



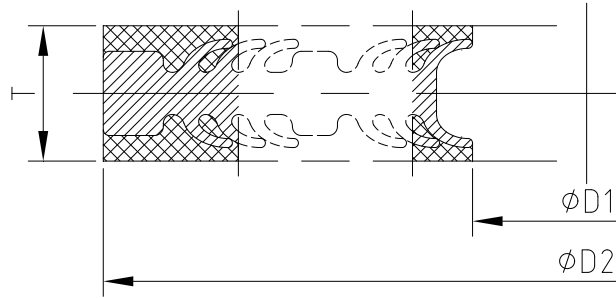
Fishbone Gaskets Size and Torque

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PN Series



TYPE I (Basic Construction) for TG (Tongue and Groove) Flanges

DN	D1 (mm)	D2 (mm)	PN10bar			PN16bar			PN25bar		
			Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)
10	24	34.4	7.2	74.4	34.9	7.2	74.4	34.9	7.2	74.4	34.9
15	29	39.4	8.4	74.4	34.9	8.4	74.4	34.9	8.4	74.4	34.9
20	36	50.4	14.7	74.4	43.9	14.7	74.4	43.9	14.7	74.4	43.9
25	43	57.4	17.0	74.4	51.0	17.0	74.4	51.0	17.0	74.4	51.0
32	51	65.4	26.3	188.7	88.5	26.3	188.7	88.5	26.3	188.7	88.5
40	61	75.4	30.9	188.7	92.3	30.9	188.7	92.3	30.9	188.7	92.3
50	73.1	87.2	35.5	188.7	106.1	35.5	188.7	106.1	35.5	188.7	106.1
65	95.1	109.2	22.6	188.7	88.5	22.6	188.7	88.5	22.6	188.7	88.5
80	106.1	120.2	25.1	188.7	88.5	25.1	188.7	88.5	25.1	188.7	88.5
100	129.2	149.2	43.7	188.7	130.1	43.7	188.7	130.1	54.7	368.6	172.8
125	155.2	175.2	51.9	188.7	154.1	51.9	188.7	154.1	77.8	636.9	298.6
150	183.2	203.2	75.9	368.6	224.8	75.9	368.6	224.8	91.0	636.9	298.6
200	239.2	259.2	97.9	368.6	288.7	65.2	368.6	192.5	78.3	636.9	298.6
250	292.2	312.2	79.1	368.6	232.4	94.9	636.9	298.6	106.8	947.7	444.2
300	343.2	363.2	92.5	368.6	270.5	111.0	636.9	324.6	93.6	947.7	444.2
350	395.4	421	102.6	368.6	298.8	123.1	636.9	358.6	153.9	1277.4	598.8
400	447.4	473	138.8	636.9	402.5	156.2	947.7	452.8	190.9	1757.8	824.0
450	497.4	523	123.1	636.9	355.5	138.5	947.7	444.2	169.3	1757.8	824.0
500	549.4	575	135.7	636.9	390.0	169.6	1277.4	598.8	186.5	1757.8	824.0
600	649.4	675	179.8	947.7	512.3	219.7	1757.8	824.0	239.7	2246.3	1054.2
700	751.4	777	172.9	947.7	488.4	211.3	1757.8	824.0	278.5	2933.3	1375.0
800	856.4	882	218.5	1277.4	611.7	262.2	2246.3	1052.9	408.5	4542.2	2129.2
900	961.4	987	209.9	1277.4	598.8	251.9	2246.3	1052.9	433.7	4542.2	2129.2
1000	1061	1093	285.8	1757.8	824.0	337.8	2933.3	1375.0	615.2	7092.8	3324.8
1200	1261	1293	323.4	2246.3	1052.9	404.2	4542.2	2129.2	742.5	7092.8	3324.8

Beneficiary: AIGI Industrial Group Ltd.

Acct. #: 7655 3888 0000 00866

Beneficiary Bank: China Everbright Bank, Nanjing Br. (SWIFT BIC: EVERCNBJN1)

Intermediary Bank: Dresdner Bank AG Frankfurt AM Main DE (SWIFT BIC: DRESDEFF)



1400	1461	1493	360.1	2933.3	1375.0	470.9	4542.2	2129.2	937.6	8802.4	3324.8
1600	1661	1693	424.6	4542.2	2129.2	624.5	7092.8	3324.8	1076.1	8802.4	4126.1
1800	1861	1893	431.9	4542.2	2129.2	705.1	7092.8	3324.8	1388.5	13322.2	6244.8
2000	2061	2093	438.1	4542.2	2129.2	846.4	8802.4	4126.1	1547.7	13322.2	6244.8

Beneficiary: AIGI Industrial Group Ltd.

Acct. #: 7655 3888 0000 00866

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Intermediary Bank: Dresdner Bank AG Frankfurt AM Main DE (SWIFT BIC: DRESDEFF)



DN	D1 (mm)	D2 (mm)	PN40bar			PN63bar			PN100bar		
			Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)
10	24	34.4	7.2	74.4	34.9	7.2	74.4	34.9	7.2	74.4	34.9
15	29	39.4	8.4	74.4	34.9	8.4	74.4	34.9	8.8	74.4	34.9
20	36	50.4	14.7	74.4	43.9	19.5	188.7	88.5	19.7	188.7	88.5
25	43	57.4	17.0	74.4	51.0	22.7	188.7	88.5	24.3	188.7	96.4
32	51	65.4	26.3	188.7	88.5	32.9	368.6	172.8	37.5	368.6	172.8
40	61	75.4	30.9	188.7	92.3	38.6	368.6	172.8	47.3	368.6	187.7
50	73.1	87.2	35.5	188.7	106.1	44.4	368.6	178.5	71.7	636.9	298.6
65	95.1	109.2	22.6	188.7	88.5	28.3	368.6	172.8	52.4	636.9	298.6
80	106.1	120.2	25.1	188.7	88.5	32.6	368.6	172.8	61.7	636.9	298.6
100	129.2	149.2	54.7	368.6	172.8	65.6	636.9	298.6	111.2	947.7	444.2
125	155.2	175.2	77.8	636.9	298.6	92.9	947.7	444.2	162.6	1277.4	645.2
150	183.2	203.2	91.0	636.9	316.3	133.5	1277.4	622.8	140.1	1277.4	598.8
175	213.2	233.2	78.9	947.7	444.2	113.3	1277.4	598.8			
200	239.2	259.2	88.1	947.7	444.2	150.4	1757.8	824.0	236.8	1757.8	939.8
225	266.2	286.2	108.5	1277.4	598.8	179.5	1757.8	832.4			
250	292.2	312.2	119.3	1277.4	598.8	210.0	1757.8	971.6	360.8	2246.3	1431.9
300	343.2	363.2	117.9	1277.4	598.8	207.4	1757.8	955.6	386.1	2933.3	1532.2
350	395.4	421	177.3	1757.8	826.1	309.4	2246.3	1419.4	609.2	4542.2	2417.5
400	447.4	473	239.2	2246.3	1109.8	414.6	2933.3	1893.6	753.4	4542.2	2989.7
450	497.4	523	230.2	2246.3	1063.4						
500	549.4	575	297.1	2933.3	1375.0	548.6	4542.2	2484.0	998.4	7092.8	3961.9
600	649.4	675	462.4	4542.2	2129.2	854.8	7092.8	3837.1			
700	751.4	777	502.0	4542.2	2269.2	928.2	7092.8	4129.9			
800	856.4	882	737.5	7092.8	3324.8	1270.8	8802.4	5604.0			
900	961.4	987	783.1	7092.8	3477.0	1349.3	8802.4	5897.5			
1000	1061	1093	961.2	7092.8	4229.2	1892.8	13322.2	8198.1			
1200	1261	1293	1249.4	8802.4	5397.4	2570.2	19584.8	10929.8			
1400	1461	1493	1464.9	8802.4	6211.4						
1600	1661	1693	1921.6	13322.2	7993.7						

Beneficiary: AIGI Industrial Group Ltd.

Acct. #: 7655 3888 0000 00866

Beneficiary Bank: China Everbright Bank, Nanjing Br. (SWIFT BIC: EVERCNBJNJ1)

Intermediary Bank: Dresdner Bank AG Frankfurt AM Main DE (SWIFT BIC: DRESDEFF)



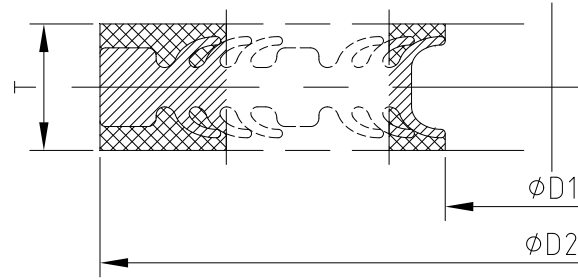
DN	D1 (mm)	D2 (mm)	PN160bar			PN250bar		
			Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)
10	24	34.4	11.2	74.4	35.8	23.8	188.7	88.5
15	29	39.4	13.9	74.4	44.5	29.6	188.7	88.5
20	36	50.4	31.3	188.7	100.1	50.0	188.7	132.9
25	43	57.4	38.5	188.7	123.3	77.1	368.6	204.8
32	51	65.4	59.5	368.6	190.4	95.2	368.6	252.9
40	61	75.4	75.1	368.6	240.3	144.2	636.9	383.0
50	73.1	87.2	113.8	636.9	364.2	91.0	636.9	298.6
65	95.1	109.2	83.1	636.9	298.6	133.0	636.9	353.2
80	106.1	120.2	97.9	636.9	313.4	176.3	947.7	468.2
100	129.2	149.2	176.5	947.7	564.9	313.8	1277.4	833.6
125	155.2	175.2	258.1	1277.4	825.8	275.3	1277.4	731.2
150	183.2	203.2	222.4	1277.4	711.8	391.5	1757.8	1040.0
200	239.2	259.2	375.9	1757.8	1202.9	710.8	2933.3	1888.1
250	292.2	312.2	620.5	2933.3	1985.6	859.1	4542.2	2282.1
300	343.2	363.2	612.9	2933.3	1961.2	1206.9	5441.6	3205.8
DN	D1 (mm)	D2 (mm)	PN320bar			PN400bar		
			Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)
10	24	34.4	37.2	188.7	88.5	47.7	188.7	89.4
15	29	39.4	46.3	188.7	94.8	74.1	368.6	172.8
20	36	50.4	97.7	368.6	200.1	125.1	368.6	234.5
25	43	57.4	120.4	368.6	246.7	185.0	636.9	346.9
32	51	65.4	178.5	636.9	365.7	228.5	636.9	428.5
40	61	75.4	225.3	636.9	461.4	324.4	947.7	608.3
50	73.1	87.2	142.3	636.9	298.6	204.8	947.7	444.2
65	95.1	109.2	233.7	947.7	478.7	332.4	1277.4	623.3
80	106.1	120.2	275.4	947.7	564.0	391.7	1277.4	734.4
100	129.2	149.2	539.4	1757.8	1104.6	753.2	2246.3	1412.2
125	155.2	175.2	473.1	1757.8	969.0	660.7	2246.3	1238.7
150	183.2	203.2	667.3	2246.3	1366.7	925.4	2933.3	1735.1
200	239.2	259.2	833.0	2933.3	1705.9	1230.2	4542.2	2306.7
250	292.2	312.2	1431.9	5441.6	2932.6			

Beneficiary: AIGI Industrial Group Ltd.

Acct. #: 7655 3888 0000 00866

Beneficiary Bank: China Everbright Bank, Nanjing Br. (SWIFT BIC: EVERCNBJNJ1)

Intermediary Bank: Dresdner Bank AG Frankfurt AM Main DE (SWIFT BIC: DRESDEFF)



TYPE I (Basic Construction) for MFM (Male-Female) Flanges

DN	D1 (mm)	D2 (mm)	PN10bar			PN16bar			PN25bar		
			Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)
10	18	34.4	10.1	74.4	34.9	10.1	74.4	34.9	10.1	74.4	34.9
15	23	39.4	12.1	74.4	36.1	12.1	74.4	36.1	12.1	74.4	36.1
20	32	50.4	17.9	74.4	53.5	17.9	74.4	53.5	17.9	74.4	53.5
25	39	57.4	20.9	74.4	62.6	20.9	74.4	62.6	20.9	74.4	62.6
32	44	65.4	36.8	188.7	110.0	36.8	188.7	110.0	36.8	188.7	110.0
40	51	75.4	48.4	188.7	144.9	48.4	188.7	144.9	48.4	188.7	144.9
50	63	87.2	57.1	188.7	170.6	57.1	188.7	170.6	57.1	188.7	170.6
65	85	109.2	36.9	188.7	110.1	36.9	188.7	110.1	36.9	188.7	110.1
80	96	120.2	41.1	188.7	122.5	41.1	188.7	122.5	41.1	188.7	122.5
100	123	149.2	55.4	188.7	164.9	55.4	188.7	164.9	69.3	368.6	206.1
125	148	175.2	67.2	188.7	176.9	67.2	188.7	176.9	100.7	636.9	299.1
150	176	203.2	98.5	368.6	291.7	98.5	368.6	291.7	118.1	636.9	350.0
200	226	259.2	140.0	368.6	345.6	93.4	368.6	275.4	112.0	636.9	330.5
250	279	312.2	113.6	368.6	333.7	136.3	636.9	400.4	153.3	947.7	450.4
300	330	363.2	133.0	368.6	345.6	159.7	636.9	467.0	134.7	947.7	444.2
350	381	421	127.2	368.6	345.6	152.7	636.9	444.7	190.9	1277.4	598.8
400	433	473	172.3	636.9	499.7	193.8	947.7	562.1	236.9	1757.8	824.0
450	486	523	147.2	636.9	425.2	165.7	947.7	478.3	202.5	1757.8	824.0
500	537	575	164.5	636.9	472.8	205.6	1277.4	598.8	226.1	1757.8	824.0
600	637	675	218.1	947.7	621.5	266.5	1757.8	824.0	290.8	2246.3	1083.1
700	730	777	232.8	947.7	657.8	284.6	1757.8	824.0	336.3	2933.3	1375.0
800	830	882	309.4	1277.4	866.4	371.3	2246.3	1052.9	464.1	4542.2	2129.2
900	930	987	311.2	1277.4	863.4	373.4	2246.3	1052.9	466.7	4542.2	2129.2
1000	1035	1093	383.0	1757.8	1053.3	452.6	2933.3	1375.0	634.7	7092.8	3324.8
1200	1235	1293	433.7	2246.3	1171.0	542.1	4542.2	2129.2	762.8	7092.8	3324.8
1400	1435	1493	483.2	2933.3	1375.0	557.5	4542.2	2129.2	960.1	8802.4	4126.1
1600	1625	1693	616.5	4542.2	2129.2	712.4	7092.8	3324.8	1106.6	8802.4	4495.4
1800	1825	1893	627.5	4542.2	2129.2	725.1	7092.8	3324.8	1424.1	13322.2	6244.8
2000	2025	2093	636.6	4542.2	2129.2	866.1	8802.4	4126.1	1583.7	13322.2	6244.8

Beneficiary: AIGI Industrial Group Ltd.

Acct. #: 7655 3888 0000 00866

Beneficiary Bank: China Everbright Bank, Nanjing Br. (SWIFT BIC: EVERCNBJNJ1)

Intermediary Bank: Dresdner Bank AG Frankfurt AM Main DE (SWIFT BIC: DRESDEFF)



DN	D1 (mm)	D2 (mm)	PN40bar			PN63bar			PN100bar		
			Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)
10	18	34.4	10.1	74.4	34.9	10.1	74.4	34.9	10.1	74.4	34.9
15	23	39.4	12.1	74.4	36.1	12.1	74.4	36.1	12.1	74.4	41.6
20	32	50.4	17.9	74.4	53.5	23.8	188.7	88.5	23.8	188.7	88.5
25	39	57.4	20.9	74.4	62.6	27.9	188.7	88.5	27.9	188.7	106.1
32	44	65.4	36.8	188.7	110.0	46.0	368.6	172.8	46.0	368.6	173.7
40	51	75.4	48.4	188.7	144.9	60.6	368.6	181.1	60.6	368.6	229.8
50	63	87.2	57.1	188.7	170.6	71.4	368.6	217.7	87.4	636.9	347.0
65	85	109.2	36.9	188.7	110.1	46.1	368.6	172.8	62.9	636.9	298.6
80	96	120.2	41.1	188.7	122.5	51.4	368.6	182.6	73.5	636.9	298.6
100	123	149.2	69.3	368.6	206.1	83.1	636.9	319.8	120.9	947.7	479.9
125	148	175.2	100.7	636.9	299.1	113.3	947.7	472.2	176.7	1277.4	701.3
150	176	203.2	118.1	636.9	350.0	147.7	1277.4	672.5	151.3	1277.4	600.6
175	200	233.2	112.6	947.7	444.2	125.2	1277.4	598.8			
200	226	259.2	126.0	947.7	444.2	165.0	1757.8	824.0	259.9	1757.8	1031.3
225	253	286.2	155.5	1277.4	598.8	195.9	1757.8	908.3			
250	279	312.2	170.4	1277.4	608.9	228.0	1757.8	1054.9	391.8	2246.3	1554.7
300	330	363.2	149.7	1277.4	598.8	223.4	1757.8	1029.0	415.8	2933.3	1649.8
350	381	421	210.0	1757.8	863.7	323.5	2246.3	1483.9	636.9	4542.2	2527.3
400	433	473	258.4	2246.3	1156.0	431.8	2933.3	1972.5	784.8	4542.2	3114.3
450	486	523	237.4	2246.3	1096.6						
500	537	575	306.4	2933.3	1409.6	565.7	4542.2	2561.7	1029.6	7092.8	4085.9
600	637	675	475.1	4542.2	2166.3	878.3	7092.8	3942.6			
700	730	777	521.9	4542.2	2359.1	965.0	7092.8	4293.6			
800	830	882	768.9	7092.8	3444.6	1324.8	8802.4	5842.5			
900	930	987	818.1	7092.8	3632.2	1409.6	8802.4	6160.7			
1000	1035	1093	991.7	7092.8	4363.4	1952.9	13322.2	8458.4			
1200	1235	1293	1283.6	8802.4	5545.2	2640.6	19584.8	11229.0			
1400	1435	1493	1500.2	8802.4	6360.8						
1600	1625	1693	1976.0	13322.2	8220.2						

Beneficiary: AIGI Industrial Group Ltd.

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Intermediary Bank: Dresdner Bank AG Frankfurt AM Main DE (SWIFT BIC: DRESDEFF)



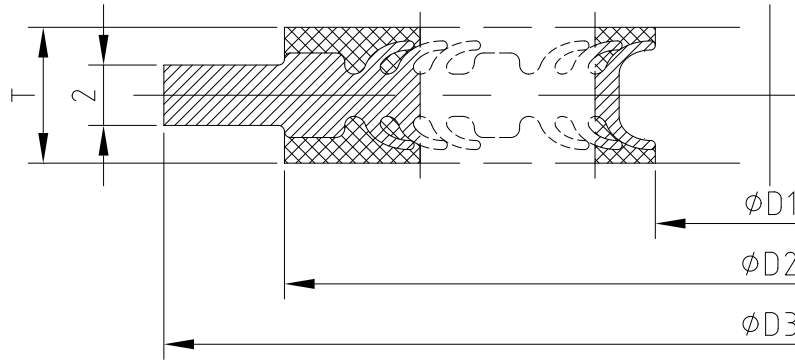
DN	PN160bar					PN250bar				
	D1 (mm)	D2 (mm)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)	D1 (mm)	D2 (mm)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)
10	18	34.4	13.4	74.4	42.7	18	34.4	28.5	188.7	88.5
15	23	39.4	16.6	74.4	53.3	19	39.4	38.5	188.7	102.3
20	32	50.4	34.5	188.7	110.3	28	50.4	59.6	188.7	158.3
25	39	57.4	42.5	188.7	135.9	35	57.4	91.8	368.6	244.0
32	44	65.4	69.5	368.6	222.3	40	65.4	119.0	368.6	316.1
40	51	75.4	91.9	368.6	294.2	46	75.4	185.0	636.9	491.3
50	63	87.2	138.8	636.9	444.2	58	87.2	116.6	636.9	309.6
65	85	109.2	99.8	636.9	319.3	80	109.2	167.3	636.9	444.3
80	96	120.2	116.7	636.9	373.5	89	120.2	222.6	947.7	591.2
100	123	149.2	192.0	947.7	614.3	113	149.2	361.4	1277.4	959.9
125	148	175.2	280.5	1277.4	897.7	139	175.2	313.8	1277.4	833.6
150	176	203.2	240.2	1277.4	768.7	163	203.2	449.6	1757.8	1194.2
200	226	259.2	412.5	1757.8	1320.1	210	259.2	826.2	2933.3	2194.6
250	279	312.2	673.7	2933.3	2155.8	258	312.2	995.7	4542.2	2644.9
300	330	363.2	659.9	2933.3	2111.8	308	363.2	1382.4	5441.6	3672.1
DN	PN320bar					PN400bar				
	D1 (mm)	D2 (mm)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)	D1 (mm)	D2 (mm)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)
10	18	34.4	44.5	188.7	91.2	18	34.4	57.0	188.7	106.9
15	19	39.4	60.2	188.7	123.2	19	39.4	96.3	368.6	180.5
20	28	50.4	116.4	368.6	238.3	28	50.4	149.0	368.6	279.3
25	35	57.4	143.5	368.6	293.9	35	57.4	220.4	636.9	413.3
32	40	65.4	223.1	636.9	457.0	40	65.4	285.6	636.9	535.5
40	46	75.4	289.0	636.9	591.9	46	75.4	416.2	947.7	780.3
50	58	87.2	182.1	636.9	373.0	58	87.2	262.3	947.7	491.7
65	80	109.2	294.0	947.7	602.2	80	109.2	418.2	1277.4	784.1
80	89	120.2	347.8	947.7	712.2	89	120.2	494.6	1277.4	927.4
100	113	149.2	621.1	1757.8	1272.1	113	149.2	867.3	2246.3	1626.2
125	139	175.2	539.4	1757.8	1104.6	139	175.2	753.2	2246.3	1412.2
150	163	203.2	766.4	2246.3	1569.5	163	203.2	1062.7	2933.3	1992.5
200	210	259.2	968.2	2933.3	1982.9	210	259.2	1430.0	4542.2	2681.2
250	258	312.2	1659.5	5441.6	3398.8					

Beneficiary: AIGI Industrial Group Ltd.

Acct. #: 7655 3888 0000 00866

Beneficiary Bank: China Everbright Bank, Nanjing Br. (SWIFT BIC: EVERCNBJNJ1)

Intermediary Bank: Dresdner Bank AG Frankfurt AM Main DE (SWIFT BIC: DRESDEFF)



TYPE II (With Centering Ring Construction) for FF (Flat Face) & RF (Raised Face) Flanges

DN	PN2.5bar						PN6bar					
	D1 (mm)	D2 (mm)	D3 (mm)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)	D1 (mm)	D2 (mm)	D3 (mm)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)
10	20	34	39	7.4	42.5	22.2	20	34	39	7.4	42.5	22.2
15	25	39	44	8.8	42.5	26.4	25	39	44	8.8	42.5	26.4
20	30	44	54	10.2	42.5	30.5	30	44	54	10.2	42.5	30.5
25	36	50	64	11.8	42.5	35.4	36	50	64	11.8	42.5	35.4
32	46	60	76	17.5	74.4	52.3	46	60	76	17.5	74.4	52.3
40	53	69	86	23.0	74.4	68.8	53	69	86	23.0	74.4	68.8
50	65	83	96	31.4	74.4	69.8	65	83	96	31.4	74.4	69.8
65	81	100	116	40.5	74.4	69.8	81	100	116	40.5	74.4	69.8
80	95	114	132	62.4	188.7	176.9	95	114	132	62.4	188.7	176.9
100	118	140	152	89.2	188.7	176.9	118	140	152	89.2	188.7	176.9
125	144	166	182	53.6	188.7	159.0	144	166	182	53.6	188.7	159.0
150	172	194	207	63.2	188.7	176.9	172	194	207	63.2	188.7	176.9
175	200	222	237	72.9	188.7	176.9	200	222	237	72.9	188.7	176.9
200	225	247	262	81.6	188.7	176.9	225	247	262	81.6	188.7	176.9
225	250	272	287	90.2	188.7	176.9	250	272	287	90.2	188.7	176.9
250	280	302	317	67.0	188.7	176.9	280	302	317	67.0	188.7	176.9
300	330	352	373	98.2	368.6	287.2	330	352	373	98.2	368.6	287.2
350	380	404	423	123.2	368.6	345.6	380	404	423	123.2	368.6	345.6
400	430	454	473	104.1	368.6	302.0	430	454	473	104.1	368.6	302.0
450	485	511	528	126.2	368.6	345.6	485	511	528	126.2	368.6	345.6
500	535	565	578	120.0	368.6	344.9	535	565	578	120.0	368.6	344.9
600	635	665	679	170.1	636.9	484.7	635	665	679	170.1	636.9	484.7
700	735	775	784	190.8	636.9	538.9	735	775	784	190.8	636.9	538.9
800	835	880	890	258.8	947.7	724.7	835	880	890	258.8	947.7	724.7
900	935	980	990	288.8	947.7	801.5	935	980	990	288.8	947.7	801.5
1000	1035	1080	1090	273.3	947.7	751.5	1035	1080	1090	273.3	947.7	751.5
1200	1235	1280	1290	284.1	947.7	767.1	1235	1280	1307	315.7	1277.4	852.3
1400	1435	1480	1490	292.5	947.7	775.2	1435	1480	1524	357.5	1757.8	947.5

Beneficiary: AIGI Industrial Group Ltd.

Acct. #: 7655 3888 0000 00866

Beneficiary Bank: China Everbright Bank, Nanjing Br. (SWIFT BIC: EVERCNBJNJ1)

Intermediary Bank: Dresdner Bank AG Frankfurt AM Main DE (SWIFT BIC: DRESDEFF)



1600	1640	1690	1700	317.2	947.7	824.6	1640	1690	1724	387.7	1757.8	1007.9
1800	1840	1890	1900	322.8	947.7	823.2	1840	1890	1931	430.4	2246.3	1097.6
2000	2040	2090	2100	327.5	947.7	818.8	2040	2090	2138	473.1	2933.3	1375.0

Beneficiary: AIGI Industrial Group Ltd.

Acct. #: 7655 3888 0000 00866

Beneficiary Bank: China Everbright Bank, Nanjing Br. (SWIFT BIC: EVERCNBJNJ1)

Intermediary Bank: Dresdner Bank AG Frankfurt AM Main DE (SWIFT BIC: DRESDEFF)



DN	PN10bar						PN16bar					
	D1 (mm)	D2 (mm)	D3 (mm)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)	D1 (mm)	D2 (mm)	D3 (mm)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)
10	20	37	46	11.4	74.4	34.9	20	37	46	11.4	74.4	34.9
15	25	42	51	13.4	74.4	40.2	25	42	51	13.4	74.4	40.2
20	30	47	61	15.4	74.4	46.2	30	47	61	15.4	74.4	46.2
25	36	52	71	16.6	74.4	49.7	36	52	71	16.6	74.4	49.7
32	46	62	82	27.1	188.7	88.5	46	62	82	27.1	188.7	88.5
40	53	71	92	35.1	188.7	104.8	53	71	92	35.1	188.7	104.8
50	65	87	107	52.5	188.7	156.9	65	87	107	52.5	188.7	156.9
65	81	103	127	31.8	188.7	94.9	81	103	127	31.8	188.7	94.9
80	95	117	142	36.6	188.7	109.2	95	117	142	36.6	188.7	109.2
100	118	140	162	44.6	188.7	132.6	118	140	162	44.6	188.7	132.6
125	144	166	192	53.6	188.7	159.0	144	166	192	53.6	188.7	159.0
150	172	194	218	79.1	368.6	234.2	172	194	218	79.1	368.6	234.2
175	200	224	248	99.9	368.6	295.3	200	224	248	99.9	368.6	295.3
200	225	249	273	111.7	368.6	329.5	225	249	273	74.5	368.6	219.6
225	250	274	303	123.5	368.6	345.6	250	274	303	82.3	368.6	242.3
250	280	305	328	95.7	368.6	281.2	280	305	329	114.9	636.9	337.4
300	330	355	378	112.1	368.6	327.8	330	355	384	134.5	636.9	393.4
350	380	408	438	103.7	368.6	302.1	380	408	444	124.5	636.9	362.5
400	430	458	489	140.2	636.9	406.7	430	458	495	157.8	947.7	457.6
450	485	515	539	130.9	636.9	378.0	485	515	555	147.3	947.7	444.2
500	535	570	594	156.6	636.9	450.2	535	570	617	195.7	1277.4	598.8
600	635	670	695	207.9	947.7	592.5	635	670	734	254.1	1757.8	824.0
700	735	780	810	228.8	947.7	646.5	735	780	804	279.7	1757.8	824.0
800	835	885	917	304.6	1277.4	852.8	835	885	911	365.5	2246.3	1052.9
900	935	990	1017	306.7	1277.4	851.1	935	990	1011	368.0	2246.3	1052.9
1000	1035	1100	1124	407.7	1757.8	1121.1	1035	1100	1128	481.8	2933.3	1375.0
1200	1235	1310	1341	498.7	2246.3	1346.6	1235	1310	1342	623.4	4542.2	2129.2
1400	1435	1520	1548	594.1	2933.3	1574.3	1435	1520	1542	685.5	4542.2	2155.5
1600	1640	1740	1772	766.6	4542.2	2129.2	1640	1740	1764	885.9	7092.8	3324.8
1800	1840	1940	1972	778.2	4542.2	2129.2	1840	1940	1964	899.3	7092.8	3324.8
2000	2040	2140	2182	787.9	4542.2	2129.2	2040	2140	2168	980.5	8802.4	4126.1

Beneficiary: AIGI Industrial Group Ltd.

Acct. #: 7655 3888 0000 00866

Beneficiary Bank: China Everbright Bank, Nanjing Br. (SWIFT BIC: EVERCNBJN1)

Intermediary Bank: Dresdner Bank AG Frankfurt AM Main DE (SWIFT BIC: DRESDEFF)



DN	PN25bar						PN40bar					
	D1 (mm)	D2 (mm)	D3 (mm)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)	D1 (mm)	D2 (mm)	D3 (mm)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)
10	20	37	46	11.4	74.4	34.9	20	37	46	11.4	74.4	34.9
15	25	42	51	13.4	74.4	40.2	25	42	51	13.4	74.4	40.2
20	30	47	61	15.4	74.4	46.2	30	47	61	15.4	74.4	46.2
25	36	52	71	16.6	74.4	49.7	36	52	71	16.6	74.4	49.7
32	46	62	82	27.1	188.7	88.5	46	64	82	31.1	188.7	93.1
40	53	71	92	35.1	188.7	104.8	53	74	92	41.9	188.7	125.3
50	65	87	107	52.5	188.7	156.9	65	89	107	58.1	188.7	173.4
65	81	103	127	31.8	188.7	94.9	81	105	127	35.1	188.7	104.6
80	95	117	142	36.6	188.7	109.2	95	119	142	40.3	188.7	120.2
100	118	140	168	55.7	368.6	172.8	118	145	168	68.1	368.6	202.5
125	144	166	194	80.3	636.9	298.6	144	171	194	97.8	636.9	298.6
150	172	194	224	94.9	636.9	298.6	172	198	224	112.5	636.9	333.4
175	200	224	254	79.9	636.9	298.6	200	230	265	105.9	947.7	444.2
200	225	249	284	89.3	636.9	298.6	225	255	290	118.1	947.7	444.2
225	250	274	310	111.1	947.7	444.2	250	280	322	144.8	1277.4	598.8
250	280	305	340	129.2	947.7	444.2	280	316	352	179.3	1277.4	628.3
300	330	355	400	113.5	947.7	444.2	330	371	417	169.3	1277.4	631.8
350	380	408	457	155.6	1277.4	598.8	380	421	474	212.5	1757.8	866.0
400	430	458	514	192.8	1757.8	824.0	430	475	546	274.7	2246.3	1178.8
450	485	515	564	180.0	1757.8	824.0	485	530	571	247.6	2246.3	1143.9
500	535	570	624	215.3	1757.8	824.0	535	585	628	324.0	2933.3	1490.3
600	635	670	731	277.2	2246.3	1061.9	635	685	747	498.7	4542.2	2273.9
700	735	780	833	330.6	2933.3	1375.0	735	790	852	544.5	4542.2	2461.2
800	835	885	942	456.9	4542.2	2129.2	835	895	974	798.0	7092.8	3575.0
900	935	990	1042	460.0	4542.2	2129.2	935	1000	1084	845.6	7092.8	3754.4
1000	1035	1100	1154	646.8	7092.8	3324.8	1035	1110	1194	1037.3	7092.8	4564.2
1200	1235	1310	1364	792.9	7092.8	3345.0	1235	1320	1398	1363.3	8802.4	5889.6
1400	1435	1520	1578	1012.2	8802.4	4191.3	1435	1530	1618	1611.0	8802.4	6830.7
1600	1640	1740	1798	1187.2	8802.4	4822.9	1640	1750	1830	2153.7	13322.2	8959.2
1800	1840	1940	2000	1517.3	13322.2	6244.8						
2000	2040	2140	2230	1677.9	13322.2	6554.1						

Beneficiary: AIGI Industrial Group Ltd.

Acct. #: 7655 3888 0000 00866

Beneficiary Bank: China Everbright Bank, Nanjing Br. (SWIFT BIC: EVERCNBJNJ1)

Intermediary Bank: Dresdner Bank AG Frankfurt AM Main DE (SWIFT BIC: DRESDEFF)



DN	PN63bar						PN100bar					
	D1 (mm)	D2 (mm)	D3 (mm)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)	D1 (mm)	D2 (mm)	D3 (mm)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)
10	20	37	56	11.4	74.4	34.9	20	37	56	11.4	74.4	38.1
15	25	42	61	13.4	74.4	40.2	25	42	61	13.4	74.4	46.8
20	30	47	72	20.6	188.7	88.5	30	47	72	20.6	188.7	88.5
25	36	52	82	22.1	188.7	88.5	36	52	82	22.1	188.7	88.5
32	46	64	88	38.9	368.6	172.8	46	64	88	39.5	368.6	172.8
40	53	74	103	52.4	368.6	172.8	53	74	103	52.9	368.6	210.1
50	65	89	113	72.6	368.6	224.2	65	89	119	90.1	636.9	357.4
65	81	105	138	43.8	368.6	172.8	81	105	144	58.8	636.9	298.6
80	95	119	148	50.4	368.6	179.1	95	119	154	72.1	636.9	298.6
100	118	145	174	81.7	636.9	306.6	118	145	180	116.0	947.7	460.2
125	144	171	210	110.0	947.7	452.8	144	171	217	169.5	1277.4	672.5
150	172	198	247	140.7	1277.4	639.2	172	198	257	143.8	1277.4	598.8
175	200	230	277	120.4	1277.4	598.8						
200	225	255	309	158.2	1757.8	824.0	225	255	324	249.2	1757.8	988.8
225	250	280	334	186.1	1757.8	862.9						
250	280	316	364	235.3	1757.8	1088.5	280	316	391	404.2	2246.3	1604.1
300	330	371	424	237.6	1757.8	1094.7	330	371	458	442.3	2933.3	1755.1
350	380	421	486	324.4	2246.3	1487.9	380	421	512	638.6	4542.2	2534.1
400	430	475	543	440.4	2933.3	2011.3	430	475	572	800.3	4542.2	3175.6
500	535	585	657	598.1	4542.2	2708.3	535	585	704	1088.5	7092.8	4319.6
600	635	685	764	922.0	7092.8	4138.6						
700	735	790	879	1006.7	7092.8	4479.4						
800	835	895	988	1375.0	8802.4	6063.8						
900	935	1000	1108	1457.0	8802.4	6368.0						
1000	1035	1110	1220	2042.7	13322.2	8847.5						
1200	1235	1320	1452	2804.6	19584.8	11926.4						

Beneficiary: AIGI Industrial Group Ltd.

Acct. #: 7655 3888 0000 00866

Beneficiary Bank: China Everbright Bank, Nanjing Br. (SWIFT BIC: EVERCNBJNJ1)

Intermediary Bank: Dresdner Bank AG Frankfurt AM Main DE (SWIFT BIC: DRESDEFF)



DN	PN160bar						PN250bar					
	D1 (mm)	D2 (mm)	D3 (mm)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)	D1 (mm)	D2 (mm)	D3 (mm)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)
10	20	37	56	15.2	74.4	48.8	18	37	67	33.9	188.7	90.0
15	25	42	61	18.7	74.4	59.9	21	42	72	43.2	188.7	114.8
20	30	47	72	29.9	188.7	95.6	26	47	77	51.9	188.7	137.9
25	36	52	82	34.3	188.7	109.7	32	54	83	82.7	368.6	219.6
32	46	64	88	62.6	368.6	200.4	41	66	98	120.0	368.6	318.8
40	53	74	103	84.0	368.6	268.9	49	76	109	184.2	636.9	489.2
50	65	89	119	143.0	636.9	457.5	60	89	124	120.3	636.9	319.5
65	81	105	144	93.3	636.9	298.7	76	105	154	156.8	636.9	416.6
80	95	119	154	114.5	636.9	366.3	89	119	170	217.4	947.7	577.4
100	118	145	180	184.1	947.7	589.0	113	145	202	337.2	1277.4	895.8
125	144	171	217	269.0	1277.4	860.9	137	173	242	307.0	1277.4	815.5
150	172	198	257	228.3	1277.4	730.6	165	206	284	461.5	1757.8	1225.8
200	225	255	324	395.5	1757.8	1265.7	215	265	358	859.9	2933.3	2284.0
250	280	316	388	695.1	2933.3	2224.3	265	320	442	1041.0	4542.2	2765.0
300	330	371	458	702.1	2933.3	2246.6	320	380	538	1511.9	5441.6	4015.9
DN	PN320bar						PN400bar					
	D1 (mm)	D2 (mm)	D3 (mm)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)	D1 (mm)	D2 (mm)	D3 (mm)	Minimum Torque (N.m)	Maximum Torque (N.m)	Preferred Torque (N.m)
10	18	37	67	52.9	188.7	108.4	18	37	67	67.7	188.7	127.0
15	21	42	72	67.5	188.7	138.3	21	42	78	108.1	368.6	202.6
20	26	47	78	101.4	368.6	207.7	26	47	93	129.8	368.6	243.4
25	32	54	93	129.2	368.6	264.6	32	54	104	198.4	636.9	372.0
32	41	66	104	225.0	636.9	460.8	41	66	119	288.0	636.9	540.0
40	49	76	119	287.8	636.9	589.4	49	76	135	414.4	947.7	777.0
50	60	89	134	187.9	636.9	384.9	60	89	150	270.6	947.7	507.4
65	76	105	170	275.7	947.7	564.6	76	105	192	392.1	1277.4	735.1
80	89	119	190	339.6	947.7	695.5	89	119	207	483.0	1277.4	905.7
100	113	145	229	579.6	1757.8	1187.1	113	145	256	809.4	2246.3	1517.6
125	137	173	274	527.7	1757.8	1080.7	137	173	301	736.9	2246.3	1381.6
150	165	206	311	786.6	2246.3	1611.0	165	206	348	1090.8	2933.3	2045.2
200	215	265	398	1007.7	2933.3	2063.7	215	265	442	1488.2	4542.2	2790.4
250	265	320	488	1734.9	5441.6	3553.1						

Maximum Torque based on Class 8.8 bolts.

Preferred Torque based on the maximum working pressure of EN 1092 flanges.

Beneficiary: AIGI Industrial Group Ltd.

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Beneficiary Bank: China Everbright Bank, Nanjing Br. (SWIFT BIC: EVERCNBJNJ1)

Intermediary Bank: Dresdner Bank AG Frankfurt AM Main DE (SWIFT BIC: DRESDEFF)



Applicable standards

PN Series	Class Series	JIS Series	BS10 Series
EN 1092	ASME B16.5	JIS B2220	BS 10
EN 1514	ASME B16.47	JIS B2404	
BS 4504	ASME B16.20		
BS 4865	ASME B 16.21		
DIN	EN 1759		
	EN 12560		
	BS 1560		
	BS 3381		
	JPI-7S-15		
	JPI-7S-41		
	JPI-7S-43		
	MSS SP-44 (A series)		
	API 605 (B series)		

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