# Victaulic<sup>®</sup> Outlet Coupling Style 72





Female Threaded Outlet

Approvals/Listings



See Victaulic <u>publication 10.01</u> for details See Victaulic <u>publication 02.06</u> for portable water approvals if applicable.

### **Product Description**

Style 72 Outlet couplings are designed to serve as a joining device providing an integral reducing outlet. The coupling housing and gasket are wider than standard grooved couplings, providing space for the outlet area. When used on other than standard grooved pipe, contact Victaulic for recommendations.

The outlet gasket is designed to seal on the joined pipe ends and in the neck of the outlet. A steel ring insert reinforces the neck opening.

Style 72 Outlet Couplings are supplied with female threaded outlet connections.

Style 72 Outlet couplings are not recommended for vacuum service.

NOTE: Style 72 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).

NOTE: Style 72 Outlet couplings are designed for application to pipe and may require additional factory preparation for use with fittings. For installation onto fittings contact Victaulic.

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 Victaulic RX roll sets must be used when grooving light-wall/thin-wall stainless steel pipe for use with Victaulic Couplings.

Failure to use Victaulic RX roll sets when grooving light-wall/thin-wall stainless steel pipe may cause joint failure, resulting in serious personal injury and/or property damage.

### NOTICE

 Victaulic RX grooving rolls must be ordered separately. They are identified by a silver color and the designation RX on the front of the roll sets.

### Job/Owner

# System No. Location Contractor Submitted By Date

Spec Section	
Paragraph	
Approved	
Date	

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Engineer

### **Material Specifications**

### 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: (specify choice)

Standard: Orange enamel.

Optional: Hot dipped galvanized and others.

### Gasket: (specify choice<sup>1</sup>)

## 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 PETROLEUM 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, air with oil vapors, vegetable and mineral oils within the specified temperature range. Not compatible for hot water services over  $+150^{\circ}F/+66^{\circ}C$  or for hot dry air over  $+140^{\circ}F/+60^{\circ}C$ .

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:**

Heat-treated plated carbon steel, trackhead meeting the physical and chemical requirements of ASTM A-449 and physical requirements of ASTM A-183

### **Gasket Neck Insert:**

Carbon steel, electroplated.



### Dimensions

### Style 72



Female Threaded Outlet

Run x Reducing Outlet Nominal Size inches mm		Maximum	Allow.	<sup>4</sup> Bolt/Nut <sup>5</sup> (No.) size inches	Dimensions						
			Pipe End Separation <sup>4</sup>		T <sup>6</sup> inches mm	<b>۷</b> <sup>7</sup> inches mm	<b>X</b> inches mm	Y inches mm	<b>Z</b> inches mm	Weight Each Ibs. kg	
			inches mm								
1½ 40	x	½ 15	500 3450	0.75–0.88 19–22	2- 3% x 2	2.06 52	2.63 67	2.94 75	4.50 114	2.75 70	1.4 0.6
	<sup>3</sup> ⁄ <sub>4</sub> 20	500 3450	0.75–0.88 19–22	2− ¾ x 2	2.06 52	2.63 67	2.94 75	4.50 114	2.75 70	1.4 0.6	
	-	1 25	500 3450	0.75–0.88 19–22	2– ⅔ x 2	1.94 49	2.63 67	2.94 75	4.50 114	2.75 70	1.4 0.6
2 50	х	½ 15	500 3450	0.81–0.88 20–22	2− ¾ x 2	2.47 63	3.03 77	3.38 86	5.00 127	2.75 70	3.5 1.6
	-	<sup>3</sup> ⁄ <sub>4</sub> 20	500 3450	0.81–0.88 20–22	2 3⁄8 x 2	2.47 63	3.03 77	3.38 86	5.00 127	2.75 70	2.5 1.1
		1 25	500 3450	0.81–0.88 20–22	2− ¾ x 2	2.34 60	3.03 77	3.38 86	5.00 127	2.75 70	2.5 1.1
2½ 65	х	½ 15	500 3450	0.81–0.88 20–22	2- ½ x 2¾	2.56 65	3.13 79	3.88 98	6.00 152	2.75 70	4.5 2.0
	<sup>3</sup> ⁄4 20	500 3450	0.81–0.88 20–22	2− ½ x 2¾	2.56 65	3.13 79	3.88 98	6.00 152	2.75 70	4.6 2.1	
		1 25	500 3450	0.81–0.88 20–22	2- ½ x 2¾	2.44 62	3.13 79	3.88 98	6.00 152	2.75 70	4.6 2.1
		1¼ 32	500 3450	1.25–1.50 32–38	2- 5% x 31⁄4	3.00 76	3.69 94	4.06 103	6.88 175	3.25 83	5.0 2.3
		1½ 40	500 3450	1.25–1.50 32–38	2- 5% x 31⁄4	-	3.69 94	4.06 103	6.88 175	3.25 83	5.0 2.3
3 80	х	<sup>3</sup> ⁄ <sub>4</sub> 20	500 3450	0.50–0.63 13–16	2- ½ x 2½	2.75 70	3.31 84	4.50 114	7.00 178	2.38 60	3.4 1.5
	_	1 25	500 3450	1.25–1.50 32–38	2- 5% x 31⁄4	4.06 103	4.75 121	4.75 121	8.00 203	3.25 83	7.0 3.2
		1¼ 32	500 3450	1.25–1.50 32–38	2- 5% x 31⁄4	4.06 103	4.75 121	4.75 121	8.00 203	3.25 83	7.0 3.2
		1½ 40	500 3450	1.25–1.50 32–38	2- 5% x 31⁄4	_	4.25 108	4.75 121	8.00 203	3.25 83	7.0 3.2
4 x 100 <sup>x</sup>	x	<sup>3</sup> ⁄4 20	500 3450	0.44–0.63 11–16	2- ½ x 2½	3.25 83	3.81 97	5.69 145	8.38 213	2.50 64	6.8 3.1
	-	1 25	500 3450	0.44–0.63 11–16	2- ½ x 2½	-	3.81 97	5.69 145	8.38 213	2.50 64	11.4 3.1
		1½ 40	400 2750	1.63–1.81 41–46	2- 5% x 31⁄4	3.91 99	4.59 117	6.13 156	9.00 229	3.69 94	11.4 5.2
	-	2 50	400 2750	1.63–1.81 41–46	2 5⁄8 x 31⁄4	-	4.59 117	6.13 156	9.00 229	3.69 94	18.0 5.2

2 No. 60 Cap is not for use in vacuum services with Style 72 or 750 couplings. No. 61 Bull Plug should be used.

3 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.

4 Allowable Pipe End Separation and Deflection 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 34 – 3 ½"/20 – 90 mm; 25% for 4"/100 mm and larger.

5 Number of bolts required equals number of housing segments.

6 Center of run to end of fittings.

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

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Female Threaded Outlet

Run x Reducing Outlet		Maximum	Allow.			Approx.					
No	Nominal Size		WorkingPipe EndPressure 2 3Separation 4		Bolt/Nut ⁵	<b>T</b> 6	V 7	x	Y	z	Weight Each
	inches		psi	inches		inches	inches	inches	inches	inches	lbs.
	mm		kPa	mm	(No.) size inches	mm	mm	mm	mm	mm	kg
6		1	400	1.63-1.81	2 - 3/ + 41/	6.19	6.88	8.13	12.00	3.69	18.0
150	х	25	2750	41–46	2- <sup>3</sup> ⁄ <sub>4</sub> x 4 <sup>1</sup> ⁄ <sub>4</sub>	157	175	206	305	94	8.2
	_	1½	400	1.63-1.81	2 - 3/ + 41/	6.19	6.88	8.13	12.00	3.69	18.0
		40	2750	41–46	2- <sup>3</sup> ⁄ <sub>4</sub> x 4 <sup>1</sup> ⁄ <sub>4</sub>	157	175	206	305	94	8.2
	_	2	400	1.63-1.81	2 3/ 41/		6.06	8.13	12.00	3.69	18.0
		50	2750	41–46	2- <sup>3</sup> ⁄ <sub>4</sub> x 4 <sup>1</sup> ⁄ <sub>4</sub>	_	154	206	305	94	8.2

2 No. 60 Cap is not for use in vacuum services with Style 72 or 750 couplings. No. 61 Bull Plug should be used.

3 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.

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5 Number of bolts required equals number of housing segments.

6 Center of run to end of fittings.

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

### **General Notes**

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.

WARNING: FOR ONE TIME FIELD TEST ONLY, the Maximum Joint Working Pressure may be increased to 11/2 times the figures shown.



### Performance

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

### Formulas for Cv/kv values:

$\Delta P = Q^2$	Where:
C 2	Q = Flow (GPM)
	$\Delta P = Pressure Drop (psi)$
$Q = C_v \times \sqrt{\Delta P}$	$C_v = Flow Coefficient$

Outlet Size Nominal Diameter	Equivalent Length of 1 in. Schedule 40 Steel Pipe (per UL 213, SECTION 16)	Cv/Kv Values
inches mm	(C=120) <sup>7</sup> , FT	inches mm
½ 15	-	5 4.3
<sup>3</sup> ⁄4 20	_	15 13.0
1 25	7.0	22 19.1
1¼ 32	9.0	40 34.6
1½ 40	11.0	53 45.6
2 50	26.0	66 56.6

8 Hazen-Williams coefficient of friction is 120.

Installation

Reference should always be made to the I-100 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.

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.

### Trademarks

Victaulic® is a registered trademark of Victaulic Company.

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