

## A505 GROOVED COUPLING FOR DUCTILE IRON PIPE



For pressure rating, listing, and approval information, refer to data sheet or visit SHURJOINT website [www.shurjoint.com](http://www.shurjoint.com) for details or contact your SHURJOINT representatives.

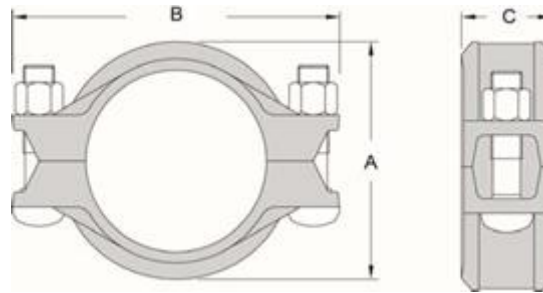
The Shurjoint Model A505 couplings are for connection of grooved ductile iron pipe and fittings of ANSI/AWWA C151/A21.51, Class 53 or higher pipe dimensions. The same coupling can be used either as a flexible coupling or a rigid coupling depending on the groove processed. The Model A505 coupling is recommended for service up to 500 psi (35 Bar) depending on the size. The GapSeal gasket fits flush over the pipe ends and prevents fluids from entering into the gasket cavity. The Model A505 couplings sizes 3" - 12" (80 mm - 300 mm) are comprised of two identical ductile iron housing segments and sizes 14" - 24" (350 mm to 600 mm) are of four segments. The A505 is supplied with painted black.



A505 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:**  
Painted black.
  - Hot dip zinc galvanized (optional).
  - Others upon request.
- **Rubber Gasket:**  
Grade "M" Halogenated Butyl (Color code: Brown stripe). Maximum Temperature Range: -20°F (-29°C) to +200°F (+93°C) Recommended for water service within the specified temperature range plus a variety of dilute acids, oil-free air, and many chemical services. UL classified in accordance with NSF/ANSI 61 and NSF/ANSI 372 for cold and hot water +180°F (+82°C) potable water service. No recommended for Petroleum services.
- **Bolts & Nuts:**  
Heat treated carbon manganese steel track 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 A505 Grooved Coupling for Ductile Iron Pipe

AWWA D.I. Pipe Nominal Size	Pipe O.D.	Max. Working Pressure (CWP)*	Max. End Load (CWP)	Axial Displacement †	Bolt No.	Bolt Size	Dimensions			Weight
							A	B	C	
in	in	psi	lbf	in			in	in	in	lbs
mm	mm	bar	kN	mm			mm	mm	mm	kg
3	3.96	500	6200	0-0.09	2	1/2 x 3	5.33	7.36	2.40	5.5
80	100.6	35	27.59	0-2.4			136	187	61	2.5
4	4.80	500	9000	0-0.09	2	5/8 x 3 1/2	6.96	8.33	2.32	7.3
100	121.9	35	40.50	0-2.4			157	212	59	3.3
6	6.90	400	14950	0-0.09	2	5/8 x 3 1/2	9.37	10.75	2.44	9.7
150	175.3	28	66.26	0-2.4			211	273	62	4.4
8	9.05	400	25600	0-0.16	2	3/4 x 4 3/4	12.07	13.94	2.64	18.7
200	229.9	28	113.92	0-4.0			272	354	67	8.5
10	11.10	350	33850	0-0.16	2	3/4 x 4 3/4	14.50	16.06	2.95	24.2
250	281.9	24	150.63	0-4.0			326	408	75	11.0
12	13.20	350	47900	0-0.16	2	7/8 x 6 1/2	16.89	18.19	2.95	30.8
300	335.3	24	211.50	0-4.0			380	462	75	14.0

\* Pressure ratings listed are based on radius cut-grooved Thickness Class 53 or higher pipe.

† Only when connected on flexible radius groove.

### 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 1 1/2 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.