

# Grooved Stainless Steel Piping System

## SPECIFICATIONS:

**PIPING** shall be schedule 10 – Grade 304 Stainless Steel.

**FITTINGS** shall be cast stainless steel with dimensions and pressure ratings as shown below. Note that pressure rating table is based on S10 Stainless Pipe.

**COUPLINGS** shall be Fig. 7400 ductile iron Rigidlite Coupling from Gruvlok specially designed to provide a rigid, locked-in pipe connection. Joint shall be swing-over installation. The Fig. 7400 Rigidlite Coupling is UL/ULC Listed and FM Approved for 300 psi (20.7 bar)

**BOLTS AND HEX NUTS** shall be ANSI heat treated, oval neck track head bolts conforming to ASTM A183 Grade 2 with a minimum tensile strength of 110,000 psi and heavy hex nuts of carbon steel conforming to ASTM A563. Bolts and nuts are zinc electroplated.

**COATING** on couplings shall be rust inhibiting lead-free blue paint.

**GASKETS** shall be Grade "E" EPDM (Green color code) NSF-61 Certified -40°F to 230°F (Service Temperature Range) (-40°C to 110°C), recommended for water service, diluted acids, alkalies solutions, oil-free air and many. Grade "E" gaskets are not for use in petroleum applications. **All water contact parts are stainless steel or gasket material.**

FIGURE 7400 RIGIDLITE COUPLING												
Nominal Size	O.D.	Max. Wk. Pressure	Max. End Load	Range of Pipe End Separation	Coupling Dimensions			Coupling Bolts		Specified Torque $\xi$		Approx. Wt. Ea.
					X	Y	Z	Qty.	Size	Min.	Max.	
in./DN(mm)	in./mm	PSI/bar	Lbs./kN	in./mm	in./mm	in./mm	in./mm		in./mm	ft.-Lbs./N-M	Lbs./Kg	
1	1.315	300	407	0 - 1/8	2 1/4	4 1/2	1 1/4	2	3/8 x 2 1/4	30	45	1.2
25	33.4	20.7	1.81	0 - 3.2	57	114	44		M10 x 57	40	60	0.5
1 1/4	1.660	300	649	0 - 1/8	2 5/8	4 3/4	1 1/4	2	3/8 x 2 1/4	30	45	1.3
32	42.2	20.7	2.89	0 - 3.2	67	121	44		M10 x 57	40	60	0.6
1 1/2	1.900	300	851	0 - 1/8	2 5/8	4 7/8	1 1/4	2	3/8 x 2 1/4	30	45	1.4
40	48.3	20.7	3.79	0 - 3.2	73	124	44		M10 x 57	40	60	0.6
2	2.375	300	1,329	0 - 1/8	3 1/4	5 1/2	1 1/4	2	3/8 x 2 1/4	30	45	1.6
50	60.3	20.7	5.91	0 - 3.2	83	140	44		M10 x 57	40	60	0.7
2 1/2	2.875	300	1,948	0 - 1/8	3 3/4	6	1 1/4	2	3/8 x 2 1/4	30	45	1.9
65	73.0	20.7	8.66	0 - 3.2	98	152	44		M10 x 57	40	60	0.9
3 O.D.	2.896	300	2,115	0 - 1/8	4	5 1/2	1 1/4	2	3/8 x 2 1/4	30	45	1.9
76.1	76.1	20.7	9.41	0 - 3.2	102	149	44		M10 x 57	40	60	0.9
3	3.500	300	2,886	0 - 1/8	4 1/2	6 3/4	1 1/4	2	3/8 x 2 3/4	30	45	2.1
80	88.9	20.7	12.84	0 - 3.2	114	171	44		M10 x 70	40	60	1.0
4	4.500	300	4,771	0 - 1/4	5 1/2	7 3/4	1 1/2	2	3/8 x 2 3/4	30	45	3.1
100	114.3	20.7	21.22	0 - 6.4	143	197	48		M10 x 70	40	60	1.4
5 1/2 O.D.	5.500	300	7,127	0 - 1/4	6 1/4	8 1/4	2	2	1/2 x 3	80	100	4.5
139.7	139.7	20.7	31.70	0 - 6.4	171	235	51		M12 x 76	110	150	2.0
5	5.563	300	7,292	0 - 1/4	6 3/4	9 1/4	2	2	1/2 x 3	80	100	4.6
125	141.3	20.7	32.44	0 - 6.4	175	235	51		M12 x 76	110	150	2.1
6 1/2 O.D.	6.500	300	9,955	0 - 1/4	7 1/4	10 1/2	2	2	1/2 x 3	80	100	5.5
165.1	165.1	20.7	44.28	0 - 6.4	200	264	51		M12 x 76	110	150	2.5
6	6.625	300	10,341	0 - 1/4	7 1/2	10 3/4	2	2	1/2 x 3	80	100	5.5
150	168.3	20.7	46.00	0 - 6.4	200	264	51		M12 x 76	110	150	2.5
8	8.625	300	17,528	0 - 1/2	10 1/4	12 3/4	2 1/2	2	1/2 x 3	80	100	8.4
200	218.1	20.7	77.97	0 - 3.2	260	324	60		M12 x 76	110	150	3.8

# CAT371.2

## FITTINGS

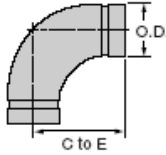


FIGURE 7050SS 90° STAINLESS STEEL ELBOW		
Nominal Size	Center to End	Approx. Wt. Ea.
In./DN(mm)	In./mm	Lbs./Kg
1¼	3¾	1.2
32	98	0.5
1½	4¼	1.4
40	108	0.6
2	4¾	2.3
50	111	1.0
2½	5¼	3.3
65	146	1.5
3	5¾	4.6
80	149	2.1
4	7½	7.9
100	191	3.6
6	10¼	17.0
150	273	7.7
8	15	29.4
200	381	13.4

**NOTE:** Fabricated fittings weights are based on Schedule 10 pipe.

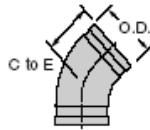


FIGURE 7051SS 45° STAINLESS STEEL ELBOW		
Nominal Size	Center to End	Approx. Wt. Ea.
In./DN(mm)	In./mm	Lbs./Kg
1¼	2½	0.7
32	64	0.3
1½	2½	0.9
40	64	0.4
2	2½	1.5
50	64	0.7
2½	3	1.9
65	76	0.9
3	3¾	3.3
80	86	1.5
4	4	5.4
100	102	2.4
6	5½	11.2
150	140	5.1
8	7¼	19.8
200	184	9.0

**NOTE:** Fabricated fittings weights are based on Schedule 10 pipe.

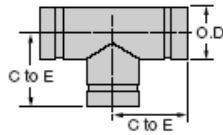


FIGURE 7060SS STAINLESS STEEL TEE		
Nominal Size	Center to End	Approx. Wt. Ea.
In./DN(mm)	In./mm	Lbs./Kg
1¼	2¾	1.5
32	70	0.7
1½	2¾	1.8
40	70	0.8
2	3¼	2.4
50	83	1.1
2½	3¾	4.0
65	95	1.8
3	4¼	5.8
80	108	2.6
4	5	10.3
100	127	4.7
6	6½	25.7
150	165	11.7
8	7¾	41.1
200	197	18.6

**NOTE:** Fabricated fittings weights are based on Schedule 10 pipe.

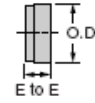


FIGURE 7074SS STAINLESS STEEL CAPS		
Nominal Size	End to End	Approx. Wt. Ea.
In./DN(mm)	In./mm	Lbs./Kg
1¼	1½	0.4
32	41	0.2
1½	1½	0.5
40	41	0.2
2	1½	0.8
50	41	0.4
2½	1¾	1.1
65	45	0.5
3	1¾	1.6
80	45	0.7
4	1¾	2.8
100	45	1.3
6	1¾	7.1
150	48	3.2
8	2¼	14.9
200	57	6.8

**NOTE:** Pressure and load ratings equal to or greater than Schedule 10S as listed above. Caps are all cast fittings.

	SIZE							
	1¼"	1½"	2"	2½"	3"	4"	6"	8"
Schedule 10S								
Pressure	275	275	275	275	275	275	250	200
End Load	595	780	1,218	1,785	2,646	4,374	8,618	11,685

Brine line piping shall be 1 ½" threaded schedule 40 – 304 stainless steel. The ball valve and check valve on the brine line shall be threaded 1 ½" brass.

**FIG. 7400**  
Rigidlite® Coupling

