aalberts integrated piping systems

K-9 RIGID COUPLING

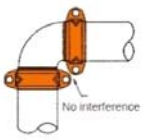
For pressure rating, listing, and approval information, refer to Data Sheet B-42 or visit ***SHURJOINT*** website, www.shurjoint.com for details or contact your ***SHURJOINT*** Representative.

The Shurjoint Model K-9 is a T&G (tongue & groove) design coupling for moderate pressure applications where rigidity is required including valve connections, mechanical rooms, fire mains and long straight runs. The built-in teeth and T&G mechanism firmly grasp the pipe ends to eliminate undesired flex. Support and hanging requirements correspond to ANSI B31.1, B31.9 and NFPA 13.

The Model K-9 couplings are comprised of two identical housing segments, 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.

K-9 couplings should always be installed so that the coupling bolt pads make metal to metal contact

The Model K-9 works has no bolt pad interference when installed with both regular and short radius elbows and tees.



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: Grade “T” - Nitrile
    Grade “O” – Fluoroelastomer
    Grade “L” – Silicone
    GapSeal Grade “E-A” – Pre-lube EPDM
    Grade “E” - EPDM
- 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)

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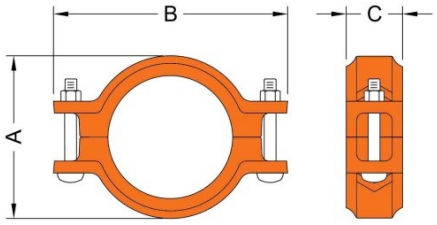

Model K-9 Rigid Coupling										
Normal Size	Pipe O.D.	Max. Working Pressure (CWP)*	Max. End Load (CWP)	Axial Displacement †	Dimensions			Bolt		Weight
					A	B	C	No.	Size	
in	in	psi	lbf	in	in	in	in		in	lbs
mm	mm	bar	kN	mm	mm	mm	mm		mm	kg
1¼	1.66	500	1080	0-0.06	2.56	4.33	1.73	2	⅜ x 1¾	1.3
32	42.2	35	4.82	0-1.6	65	110	44		M10 x 45	0.6
1½	1.9	500	1410	0-0.06	2.8	4.45	1.73	2	⅜ x 2⅛	1.3
40	48.3	35	6.32	0-1.6	71	113	44		M10 x 55	0.6
2	2.375	500	2210	0-0.06	3.27	4.88	1.73	2	⅜ x 2⅛	1.5
50	60.3	35	9.85	0-1.6	83	124	44		M10 x 55	0.7
2½	2.875	500	3240	0-0.06	3.86	5.39	1.73	2	⅜ x 2⅛	1.8
65	73	35	14.43	0-1.6	98	137	44		M10 x 55	0.8
76.1	3	500	3530	0-0.06	4	5.51	1.73	2	⅜ x 2⅛	1.8
	76.1	35	15.68	0-1.6	102	140	44		M10 x 55	0.8
3	3.5	500	4800	0-0.06	4.5	5.94	1.73	2	⅜ x 2¾	2.6
80	88.9	35	21.4	0-1.6	114	151	44		M10 x 70	1.2
4	4.5	500	5560	0-0.13	5.63	7.48	1.97	2	⅜ x 2¾	3.6
100	114.3	35	24.72	0-3.2	143	190	50		M10 x 70	1.7
139.7	5.5	450	8310	0-0.13	6.77	9.21	2	2	½ x 3	4.6
	139.7	31	36.92	0-3.2	172	234	51		M12 x 75	2.1
5	5.563	450	8500	0-0.13	6.89	8.98	1.97	2	½ x 3	4.6
125	141.3	31	37.77	0-3.2	175	228	50		M12 x 75	2.1
165.1	6.5	450	11600	0-0.13	7.75	9.92	2.09	2	½ x 3	5.3
	165.1	31	51.57	0-3.2	197	252	53		M12 x 75	2.4
6	6.625	450	12050	0-0.13	7.87	10.04	2.09	2	½ x 3	5.9
150	168.3	31	53.59	0-3.2	200	255	53		M12 x 75	2.7
8	8.625	350	20430	0-0.13	10.16	13.15	2.44	2	⅝ x 3½	9.7
200	219.1	24	90.82	0-3.2	258	334	62		M16 x 90	4.4

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

Model K-9H 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
8	8.625	350	20430	0~0.13	10.29	13.08	2.44	2	¾ x 4¾	15.8
200	219.1	24	90.82	0~3.2	261	332	62		M20 x 120	7.2

*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.

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.

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