Victaulic® Composite Flexible Coupling
Style 171

06.22



Patented

1.0 PRODUCT DESCRIPTION

Available Sizes

- 1 ½ – 4"/DN40 – DN100

Maximum Working Pressure

- Accommodates pressures ranging from full vacuum (29.9 in Hg/760 mm Hg) up to 150 psi/1034 kPa/10 Bar

Operating Temperature

- +33°F/+1°C to +130°F/+54°C

Application

- Designed for use in corrosive applications
- Utilizes Installation-Ready™ technology
- Provides a flexible pipe joint which allows for expansion, contraction and deflection

2.0 CERTIFICATION/LISTINGS

Not applicable – contact Victaulic with any questions.

3.0 SPECIFICATIONS – MATERIAL

Housing: Injection Molded Engineered Composite

Gasket: (specify choice[1])

☐ **Grade "E" EPDM**
(Green Stripe color code). UL classified in accordance with ANSI/NSF 61 for cold+86°F/+30°C potable water service. NOT RECOMMENDED FOR PETROLEUM SERVICES

☐ **Grade "E2" EPDM**
(Double Green Stripe color code). UL classified in accordance with ANSI/NSF 61 for cold+86°F/+30°C potable water service. NOT RECOMMENDED FOR PETROLEUM 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:

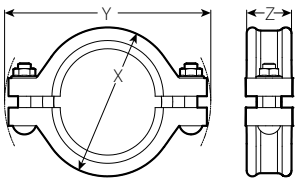
- ASTM F-593 Group 2 (316 stainless steel) track bolts with special anti-galling coating and ASTM F-594 (316 stainless steel) flange nuts.

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

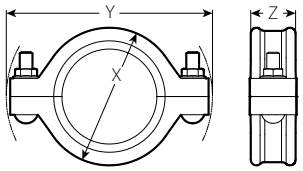
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4.0 DIMENSIONS

Style 171



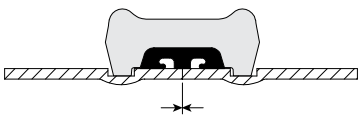
Style 171 Pre-Assembled
(Installation-Ready Condition)



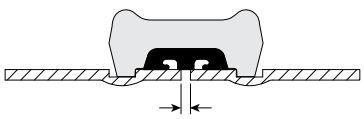
Style 171 Joint Assembled

Size		Pipe End Separation		Bolt/Nut		Dimensions						Weight
						Pre-assembled (Installation-Ready™ condition)			Joint Assembled			
Nominal inches DN	Actual Outside Diameter inches mm	(1) Min inches mm	(2) Max inches mm	Qty.	Size inches	X inches mm	Y inches mm	Z inches mm	X inches mm	Y inches mm	Z inches mm	Approximate (Each) lb kg
1 ½ 40	1.900 48.3	0.00	0.06 1.6	⅜	16 x 2 ¼	3.73 95	5.24 132	1.91 48	3.31 84	5.24 133	1.91 48	0.79 0.36
2 50	2.375 60.3	0.00	0.06 1.6	⅜	16 x 2 ½	4.28 109	5.84 148	1.93 49	3.86 98	6.09 155	1.93 49	0.93 0.42
2 ½ 65	2.875 73.0	0.00	0.06 1.6	⅜	16 x 2 ½	4.87 124	6.25 159	1.92 49	4.37 111	6.50 165	1.92 49	1.04 0.47
3 80	3.500 88.9	0.00	0.06 1.6	½	13 x 2 ¾	5.68 144	7.46 189	2.01 51	5.09 129	7.58 193	2.01 51	1.55 0.70
4 100	4.500 114.3	0.00	0.13 3.2	½	13 x 3	6.86 174	8.74 222	2.13 54	6.08 154	8.78 223	2.13 54	1.64 0.74

Maximum pipe end separation to be used for determining overall piping system movement for roll or cut groove pipe. For design and installation purposes, the minimum and maximum pipe end separations shall be reduced to the values as indicated in the table below. These design and installation considerations include thermal growth, settlement, installation misalignment and offsets. See illustrations below.



Minimum Pipe Separation (1)
Roll and Cut Groove



Maximum Pipe Separation (2)
Roll and Cut Groove

Design and Installation

The amount of linear movement and angular deflection to be used for design and installation consideration for each coupling is illustrated below.

Size Range inches DN	Design and Installation Values Roll Groove and Cut Grooved Pipe Linear Movement[2] per Coupling inches mm	Joint Deflection[2] Angle at Coupling degrees per coupling	Slope of Pipe inches/ft mm/m
1 ½ 40	0.06 1.6	1.81°	0.38 32
2 50	0.06 1.6	1.52°	0.32 26
2 ½ 65	0.06 1.6	1.25°	0.26 22
3 80	0.06 1.6	1.03°	0.22 18
4 100	0.13 3.2	1.60°	0.34 28

[2] Victaulic recommends, for design and installation purposes, these values should be reduced by 50% for 1½ – 3"/40 – 80 mm sizes; 25% for 4"/100 mm and larger sizes.

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5.0 PERFORMANCE

ANSI Standard

Size		Schedules 40 – PVC			Sch. 10 – Carbon Steel		
Nominal inches DN	Actual Outside Diameter inches mm	Wall Thickness inches mm	Maximum Joint Working Pressure psi kPa	Maximum Permissable End Load lbs N	Wall Thickness inches mm	Maximum Joint Working Pressure psi kPa	Maximum Permissable End Load lbs N
1 ½ 40	1.9 48.3	0.145 3.683	150 1034	425 1892	0.109 2.769	150 1034	425 1892
2 50	2.375 60.3	0.154 3.912	150 1034	665 2956	0.109 2.769	150 1034	665 2956
2 ½ 65	2.875 73	0.203 5.2	150 1034	974 4332	0.12 3.048	150 1034	974 4332
3 80	3.5 88.9	0.216 5.486	150 1034	1443 6420	0.12 3.048	150 1034	1443 6420
4 100	4.5 114.3	0.237 6.02	150 1034	2386 10612	0.12 3.048	150 1034	2386 10612

WARNING

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

6.0 NOTIFICATIONS

⚠ WARNING



- **Read and understand all instructions before attempting to install any Victaulic 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.**
- **Confirm that any equipment, branch lines, or sections of piping that may have been isolated for/during testing or due to valve closures/positioning are identified, depressurized, and drained immediately prior to installation, removal, adjustment, or maintenance of any Victaulic products.**
- **Always read and follow the I-ENDCAP, Victaulic End Cap Installation Safety Instructions, which can be downloaded at Victaulic.com.**
- **Wear safety glasses, hardhat, foot protection, and hearing protection.**

Failure to follow these instructions could compromise system integrity or cause system failure, resulting in death or serious personal injury and property damage.

7.0 REFERENCE MATERIALS

05.01: Seal Selection Guide

29.01: Terms and Conditions

I-171: Composite Flexible Coupling Installation Instructions

I-ENDCAP: Victaulic End Caps Installation Instructions

User Responsibility for Product Selection and Suitability

Each user bears final responsibility for determining the suitability of Victaulic products for their end-use application, in accordance with industry standards, project specifications, and Victaulic's published performance, maintenance, and safety data, as well as all warnings and installation 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, warranty, installation instructions, or this disclaimer.

Installation

Always refer to and follow the Victaulic Installation Handbook or installation instructions for 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 victaulic.com.

Warranty

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

Intellectual Property Rights

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Note

All products bearing a Victaulic trademark are manufactured by Victaulic or to Victaulic specifications. All products are to be installed only in accordance with the applicable Victaulic installation instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

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