Composite Flexible Coupling Style 171





Patent Pending

1.0 PRODUCT DESCRIPTION

Available Sizes

• 1¹/₂ - 4"/DN40 - DN100

Maximum Working Pressure

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

Operating Temperature

• +33°F/+1°C to +130°F/+54°C.

Function

- Designed for use in corrosive applications.
- Utilizes patented 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:

Grade "E" EPDM¹

(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 <u>Victaulic Gasket Selection Guide</u> 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.

System No.	Location	Spec Section	Paragraph	
Submitted By	Date	Approved	Date	

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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		
	Actual Outside	(1)	(2)			P (Inst	re-assemble allation-Rea condition)	ed ady™	Joint Assembled			Approximate
Nominal	Diameter	Min	Max	Qty.	Size	Х	Y	Z	Х	Y	Z	(Each)
inches DN	inches mm	inches mm	inches mm		inches	inches mm	inches mm	inches mm	inches mm	inches mm	inches mm	lb kg
1 ½ 40	1.900 48.3	0.00	0.06 1.6	3⁄8	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	3⁄8	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	3⁄8	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	1⁄2	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	1⁄2	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

(2 & 3) Maximum pipe end separation to be used for determining overall piping system movement for roll (2) or cut (3) 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.

	Design and Installation Values Roll Groove and Cut Grooved Pipe						
Size							
Range	Linear Movement ²	Angular Deflection ²					
inches DN	inches mm	Per Cplg. Deg.	Pipe In/Ft mm/m.				
1 ½	0.06	1.81°	0.38				
40	1.6		32				
2	0.06	1.52°	0.32				
50	1.6		26				
2½	0.06	1.25°	0.26				
65	1.6		22				
3	0.06	1.03°	0.22				
80	1.6		18				
4	0.13	1.60°	0.34				
100	3.2		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

Si	ze	5	Schedules 40 – PV	C	Sch. 10 – Carbon Steel			
Nominal	Actual Outside Diameter	Wall Thickness	Maximum Joint Working Pressure	Maximum Permissable End Load	Wall Thickness	Maximum Joint Working Pressure	Maximum Permissable End Load	
inches	inches	inches	psi	Lbs	inches	psi	Lbs	
DN	mm	mm	kPa	N	mm	kPa	N	
1	1.315	0.133	150	204	0.109	150	204	
25	33.4	3.378	1034	906	2.769	1034	906	
1 1⁄2	1.9	0.145	150	425	0.109	150	425	
40	48.3	3.683	1034	1892	2.769	1034	1892	
2	2.375	0.154	150	665	0.109	150	665	
50	60.3	3.912	1034	2956	2.769	1034	2956	
2 1/2	2.875	0.203	150	974	0.12	150	974	
65	73	5.2	1034	4332	3.048	1034	4332	
3	3.5	0.216	150	1443	0.12	150	1443	
80	88.9	5.486	1034	6420	3.048	1034	6420	
4	4.5	0.237	150	2386	0.12	150	2386	
100	114.3	6.02	1034	10612	3.048	1034	10612	

WARNING

• Depressurize and drain the piping system before attempting to install, remove or adjust any Victaulic piping products.

6.0 NOTIFICATIONS

Not applicable – contact Victaulic with any questions.

7.0 REFERENCE MATERIALS

05.01: Seal Selection Guide

29.01: Terms and Conditions

I-100: Field Installation Handbook

I-ENDCAP: Victaulic End Caps Installation 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 Pofor t

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