

Grooved Couplings

Style 31 Couplings



Style 31 Couplings are designed to provide a strong component for ductile iron pipe systems of AWWA dimensions. The Style 31 FlushSeal® gasket is specifically designed for ductile pipe surfaces and provides an efficient triple seal. Rigid radius grooved ductile iron systems with Style 31 couplings are comparable with flanged ductile iron systems.

The outside surface of pipe between the groove and pipe end must be smooth and free from deep pits or swells to provide a leak-tight seal for the Victaulic gasket. All rust, loose scale, oil, grease and dirt shall be removed. Peened surfaces may require corrective action in order to provide a leak-tight gasket seal.

Sizes 3 - 12" are two-piece housings, with 14 - 20" sizes cast in four identical segments and 24 - 36" in six segments, to assure concentricity and easy handling.

All sizes are supplied painted, with plated nuts and bolts.

Material Specifications

- **Housing:** Ductile Iron conforming to ASTM A-536.
- **Housing Coating:** Couplings are Alkyd, phenolic primer (1.5 mil)

On request the following are available:

- Orange enamel
- Coal tar epoxy coating (3 mils)

Optional:

- Organic zinc primer (3 mils)
- Bituminous coating
- Others available, contact E.J. Prescott

- **Gasket (specify choice*)**

Grade "M" FlushSeal:

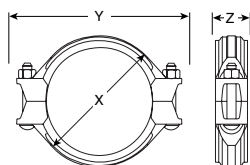
Halogenated Butyl (Brown color code). Temperature range -20°F to +200°F (-29°C to +93°C). Specifically compounded to conform to ductile pipe surfaces. Recommended for water service within the specified temperature range plus a variety of diluted acids, oil-free air and many chemical services. UL classified in accordance with ANSI/NSF 61 to cold +86°F (+30°C) potable water service. **Not recommended for petroleum services.**

Grade "S" FlushSeal:

Nitrile (Red color code). Temperature range -20°F to +180°F (-29°C to +82°C). Specially compounded to conform to ductile pipe surfaces. Recommended for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range, except hot dry air over 140°F (60°C) and water over 150°F (66°C). **Not recommended for hot water services.**

*Services listed are General Service Recommendations only. It should be noted that there are services for which these gaskets are not recommended. Reference should always be made to the latest Victaulic Gasket Selection guide for specific gasket service recommendations and for listing or services which are not recommended.

Style 31 Couplings for Ductile Iron	SIZE	PRODUCT NUMBER
	3"	37910 1
4"	37915 1	
6"	37920 1	
8"	37925 1	
10"	37930 1	
12"	37935	



PIPE		Max. Work. Pres. (psi)	Max. End Load (lbs.)	Allow. Pipe End Sep. *#	DEFLECT FR. C/L*#		Bolt/Nut No. And Size (inches)	COUPLING DIMENSIONS (inches)			Approx. Wt. Each (lbs.)
Nom. Size (in.)	Actual Size (in.)				Per Cplg. Degree	Pipe In./Ft.		X	Y	Z	
3"	3.96	500	6,200	0-0.09	1° - 21'	0.28	2½ × 2¾	5.50	7.38	2.13	4.8
4"	4.80	500	9,000	0-0.09	1° - 8'	0.21	2⅞ × 3¼	6.38	9.00	2.13	7.5
6"	6.90	400	14,950	0-0.09	0° - 47'	0.14	2⅞ × 3¼	8.31	11.13	2.25	9.4
8"	9.05	400	25,600	0-0.09	0° - 36'	0.11	2¾ × 5	11.00	13.88	2.63	16.5
10"	11.10	350	33,850	0-0.16	0° - 48'	0.15	2¾ × 5	13.13	16.13	2.75	22.5
12"	13.20	350	47,900	0-0.16	0° - 41'	0.13	2⅞ × 5	15.50	18.88	2.88	30.0

*Working Pressure and End Load are total, from all internal and external loads, based on AWWA class 53 ductile iron pipe radius cut grooved in accordance with ANSI/AWWA C-606 specifications.

#Allowable Pipe End Separation and Deflection figures show the maximum nominal range of movement available at each joint for pipe prepared to flexible radius cut grooved specifications. Pipe cut grooved to rigid specifications is essentially rigid and does not permit expansion and contraction.