

Coupling

STYLE 31



SEE VICTAULIC PUBLICATION 10.01 FOR DETAILS

Style 31 couplings are designed to provide a strong component for ductile iron pipe systems of AWWA dimensions. The Style 31 coupling is designed for use on radius cut grooved pipe with minimum wall thickness of ANSI/AWWA C151/A21.51, Class 53. 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.

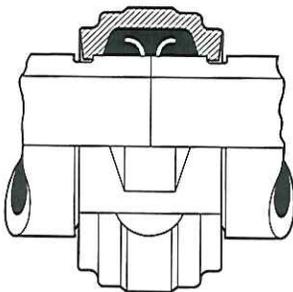
Sizes 3 – 12"/80 – 300 mm are two-piece housings, with 14 – 20"/350 – 500 mm sizes cast in four identical segments and 24 – 36"/650 – 900 mm in six segments, to assure concentricity and easy handling.

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



PATENTED

MATERIAL SPECIFICATIONS



Exaggerated for Clarity

Housing: Ductile iron conforming to ASTM A-536, grade 65-45-12. Ductile iron conforming to ASTM A-395, grade 65-45-15, is available upon special request.

Housing Coating: Couplings are alkyd-phenolic primer (2.5 mil)

Optional:

- Orange enamel
- Coal tar epoxy coating (3 mils)
- Organic zinc primer (3 mils)
- Bituminous coating
- Others available, contact Victaulic

Gasket (specify choice*):

Grade "M" FlushSeal

Halogenated Butyl (Brown color code). Temperature range -20°F to +200°F/-29°C to +93°C. Specially compounded to conform to ductile pipe surfaces. 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 ANSI/NSF 61 for 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. Specifically 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 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 a listing of services which are not recommended.

Bolts/Nuts: Heat-treated plated carbon steel, trackhead meeting the physical and chemical requirements of ASTM A-449 and physical requirements of ASTM A-183.

Optional: Type 316 Stainless Steel, Grade B-8M, Class 2



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JOB/OWNER

System No. _____
 Location _____

CONTRACTOR

Submitted By _____
 Date _____

ENGINEER

Spec Sect _____ Para _____
 Approved _____
 Date _____

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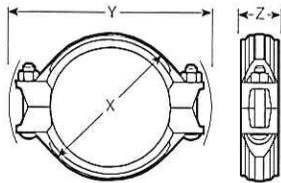
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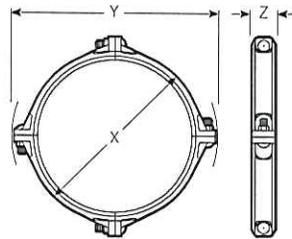
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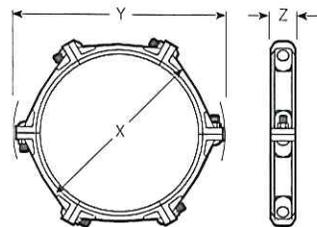
DIMENSIONS



3 – 12" Sizes



14 – 20" Sizes



24 – 36" Sizes

Pipe Size		Max. Work. Pres. PSI/kPa	Max. End Load Lbs./kN	Allow. Pipe End *† Sep. In./mm	Deflect Fr. C _i **†		Bolt/Nut No. Size Inches @	Coupling Dimensions Inches/mm			Aprx. Wgt. Each Lbs./kg
Nominal Dia. In./mm	Actual Out. Dia. In./mm				Per Cplg. Degree	Pipe In./Ft. mm/m		X	Y	Z	
3	3.960	500	6200	0 - 0.09	0.28	1° - 21'	2 - 1/2 x 2 1/4	5.50	7.63	2.13	4.8
80	100.6	3450	27590	0 - 2.4	23			140	194	54	2.2
4	4.800	500	9000	0 - 0.09	0.21	1° - 8'	2 - 7/8 x 3/4	6.25	9.20	2.09	7.5
100	121.9	3450	40050	0 - 2.4	17			159	234	53	3.4
6	6.900	400	14950	0 - 0.09	0.14	0° - 47'	2 - 7/8 x 3/4	8.28	11.19	2.22	9.4
150	175.3	2750	66528	0 - 2.4	12			210	284	56	4.3
8	9.050	400	25600	0 - 0.09	0.11	0° - 36'	2 - 3/4 x 5	10.74	14.33	2.59	16.5
200	229.9	2750	113920	0 - 2.4	9			273	364	66	7.5
10	11.100	350	33850	0 - 0.16	0.15	0° - 48'	2 - 3/4 x 5	12.84	16.44	2.75	22.5
250	281.9	2410	150632	0 - 4.0	13			326	418	70	10.2
12	13.200	350	47900	0 - 0.16	0.13	0° - 41'	2 - 3/4 x 5	15.27	19.16	2.75	30.0
300	335.3	2410	21150	0 - 4.0	11			388	487	70	14.0
14	15.300	250	45950	0 - 0.16	0.11	0° - 35'	4 - 1 x 3 1/2	17.21	21.96	2.75	40.8
350	388.6	1725	204470	0 - 4.0	9			437	558	70	18.5
16	17.400	250	59400	0 - 0.25	0.16	0° - 49'	4 - 1 x 3 1/2	19.90	23.96	3.50	61.3
400	442.0	1725	264330	0 - 6.4	13			505	609	89	27.8
18 †	19.500	250	74650	0 - 0.25	0.14	0° - 44'	4 - 1 x 3 1/2	22.03	26.33	3.50	80.0
450	495.3	1725	332190	0 - 6.4	12			560	669	89	36.3
20	21.600	150	54900	0 - 0.25	0.12	0° - 40'	4 - 1 1/8 x 4	24.13	28.69	3.50	76.0
500	548.6	1035	244305	0 - 6.4	10			613	729	89	34.5
24	25.800	150	78400	0 - 0.25	0.11	0° - 33'	6 - 1 1/8 x 4	28.31	33.06	3.50	104.0
600	655.3	1035	34880	0 - 6.4	9			719	840	89	47.2
30	32.000	150	120570	0 - 0.47	0.17	0° - 51'	6 - 1 1/8 x 4	35.02	39.39	4.38	162.0
750	812.8	1035	536530	0 - 11.9	14			890	1001	111	73.5
36	38.300	150	172815	0 - 0.47	0.15	0° - 47'	6 - 1 1/8 x 4	41.56	46.04	4.44	200.0
900	972.8	1035	769030	0 - 11.9	13			1056	1169	113	90.7

‡ For class 53 pipe rating is 150 psi (1035 kPa). For larger couplings contact Victaulic.

* Working Pressure and End Load are total, from all internal and external loads, based on AWWA class 53 (except where noted) ductile iron pipe radius cut grooved in accordance with ANSI/AWWA C-606 specifications. Contact Victaulic for performance on other pipe. WARNING: FOR ONE TIME FIELD TEST ONLY, the Maximum Joint Working Pressure may be increased to 1 1/2 times the figures shown.

† 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.

@ Number of bolts required equals number of housing segments. Metric thread size bolts are available (color coded gold) for all coupling sizes upon request. Contact Victaulic for details.

WARNING: Depressurize and drain the piping system before attempting to install, remove, or adjust any Victaulic piping products.

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WARRANTY

Refer to the Warranty section of the current Price List or contact Victaulic for details.

NOTE

This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

INSTALLATION

Reference should always be made to the I-300 Victaulic Field Installation Handbook for the product you are installing. Handbooks are included with each shipment of Victaulic products for complete installation and assembly data, and are available in PDF format on our website at www.victaulic.com.

For complete contact information, visit www.victaulic.com

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