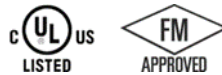


7771 STANDARD RIGID COUPLING



For pressure rating, listing, and approval information, refer to data sheet or visit SHURJOINT website www.shurjoint.com for details or contact your SHURJOINT representatives.

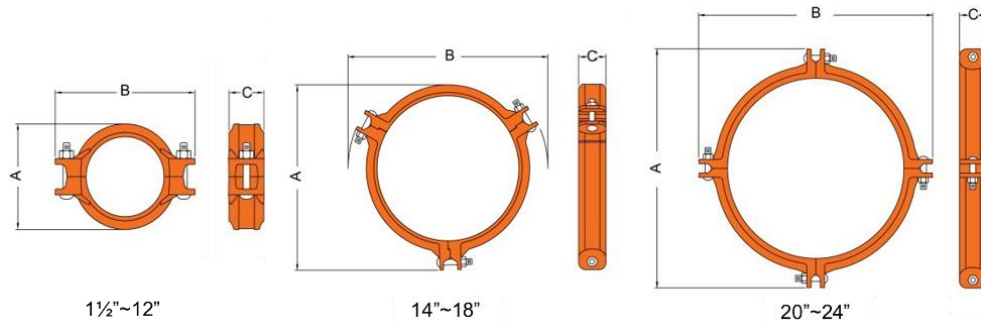
The Model 7771 Standard Rigid Coupling is the ideal choice for risers, mechanical rooms or other applications where rigidity is required. The tongue and groove design and mechanisms provide a rigid connection reducing and or eliminating flexural and torsional loads. The Model 7771 coupling sizes 1½" - 12" (40 mm - 300 mm) are comprised of two identical housing segments, sizes 14"-18" (350 mm - 400 mm) are comprised of three identical segments and sizes 20" - 24" (500 mm - 600 mm) are comprised of four identical segments. All include an EPDM rubber gasket and plated track bolts and nuts. Housing segments are supplied with our standard painted finishes, i.e. orange or RAL3000 red. Optional finishes such as hot dipped zinc galvanized and custom epoxy coatings are available.



7771 couplings should always be installed so that the coupling bolt pads make metal to metal contact.

material specification

- **Housing:**
Ductile Iron to ASTM A536, Gr. 65-45-12, min. tensile strength 65,000 psi (448 MPa).
- **Surface Finish:**
Standard painted finishes in orange or RAL3000 red.
 - Hot dip zinc galvanized (Option).
 - Epoxy Coatings in RAL3000 red or other colors (Option).
 For additional details contact Shurjoint.
- **Rubber Gasket:**
Grade E-pw EPDM (Color code: Double Green stripe) approved under NSF/ANSI 61 and NSF/ANSI 372 for potable water service to +180°F (+82°C). Also good for services for water with acid, water with chlorine or chloramines, deionized water, seawater and wastewater, dilute acids, oil-free air, and many chemicals. Not recommended for petroleum oils, minerals oils, solvents, and aromatic hydrocarbons. Maximum Temperature Range: -30°F (-34°C) to +230°F (+110°C) *.
*EPDM seat for water services, not recommended for steam services unless valves or components are accessible for frequent replacement.
 - Other options: Grade "T" - Nitrile
Grade "O" - Fluoroelastomer.
Grade "L" - Silicone.
 For additional details contact Shurjoint.
- **Bolts & Nuts:**
Heat treated carbon manganese steel track bolts to ASTM A449-83a (or A183 Gr. 2), minimum tensile strength 110,000 psi (758 MPa), Zinc electroplated, with heavy-duty hexagonal nuts to ASTM A563.



Model 7771 Standard Rigid Coupling

Normal Size	Pipe O.D.	Max. Working Pressure (CWP)*	Max. End Load (CWP)	Axial Displacement†	Dimensions			Bolt		Weight
					A	B	C	No.	Size	
in	in	psi	lbf	in	in	in	in		in	lbs
mm	mm	bar	kN	mm	mm	mm	mm		mm	kg
1½	1.900	500	1410	0-0.06	2.91	4.41	1.81	2	¾ x 2½	1.5
40	48.3	35	6.23	0-1.6	74	112	46		M10 x 55	0.7
2	2.375	500	2210	0-0.06	3.34	4.96	1.81	2	¾ x 2½	1.9
50	60.3	35	9.70	0-1.6	85	126	46		M10 x 55	0.9
2½	2.875	500	3240	0-0.06	3.89	5.59	1.81	2	¾ x 2½	2.6
65	73.0	35	14.22	0-1.6	99	142	46		M10 x 55	1.2
76.1	3.000	500	3530	0-0.06	4.00	5.90	1.81	2	¾ x 2½	2.6
	76.1	35	15.46	0-1.6	102	150	46		M10 x 55	1.2
3	3.500	500	4800	0-0.06	4.52	6.50	1.81	2	½ x 3	3.3
80	88.9	35	21.09	0-1.6	115	165	46		M12 x 75	1.5
108.0	4.250	500	7090	0-0.16	5.54	7.59	2.00	2	½ x 3	4.8
	108.0	35	31.13	0-4.1	141	193	51		M12 x 75	2.2
4	4.500	500	7940	0-0.16	5.82	7.79	2.00	2	½ x 3	4.8
100	114.3	35	34.87	0-4.1	148	198	51		M12 x 75	2.2
133.0	5.250	450	9730	0-0.16	6.61	9.72	2.00	2	¾ x 3½	6.0
	133.0	31	43.05	0-4.1	168	247	51		M16 x 90	2.7
139.7	5.500	450	10680	0-0.16	6.8	9.45	2.00	2	¾ x 3½	6.4
	139.7	31	47.49	0-4.1	173	240	51		M16 x 90	2.9
5	5.563	450	10930	0-0.16	6.88	9.84	2.00	2	¾ x 3½	6.4
125	141.3	31	48.59	0-4.1	175	250	51		M16 x 90	2.9
165.1	6.500	450	14920	0-0.16	7.87	11.02	2.09	2	¾ x 3½	7.7
	165.1	31	66.33	0-4.1	200	280	53		M16 x 90	3.5
6	6.625	450	15500	0-0.16	8.07	11.18	2.09	2	¾ x 3½	8.1
150	168.3	31	68.93	0-4.1	205	284	53		M16 x 90	3.7
8	8.625	300	17510	0-0.16	10.27	13.58	2.48	2	¾ x 5 5/16	14.6
200	219.1	20	75.37	0-4.1	261	345	63		M16 x 135	6.6

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Model 7771 Standard Rigid Coupling										
Normal Size	Pipe O.D.	Max. Working Pressure (CWP)*	Max. End Load (CWP)	Axial Displacement†	Dimensions			Bolt		Weight
					A	B	C	No.	Size	
in	in	psi	lbf	in	in	in	in		in	lbs
mm	mm	bar	kN	mm	mm	mm	mm		mm	kg
10	10.750	300	27210	0-0.16	12.44	15.51	2.50	2	¾ x 4¾	18.6
250	273.0	20	117.01	0-4.1	316	394	64	2	M20 x 120	8.4
12	12.750	300	38280	0-0.16	14.17	18.00	2.50	2	⅞ x 6½	24.5
300	323.9	20	164.71	0-4.1	360	457	64	2	---	11.1
200 JIS	8.516	300	17070	0-0.16	10.00	13.58	2.48	2	⅝ x 5 ⅙	15.2
	216.3	20	73.45	0-4.1	254	345	63		M16 x 135	6.9
250 JIS	10.528	300	26100	0-0.16	12.20	15.20	2.50	2	¾ x 4¾	19.3
	267.4	20	112.26	0-4.1	310	386	64		M20 x 120	8.7
300 JIS	12.539	300	37020	0-0.16	13.94	17.48	2.50	2	⅞ x 6½	26.0
	318.5	20	159.26	0-4.1	354	444	64		---	11.2
14	14.000	300	46150	0-0.13	16.25	20.28	2.95	2	⅞ x 4	31.9
350	355.6	20	198.53	0-3.2	413	515	75		---	14.5
16	16.000	300	60280	0-0.13	18.11	22.17	2.95	3	⅞ x 4	35.2
400	406.4	20	259.30	0-3.2	460	563	75		---	16.0
18	18.000	300	76300	0-0.13	20.51	24.21	3.11	3	⅞ x 4	37.4
450	457.2	20	328.18	0-3.2	521	615	79		---	17.0
20	20.000	300	94200	0-0.13	22.87	26.26	3.11	4	1 x 3½	52.8
500	508.0	20	405.16	0-3.2	581	667	79		---	24.0
22	22.000	250	94980	0-0.13	24.49	28.35	3.11	4	1 x 3½	58.3
550	558.8	17	416.71	0-3.2	622	720	79		---	26.5
24	24.000	250	113040	0-0.13	27.12	30.24	3.11	4	1 x 3½	62.6
600	609.6	17	495.92	0-3.2	689	768	79		---	28.4

* Working Pressure is based on roll grooved standard wall carbon steel pipe.

† Allowable Axial Displacement and Angular Movement (deflection) figures are for roll grooved standard steel pipe. Values for cut grooved pipe will be double that of roll grooved. These values are maximums; for design and installation purposes these figures should be reduced by 50% for ¾" – 3½"; 25% for 4" and larger to compensate for jobsite conditions.

General note

- Maximum Working Pressure (CWP) listed is the maximum cold water pressure for general piping services tested to ASTM F1476 and or AWWA C606 methods. Figures listed are based on roll- or cut-grooved standard wall carbon steel pipe. For other pipe schedules or pipe materials, contact Shurjoint for additional information.
- Max. End Load is calculated based on the maximum working pressure (CWP).
- Listed and or Approved Pressures are pressure ratings for fire protection systems, tested and approved by various approval bodies. Please always refer to the latest approval data posted on the Shurjoint website.
- Field Joint Test: For one time only, the system may be tested hydrostatically at 1½ times the maximum working pressure listed (AWWA C606 5.2.3).
- Warning: Piping systems must always be depressurized and drained before attempting disassembly and or removal of any components.
- The 10 Year Limited Warranty applies to manufacturing defects only and does not cover severe service/temperature applications or wear parts.
- Shurjoint reserves the right to change specifications, designs and or standard without notice and without incurring any obligations.