aalberts integrated piping systems

Z05 RIGID COUPLING

For pressure rating, listing, and approval information, refer to Data Sheet B-42 or visit ***SHURJOINT*** website, www.shurjoint.com for details or contact your ***SHURJOINT*** Representative.

The ***Shurjoint*** Model Z05 is an *angle-pad design* rigid coupling for moderate pressure piping services including fire mains, long straight runs and valve connections. The angle-pad design allows the coupling housings to slide along the bolt pads when tightened. The result is an offset clamping action which provides a rigid joint which resists so called snaking of a long straight run. Support and hanging requirements correspond to ANSI B31.1, B31.9 and NFPA 13. With the removal of only one bolt, you can make a fast and easy "swing-over" installation.

The ***Shurjoint*** Model Z05 is available with a standard "C" shaped or ***GapSeal*** gasket type to meet your specific service requirements

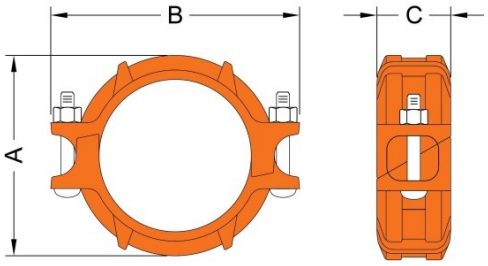
Z05 couplings should always be installed so that the coupling bolt pads make metal to metal contact

material specification

- Housing:
  Ductile Iron to ASTM A536, Gr. 65-45-12, min. tensile strength 65,000 psi (448 MPa).
- Rubber Gasket:
  Grade "Lube-E" (E-A) (Color code: Violet stripe) UL/FM approved pre-lubricated gasket designed specifically for the fire protection industry. Maximum Temperature Range: ambient
  - Other options: GapSeal Grade "E-A" – EPDM
    Grade "E" - EPDM
    Grade "T" - Nitrile
- Surface Finish:
  Standard painted finishes in orange or RAL3000 red.
  - Hot dip zinc galvanized (Optional).
  - Epoxy Coatings in RAL3000 red or other colors (Optional)
- 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.

  For dry fire systems, we recommend GapSeal E-A gasket (listed under other options)

SHURJOINT®



Model Z05 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
1¼	1.66	500	1080	0 ~ 0.05	2.6	4	1.81	2	⅜ x 2⅛	1.41
32	42.2	35	4.89	0 ~ 1.2	66	102	46		M10 x 55	0.64
1½	1.9	500	1410	0 ~ 0.05	2.83	4.29	1.81	2	⅜ x 2⅛	1.46
40	48.3	35	6.41	0 ~ 1.2	72	109	46		M10 x 55	0.66
2	2.375	500	2210	0 ~ 0.07	3.35	4.61	1.85	2	⅜ x 2¾	1.74
50	60.3	35	9.99	0 ~ 1.7	85	117	47		M10 x 70	0.79
2½	2.875	500	3240	0 ~ 0.07	3.86	5.24	1.85	2	⅜ x 2¾	2.05
65	73	35	14.64	0 ~ 1.7	98	133	47		M10 x 70	0.93
76.1	3	500	3530	0 ~ 0.07	3.94	5.35	1.85	2	⅜ x 2¾	2.16
	76.1	35	15.91	0 ~ 1.7	100	136	47		M10 x 70	0.98
3	3.5	500	4800	0 ~ 0.07	4.45	5.91	1.88	2	⅜ x 2¾	2.6
80	88.9	35	21.71	0 ~ 1.7	113	150	48		M10 x 70	1.2
108	4.25	500	7080	0 ~ 0.16	5.59	6.93	2.13	2	⅜ x 2¾	3.62
	108	35	32.05	0 ~ 4.1	142	176	54		M10 x 70	1.64
4	4.5	500	7940	0 ~ 0.16	5.75	7.2	2.13	2	⅜ x 2¾	4.12
100	114.3	35	35.89	0 ~ 4.1	146	183	54		M10 x 70	1.87
133	5.25	350	7570	0 ~ 0.16	6.69	8.82	2.13	2	½ x 3	5.14
	133	24	33.33	0 ~ 4.1	170	224	54		M12 x 75	2.33
139.7	5.5	350	8310	0 ~ 0.16	6.81	8.98	2.09	2	½ x 3	5.67
	139.7	24	36.77	0 ~ 4.1	173	228	53		M12 x 75	2.57
5	5.563	350	8500	0 ~ 0.16	6.89	9.06	2.13	2	½ x 3	5.69
125	141.3	24	37.62	0 ~ 4.1	175	230	54		M12 x 75	2.58

Model Z05 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
159	6.25	350	10730	0 ~ 0.16	7.8	9.84	2.09	2	½ x 3	6.06
	159	24	47.63	0 ~ 4.1	198	250	53		M12 x 75	2.75
165.1	6.5	350	11600	0 ~ 0.16	7.87	9.92	2.09	2	½ x 3	6.72
	165.1	24	51.35	0 ~ 4.1	200	252	53		M12 x 75	3.05
6	6.625	350	12050	0 ~ 0.16	8	10	2.09	2	½ x 3	6.77
150	168.3	24	53.36	0 ~ 4.1	203	254	53		M12 x 75	3.07
8	8.625	350	20430	0 ~ 0.19	10.4	12.68	2.52	2	⅝ x 5 5/16	13.38
200	219.1	24	90.44	0 ~ 4.8	264	322	64		M16 x 135	6.07
200 JIS	8.516	350	19920	0 ~ 0.19	10.24	13.35	2.52	2	¾ x 4¾	15.43
	216.3	24	88.14	0 ~ 4.8	260	339	64		M20 x 120	7.00

* Working Pressure is based on roll grooved standard wall carbon steel pipe. Pressure ratings for use on cut grooved pipe, thin wall carbon steel pipe, and on stainless steel pipe can be found on Shurjoint publication B-33.
† 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"/DN20 – 3½"/DN90; 25% for 4"/DN100 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.

Aalberts integrated piping systems APAC Inc.
11F-2 No. 175 Zhongzheng 2nd Rd. / Lingya, Kaohsiung
Taiwan
www.aalberts.com/ips