



Data Sheet 8.51

Issue E



063-UWB-0272

G412020, G412021

Standard Rigid Coupling

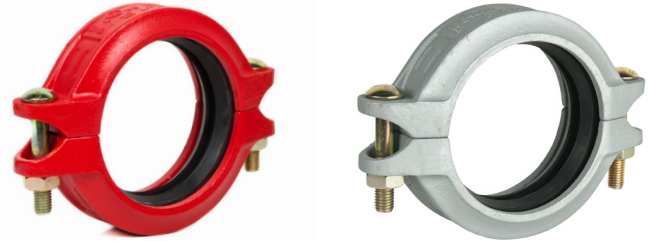
Model 1G & 1GS

Material Specification

- Body - Ductile Iron, ASTM A536
- Bolts and nuts - Mild steel Zinc Plated, ASTM A183, ISO898

Gasket Specification

- EPDM, ASTM D2000
- Temperature range -34°C to +110°C (-30°C to +230°F).
Recommended for hot water service within specified temperature range plus a variety of diluted acids, oil free air and many chemical services. Not recommended for petroleum service.

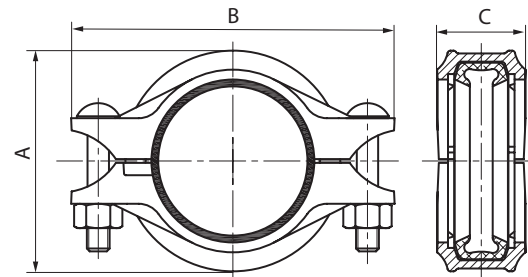


Options

- Model 1G - Standard Rigid Coupling
- Model 1GS - Light Duty Rigid Coupling

Finish

- Red painted (RAL 3000)
- Galvanised



Model Number (Red Painted)	Model Number (Galvanised)	Nominal Size mm/in	Pipe O.D mm/in	Max. Working Pressure bar/psi				Max End Load kN/Lbs	Pipe End Separation mm/in	Dimensions			Bolt Size No.-Size mm
				UL	FM	VdS	CNBOP			A mm/in	B mm/in	C mm/in	
RD1G033	RD1G033G	25 1	33.7 1.327	-	20.7 300	16 232	20 290	3.0/680	0-1.6 0-0.06	59 2.33	100 3.94	44 1.74	2 - 3/8 x 55 2 - M10X57
RD1G042	RD1G042G	32 1¼	42.4 1.669	34.5 500	20.7 300	16 232	20 290	4.8/1080	0-1.6 0-0.06	66 2.60	109.5 4.31	45 1.78	2 - 3/8 x 55 2 - M10X57
RD1G048	RD1G048G	40 1½	48.3 1.900	34.5 500	20.7 300	16 232	20 290	6.3/1420	0-3.2 0-0.13	72 2.84	115 4.53	45 1.78	2 - 3/8 x 55 2 - M10X57
RD1G060	RD1G060G	50 2	60.3 2.375	20.7 300	20.7 300	16 232	20 290	5.9/1330	0-3.2 0-0.13	85 3.35	131 5.16	45 1.78	2 - 3/8 x 55 2 - M10X57
RD1G076	RD1G076G	65 2½	76.1 3.000	34.5 500	20.7 300	16 232	20 290	9.4/2120	0-3.2 0-0.13	101 3.98	147 5.78	45 1.77	2 - 3/8 x 55 2 - M10X57
RD1G089	RD1G089G	80 3	88.9 3.500	20.7 300	20.7 300	16 232	20 290	12.8/2885	0-3.2 0-0.13	115 4.53	170 6.69	46 1.82	2 - 1/2 x 70 2 - M12X70
RD1GS089*	RD1GS089G*	80 3	88.9 3.500	20.7 300	20.7 300	16 232	20 290	12.8/2885	0-3.2 0-0.13	114 4.50	160 6.30	45 1.78	2 - 3/8 x 55 2 - M10X57
RD1G114	RD1G114G	100 4	114.3 4.500	20.7 300	20.7 300	16 232	20 290	21.2/4770	0-3.2 0-0.13	146 5.75	200 7.88	52 2.05	2 - 1/2 x 70 2 - M12X70
RD1GS114*	RD1GS114G*	100 4	114.3 4.500	20.7 300	20.7 300	16 232	20 290	21.2/4770	0-3.2 0-0.13	140 5.51	192 7.56	50 1.97	2 - 1/2 x 70 2 - M12X70
RD1G139	RD1G139G	125 5	139.7 5.500	20.7 300	20.7 300	16 232	20 290	47.5/10680	0-3.2 0-0.13	170 6.69	238 9.37	52 2.05	2 - 5/8 x 85 2 - M16X85
RD1G168	RD1G168G	150 6	168.3 6.625	20.7 300	20.7 300	16 232	20 290	46.0/10340	0-3.2 0-0.13	202.0 7.95	270 10.63	52 2.05	2 - 5/8 x 85 2 - M16X85
RD1G219	RD1G219G	200 8	219.1 8.625	31.0 450	20.7 300	16 232	20 290	116.9/26280	0-3.2 0-0.13	260.0 10.24	346 13.625	62 2.44	2 - 3/4 x 115 2 - M20X115
RD1G273	RD1G273G	250 10	273.0 10.750	20.7 300	20.7 300	16 232	20 290	121.0/27210	0-3.2 0-0.13	327 12.88	420 16.54	63 2.48	2 - 7/8 x 125 2 - M22X140
RD1G323	RD1G323G	300 12	323.9 12.750	20.7 300	20.7 300	-	20 290	170.3/38280	0-3.2 0-0.13	378 14.88	466 18.35	63 2.48	2 - 7/8 x 125 2 - M22X140

*Model 1GS - Light Duty Rigid Coupling

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Standard Rigid Coupling Model 1G & 1GS



1. Pipe Preparation

Check pipe end for proper groove dimensions and to assure that pipe end is free of indentations and projections that would prevent proper sealing.



2. Lubricate Gasket

Check gasket to be sure it's compatible for the intended service. Apply thin lubricant to the outside and sealing lips of the gasket.



3. Gasket Installation

Slip the gasket over one pipe, making sure the gasket lip does not over-hang the pipe end.



4. Alignment

After aligning two pipe ends together, pull the gasket into position, centering between the grooves on each pipe. The gasket should not extend into the groove on either pipe.



5. Housing Installation

Remove one bolt&nut and loosen the other nut. Place one housing over the gasket, making sure the housing keys fit into the pipe grooves. Swing the other housing over the gasket and into the grooves on both pipes. Re-insert the bolt and connect two housings.



6. Tighten Nuts

Firstly hand tighten nuts and make sure oval neck bolt completely fits into bolt hole. Then securely tighten nuts alternatively and equally to the specified bolt torque by using spanner.



7. Assembly Completed
Rigid Coupling

For Rigid Coupling, keep the gaps at bolt pads evenly spaced. Gaskets can't be seen visually.

Caution

Proper torquing of bolts is required to obtain specified performance.

- Over torquing the bolts may result in damage to the bolt and / or casting which could result in pipe joint separation.
- Under torquing the bolts may result in lower pressure retention capabilities, lower bend load capabilities, joint leakage and pipe joint separation. Pipe joint separation may result in significant property damage and serious injury.

Specified Bolt Torque ANSI BOLTS

Bolt Size Inch	Specified Bolt Torque	
	Lbs-Ft.	N.m
3/8	30-45	40-60
1/2	80-100	110-135
5/8	100-130	135-175
3/4	130-180	175-245
7/8	180-240	245-325