	0–0.06"	1.929"	3.504"	1.732"		
25	32 mm	1200 psi	0–1.6 mm	56 mm	96 mm	45 mm	2 pcs	M10 mm × 45 mm
1"	1.260"	83 bar	0–0.06"	2.205"	3.779"	1.772"		
25	33.7 mm	1200 psi	0–1.6 mm	56 mm	96 mm	45 mm	2 pcs	M10 mm × 45 mm
1"	1.315"	83 bar	0–0.06"	2.205"	3.779"	1.772"		
*32	38 mm	1200 psi	0–1.6 mm	62 mm	102 mm	45 mm	2 pcs	M10 mm × 50 mm
*1-1/4"	1.496"	83 bar	0–0.06"	2.441"	4.016"	1.772"		
32	42.4 mm	1200 psi	0–1.6 mm	66 mm	103 mm	45 mm	2 pcs	M10 mm × 50 mm
1-1/4"	1.660"	83 bar	0–0.06"	2.598"	4.055"	1.772"		
40	48.3 mm	1200 psi	0–1.6 mm	70 mm	108 mm	45 mm	2 pcs	M10 mm × 50 mm
1-1/2"	1.900"	83 bar	0–0.06"	2.755"	4.251"	1.772"		
50	57 mm	1200 psi	0–1.6 mm	82 mm	128 mm	46 mm	2 pcs	M12 mm × 60 mm
2"	2.244"	83 bar	0–0.06"	3.228"	5.039"	1.811"		
50	60.3 mm	1200 psi	0–1.6 mm	83 mm	128 mm	46 mm	2 pcs	M12 mm × 60 mm
2"	2.375"	83 bar	0–0.06"	3.267"	5.039"	1.811"		
65	73 mm	1200 psi	0–1.6 mm	100 mm	142 mm	47 mm	2 pcs	M12 mm × 70 mm
2-1/2"	2.875"	83 bar	0–0.06"	3.937"	5.590"	1.850"		
65	76.1 mm	1200 psi	0–1.6 mm	100 mm	142 mm	47 mm	2 pcs	M12 mm × 70 mm
2-1/2"	3.000"	83 bar	0–0.06"	3.937"	5.590"	1.850"		
80	88.9 mm	1200 psi	0–1.6 mm	117 mm	160 mm	47 mm	2 pcs	M12 mm × 70 mm
3"	3.500"	83 bar	0–0.06"	4.606"	6.299"	1.850"		
100	108 mm	1200 psi	0–3.2 mm	147 mm	210 mm	52 mm	2 pcs	M16 mm × 90 mm
4"	4.250"	83 bar	0–0.13"	5.787"	8.267"	2.047"		
100	114.3 mm	1200 psi	0–3.2 mm	148 mm	210 mm	52 mm	2 pcs	M16 mm × 90 mm
4"	4.500"	83 bar	0–0.13"	5.827"	8.267"	2.047"		
*125	133 mm	1200 psi	0–3.2 mm	180 mm	252 mm	52 mm	2 pcs	M16 mm × 90 mm
*5"	5.250"	83 bar	0–0.13"	7.087"	9.921"	2.047"		
*125	139.7 mm	1200 psi	0–3.2 mm	180 mm	252 mm	52 mm	2 pcs	M16 mm × 90 mm
*5"	5.500"	83 bar	0–0.13"	7.087"	9.921"	2.047"		
*150	159 mm	1200 psi	0–3.2 mm	210 mm	280 mm	52 mm	2 pcs	M20 mm × 100 mm
*6"	6.259"	83 bar	0–0.13"	8.267"	11.023"	2.047"		
*150	168.3 mm	1200 psi	0–3.2 mm	210 mm	280 mm	52 mm	2 pcs	M20 mm × 100 mm
*6"	6.625"	83 bar	0–0.13"	8.267"	11.023"	2.047"		
*200	219.1 mm	1200 psi	0–3.2 mm	276 mm	360 mm	62 mm	2 pcs	M24 mm × 130 mm
*8"	8.625"	83 bar	0–0.13"	10.866"	14.173"	2.441"		
*250	273 mm	1200 psi	0–3.2 mm	342 mm	420 mm	67 mm	2 pcs	M24 mm × 160 mm
*10"	10.750"	83 bar	0–0.13"	13.465"	16.535"	2.637"		
*300	323.9 mm	1200 psi	0–3.2 mm	394 mm	480 mm	67 mm	2 pcs	M24 mm × 180 mm
*12"	12.750"	83 bar	0–0.13"	15.512"	18.897"	2.637"		

Note: 1. The model with "*" are under development.

2. Used at the outlet of high pressure pumps and plug pumps, it is recommended to choose the corresponding model of the Model S160 series with higher pressure level.

Model S160 Stainless Steel

Superhigh Pressure Flexible Coupling Clamp

1200–2322 psi



The Model S160 is a flexible coupling clamp designed for superhigh pressure applications including SWRO, DTRO and STRO systems. The S160 is available in strong and anti-corrosive Type alloys of 316L, The S160 features 316 bolts and heavy duty nuts help prevent galling during repetitive use.

Sizes: 3/4" – 12" (DN20 – DN300)

Rated Working Pressure: 2322 psi (160 bar), Sch 40S, cut groove only

Model S160 Material Specification

Housing:

- ☐ Type 304 Stainless steel to ASTM A959-2004
- ☐ Type 316 to ASTM A959-2004
- ☐ Type 316 L to ASTM A959-2004
- ☐ Duplex 2205(CD3MN) ASTM A995/A995M-19 4A
- ☐ Super Duplex 2507(CE3MN) to ASTM A995/A995M-19 5A

Rubber Gasket:

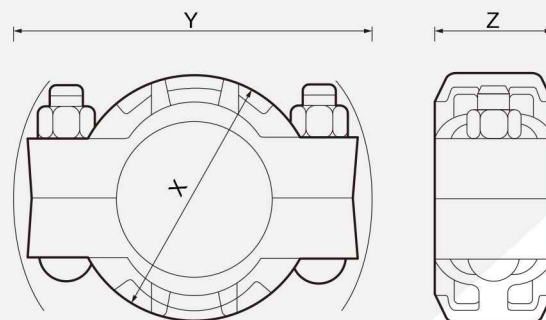
The gasket seals is C-shaped, made of standard gasket EPDM (ethylene propylene diene monomer) for cold water, hot water, rare acid, oil-free air and multiple chemical products (-34 °C to +130 °C). It is not suitable for medium like petroleum. In case of special conditions requiring resistance to high temperature, acid and alkali solutions as well as lubricants and hydraulic oils, FKM is recommended.

Bolts & Nuts:

- ☐ Type 304 stainless steel track bolts and nuts to GB12-88.
- ☐ Type 316 stainless steel track bolts and nuts to GB12-88.

Model S160

Stainless Steel Flexible Coupling



Nominal Size	Pipe O.D.	Working Pressure	Pipe End Separation	Coupling Dimensions			Coupling Bolts	
				X	Y	Z	Qty.	Size
(DN/in)	(mm/in)	(psi/bar)	(mm/in)	mm/in	mm/in	mm/in	pcs	mm
20	26.9 mm	2322 psi	0–1.6 mm	56 mm	96 mm	47 mm	2 pcs	M10 mm × 50 mm
3/4"	1.050"	160 bar	0–0.06"	2.205"	3.779"	1.850"		
25	32 mm	2322 psi	0–1.6 mm	60 mm	95 mm	48 mm	2 pcs	M10 mm × 50 mm
1"	1.260"	160 bar	0–0.06"	2.362"	3.741"	1.889"		
25	33.7 mm	2322 psi	0–1.6 mm	61 mm	99 mm	48 mm	2 pcs	M10 mm × 50 mm
1"	1.315"	160 bar	0–0.06"	2.401"	3.897"	1.889"		
32	42.4 mm	2322 psi	0–1.6 mm	73 mm	112 mm	47 mm	2 pcs	M12 mm × 60 mm
1-1/4"	1.660"	160 bar	0–0.06"	2.874"	4.409"	1.851"		
40	48.3 mm	2322 psi	0–1.6 mm	78 mm	119 mm	47 mm	2 pcs	M12 mm × 60 mm
1-1/2"	1.900"	160 bar	0–0.06"	3.071"	4.685"	1.851"		
50	60.3 mm	2322 psi	0–1.6 mm	92 mm	130 mm	47 mm	2 pcs	M12 mm × 60 mm
2"	2.375"	160 bar	0–0.06"	3.622"	5.118"	1.851"		
65	73 mm	2322 psi	0–1.6 mm	108 mm	146 mm	47 mm	2 pcs	M12 mm × 70 mm
2-1/2"	2.875"	160 bar	0–0.06"	4.252"	5.748"	1.851"		
65	76.1 mm	2322 psi	0–1.6 mm	110 mm	148 mm	47 mm	2 pcs	M12 mm × 70 mm
2-1/2"	3.000"	160 bar	0–0.06"	4.331"	5.826"	1.851"		
80	88.9 mm	2322 psi	0–1.6 mm	125 mm	167 mm	47 mm	2 pcs	M12 mm × 70 mm
3"	3.500"	160 bar	0–0.06"	4.921"	6.574"	1.851"		
100	108 mm	2322 psi	0–3.2 mm	152 mm	204 mm	51 mm	2 pcs	M16 mm × 90 mm
4"	4.251"	160 bar	0–0.13"	5.984"	8.031"	2.008"		
100	114.3 mm	2322 psi	0–3.2 mm	156 mm	209 mm	51 mm	2 pcs	M16 mm × 90 mm
4"	4.500"	160 bar	0–0.13"	6.142"	8.228"	2.008"		
125	133 mm	2322 psi	0–3.2 mm	180 mm	233 mm	51 mm	2 pcs	M16 mm × 90 mm
5"	5.250"	160 bar	0–0.13"	7.087"	9.173"	2.008"		
125	139.7 mm	2322 psi	0–3.2 mm	183 mm	238 mm	51 mm	2 pcs	M16 mm × 90 mm
5"	5.500"	160 bar	0–0.13"	7.205"	9.37"	2.008"		
150	159 mm	2322 psi	0–3.2 mm	213 mm	277 mm	52 mm	2 pcs	M20 mm × 100 mm
6"	6.259"	160 bar	0–0.13"	8.386"	10.906"	2.047"		
150	168.3 mm	2322 psi	0–3.2 mm	219 mm	279 mm	52 mm	2 pcs	M20 mm × 100 mm
6"	6.625"	160 bar	0–0.13"	8.622"	10.984"	2.047"		
200	219.1 mm	2322 psi	0–3.2 mm	275 mm	345 mm	61 mm	2 pcs	M24 mm × 130 mm
8"	8.625"	160 bar	0–0.13"	10.827"	13.583"	2.402"		
250	273 mm	2322 psi	0–3.2 mm	345 mm	435 mm	65 mm	2 pcs	M27 mm × 180 mm
10"	10.750"	160 bar	0–0.13"	13.583"	17.126"	2.559"		
300	323.9 mm	2322 psi	0–3.2 mm	400 mm	495 mm	65 mm	2 pcs	M27 mm × 180 mm
12"	12.750"	160 bar	0–0.13"	15.748"	19.488"	2.559"		

Note: Used at the outlet of high pressure pumps and plug pumps, it is recommended to choose the corresponding mode of the Model S160 series with higher pressure level.

Model G30 Stainless Steel

Normal Pressure Rigid Coupling Clamp

0~600psi



The Model G30 is a rigid coupling clamp designed for low & Medium pressure applications including Microfiltration, Ultrafiltration, Nanofiltration and Reverse Osmosis systems. The G30 is supplied standard in CF8 (304) and CF8M (316) with 304 or 316 bolts and nuts.

Sizes: 3/4" ~ 12" (DN20 ~ DN300)

Rated Working Pressure: 600psi (42bar)- Sch. 40S, rolled grooved only

Model G30 Material Specification

Housing:

- ☐ Type 304 Stainless steel to ASTM A351 304 or A743 Gr. 304
- ☐ Type 316 to ASTM A351 316
- ☐ Type 316L to ASTM A351 316L
- ☐ Type CE8MN to ASTM A890 2A (*)
- ☐ Duplex 2205 (CD3MN) to ASTM A890 4A (*)
- ☐ Super Duplex 2507 (CE3MN) to ASTM A890 5A (*)

Rubber Gaskets:

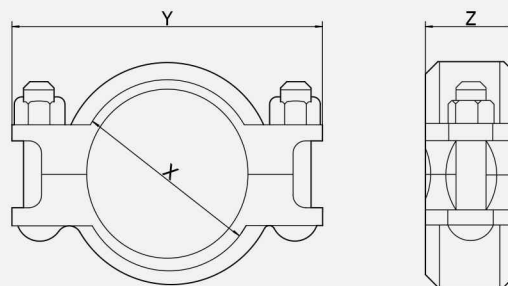
The gasket seals is C-shaped, made of standard gasket EPDM (ethylene propylene diene monomer) for cold water, hot water, rare acid, oil-free air and multiple chemical product (-34°C~+150°C). It is not suitable for medium like petroleum.

Bolts & Nuts:

- ☐ Type 304 stainless steel track bolts and nuts to GB12 or ASTM F-593.
- ☐ Type 316 stainless steel track bolts and nuts to GB12 or ASTM F-593

Model G30

Stainless Steel Rigid Coupling Clamp



Nominal size	Pipe O.D.	Working Pressure	Pipe End Separation	Coupling Clamp Dimensions			Coupling Clamp Bolts	
				x	Y	z	Qty.	Size
(DN/in)	(mm/in)	(psi/bar)	(mm/in)	mm/in	mm/in	mm/in	pcs	mm
*20	26.9	600	0-1.6	47	88	43	2	M10X45
*3/4	1.050	42	0-0.06	1.850	3.465	1.693		
*25	32	600	0-1.6	53	90	43	2	M10X45
*1	1.260	42	0-0.06	2.087	3.543	1.693		
*25	33.7	600	0-1.6	53	90	43	2	M10X45
*1	1.315	42	0-0.06	2.087	3.543	1.693		
*32	38	600	0-1.6	58	94	44	2	M10X45
*1 1/4	1.496	42	0-0.06	2.283	3.700	1.732		
*32	42.4	600	0-1.6	62	102	44	2	M10X45
*1 1/4	1.660	42	0-0.06	2.441	4.016	1.732		
*40	48.3	600	0-1.6	67	107	43	2	M10X45
*1 1/2	1.900	42	0-0.06	2.638	4.212	1.693		
*50	57	600	0-1.6	78	117	43	2	M10X50
*2	2.244	42	0-0.06	3.071	4.606	1.693		
*50	60.3	600	0-1.6	79	118	43	2	M10X50
*2	2.375	42	0-0.06	3.110	4.645	1.693		
*65	73	600	0-1.6	94	135	44	2	M10X50
*2 1/2	2.875	42	0-0.06	3.700	5.315	1.732		
*65	76.1	600	0-1.6	95	135	44	2	M10X50
*2 1/2	3.000	42	0-0.06	3.740	5.315	1.732		
*80	88.9	600	0-1.6	110	151	45	2	M10X50
*3	3.500	42	0-0.06	4.330	5.945	1.771		
100	108	600	0-3.2	137	184	47	2	M12X60
4	4.251	42	0-0.13	5.394	7.244	1.850		
100	114.3	600	0-3.2	142	190	48	2	M12X60
4	4.500	42	0-0.13	5.591	7.480	1.890		
125	133	600	0-3.2	162	216	48	2	M12X65
5	5.250	42	0-0.13	6.378	8.504	1.890		
125	139.7	600	0-3.2	167	216	48	2	M12X65
5	5.500	42	0-0.13	6.575	8.504	1.890		
150	159	600	0-3.2	190	240	50	2	M12X75
6	6.259	42	0-0.13	7.480	9.448	1.968		
150	168.3	600	0-3.2	196	246	50	2	M12X75
6	6.625	42	0-0.13	7.717	9.685	1.968		
200	219.1	600	0-3.2	253	325	58	2	M16X90
8	8.625	42	0-0.13	9.961	12.795	2.283		
250	273	600	0-3.2	315	396	62	2	M20X110
10	10.750	42	0-0.13	12.401	15.590	2.441		
*300	323.9	600	0-3.2	372	452	65	2	M24X130
*12	12.750	42	0-0.13	14.645	17.795	2.559		

Note: 1. The model with "*" are under development.

Model C Ductile Iron

Medium Pressure Flexible Coupling Clamp

0–600 psi

The Model C is designed for connection of grooved medium pressure pipe systems.



Sizes: 1" – 16" (DN25 – DN400)

Rated Working Pressure: 600 psi (42 bar), Sch 40S, cut groove only

Model C Material Specifications

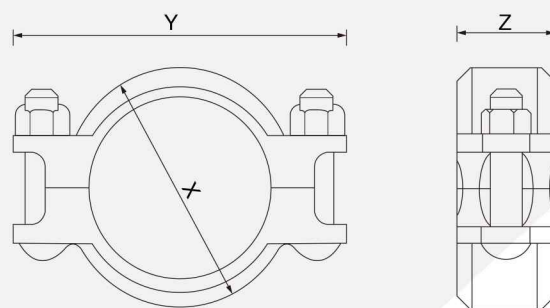
Housing: Ductile iron to ASTM A536 QT450-12

Surface Finish: Electrostatic spray molding, available in colors: red, blue, silver

Rubber Gasket: The gasket seals is C-shaped, made of standard gasket EPDM (ethylene propylene diene monomer) for cold water, hot water, rare acid, oil-free air and multiple chemical products (-34 °C to +130 °C). It is not suitable for medium like petroleum.

Bolts & Nuts: Round-head, elliptoid-neck, carriage bolts, type carbon iron covered with zinc.

Model C Ductile Iron Flexible Coupling



Nominal Size (DN/in)	Pipe O.D. (mm/in)	Working Pressure (psi/bar)	Pipe End Separation (mm/in)	Coupling Dimensions			Coupling Bolts	
				X mm/in	Y mm/in	Z mm/in	Qty. pcs	Size mm
25 1"	33.7 mm 1.315"	600 psi 42 bar	0–1.6 mm 0–0.06"	58 mm 2.283"	99 mm 3.898"	44 mm 1.732"	2 pcs	M10 mm × 45 mm
32 1-1/4"	42.4 mm 1.660"	600 psi 42 bar	0–1.6 mm 0–0.06"	67 mm 2.637"	107 mm 4.212"	45 mm 1.771"	2 pcs	M10 mm × 45 mm
40 1-1/2"	48.3 mm 1.900"	600 psi 42 bar	0–1.6 mm 0–0.06"	74 mm 2.913"	112 mm 4.409"	45 mm 1.771"	2 pcs	M10 mm × 45 mm
*50 *2"	57 mm 2.244"	600 psi 42 bar	0–1.6 mm 0–0.06"	86 mm 3.385"	124 mm 4.882"	45 mm 1.771"	2 pcs	M10 mm × 55 mm
50 2"	60.3 mm 2.375"	600 psi 42 bar	0–1.6 mm 0–0.06"	86 mm 3.385"	124 mm 4.882"	45 mm 1.771"	2 pcs	M10 mm × 55 mm
65 2-1/2"	73 mm 2.875"	600 psi 42 bar	0–1.6 mm 0–0.06"	100 mm 3.937"	139 mm 5.472"	46 mm 1.811"	2 pcs	M10 mm × 55 mm
65 2-1/2"	76.1 mm 3.000"	600 psi 42 bar	0–1.6 mm 0–0.06"	103 mm 4.055"	142 mm 5.591"	47 mm 1.851"	2 pcs	M10 mm × 55 mm
80 3"	88.9 mm 3.500"	600 psi 42 bar	0–1.6 mm 0–0.06"	117 mm 4.606"	165 mm 6.496"	47 mm 1.851"	2 pcs	M12 mm × 60 mm
*100 *4"	102 mm 4.016"	500 psi 35 bar	0–3.2 mm 0–0.13"	137 mm 5.393"	192 mm 7.559"	52 mm 2.047"	2 pcs	M12 mm × 65 mm
100 4"	108 mm 4.250"	500 psi 35 bar	0–3.2 mm 0–0.13"	140 mm 5.511"	185 mm 7.283"	52 mm 2.047"	2 pcs	M12 mm × 65 mm
100 4"	114.3 mm 4.500"	500 psi 35 bar	0–3.2 mm 0–0.13"	141 mm 5.551"	188 mm 7.401"	52 mm 2.047"	2 pcs	M12 mm × 65 mm
125 5"	133 mm 5.250"	450 psi 31 bar	0–3.2 mm 0–0.13"	177 mm 6.968"	220 mm 8.661"	52 mm 2.047"	2 pcs	M12 mm × 75 mm
125 5"	140 mm 5.511"	450 psi 31 bar	0–3.2 mm 0–0.13"	180 mm 7.086"	242 mm 9.527"	52 mm 2.047"	2 pcs	M12 mm × 75 mm
150 6"	159 mm 6.259"	450 psi 31 bar	0–3.2 mm 0–0.13"	196 mm 7.716"	245 mm 9.645"	52 mm 2.047"	2 pcs	M12 mm × 75 mm
*150 *6"	165.1 mm 6.500"	450 psi 31 bar	0–3.2 mm 0–0.13"	200 mm 7.874"	247 mm 9.724"	52 mm 2.047"	2 pcs	M12 mm × 75 mm
150 6"	168.3 mm 6.625"	450 psi 31 bar	0–3.2 mm 0–0.13"	201 mm 7.913"	249 mm 9.803"	52 mm 2.047"	2 pcs	M12 mm × 75 mm
200 8"	219.1 mm 8.625"	450 psi 31 bar	0–3.2 mm 0–0.13"	252 mm 9.921"	330 mm 12.992"	61 mm 2.401"	2 pcs	M16 mm × 90 mm
250 10"	273 mm 10.750"	350 psi 25 bar	0–3.2 mm 0–0.13"	328 mm 12.913"	414 mm 16.299"	65 mm 2.559"	2 pcs	M22 mm × 130 mm
300 12"	323.9 mm 12.750"	350 psi 25 bar	0–3.2 mm 0–0.13"	392 mm 15.433"	466 mm 18.346"	65 mm 2.559"	2 pcs	M24 mm × 165 mm
*350 *14"	355 mm 14.000"	300 psi 21 bar	0–3.2 mm 0–0.13"	406 mm 15.984"	445 mm 17.519"	75 mm 2.952"	3 pcs	M24 mm × 180 mm
*350 *14"	377 mm 14.000"	300 psi 21 bar	0–3.2 mm 0–0.13"	420 mm 16.535"	470 mm 18.503"	75 mm 2.952"	3 pcs	M24 mm × 210 mm
*400 *16"	406 mm 16.000"	300 psi 21 bar	0–3.2 mm 0–0.13"	479 mm 18.858"	522 mm 20.551"	75 mm 2.952"	3 pcs	M30 mm × 240 mm
*400 *16"	426 mm 16.000"	300 psi 21 bar	0–3.2 mm 0–0.13"	500 mm 19.685"	590 mm 23.228"	79 mm 3.110"	3 pcs	M30 mm × 240 mm

Note: 1. The model with "*" are under development.

HT60 Ordinary Pressure / HT150 High Pressure – Short Pipe

HT60 Series Ordinary Pressure Short Pipe

Working pressure: 0–60 bar

Material: 304, 316, 316L, 2205 (Duplex), 2507 (Super Duplex)

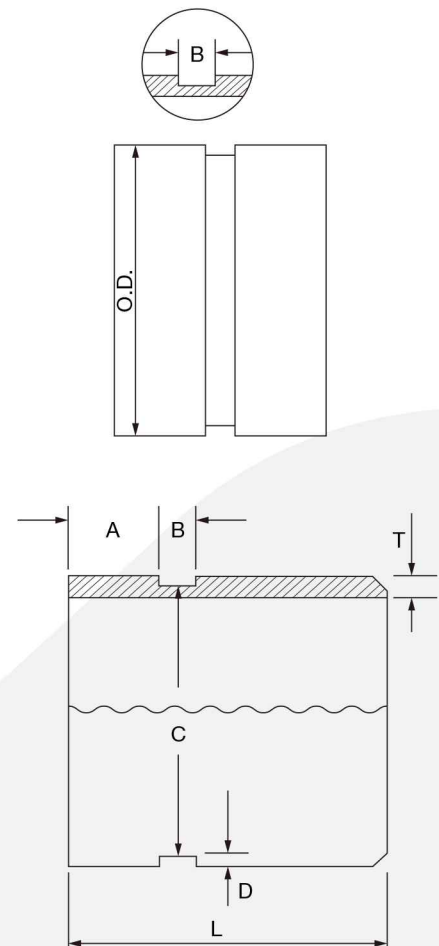
HT150 Series High Pressure Short Pipe

Working pressure: 60–160 bar

Material: 304, 316, 316L, 2205 (Duplex), 2507 (Super Duplex)



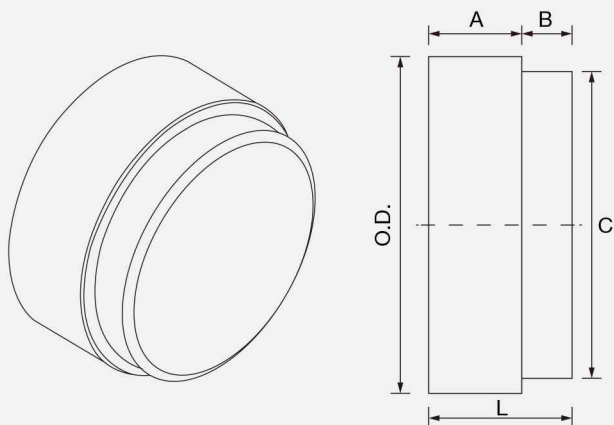
Size	O.D. (mm)	A (mm)	B (mm)	C (mm)	D (mm)	HT60 Ordinary Pressure Thickness	HT150 High Pressure Thickness	HT60 Length	HT150 Length
						T (mm)	T (mm)	L (mm)	L (mm)
DN20	26.9	16	8	23.8	1.55	3.5	5	45	50
*DN25	32	16	8	28.8	1.6	4	5	45	50
DN25	33.7	16	8	30	1.7	4	5	45	50
DN32	42.4	16	8	39	1.7	4	6	45	50
DN40	48.3	16	8	44.9	1.7	4	6	45	50
*DN50	57.2	16	8	53.8	1.7	4	6	45	50
DN50	60.3	16	8	56.9	1.7	4	6	45	50
DN65	73	16	8	69	2	5	7	45	50
*DN65	76.1	16	8	71.8	2.15	5	7	45	50
DN80	89.2	16	8	84.8	2.2	5.5	7.5	45	50
*DN90	101.6	16	9.5	97	2.3	5.5	7.5	41.5	50
*DN100	108	16	9.5	103.3	2.35	6	7.5	41.5	50
DN100	114.3	16	9.5	109.5	2.4	6	8	41.5	50
*DN125	133	16	9.5	127	3	6	8	41.5	50
DN125	140	16	9.5	134	3	6	8	41.5	50
*DN150	159	16	9.5	153	3	6	9	41.5	50
DN150	168.3	16	9.5	163	2.65	6	9	41.5	50
DN200	219.1	19.5	11	213.8	2.65	6	10	50	50
*DN250	273	19.5	13	267.7	2.65	8	12	52	52
*DN300	323.9	19.5	13	318	2.95	10	14	52	52



Note: 1. The model with "*" are under development.

Endcap Plate

Material: 304, 316, 316L, 2205 (Duplex), 2507 (Super Duplex)



DN	Inch	O.D. (mm)	A (mm)	B (mm)	C (mm)	L (mm)
20	3/4"	26.9	16	8	23.8	24
*25	1"	32	16	8	28.8	24
25	1"	33.7	16	8	30	24
32	1-1/4"	42.4	16	8	39	24
40	1-1/2"	48.3	16	8	44.9	24
*50	2"	57	16	8	53.8	24
50	2"	60.3	16	8	56.9	24
65	2-1/2"	73	16	8	69	24
*65	2-1/2"	76.1	16	8	71.8	24
80	3"	88.9	16	8	84.8	24
*100	4"	108	16	9	103.3	25
100	4"	114.3	16	9	109.5	25

Note: 1. The model with "*" are under development.

Male Threaded Grooved Fittings (Same Diameter & Reducing Diameter)



Male type thread: NPT thread, G thread

Material: 304, 316, 316L, 2205 (Duplex), 2507 (Super Duplex)

Coupling Clamp Selection

Pressure Ratings

S30 series: 0–600 psi **S80 series:** 0–1200 psi **S160 series:** 0–2322 psi

Special tips: Used at the outlet of high pressure pumps and plug pumps, it is recommended to choose the model of one level higher than the operating pressure. (For example, if the actual pressure at the pump outlet is 1200 psi (S80), it is recommended to choose coupling clamps from S160 series.)

Selection Requirements on Coupling Clamps at Pump Outlet

No.	Working Conditions	Selection Requirements
1	The pressure at the outlet of high pressure pumps and plug pumps falls between 30 and 40 bar.	S80 series coupling clamps are recommended.
2	The pressure at the outlet of high pressure pumps and plug pumps falls between 60 and 120 bar.	S160 series coupling clamps are recommended.

Note: Due to the high pressure at the outlet of high pressure pumps or plug pumps, and frequent vibrations occurring at the pump outlet, please engage in thorough technical communication with the sales representative in your area before placing an order if you are using this in a pump outlet. We will match the model according to your usage requirements to ensure the long-term stable operation of your pump set and equipment.



Example 1



Example 2

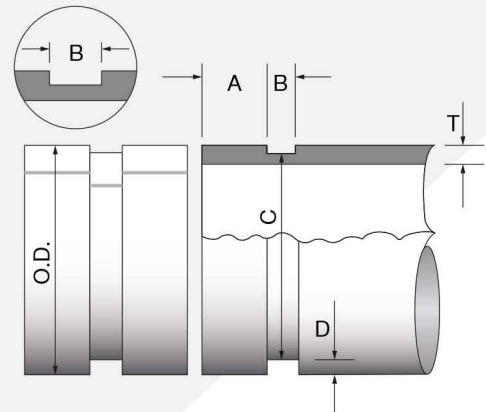
Rubber Gasket Applicable Media & Temperature Range

Material	Applicable Media	Recommended Temperature Range
EPDM	Water supply, drainage, sewage, room temperature air, weak acid and weak base	-30 °C to +130 °C
NBR	Petroleum-based oils	-20 °C to +80 °C
SR	Drinking water, hot dry air and some hot chemicals	-40 °C to +180 °C
FKM	Acids, alkali solutions, hot lubricants	-20 °C to +180 °C

Breaking Torque Table For Austenitic Stainless Steel Bolts & Screws (M1.6-M16)

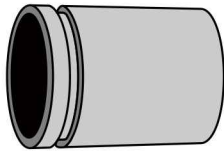
Thread	Breaking Torque (N·m)		
	Performance Level		
	50	70	80
M1.6	0.15	0.2	0.24
M2	0.3	0.4	0.48
M2.5	0.6	0.9	0.96
M3	1.1	1.6	1.8
M4	2.7	3.8	4.3
M5	5.5	7.8	8.8
M6	9.3	13	15
M8	23	32	37
M10	46	65	74
M12	80	110	130
M16	210	290	330

Cut Groove Pipe International Specifications



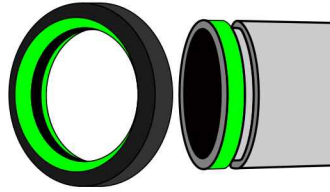
Nominal Size	Tolerance for outer diameter pipe			Gasket Seat	Groove Width	Groove Dia. C		Groove Depth	Min. Wall Thickness
	Basic O.D.	Tol.		A	B	Basic	Tol.	D	T
in	in	in	in	±0.03"	±0.03"	in	in	in	in
DN	mm	+mm	-mm	±0.76 mm	±0.76 mm	mm	mm	mm	mm
3/4"	1.050"	0.01"	0.01"	0.625"	0.313"	0.938"	-0.015"	0.056"	0.113"
20	26.70 mm	+0.25 mm	-0.25 mm	15.88 mm	7.95 mm	23.83 mm	-0.38 mm	1.42 mm	2.87 mm
1"	1.300"	0.013"	0.013"	0.625"	0.313"	1.138"	-0.015"	0.063"	0.133"
25	32 mm	+0.33 mm	-0.33 mm	15.88 mm	7.95 mm	28.90 mm	0.38 mm	1.60 mm	3.38 mm
1"	1.315"	0.013"	0.013"	0.625"	0.313"	1.19"	-0.015"	0.063"	0.133"
25	33.7 mm	+0.33 mm	-0.33 mm	15.88 mm	7.95 mm	30.23 mm	0.38 mm	1.60 mm	3.38 mm
1-1/4"	1.660"	0.016"	0.016"	0.625"	0.313"	1.535"	-0.015"	0.063"	0.14"
32	42.2 mm	+0.41 mm	-0.41 mm	15.88 mm	7.95 mm	38.99 mm	-0.38 mm	1.60 mm	3.56 mm
1-1/2"	1.900"	0.019"	0.019"	0.625"	0.313"	1.775"	-0.015"	0.063"	0.145"
40	48.3 mm	+0.48 mm	-0.48 mm	15.88 mm	7.95 mm	45.09 mm	-0.38 mm	1.60 mm	3.68 mm
2"	2.244"	0.024"	0.024"	0.625"	0.313"	2.120"	-0.015"	0.063"	0.154"
50	57 mm	+0.61 mm	-0.61 mm	15.88 mm	7.95 mm	53.85 mm	-0.38 mm	1.60 mm	3.91 mm
2"	2.375"	0.024"	0.024"	0.625"	0.313"	2.250"	-0.015"	0.063"	0.154"
50	60.3 mm	+0.61 mm	-0.61 mm	15.88 mm	7.95 mm	57.15 mm	-0.38 mm	1.60 mm	3.91 mm
2-1/2"	2.875"	0.029"	0.029"	0.625"	0.313"	2.720"	-0.018"	0.078"	0.188"
65	73 mm	+0.74 mm	-0.74 mm	15.88 mm	7.95 mm	69.09 mm	-0.46 mm	1.98 mm	4.78 mm
2-1/2"	3.000"	0.029"	0.029"	0.625"	0.313"	2.845"	-0.018"	0.078"	0.188"
65	76.1 mm	+0.74 mm	-0.74 mm	15.88 mm	7.95 mm	72.26 mm	-0.46 mm	1.98 mm	4.78 mm
3"	3.500"	0.035"	0.031"	0.625"	0.313"	3.344"	-0.018"	0.078"	0.188"
80	88.9 mm	+0.89 mm	-0.79 mm	15.88 mm	7.95 mm	84.94 mm	-0.46 mm	1.98 mm	4.78 mm
4"	4.251"	0.035"	0.031"	0.625"	0.375"	4.085"	-0.02"	0.083"	0.203"
100	108 mm	+0.89 mm	-0.79 mm	15.88 mm	9.53 mm	103.78 mm	-0.51 mm	2.11 mm	5.16 mm
4"	4.500"	0.035"	0.031"	0.625"	0.375"	4.334"	-0.02"	0.083"	0.203"
100	114.3 mm	+0.89 mm	-0.79 mm	15.88 mm	9.53 mm	110.08 mm	-0.51 mm	2.11 mm	5.16 mm
5"	5.240"	0.039"	0.031"	0.625"	0.375"	5.07"	-0.02"	0.084"	0.203"
125	133 mm	+1.00 mm	-0.79 mm	15.88 mm	9.53 mm	128.78 mm	-0.51 mm	2.11 mm	5.16 mm
5"	5.563"	0.039"	0.031"	0.625"	0.375"	5.395"	-0.02"	0.084"	0.203"
125	141.3 mm	+1.00 mm	-0.79 mm	15.88 mm	9.53 mm	137.03 mm	-0.51 mm	2.13 mm	5.16 mm
6"	6.259"	0.039"	0.031"	0.625"	0.375"	6.089"	-0.022"	0.085"	0.219"
150	159 mm	+1.00 mm	-0.79 mm	15.88 mm	9.53 mm	154.68 mm	-0.56 mm	2.16 mm	5.56 mm
6"	6.625"	0.063"	0.031"	0.625"	0.375"	6.455"	-0.022"	0.085"	0.219"
150	168.3 mm	+1.60 mm	-0.79 mm	15.88 mm	9.53 mm	163.96 mm	-0.56 mm	2.16 mm	5.56 mm
8"	8.625"	0.063"	0.031"	0.75"	0.438"	8.441"	-0.025"	0.092"	0.238"
200	219.1 mm	+1.60 mm	-0.79 mm	19.05 mm	11.13 mm	214.40 mm	-0.64 mm	2.34 mm	6.05 mm
10"	10.75"	0.063"	0.031"	0.750"	0.500"	10.562"	-0.027"	0.094"	0.25"
250	273 mm	+1.60 mm	-0.79 mm	19.05 mm	12.70 mm	268.28 mm	-0.69 mm	2.39 mm	6.35 mm
12"	12.75"	0.063"	0.031"	0.750"	0.500"	12.531"	-0.03"	0.109"	0.279"
300	323.9 mm	+1.60 mm	-0.79 mm	19.05 mm	12.70 mm	318.29 mm	-0.76 mm	2.77 mm	7.09 mm

Grooved Coupling Installation Diagram



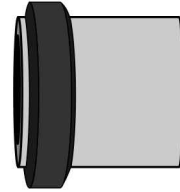
Step 1

Check whether the groove meets the standard before installation. Remove the burrs, rust, oil, paint and other impurities on the tube and sealing ring. Pipe ends must be clean and smooth, free from unevenness.



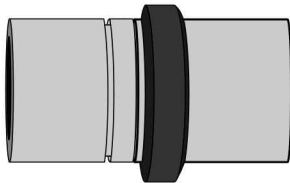
Step 2

Apply silicone lubricant to the end of pipe, outer surface of rubber ring and sealing lip, and do not use petroleum-based lubricant.



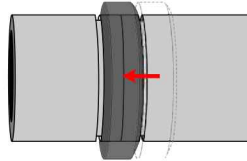
Step 3

Put the sealing rubber into the sealing part of a steel pipe.



Step 4

Align the two steel pipes.



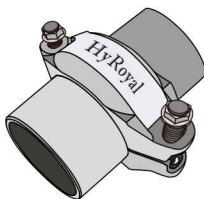
Step 5

After the two steel pipes are aligned, pull back the rubber ring to the center of the pipe end, so that the rubber ring is just located at the sealing part outside the groove, and ensure that the rubber ring stretches naturally without distortion.



Step 6

Make sure that the tube clamps are aligned with the grooves on both sides.



Step 7

Thread the bolts and nuts.



Step 8

Tighten the nuts evenly from both sides with a torque wrench until the pipe clamp is tightly fastened to the pipe. The gap at the rigid joint must be equal on both sides, and there is no gap at the flexible joint. Rubber rings should not be seen from the outside of rigid and flexible joint.

Precautions

- For cut grooved pipes or roll grooved pipes, specifications are based on groove diameter, the groove depth is just a reference dimensions.
- Before installation, please ensure that the outer diameter of the pipe reaches the standard value or above. If the outer diameter of the pipe is lower than the standard value, water leakage will easily occur.
- To achieve the best performance, proper bolt torque is required. Excessive torque will damage the clamp and bolts, causing the pipe connection to fall off, causing heavy property loss and serious personal injury!