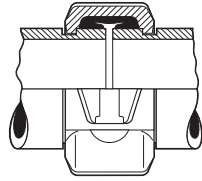


# Victaulic® Flexible Coupling

## Style 75



1 – 8"/DN25 – DN200



*Exaggerated for clarity*

### 1.0 PRODUCT DESCRIPTION

#### Available Sizes

- 1 – 8"/DN25 – DN200

#### Pipe Material

- Carbon steel
- Stainless steel
- For exceptions see section 6.0 Notifications

#### Maximum Working Pressure

- Accommodates pressures ranging from full vacuum (29.9 in Hg/760 mm Hg) up to 500 psi/3447 kPa/34 bar
- Working pressure dependent on material, wall thickness and size of pipe

#### Application

- Joins standard roll grooved and cut grooved pipe, as well as grooved fittings, valves and accessories
- Provides a flexible pipe joint which allows for expansion, contraction and deflection
- Up to 50% lighter in weight than standard Victaulic Style 77 or Style 177N flexible couplings

### 2.0 CERTIFICATION/LISTINGS



#### NOTES

- Download [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

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**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 for other coatings.

**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 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, air with oil vapors, vegetable and mineral oils within the specified temperature range; not compatible for hot dry air over +140°F/+60°C and water over +150°F/+66°C. NOT COMPATIBLE FOR USE WITH HOT WATER.

**Others**

For alternate gasket selection, reference [publication 05.01](#): Victaulic Seal Selection Guide - Elastomeric Seal Construction.

<sup>1</sup> 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 choice<sup>2</sup>)**

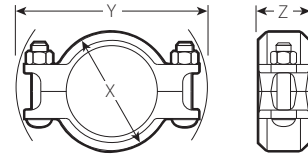
Standard: Carbon steel oval neck track bolts meeting the mechanical property requirements of ASTM A449 (imperial) and ISO 898-1 Class 9.8 (M10-M16) Class 8.8 (M20 and greater). Carbon steel hex nuts meeting the mechanical property requirements of ASTM A563 Grade B (imperial - Heavy Hex nuts) and ASTM 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.

<sup>2</sup> Optional bolts/nuts are available in imperial sizes only.

## 4.0 DIMENSIONS

### Style 75 Flexible Coupling



Size		Pipe End Separation <sup>3</sup>	Deflection from Centerline <sup>3</sup>		Bolt/Nut		Dimensions			Weight
Nominal inches DN	Actual Outside Diameter inches mm	Allowable inches mm	Per Cplg. Degrees	Pipe inches/ft. mm/m	Qty.	Size imperial metric	X inches mm	Y inches mm	Z inches mm	Approx. (Each) lb kg
1 DN25	1.315 33.7	0-0.06 0-1.6	2°-43'	0.57 48	2	⅝ x 2 M10 x 51	2.38 61	4.27 108	1.77 45	1.3 0.6
1 ¼ DN32	1.660 42.4	0-0.06 0-1.6	2°-10'	0.45 38	2	⅝ x 2 M10 x 51	2.68 68	4.61 117	1.77 45	1.4 0.6
1 ½ DN40	1.900 48.3	0-0.06 0-1.6	1°-56'	0.40 33	2	⅝ x 2 M10 x 51	2.91 74	4.82 122	1.77 45	1.5 0.6
2 DN50	2.375 60.3	0-0.06 0-1.6	1°-31'	0.32 26	2	⅝ x 2 M10 x 51	3.43 87	5.22 133	1.88 48	1.7 0.8
2 ½	2.875 73.0	0-0.06 0-1.6	1°-15'	0.26 22	2	⅝ x 2 M10 x 51	3.88 98	5.68 144	1.88 48	1.9 0.9
DN65	3.000 76.1	0-0.06 0-1.6	1°-12'	0.26 22	2	⅝ x 2 M10 x 51	4.00 102	5.90 150	1.88 48	1.9 0.9
3 DN80	3.500 88.9	0-0.06 0-1.6	1°-2'	0.22 18	2	½ x 2 ¾ M12 x 70	4.50 114	7.00 178	1.88 48	2.9 1.3
3 ½ DN90	4.000 101.6	0-0.06 0-1.6	0°-54'	0.19 16	2	½ x 2 ¾ M12 x 70	5.00 127	7.50 191	1.88 48	2.9 1.3
4 DN100	4.500 114.3	0-0.13 0-3.2	1°-36'	0.34 28	2	½ x 2 ¾ M12 x 70	5.80 147	8.03 204	2.13 54	4.1 1.9
	4.250 108.0	0-0.13 0-3.2	1°-41'	0.35 29	2	½ x 2 ¾ M12 x 70	5.55 141	7.79 198	2.13 54	3.7 1.7
	5.000 127.0	0-0.13 0-3.2	1°-26'	0.25 21	2	⅝ x 3 ¼ M16 x 83	6.13 156	9.43 240	2.13 54	5.5 2.5
	5.250 133.0	0-0.13 0-3.2	1°-21'	0.28 24	2	⅝ x 3 ¼ M16 x 83	6.55 166	9.37 238	2.13 54	6.0 2.7
DN125	5.500 139.7	0-0.13 0-3.2	1°-18'	0.28 24	2	⅝ x 3 ¼ M16 x 83	6.80 173	9.59 244	2.13 54	6.3 2.9
5	5.563 141.3	0-0.13 0-3.2	1°-18'	0.27 23	2	⅝ x 3 ¼ M16 x 83	6.88 175	10.07 256	2.13 54	5.8 2.6
	6.000 152.4	0-0.13 0-3.2	1°-12'	0.21 18	2	⅝ x 3 ¼ M16 x 83	7.38 187	10.48 266	1.88 48	6.2 2.8
	6.250 159.0	0-0.13 0-3.2	1°-9'	0.24 20	2	⅝ x 3 ¼ M16 x 83	7.63 194	10.49 266	2.13 54	6.8 3.1
	6.500 165.1	0-0.13 0-3.2	1°-7'	0.23 58	2	⅝ x 3 ¼ M16 x 83	7.84 199	10.66 271	2.08 53	6.6 3.0
6 DN150	6.625 168.3	0-0.13 0-3.2	1°-5'	0.23 18	2	⅝ x 3 ¼ M16 x 83	8.00 203	11.07 281	2.13 54	7.0 3.2
200A <sup>4</sup>	216.3	0-0.13 0-3.2	0°-51'	0.18 46	2	¾ x 4 ¼ M20 x 108	10.19 259	13.75 350	2.32 59	13.2 6.0
8 DN200	8.625 219.1	0-0.13 0-3.2	0°-50'	0.18 14	2	¾ x 4 ¼ M20 x 108	10.34 263	13.97 355	2.13 59	12.4 5.6

<sup>3</sup> 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 ¾ - 3 ½"/DN20 - DN90; 25% for 4"/DN100 and larger.

<sup>4</sup> Japanese Industrial Standard (JIS) size

#### NOTE

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

## 5.0 PERFORMANCE

### Style 75 Flexible Coupling

Size		Maximum Working Pressure <sup>5</sup>	Maximum End Load <sup>5</sup>
Nominal inches DN	Actual Outside Diameter inches mm		
1 DN25	1.315 33.7	500 3447	680 3025
1 ¼ DN32	1.660 42.4	500 3447	1080 4805
1 ½ DN40	1.900 48.3	500 3447	1420 6320
2 DN50	2.375 60.3	500 3447	2215 9860
2 ½	2.875 73.0	500 3447	3245 14440
DN65	3.000 76.1	500 3447	3535 15730
3 DN80	3.500 88.9	500 3447	4800 21360
3 ½ DN90	4.000 101.6	500 3447	6300 28035
4 DN100	4.500 114.3	500 3447	7950 35380
	4.250 108.0	450 3103	6380 28395
	5.000 127.0	450 3103	8820 39250
	5.250 133.0	450 3103	9735 43325
DN125	5.500 139.7	450 3103	10665 47460
5	5.563 141.3	450 3103	10935 48660
	6.000 152.4	450 3103	12735 56670
	6.250 159.0	450 3103	13800 61405
6 DN150	6.625 168.3	450 3103	15525 69085
	6.500 165.1	450 3103	14930 66412
200A <sup>4</sup>	216.3	450 3103	25625 113986
8 DN200	8.625 219.1	450 3103	26280 116945

<sup>4</sup> Japanese Industrial Standard (JIS) size

<sup>5</sup> Working Pressure and End Load are total, from all internal and external loads, based on ANSI B36.10 sized carbon steel pipe, grooved in accordance with Victaulic specifications. Contact Victaulic for performance on other pipe.

**NOTE**

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

## 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 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.

### 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 - Elastomeric Seal Construction](#)

[06.15: Victaulic Pressure Ratings and End Loads for Victaulic Couplings on Steel Pipe](#)

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

[17.01: Victaulic Pipe Preparation for Use on Stainless Steel Pipe With Victaulic Products](#)

[17.09: Victaulic Ductile Iron Grooved Couplings Performance Data for Stainless Steel Pipe](#)

[25.01: Victaulic Standard Groove Specifications](#)

[26.01: Victaulic Design Data](#)

[29.01: Victaulic Terms and Conditions of Sale](#)

[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](http://www.victaulic.com).

### Warranty

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

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