

**SHURJOINT®**

## MODEL K-9 RIGID COUPLING

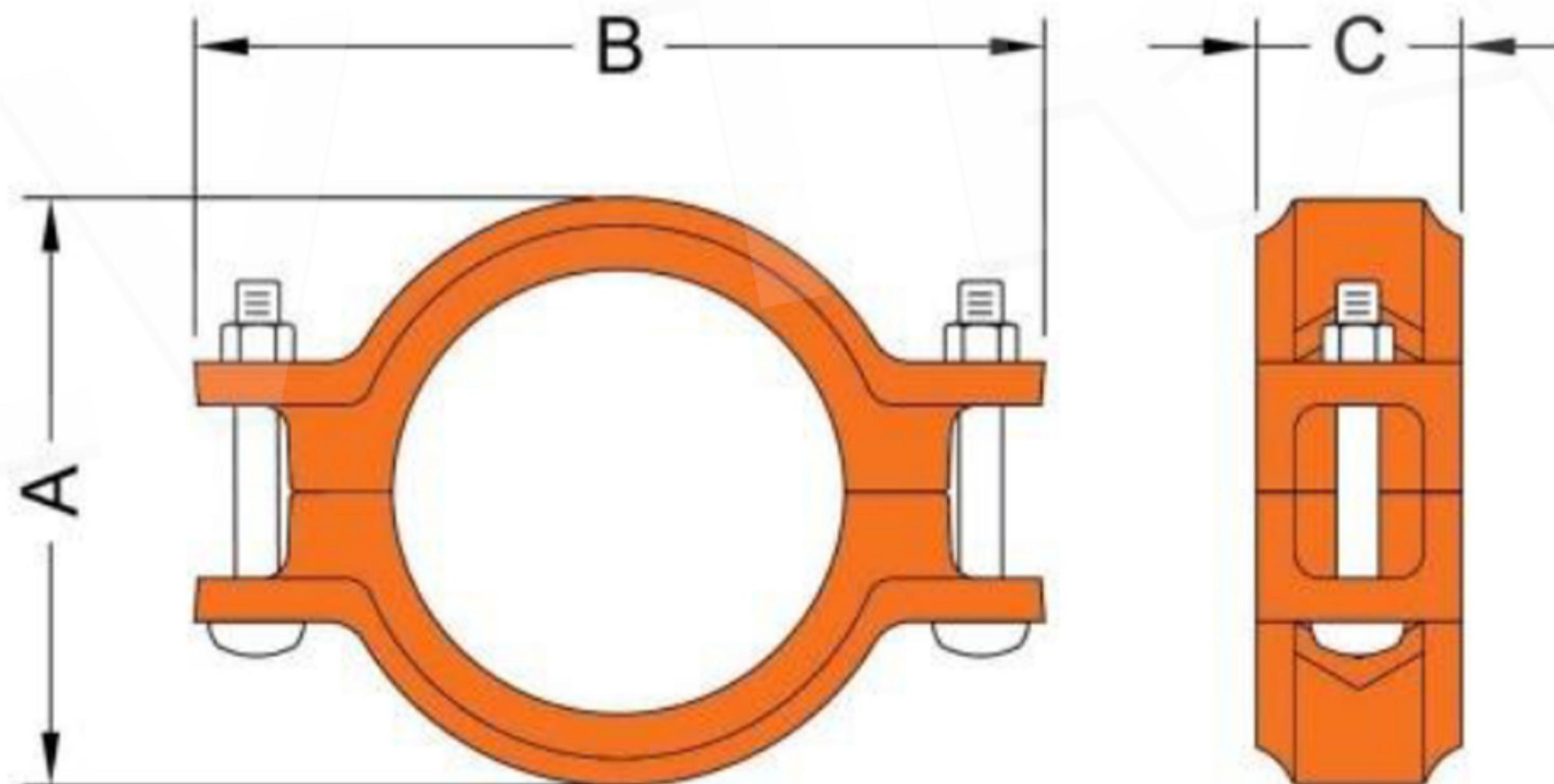
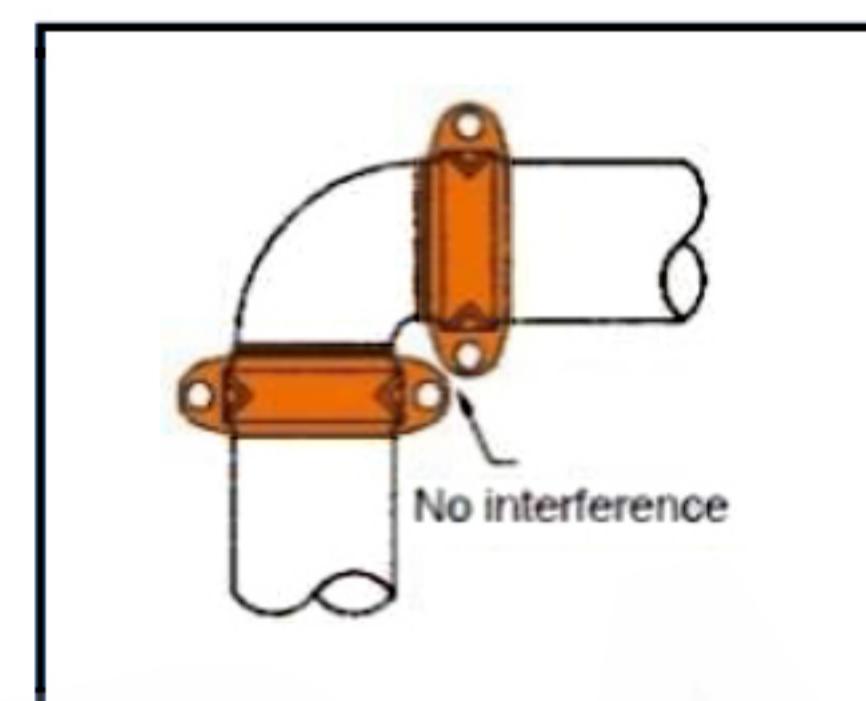
### - T&G Design -

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.

No need to worry about bolt pad interference as the Model K-9 works well with both regular and short radius elbows and tees.



**10  
YEAR  
LIMITED  
WARRANTY**

Full warranty terms  
can be found on  
[www.shurjoint.com](http://www.shurjoint.com)

Model K-9 Rigid Coupling									
Nominal Size	Pipe O.D.	Max. Working Pressure (CWP)*	Max End Load (CWP)	Axial Displacement	Dimension				
					A	B	C	Bolt Size	Weight
in mm	in mm	PSI Bar	Lbs kN	in mm	in mm	in mm	in mm	in mm	Lbs Kgs
1 1/4 32	1.660 42.2	500 35	1080 4.82	0~0.06 0~1.6	2.56 65	4.33 110	1.73 44	5/8 X 1 1/4 M10 x 45	1.3 0.6
1 1/2 40	1.900 48.3	500 35	1410 6.32	0~0.06 0~1.6	2.80 71	4.45 113	1.73 44	5/8 X 2 1/8 M10 x 55	1.3 0.6
2 50	2.375 60.3	500 35	2210 9.85	0~0.06 0~1.6	3.27 83	4.88 124	1.73 44	5/8 X 2 1/8 M10 x 55	1.5 0.7
2 1/2 65	2.875 73.0	500 35	3240 14.43	0~0.06 0~1.6	3.86 98	5.39 137	1.73 44	5/8 X 2 1/8 M10 x 55	1.8 0.8
76.1 mm	3.000 76.1	500 35	3530 15.68	0~0.06 0~1.6	4.00 102	5.51 140	1.73 44	5/8 X 2 1/8 M10 x 55	1.8 0.8
3 80	3.500 88.9	500 35	4800 21.40	0~0.06 0~1.6	4.50 114	5.94 151	1.73 44	5/8 X 2 1/8 M10 x 70	2.6 1.2
4 100	4.500 114.3	500 35	5560 24.72	0~0.13 0~3.2	5.63 143	7.48 190	1.97 50	5/8 X 2 3/4 M10 x 70	3.6 1.7
139.7 mm	5.500 139.7	450 31	8310 36.92	0~0.13 0~3.2	6.77 172	9.21 234	2.00 51	1/2 x 3 M12 x 75	4.6 2.1
5 125	5.563 141.3	450 31	8500 37.77	0~0.13 0~3.2	6.89 175	8.98 228	1.97 50	1/2 x 3 M12 x 75	4.6 2.1
165.1 mm	6.500 165.1	450 31	11600 51.57	0~0.13 0~3.2	7.75 197	9.92 252	2.09 53	1/2 x 3 M12 x 75	5.3 2.4
6 150	6.625 168.3	450 31	12050 53.59	0~0.13 0~3.2	7.87 200	10.04 255	2.09 53	1/2 x 3 M12 x 75	5.9 2.7
8 200	8.625 219.1	350 24	20430 90.82	0~0.13 0~3.2	10.16 258	13.15 334	2.44 62	5/8 X 3 1/2 M16 x 90	9.7 4.4

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

## MODEL K-9H RIGID COUPLING

### Model K-9H Rigid Coupling

Nominal Size	Pipe O.D.	Max. Working Pressure (CWP)*	Max End Load (CWP)	Axial Displacement	Dimension				
					A	B	C	Bolt Size	Weight
in mm	in mm	PSI Bar	Lbs kN	in mm	in mm	in mm	in mm	in mm	Lbs Kgs
8 200	8.625 219.1	350 24	20430 90.82	0~0.13 0~3.2	10.29 261	13.08 332	2.44 62	3/4 x 4 3/4 M20 x 120	15.8 7.2

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

### Performance Data

The following tables show the maximum working pressures (CWP) of **Shurjoint** Model K-9/K-9H Rigid Coupling used on both carbon steel and stainless steel pipes. **Shurjoint** ductile iron couplings can be used in conjunction with stainless steel pipe in non-corrosive environment as the flow media does not come in direct contact with the coupling housings but rather only the gasket.

Model K-9 on Carbon Steel Pipe					
Nom. Size	Cut-Grooved		Roll-Grooved		
in / mm	XS PSI / Bar	STD PSI / Bar	STD PSI / Bar	Sch. 10 PSI / Bar	Sch. 7 PSI / Bar
1 1/4 32	600 42	600 42	500 35	400 28	300 20
1 1/2 40	600 42	600 42	500 35	400 28	300 20
2 50	600 42	600 42	500 35	400 28	300 20
2 1/2 65	600 42	600 42	500 35	400 28	300 20
3 80	600 42	600 42	500 35	400 28	300 20
4 100	600 42	600 42	500 35	400 28	300 20
5 125	450 31	450 31	450 31	350 24	250 17
6 150	450 31	450 31	450 31	350 24	250 17
8 200	450 31	450 31	350 24	250 17	200 14
8 (K-9H) 200	450 31	450 31	350 24	250 17	200 14

Model K-9 on Stainless Steel Pipe					
Nom. Size	Cut-Grooved		Roll-Grooved		
in / mm	Sch. 80S PSI / Bar	Sch. 40S PSI / Bar	Sch. 40S PSI / Bar	Sch. 10S PSI / Bar	Sch. 5S PSI / Bar
1 1/4 32	600 42	600 42	450 31	300 20	250 17
1 1/2 40	600 42	600 42	450 31	300 20	250 17
2 50	600 42	600 42	450 31	300 20	250 17
2 1/2 65	600 42	600 42	450 31	300 20	250 17
3 80	600 42	600 42	450 31	300 20	250 17
4 100	600 42	600 42	450 31	300 20	200 14
5 125	450 31	450 31	300 20	200 14	NR
6 150	450 31	450 31	300 20	125 9	NR
8 200	450 31	450 31	300 20	100 7	NR
8 (K-9H) 200	450 31	450 31	300 20	100 7	NR

## MATERIAL SPECIFICATIONS

### • Housing:

Ductile Iron to ASTM A536, Gr. 65-45-12 and or ASTM A395, Gr. 65-45-15, 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)

### • Rubber Gasket:

**Grade "E" EPDM** (Color code: Green stripe) Good for cold & hot water up to +230°F (+110°C). Also good for services for water with acid, water with chlorine or chloramines, deionized water, seawater and waste water, 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 gaskets for water services are not recommended for steam services unless couplings or components are accessible for frequent gasket replacement.

- (Option) **Grade "T" Nitrile** (Color code: Orange stripe) Recommended for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range. Also good for water services under +150°F (+66°C). Temperature range: -20°F to +180°F (-29°C to +82°C). **Do not use for HOT WATER above +150°F (+66°C) or HOT DRY AIR above +140°F (+60°C)**

- Other options: 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.

#### General Notes:

- **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.

**Shurjoint** product specifications in U.S. customary units and metric are approximate and are provided for reference only. For precise measurements, please contact **Shurjoint** Technical Service. **Shurjoint** reserves the right to change or modify product design, construction, specifications, or materials without prior notice and without incurring any obligations to make such changes and modifications on **Shurjoint** products previously subsequently sold.