

Victaulic® Outlet Coupling

Style 72



1.0 PRODUCT DESCRIPTION

Available Sizes

- 1 ½ x ½" through 6 x 2"/DN40 x DN15 through DN150 x DN50

Pipe Material

- Carbon steel

Maximum Working Pressure

- Accommodates pressures up to 500 psi/3450 kPa/34 bar
- Working pressure dependent on material and size of pipe

Operating Temperature

- Dependent on gasket selection from section 3.0

Function

- Provides an integral reducing outlet
- Supplied with female threaded NPT or BSPT outlet connections

NOTES

- Style 72 outlet couplings are primarily intended for use when flow is out from the outlet. Flow into the outlet must not exceed 7 ft/sec (2.1 m/sec).
- Not recommended for use with stainless steel pipe
- Not for use on vacuum service

2.0 CERTIFICATION/LISTINGS



NOTES

- See [publication 10.01](#) for Fire Protection Certifications/Listings Reference Guide.
- See [publication 02.06](#): Victaulic Potable Water Approvals ANSI/NSF for potable water approvals if applicable.

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.

Optional: Hot dipped galvanized.

Optional: Contact Victaulic with your requirements.

Gasket: (specify choice¹)

Grade “E” EPDM

EPDM (Green stripe color code). Temperature range –30°F to +230°F/–34°C to +110°C. May be specified for cold and hot 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 +73°F/+23°C and hot +180°F/+82°C potable water service and ANSI/NSF 372. NOT COMPATIBLE FOR USE WITH PETROLEUM SERVICES OR STEAM SERVICES.

Grade “T” Nitrile

Nitrile (Orange stripe color code). Temperature range –20°F to +180°F/–29°C to +82°C. May be specified for petroleum products, hydrocarbons, air with oil vapors, vegetable and mineral oils within the specified temperature range. Not compatible for hot water services over +150°F/+66°C or for hot dry air over +140°F/+60°C. NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES OR STEAM SERVICES.

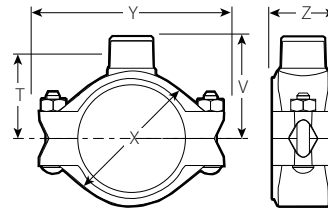
¹ Services listed are General Service Guidelines only. It should be noted that there are services for which these gaskets are not compatible. Reference should always be made to the latest [Victaulic Gasket Selection Guide](#) for specific gasket service guidelines and for a listing of services which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

Bolts/Nuts: Carbon steel oval neck track bolts meeting the mechanical property requirements of ASTM A449. Carbon steel heavy hex nuts meeting the mechanical property requirements of ASTM A563 Grade B. Track bolts and heavy hex nuts are zinc electroplated per ASTM B633 ZN/FE5, finish Type III (imperial).

Gasket Neck Insert: Carbon steel, electroplated.

4.0 DIMENSIONS

Style 72 Outlet Coupling



Female Threaded Outlet

Size		Allow. Pipe End Separation ²	Bolt/Nut ³		Dimensions					Weight			
Run x Reducing Outlet			Qty.	Size	X	Y	Z	T ⁴	V ⁵	Approx. (Each)			
Nominal	Actual Outside Diameter	inches mm		inches	inches mm	inches mm	inches mm	inches mm	inches mm	lb kg			
1½ DN40	x ½ DN15	1.900 48.3	x	0.840 21.3	0.75–0.88 19–22	2	⅜ x 2	2.94 75	4.50 114	2.75 70	2.06 52	2.63 67	1.4 0.6
	¾ DN20			1.050 26.9	0.75–0.88 19–22	2	⅜ x 2	2.94 75	4.50 114	2.75 70	2.06 52	2.63 67	1.4 0.6
	1 DN25			1.315 33.7	0.75–0.88 19–22	2	⅜ x 2	2.94 75	4.50 114	2.75 70	1.94 49	2.63 67	1.4 0.6
2 DN50	x ½ DN15	2.375 60.3	x	0.840 21.3	0.81–0.88 20–22	2	⅜ x 2	3.38 86	5.00 127	2.75 70	2.47 63	3.03 77	3.5 1.6
	¾ DN20			1.050 26.9	0.81–0.88 20–22	2	⅜ x 2	3.38 86	5.00 127	2.75 70	2.47 63	3.03 77	2.5 1.1
	1 DN25			1.315 33.7	0.81–0.88 20–22	2	⅜ x 2	3.38 86	5.00 127	2.75 70	2.34 60	3.03 77	2.5 1.1
2½	x ½ DN15	2.875 73.0	x	0.840 21.3	0.81–0.88 20–22	2	½ x 2¾	3.88 98	6.00 152	2.75 70	2.56 65	3.13 79	4.5 2.0
	¾ DN20			1.050 26.9	0.81–0.88 20–22	2	½ x 2¾	3.88 98	6.00 152	2.75 70	2.56 65	3.13 79	4.6 2.1
	1 DN25			1.315 33.7	0.81–0.88 20–22	2	½ x 2¾	3.88 98	6.00 152	2.75 70	2.44 62	3.13 79	4.6 2.1
	1¼ DN32			1.660 42.4	1.25–1.50 32–38	2	⅝ x 3¼	4.06 103	6.88 175	3.25 83	3.00 76	3.69 94	5.0 2.3
	1½ DN40			1.900 48.3	1.25–1.50 32–38	2	⅝ x 3¼	4.06 103	6.88 175	3.25 83	3.00 76	3.69 94	5.0 2.3
3 DN80	x ¾ DN20	3.500 88.9	x	1.050 26.9	0.50–0.63 13–16	2	½ x 2½	4.50 114	7.00 178	2.38 60	2.75 70	3.31 84	3.4 1.5
	1 DN25			1.315 33.7	1.25–1.50 32–38	2	⅝ x 3¼	4.75 121	8.00 203	3.25 83	4.06 103	4.75 121	7.0 3.2
	1¼ DN32			1.660 42.4	1.25–1.50 32–38	2	⅝ x 3¼	4.75 121	8.00 203	3.25 83	4.06 103	4.75 121	7.0 3.2
	1½ DN40			1.900 48.3	1.25–1.50 32–38	2	⅝ x 3¼	4.75 121	8.00 203	3.25 83	4.06 103	4.25 108	7.0 3.2

² Allowable Pipe End Separation figures show the maximum nominal range of movement available at each joint for standard roll grooved pipe. Figures for standard cut grooved pipe may be doubled. These figures are maximums; for design and installation purposes, these figures should be reduced by 50% for ¾ – 3 ½"/20 – 90 mm or 25% for 4"/100 mm and larger.

³ Number of bolts required equals number of housing segments.

⁴ Center of run to the engaged pipe end. Female threaded outlet only (dimensions approximate).

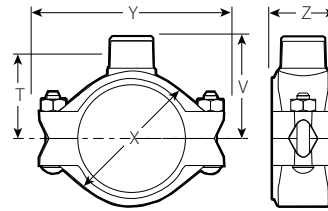
⁵ Center of run to end of fittings.

NOTES

- Metric thread size bolts are available (color-coded gold) for all coupling sizes upon request. Contact Victaulic for details.
- NPT or BSPT threaded outlets available.

4.0 DIMENSIONS (Continued)

Style 72 Outlet Coupling



Female Threaded Outlet

Size		Allow. Pipe End Separation ²	Bolt/Nut ³		Dimensions					Weight		
Run x Reducing Outlet			Qty.	Size	X	Y	Z	T ⁴	V ⁵	Approx. (Each)		
Nominal	Actual Outside Diameter											
inches DN	inches mm	inches mm		inches	inches mm	inches mm	inches mm	inches mm	inches mm	lb kg		
4 DN100	x ¾ DN20	4.500 114.3	x 1.050 26.9	0.44–0.63 11–16	2	½ x 2½	5.69 145	8.38 213	2.50 64	3.25 83	3.81 97	6.8 3.1
	1 DN25		1.315 33.7	0.44–0.63 11–16	2	½ x 2½	5.69 145	8.38 213	2.50 64	3.25 83	3.81 97	11.4 3.1
	1½ DN40		1.900 48.3	1.63–1.81 41–46	2	⅝ x 3¼	6.13 156	9.00 229	3.69 94	3.91 99	4.59 117	11.4 5.2
	2 DN50		2.375 60.3	1.63–1.81 41–46	2	2- ⅝ x 3¼	6.13 156	9.00 229	3.69 94	3.91 99	4.59 117	18.0 5.2
6 DN150	x 1 DN25	6.625 219.1	x 1.315 33.7	1.63–1.81 41–46	2	¾ x 4¼	8.13 206	12.00 305	3.69 94	6.19 157	6.88 175	18.0 8.2
	1½ DN40		1.900 48.3	1.63–1.81 41–46	2	¾ x 4¼	8.13 206	12.00 305	3.69 94	6.19 157	6.88 175	18.0 8.2
	2 DN50		2.375 60.3	1.63–1.81 41–46	2	¾ x 4¼	8.13 206	12.00 305	3.69 94	6.19 157	6.06 154	18.0 8.2

² Allowable Pipe End Separation figures show the maximum nominal range of movement available at each joint for standard roll grooved pipe. Figures for standard cut grooved pipe may be doubled. These figures are maximums; for design and installation purposes, these figures should be reduced by 50% for ¾ – 3 ½"/20 – 90 mm or 25% for 4"/100 mm and larger.

³ Number of bolts required equals number of housing segments.

⁴ Center of run to the engaged pipe end. Female threaded outlet only (dimensions approximate).

⁵ Center of run to end of fittings.

NOTES

- Metric thread size bolts are available (color-coded gold) for all coupling sizes upon request. Contact Victaulic for details.
- NPT or BSPT threaded outlets available.

5.0 PERFORMANCE

Style 72 Outlet Coupling

Size				Maximum Working Pressure ⁶	Maximum Permissible End Load			
Run x Reducing Outlet					Run	Reducing Outlet		
Nominal inches DN		Actual Outside Diameter inches mm		psi kPa	lb N	lb N		
1½ DN40	x	½ DN15	1.900 48.3	x	0.840 21.3	500	1418	277
						3450	6308	1232
		¾ DN20	1.050 26.9	500	1418	433		
				3450	6308	1926		
1 DN25	1.315 33.7	500	1418	679				
		3450	6308	3020				
2 DN50	x	½ DN15	2.375 60.3	x	0.840 21.3	500	2215	277
						3450	9853	1232
		¾ DN20	1.050 26.9	500	2215	433		
				3450	9853	1926		
1 DN25	1.315 33.7	500	2215	679				
		3450	9853	3020				
2½	x	½ DN15	2.875 73.0	x	0.840 21.3	500	3246	277
						3450	14439	1232
		¾ DN20	1.050 26.9	500	3246	433		
				3450	14439	1926		
		1 DN25	1.315 33.7	500	3246	679		
				3450	14439	3020		
1¼ DN32	1.660 42.4	500	3246	1082				
1½ DN40	1.900 48.3	500	3246	1418				
3 DN80	x	¾ DN20	3.500 88.9	x	1.050 26.9	500	4811	433
						3450	21400	1926
		1 DN25	1.315 33.7	500	4811	679		
				3450	21400	3020		
		1¼ DN32	1.660 42.4	500	4811	1082		
3450	21400			4813				
1½ DN40	1.900 48.3	500	4811	1418				
4 DN100	x	¾ DN20	4.500 114.3	x	1.050 26.9	500	7952	433
						3450	35372	1926
		1 DN25	1.315 33.7	500	7952	679		
				3450	35372	3020		
		1½ DN40	1.900 48.3	400	6362	1134		
2750	28300			5044				
2 DN50	2.375 60.3	400	6362	1772				
6 DN150	x	1 DN25	6.625 219.1	x	1.315 33.7	400	13789	543
						2750	61337	2415
		1½ DN40	1.900 48.3	400	13789	1134		
				2750	61337	5044		
2 DN50	2.375 60.3	400	13789	1772				
		2750	61337	7882				

⁶ Working Pressure and End Load are total, from all internal and external loads, based on standard weight (ANSI) steel pipe, standard roll or cut grooved in accordance with Victaulic specifications. Contact Victaulic for performance on other pipe.

NOTE

- WARNING: FOR ONE-TIME FIELD USE ONLY, the Maximum Joint Working Pressure may be increased to 1½ times the figures shown.

5.1 PERFORMANCE

Style 72 Outlet Coupling

C_v/K_v values for flow of water at +60°F/+16°C are shown in the table below.

Formulas for C_v/K_v values:

$$\Delta P = \frac{Q^2}{C_v^2}$$

$$Q = C_v \times \sqrt{\Delta P}$$

Where:

Q = Flow (GPM)
 ΔP = Pressure Drop (psi)
 C_v = Flow Coefficient

$$\Delta P = \frac{Q^2}{K_v^2}$$

$$Q = K_v \times \sqrt{\Delta P}$$







Where:

Q = Flow (m³/hr)
 ΔP = Pressure Drop (Bar)
 K_v = Flow Coefficient

Outlet Size	Equivalent Length of 1 in. Schedule 40 Steel Pipe (per UL 213, SECTION 16)	C _v K _v
inches mm	(C=120) ⁷ , FT	
1/2 15	–	5.0 4.3
3/4 20	–	15.0 13.0
1 25	7.0	22.0 19.1
1 1/4 32	9.0	40.0 34.6
1 1/2 40	11.0	53.0 45.6
2 50	26.0	66.0 56.6

⁷ Hazen-Williams coefficient of friction is 120.

6.0 NOTIFICATIONS

⚠ WARNING					
					
<ul style="list-style-type: none">• Read and understand all instructions before attempting to install, remove, adjust, or maintain any Victaulic piping products.• Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.• Wear safety glasses, hardhat, and foot protection. <p>Failure to follow these instructions could result in death or serious personal injury and property damage.</p>					

7.0 REFERENCE MATERIALS

[02.06: Victaulic Potable Water Approvals ANSI/NSF](#)

[05.01: Victaulic Seal Selection Guide](#)

[06.08: Victaulic Reducing Coupling Style 750](#)

[10.01: Victaulic Products for Fire Protection Piping Systems - Regulatory Approval Reference Guide](#)

[I-100: Victaulic Field Installation Handbook](#)

[I-ENDCAP: Victaulic End Cap Installation Safety 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, and the applicable building codes and related regulations 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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