

RC1SS Stainless Steel Rigid Couplings

- The model RC1SS stainless steel rigid coupling is ideally designed for use with Sch5s to Sch40s or BS stainless steel pipe.
- The tongue and groove mechanism with build-in teeth provide rigidity in high flow and pressure pipeline.

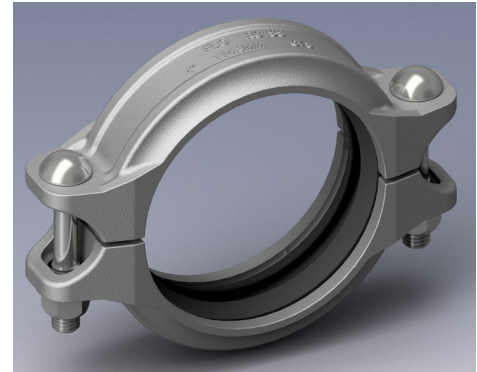
Material Specifications

Housing:

Type CF8 (304) stainless steel to ASTM A351, A743 or A744 Gr. CF8

Type CF8M (316) stainless steel to ASTM A351, A743 or A744 Gr. CF8M

Other material available upon request



Rubber Gaskets:

Standard:

Grade "E" EPDM (Color code: Green stripe)

Temperature range -30°F to +230°F (-34°C to +110°C). Recommended for cold and hot water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. NOT RECOMMENDED FOR PETROLEUM SERVICES.

Option:

Grade "T" Nitrile (Color code: Orange stripe)

Temperature range -20°F to +180°F (-29°C to +82°C). Recommended for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range. Not recommended for hot water services over +150°F (+66°C) or for hot dry air over +140°F (+60°C).

Grade "O" Fluoroelastomer (Color code: Blue stripe)

Temperature range +20°F to +300°F (-7°C to +149°C). Recommended for many oxidizing acids, petroleum oils, halogenated hydrocarbons, lubricants, hydraulic fluids, organic liquids and air with hydrocarbons.

Grade "L" Silicone (Color code: Red stripe)

Temperature range -30°F to +350°F (-34 to +177°C). Recommended for dry heat, air without hydrocarbons to +350°F (+177°C) and certain chemical services. FIT products silicone gaskets are recommended for fire protection dry systems, all systems operating below 0°F (-18°C), plus dry heat, air without hydrocarbons, certain chemical services, and water to +160°F (71°C).

Bolts & Nuts:

Type 316 stainless steel oval neck track bolts to ASTM A193 B8M and Type 304 stainless steel heavy duty nuts to ASTM A194 B8.

Other material available upon request.

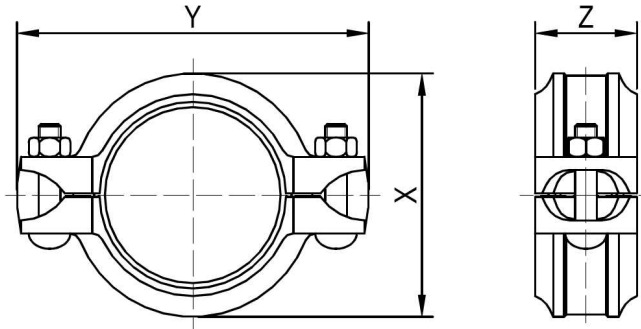
FlowCom strongly recommends to use the pipe rolls designed for the roll grooving of stainless steel pipe.

Warning: Piping systems must always be depressurized and drained before attempting disassembly and/or removal of any components.

GROOVED COUPLINGS



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Dimension

Part Number	Size		Pipe O.D.		Pipe end separation		X		Y		Z		Bolt Size		Approx Wt.	
	in.	mm	mm	in.	mm	in.	mm	in.	mm	in.	mm	in.	mm	lbs	kg	
RC1SS-027	3/4	20	26.7	0-0.09	0-2.2	1.82	46	3.70	94	1.74	44	3/8X2	M10X50	1.1	0.5	
RC1SS-033	1	25	33.4	0-0.09	0-2.2	2.09	53	3.98	101	1.74	44	3/8X2	M10X50	1.3	0.6	
RC1SS-042	1 1/4	32	42.2	0-0.09	0-2.2	2.45	62	4.30	109	1.74	44	3/8X2	M10X50	1.3	0.6	
RC1SS-048	1 1/2	40	48.3	0-0.09	0-2.2	2.68	68	4.49	114	1.74	44	3/8X2	M10X50	1.3	0.6	
RC1SS-060	2	50	60.3	0-0.09	0-2.2	3.23	82	5.04	128	1.78	45	3/8X2	M10X50	1.6	0.7	
RC1SS-073	2 1/2	65	73.0	0-0.09	0-2.2	3.75	95	5.60	142	1.82	46	3/8X2	M10X50	2.0	0.9	
RC1SS-076	3OD	65	76.1	0-0.09	0-2.2	3.86	98	5.71	145	1.82	46	3/8X2	M10X50	2.0	0.9	
RC1SS-089	3	80	88.9	0-0.10	0-2.6	4.41	112	6.34	161	1.85	47	3/8X2	M10X50	2.2	1.0	
RC1SS-114	4	100	114.3	0-0.10	0-2.6	5.52	140	7.76	197	1.89	48	1/2X2 3/4	M12X70	3.52	1.6	
RC1SS-140	5 1/2OD	125	139.7	0-0.10	0-2.6	6.62	168	8.90	226	1.93	49	1/2X2 3/4	M12X70	4.4	2.0	
RC1SS-141	5	125	141.3	0-0.10	0-2.6	6.66	169	8.94	227	1.93	49	1/2X2 3/4	M12X70	4.4	2.0	
RC1SS-165	6 1/2OD	150	165.1	0-0.10	0-2.6	7.64	194	10.00	254	1.93	49	1/2X2 3/4	M12X70	5.1	2.3	
RC1SS-168	6	150	168.3	0-0.10	0-2.6	7.76	197	10.12	257	1.93	49	1/2X2 3/4	M12X70	5.1	2.3	
RC1SS-219	8	200	219.1	0-0.19	0-4.9	10.00	254	12.72	323	2.33	59	5/8X3 1/2	M16X90	8.8	4.0	
RC1SS-273	10	250	273.0	0-0.19	0-4.9	12.21	310	15.63	397	2.48	63	3/4 X4	M20X100	14	6.1	
RC1SS-324	12	300	323.9	0-0.19	0-4.9	14.30	363	17.76	451	2.48	63	3/4 X4	M20X100	16	7.2	

Performance Data (-29~38°C, CF8 (304) & CF8M (316))

Part Number	Size		Pipe O.D.	Sch.40S (Roll or Cut Groove)				Sch.10S (Roll Groove)				Sch.5S (Roll Groove)			
				Max. Working Pressure		Max. End Load		Max. Working Pressure		Max. End Load		Max. Working Pressure		Max. End Load	
				PSI	MPa	lbs	kN	PSI	MPa	lbs	kN	PSI	MPa	lbs	kN
RC1SS-027	3/4	20	26.7	750	5.2	651	2.91	600	4.2	521	2.35	400	2.8	347	1.57
RC1SS-033	1	25	33.4	750	5.2	1019	4.56	600	4.2	815	3.68	400	2.8	543	2.45
RC1SS-042	1 1/4	32	42.2	750	5.2	1626	7.27	600	4.2	1301	5.87	400	2.8	867	3.92
RC1SS-048	1 1/2	40	48.3	750	5.2	2130	9.53	600	4.2	1704	7.70	400	2.8	1136	5.13
RC1SS-060	2	50	60.3	750	5.2	3320	14.85	600	4.2	2656	11.99	400	2.8	1771	8.00
RC1SS-073	2 1/2	65	73.0	600	4.2	3892	17.58	500	3.5	3244	14.65	350	2.4	2271	10.04
RC1SS-076	3OD	65	76.1	600	4.2	4230	19.10	500	3.5	3525	15.92	350	2.4	2468	10.92
RC1SS-089	3	80	88.9	600	4.2	5773	26.07	500	3.5	4811	21.73	350	2.4	3367	14.90
RC1SS-114	4	100	114.3	500	3.5	7952	35.91	500	3.5	7952	35.91	350	2.4	5567	24.63
RC1SS-140	5 1/2OD	150	139.7	400	2.8	9503	42.92	400	2.8	9503	42.92	300	2.1	7128	32.19
RC1SS-141	5	125	141.3	400	2.8	9722	43.91	400	2.8	9722	43.91	300	2.1	7292	32.93
RC1SS-165	6 1/2OD	150	165.1	400	2.8	13273	59.94	400	2.8	13273	59.94	300	2.1	9955	44.96
RC1SS-168	6	150	168.3	400	2.8	13793	62.29	400	2.8	13793	62.29	300	2.1	10345	46.72
RC1SS-219	8	200	219.1	300	2.1	17532	79.18	300	2.1	17532	79.18	200	1.4	11688	52.78
RC1SS-273	10	250	273.0	300	2.1	27219	122.92	300	2.1	27219	122.92	200	1.4	18146	81.95
RC1SS-324	12	300	323.9	300	2.1	38315	173.03	300	2.1	38315	173.03	200	1.4	25543	115.36



GROOVED COUPLINGS

RC1SS Stainless Steel Rigid Couplings

Performance Data (50°C, CF8 (304))

Part Number	Size		Pipe O.D.	Sch.40S (Roll or Cut Groove)				Sch.10S (Roll Groove)				Sch.5S (Roll Groove)			
				Max. Working Pressure		Max. End Load		Max. Working Pressure		Max. End Load		Max. Working Pressure		Max. End Load	
				PSI	MPa	lbs	kN	PSI	MPa	lbs	kN	PSI	MPa	lbs	kN
RC1SS-027	3/4	20	26.7	720	5	625	2.80	580	4	503	2.24	385	2.7	334	1.51
RC1SS-033	1	25	33.4	720	5	977	4.38	580	4	787	3.50	385	2.7	523	2.36
RC1SS-042	1 1/4	32	42.2	720	5	1560	6.99	580	4	1257	5.59	385	2.7	834	3.77
RC1SS-048	1 1/2	40	48.3	720	5	2044	9.16	580	4	1646	7.33	385	2.7	1093	4.94
RC1SS-060	2	50	60.3	720	5	3185	14.27	580	4	2566	11.42	385	2.7	1703	7.71
RC1SS-073	2 1/2	65	73.0	580	4	3761	16.73	480	3.3	3112	13.80	340	2.3	2205	9.62
RC1SS-076	3OD	65	76.1	580	4	4087	18.18	480	3.3	3382	15.00	340	2.3	2396	10.46
RC1SS-089	3	80	88.9	580	4	5577	24.82	480	3.3	4616	20.47	340	2.3	3270	14.27
RC1SS-114	4	100	114.3	480	3.3	7630	33.84	480	3.3	7630	33.84	340	2.3	5405	23.59
RC1SS-140	5 1/2OD	150	139.7	385	2.7	9142	41.36	385	2.7	9142	41.36	290	2	6886	30.64
RC1SS-141	5	125	141.3	385	2.7	9353	42.32	385	2.7	9353	42.32	290	2	7045	31.35
RC1SS-165	6 1/2OD	150	165.1	385	2.7	12769	57.77	385	2.7	12769	57.77	290	2	9618	42.80
RC1SS-168	6	150	168.3	385	2.7	13269	60.03	385	2.7	13269	60.03	290	2	9995	44.47
RC1SS-219	8	200	219.1	290	2	16939	75.37	290	2	16939	75.37	190	1.3	11098	48.99
RC1SS-273	10	250	273.0	290	2	26298	117.01	290	2	26298	117.01	190	1.3	17230	76.06
RC1SS-324	12	300	323.9	290	2	37019	164.71	290	2	37019	164.71	190	1.3	24254	107.06

Performance Data (100°C, CF8 (304))

Part Number	Size		Pipe O.D.	Sch.40S (Roll or Cut Groove)				Sch.10S (Roll Groove)				Sch.5S (Roll Groove)			
				Max. Working Pressure		Max. End Load		Max. Working Pressure		Max. End Load		Max. Working Pressure		Max. End Load	
				PSI	MPa	lbs	kN	PSI	MPa	lbs	kN	PSI	MPa	lbs	kN
RC1SS-027	3/4	20	26.7	620	4.3	538	2.41	500	3.5	434	1.96	330	2.3	286	1.29
RC1SS-033	1	25	33.4	620	4.3	842	3.77	500	3.5	679	3.07	330	2.3	448	2.01
RC1SS-042	1 1/4	32	42.2	620	4.3	1343	6.01	500	3.5	1083	4.89	330	2.3	715	3.22
RC1SS-048	1 1/2	40	48.3	620	4.3	1760	7.87	500	3.5	1419	6.41	330	2.3	937	4.21
RC1SS-060	2	50	60.3	620	4.3	2743	12.27	500	3.5	2212	9.99	330	2.3	1460	6.56
RC1SS-073	2 1/2	65	73.0	500	3.5	3242	14.64	410	2.8	2658	11.71	290	2	1880	8.37
RC1SS-076	3OD	65	76.1	500	3.5	3523	15.91	410	2.8	2889	12.73	290	2	2043	9.09
RC1SS-089	3	80	88.9	500	3.5	4808	21.71	410	2.8	3943	17.37	290	2	2789	12.41
RC1SS-114	4	100	114.3	410	2.8	6517	28.72	410	2.8	6517	28.72	290	2	4610	20.51
RC1SS-140	5 1/2OD	150	139.7	330	2.3	7836	35.24	330	2.3	7836	35.24	250	1.7	5937	26.04
RC1SS-141	5	125	141.3	330	2.3	8017	36.05	330	2.3	8017	36.05	250	1.7	6073	26.64
RC1SS-165	6 1/2OD	150	165.1	330	2.3	10945	49.21	330	2.3	10945	49.21	250	1.7	8292	36.38
RC1SS-168	6	150	168.3	330	2.3	11373	51.14	330	2.3	11373	51.14	250	1.7	8616	37.80
RC1SS-219	8	200	219.1	250	1.7	14602	64.06	250	1.7	14602	64.06	165	1.2	9638	45.22
RC1SS-273	10	250	273.0	250	1.7	22671	99.46	250	1.7	22671	99.46	165	1.2	14963	70.21
RC1SS-324	12	300	323.9	250	1.7	31913	140.00	250	1.7	31913	140.00	165	1.2	21062	98.83



GROOVED COUPLINGS

RC1SS Stainless Steel Rigid Couplings

Performance Data (50°C, CF8M (316))

Part Number	Size		Pipe O.D.	Sch.40S (Roll or Cut Groove)				Sch.10S (Roll Groove)				Sch.5S (Roll Groove)			
				Max.		Max.		Max.		Max.		Max.		Max.	
				Working Pressure	End Load	Working Pressure	End Load	Working Pressure	End Load	Working Pressure	End Load				
in.	mm	mm	PSI	MPa	lbs	kN	PSI	MPa	lbs	kN	PSI	MPa	lbs	kN	
RC1SS-027	3/4	20	26.7	730	5	633	2.80	585	4	507	2.24	390	2.7	338	1.51
RC1SS-033	1	25	33.4	730	5	991	4.38	585	4	794	3.50	390	2.7	529	2.36
RC1SS-042	1 1/4	32	42.2	730	5	1582	6.99	585	4	1268	5.59	390	2.7	845	3.77
RC1SS-048	1 1/2	40	48.3	730	5	2072	9.16	585	4	1661	7.33	390	2.7	1107	4.94
RC1SS-060	2	50	60.3	730	5	3230	14.27	585	4	2588	11.42	390	2.7	1725	7.71
RC1SS-073	2 1/2	65	73.0	585	4	3793	16.73	490	3.4	3177	14.22	340	2.3	2205	9.62
RC1SS-076	3OD	65	76.1	585	4	4122	18.18	490	3.4	3453	15.46	340	2.3	2396	10.46
RC1SS-089	3	80	88.9	585	4	5626	24.82	490	3.4	4712	21.09	340	2.3	3270	14.27
RC1SS-114	4	100	114.3	490	3.4	7789	34.87	490	3.4	7789	34.87	340	2.3	5405	23.59
RC1SS-140	5 1/2OD	150	139.7	390	2.7	9261	41.36	390	2.7	9261	41.36	290	2	6886	30.64
RC1SS-141	5	125	141.3	390	2.7	9474	42.32	390	2.7	9474	42.32	290	2	7045	31.35
RC1SS-165	6 1/2OD	150	165.1	390	2.7	12935	57.77	390	2.7	12935	57.77	290	2	9618	42.80
RC1SS-168	6	150	168.3	390	2.7	13441	60.03	390	2.7	13441	60.03	290	2	9995	44.47
RC1SS-219	8	200	219.1	290	2	16939	75.37	290	2	16939	75.37	195	1.3	11390	48.99
RC1SS-273	10	250	273.0	290	2	26298	117.01	290	2	26298	117.01	195	1.3	17683	76.06
RC1SS-324	12	300	323.9	290	2	37019	164.71	290	2	37019	164.71	195	1.3	24892	107.06

Performance Data (100°C, CF8M (316))

Part Number	Size		Pipe O.D.	Sch.40S (Roll or Cut Groove)				Sch.10S (Roll Groove)				Sch.5S (Roll Groove)			
				Max.		Max.		Max.		Max.		Max.		Max.	
				Working Pressure	End Load	Working Pressure	End Load	Working Pressure	End Load	Working Pressure	End Load				
in.	mm	mm	PSI	MPa	lbs	kN	PSI	MPa	lbs	kN	PSI	MPa	lbs	kN	
RC1SS-027	3/4	20	26.7	660	4.6	572	2.57	530	3.7	460	2.07	350	2.4	304	1.34
RC1SS-033	1	25	33.4	660	4.6	896	4.03	530	3.7	719	3.24	350	2.4	475	2.10
RC1SS-042	1 1/4	32	42.2	660	4.6	1430	6.43	530	3.7	1148	5.17	350	2.4	758	3.36
RC1SS-048	1 1/2	40	48.3	660	4.6	1873	8.42	530	3.7	1504	6.78	350	2.4	993	4.40
RC1SS-060	2	50	60.3	660	4.6	2920	13.13	530	3.7	2345	10.56	350	2.4	1548	6.85
RC1SS-073	2 1/2	65	73.0	530	3.7	3437	15.48	440	3	2853	12.55	310	2.1	2010	8.78
RC1SS-076	3OD	65	76.1	530	3.7	3735	16.82	440	3	3100	13.64	310	2.1	2184	9.55
RC1SS-089	3	80	88.9	530	3.7	5097	22.95	440	3	4231	18.61	310	2.1	2981	13.03
RC1SS-114	4	100	114.3	440	3	6994	30.77	440	3	6994	30.77	310	2.1	4928	21.54
RC1SS-140	5 1/2OD	150	139.7	350	2.4	8311	36.77	350	2.4	8311	36.77	265	1.8	6293	27.58
RC1SS-141	5	125	141.3	350	2.4	8503	37.62	350	2.4	8503	37.62	265	1.8	6438	28.21
RC1SS-165	6 1/2OD	150	165.1	350	2.4	11608	51.35	350	2.4	11608	51.35	265	1.8	8789	38.52
RC1SS-168	6	150	168.3	350	2.4	12063	53.36	350	2.4	12063	53.36	265	1.8	9133	40.02
RC1SS-219	8	200	219.1	265	1.8	15479	67.83	265	1.8	15479	67.83	175	1.2	10222	45.22
RC1SS-273	10	250	273.0	265	1.8	24031	105.31	265	1.8	24031	105.31	175	1.2	15870	70.21
RC1SS-324	12	300	323.9	265	1.8	33828	148.24	265	1.8	33828	148.24	175	1.2	22339	98.83