

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
- For exceptions reference section 6.0 Notifications

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



EN 10311
CPR (EU)
No. 305/2011



BS EN 10311
CPR (UK)
2019 No. 465

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.

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.

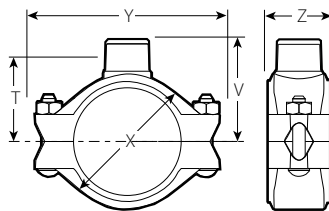
¹ Services listed are General Service Guidelines only. It should be noted that there are services for which these gaskets are not compatible. Reference should always be made to the latest [Victaulic Gasket Selection Guide](#) for specific gasket service guidelines and for a listing of services which 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						Allowable Pipe End Separation ² inches mm	Bolt/ Nut ³		Dimensions					Weight
Nominal inches DN			Actual Outside Diameter inches mm				Qty.	Size inches	X inches mm	Y inches mm	Z inches mm	T ⁴ inches mm	V ⁵ inches mm	Approx. (Each) lb kg
1 ½ 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	2.50 64	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	2.50 64	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	2.38 60	3.03 77	2.5 1.1
2 ½	x	½ DN15	2.375 60.3	x	0.840 21.3	0.81 – 0.88 20 – 22	2	½ x 2 ¾	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 2 ¾	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 2 ¾	3.88 98	6.00 152	2.75 70	2.44 62	3.13 79	4.6 2.1
		1 ¼ DN32			1.660 42.4	1.25 – 1.50 32 – 38	2	⅝ x 3 ¼	4.13 105	6.88 175	3.25 83	3.00 76	3.75 95	5.0 2.3
		1 ½ DN40			1.900 48.3	1.25 – 1.50 32 – 38	2	⅝ x 3 ¼	4.13 105	6.88 175	3.25 83	3.00 76	3.75 95	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 2 ¾	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 3 ¼	4.75 121	8.00 203	3.25 83	3.63 92	4.25 108	7.0 3.2
		1 ¼ DN32			1.660 42.4	1.25 – 1.50 32 – 38	2	⅝ x 3 ¼	4.75 121	8.00 203	3.25 83	3.50 89	4.25 108	7.0 3.2
		1 ½ DN40			1.900 48.3	1.25 – 1.50 32 – 38	2	⅝ x 3 ¼	4.75 121	8.00 203	3.25 83	3.50 89	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 3/4 – 3 1/2"/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).

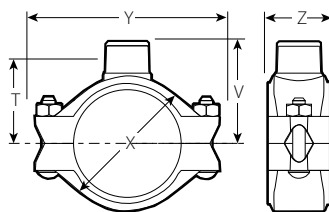
⁵ Center of run to end of fittings.

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					Allowable Pipe End Separation ² inches mm	Bolt/ Nut ³		Dimensions					Weight	
Nominal inches DN		Actual Outside Diameter inches mm		Qty.		Size inches	X inches mm	Y inches mm	Z inches mm	T ⁴ inches mm	V ⁵ inches mm	Approx. (Each) 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 2 ¾	5.69 145	8.38 213	2.50 64	3.25 83	3.88 98	6.8 3.1
		1 DN25			1.315 33.7	0.44 – 0.63 11 – 16	2	½ x 2 ¾	5.69 145	8.38 213	2.50 64	3.25 83	3.88 98	11.4 5.2
		1 ½ DN40			1.900 48.3	1.63 – 1.81 41 – 46	2	⅝ x 3 ¼	6.13 156	9.00 229	3.75 95	3.91 99	4.63 117	11.4 5.2
		2 DN50			2.375 60.3	1.63 – 1.81 41 – 46	2	⅝ x 3 ¼	6.13 156	9.00 229	3.75 95	3.91 99	4.63 117	18.0 8.2
6 DN150	x	1 DN25	6.625 168.3	x	1.315 33.7	1.63 – 1.81 41 – 46	2	¾ x 4 ¼	8.13 206	12.00 305	3.69 94	5.38 137	6.00 152	18.0 8.2
		1 ½ DN40			1.900 48.3	1.63 – 1.81 41 – 46	2	¾ x 4 ¼	8.13 206	12.00 305	3.69 94	5.38 137	6.00 152	18.0 8.2
		2 DN50			2.375 60.3	1.63 – 1.81 41 – 46	2	¾ x 4 ¼	8.13 206	12.00 305	3.69 94	5.25 133	6.00 152	18.0 8.2
		DN65			3.000 76.1	1.63 – 1.81 41 – 46	2	¾ x 4 ¼	8.13 206	11.50 292	4.50 114	– 146	5.75 146	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 3/4 – 3 1/2"/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).

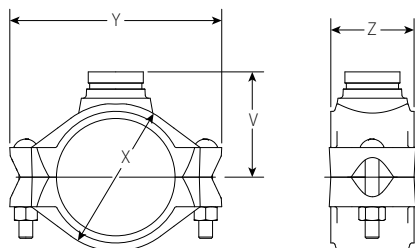
⁵ Center of run to end of fittings.

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.

4.1 DIMENSIONS

Style 72 Outlet Coupling



Grooved Outlet

Size						Allowable Pipe End Separation ² inches mm	Bolt/ Nut ³		Dimensions					Weight
Nominal inches DN			Actual Outside Diameter inches mm				Qty.	Size inches	X inches mm	Y inches mm	Z inches mm	T ⁴ inches mm	V ⁵ inches mm	Approx. (Each) lb kg
4 DN100	x	2 DN50	4.500 114.3	x	2.375 60.3		1.63 – 1.81 41 – 46	2	5/8 x 3 1/4	6.13 156	9.00 229	3.75 95	–	4.50 114
6 DN150	x	DN65	6.625 168.3	x	3.000 76.1	1.63 – 1.81 41 – 46	2	3/4 x 4 1/4	8.13 206	11.50 292	4.50 114	–	5.75 146	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 3/4 – 3 1/2"/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.

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				lbs N	lbs N	
1 ½ DN40	x	½ DN15	1.900 48.3	x	0.840 21.3	500 3447	1418 6307	277 1232
		¾ DN20			1.050 26.9	500 3447	1418 6307	433 1926
		1 DN25			1.315 33.7	500 3447	1418 6307	679 3020
2 DN50	x	½ DN15	2.375 60.3	x	0.840 21.3	500 3447	2215 9852	277 1232
		¾ DN20			1.050 26.9	500 3447	2215 9852	433 1926
		1 DN25			1.315 33.7	500 3447	2215 9852	679 3020
2 ½	x	½ DN15	2.375 60.3	x	0.840 21.3	500 3447	3246 14438	277 1232
		¾ DN20			1.050 26.9	500 3447	3246 14438	433 1926
		1 DN25			1.315 33.7	500 3447	3246 14438	679 3020
		1 ¼ DN32			1.660 42.4	500 3447	3246 14438	1082 4813
		1 ½ DN40			1.900 48.3	500 3447	3246 14438	1418 6308
3 DN80	x	¾ DN20	3.500 88.9	x	1.050 26.9	500 3447	4811 21399	433 1926
		1 DN25			1.315 33.7	500 3447	4811 21399	679 3020
		1 ¼ DN32			1.660 42.4	500 3447	4811 21399	1082 4813
		1 1/2 DN40			1.900 48.3	500 3447	4811 21399	1418 6308
4 DN100	x	¾ DN20	4.500 114.3	x	1.050 26.9	500 3447	7952 35370	433 1926
		1 DN25			1.315 33.7	500 3447	7952 35370	679 3020
		1 ½ DN40			1.900 48.3	400 2758	6362 28298	1134 5044
		2 DN50			2.375 60.3	400 2758	6362 28298	1772 7882
6 DN150	x	1 DN25	6.625 168.3	x	1.315 33.7	400 2758	13789 61333	543 2415
		1 ½ DN40			1.900 48.3	400 2758	13789 61333	1134 5044
		2 DN50			2.375 60.3	400 2758	13789 61333	1772 7882
					3.000 76.1	400 2758	13789 61333	2828 12580

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 inches DN	Equivalent Length of 1 in. Schedule 40 Steel Pipe (per UL 213) (C=120) ⁷ FT		C _v K _v	
	Grooved	Threaded	Grooved	Threaded
½ DN15	–	–	–	5.0 4.3
¾ DN20	–	–	–	15.0 13.0
1 DN25	–	7.0	–	22.0 19.0
1 ¼ DN32	–	9.0	–	40.0 34.6
1 ½ DN40	–	11.0	–	53.0 45.8
2 DN50	9.0	26.0	112.0 96.9	66.0 57.1
DN65	16.0	–	161.0 139.3	–

⁷ Hazen-Williams coefficient of friction is 120.

6.0 NOTIFICATIONS

⚠️ WARNING



- 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.

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

NOTICE

- Victaulic does not recommend the use of any furnace butt-welded pipe with sizes NPS 2"/DN50 and smaller Victaulic gasketed joint products. This includes, but is not limited to, ASTM A53 Type F pipe.

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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