

Victaulic® Transition Couplings

Style 307



Patented

1.0 PRODUCT DESCRIPTION

Available Sizes

- 3 – 12"/DN80 – DN300

Maximum Working Pressure

- Up to 500 psi/3450 kPa

Application

- Provides direct transition from cut or roll grooved IPS pipe to AWWA ductile iron pipe.
- Provides a rigid pipe joint designed to restrict axial or angular movement.

Pipe Material

- Steel and ductile iron.

2.0 CERTIFICATION/LISTINGS



NOTE

- Refer to Victaulic [publication 10.01](#) for details

ALWAYS REFER TO ANY NOTIFICATIONS AT THE END OF THIS DOCUMENT REGARDING PRODUCT INSTALLATION, MAINTENANCE OR SUPPORT.

System No.		Location	
Submitted By		Date	

Spec Section		Paragraph	
Approved		Date	

3.0 SPECIFICATIONS – MATERIAL

Housing: Ductile iron conforming to ASTM A536, Grade 65-45-12. Ductile iron conforming to ASTM A395, Grade 65-45-15, is available upon special request.

Housing Coating: (specify choice)

Standard: Orange enamel.

On request the following are available:

Alkyd-phenolic primer (1.5 mil).

Coal tar epoxy coating (3 mils).

Optional: Organic zinc primer (3 mils).

Optional: Bituminous coating.

Optional: Hot dipped galvanized.

NOTE

- Others available, contact Victaulic.

Gasket: (specify choice¹)

Grade “M” Flush-Seal™

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” Flush-Seal™

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.

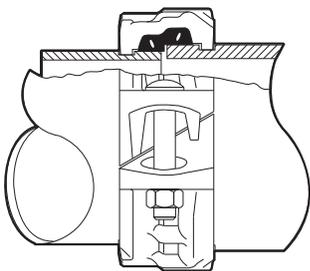
¹ Services listed are General Service Guidelines only. It should be noted that there are services for which these gaskets are not compatible. Reference should always be made to the latest [Victaulic Seal Selection Guide](#) for specific gasket service guidelines and for a listing of services which are not compatible.

Bolts/Nuts: (specify choice²)

Standard: Carbon steel oval neck track bolts meeting the mechanical property requirements of ASTM A449 (imperial) and ISO 898-1 Class 9.8 (M10-M16) Class 8.8 (M20 and greater). Carbon steel hex nuts meeting the mechanical property requirements of ASTM A563 Grade B (imperial – heavy hex nuts) and ASTM A563M Class 9 (metric – hex nuts). Track bolts and hex nuts are zinc electroplated per ASTM B633 ZN/FE5, finish Type III (imperial) or Type II (metric).

Optional (imperial): Stainless steel oval neck track bolts meeting the mechanical property requirements of ASTM F593, Group 2 (316 Stainless Steel), condition CW. Stainless steel heavy nuts meeting the mechanical property requirements of ASTM F594, Group 2 (316 stainless steel), condition CW, with galling reducing coating.

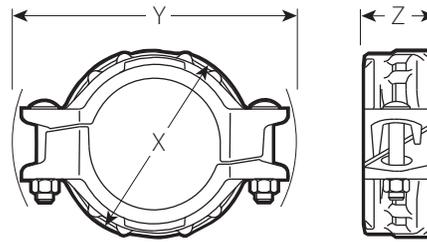
² Optional bolts/nuts are available in imperial size only.



Exaggerated for Clarity

4.0 DIMENSIONS

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Pipe Size		Mating Pipe Actual Size		Bolt/Nut ³		Dimensions			Weight
Nominal inches DN	Actual Outside Diameter inches mm	IPS Steel inches mm	AWWA Ductile inches mm	Qty.	Size inches	X inches mm	Y inches mm	Z inches mm	Approximate (Each) lb kg
3 DN80	3.960 100.6	3.500 88.9	3.96 100.6	2	½ x 2 ¾	5.50 140	7.38 187	2.07 53	6.0 2.7
4 DN100	4.800 121.9	4.500 114.3	4.80 121.9	2	½ x 3 ¼	6.38 162	9.00 229	2.19 56	8.0 3.6
6 DN150	6.900 175.3	6.625 168.3	6.90 175.3	2	5/8 x 3 ¼	8.44 214	11.13 283	2.31 59	9.0 4.1
8 DN200	9.050 229.9	8.625 219.1	9.05 229.9	2	¾ x 5	11.00 279	13.88 353	2.63 67	18.0 8.2
10 DN250	11.100 281.9	10.750 273.0	11.10 281.9	2	7/8 x 6 ½	13.13 334	16.50 419	2.63 67	22.0 10.0
12 DN300	13.200 335.3	12.750 323.9	13.20 335.3	2	7/8 x 6 ½	15.38 391	18.94 481	2.63 67	31.0 14.1

³ Metric thread size bolts are available (color coded gold) for all coupling sizes upon request. Contact Victaulic for details.

5.0 PERFORMANCE

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Size		Pipe End Separation	Maximum Joint Working Pressure ⁴ psi kPa	Maximum Permis. End Load ⁴ lb N
Nominal inches DN	Actual Outside Diameter inches mm	Allowable inches mm		
3 DN80	3.960 100.6	0.03 1	500 3450	4810 21405
4 DN100	4.800 121.9	0.06 2	500 3450	7950 35377
6 DN150	6.900 175.3	0.06 2	400 2750	13780 61321
8 DN200	9.050 229.9	0.03 1	400 2750	23370 103997
10 DN250	11.100 281.9	0.03 1	350 2410	31760 141332
12 DN300	13.200 335.3	0.03 1	350 2410	44680 198826

⁴ 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 and ANSI standard wall carbon steel pipe cut or roll grooved in accordance with Victaulic specifications. Contact Victaulic for performance on other pipe.

6.0 NOTIFICATIONS

- WARNING: FOR ONE TIME FIELD TEST ONLY, the Maximum Joint Working Pressure may be increased to 1 ½ times the figures shown.
- For field installation only. Style 307 Transition couplings are essentially rigid and do not permit expansion/contraction.

⚠ WARNING



- Read and understand all instructions before attempting to install, remove, adjust, or maintain any Victaulic piping products.
- Depressurize and drain the piping system before attempting to install, remove, adjust, or maintain any Victaulic piping products.
- Wear safety glasses, hardhat, and foot protection.

Failure to follow these instructions could result in death or serious personal injury and property damage.

7.0 REFERENCE MATERIALS

- [10.01: Regulatory Approval Reference Guide](#)
- [23.01: AWWA Ductile Iron Pipe - Grooved System](#)
- [23.02 Style 31 Grooved Coupling](#)
- [29.01: Terms and Conditions/Warranty](#)
- [I-300: Field Installation Handbook: AWWA Products](#)
- [I-ENDCAP: Victaulic® End Caps Installation Instructions](#)

User Responsibility for Product Selection and Suitability

Each user bears final responsibility for making a determination as to the suitability of Victaulic products for a particular end-use application, in accordance with industry standards and project specifications, as well as Victaulic performance, maintenance, safety, and warning instructions. Nothing in this or any other document, nor any verbal recommendation, advice, or opinion from any Victaulic employee, shall be deemed to alter, vary, supersede, or waive any provision of Victaulic Company's standard conditions of sale, installation guide, or this disclaimer.

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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 Victaulic installation handbook or installation instructions of the product you are installing. Handbooks are included with each shipment of Victaulic products, providing complete installation and assembly data, and are available in PDF format on our website at www.victaulic.com.

Warranty

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

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