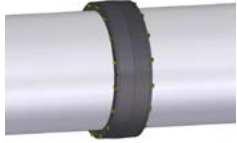


Expansion Joint Coupling Style 152A



Patented

1.0 PRODUCT DESCRIPTION

Available Sizes

- 10 – 30"/DN250 – 780 mm

Maximum Working Pressure

- Up to 50 psi/345 kPa

Application

- Provides a flexible pipe joint which allows for expansion, contraction and deflection

Pipe Material

- Carbon steel

Codes and Requirements

- Support hanger spacing correspond to ASME B31.1 Power Piping Code and ASME B31.9 Building Services Piping Code.

NOTES

- Useful in coupling pipe to ceramic lined elbows.
- Designed to be used in industrial applications such as new or retrofit coal-fired electric generation facilities and bridges that require a coupling with this level of angular deflection and/or expansion/contraction capabilities.
- Pipe ends only need to be separated 5/8"/16 mm to replace seals
- 4° Maximum Angular deflection

2.0 CERTIFICATION/LISTINGS

Product designed and manufactured under the Victaulic Quality Management System, as certified by LPCB in accordance with ISO-9001:2008.

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

Housing: Ductile iron conforming to ASTM A536, Grade 65-45-12 or carbon steel conforming to ASTM A105. Ductile iron conforming to ASTM A395, Grade 65-45-15, is available upon special request.

Housing Coating: Polyphenylene sulfide blend (PPS) heat fused, prime and top coats.

End Retainer: Ductile iron or carbon steel.

End Retainer Coating: Black enamel.

Vic-Ring: Carbon steel.

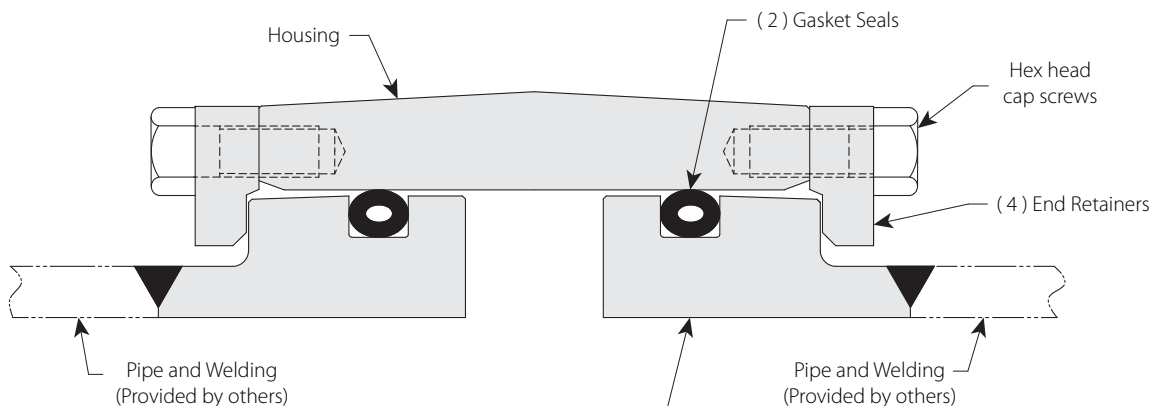
Bolts: Heat-treated plated carbon steel, SAE Grade 8, yellow zinc electro-plated.

Gasket/Seal

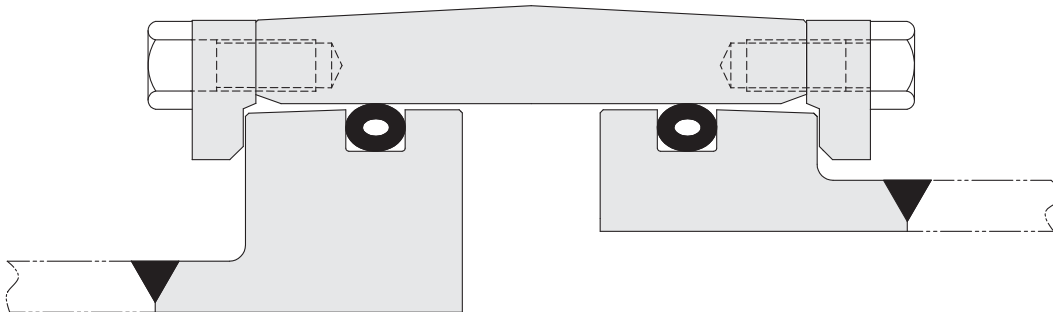
Victaulic Silicone

Silicone (light gray color code). Temperature range -30°F to +300°F/-34°C to +149°C. May be specified for dry heat, air without hydrocarbons and certain chemicals within the specified temperature range.

Nomenclature:

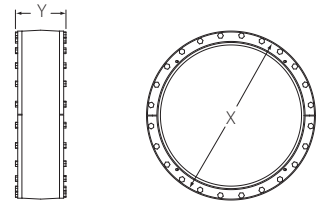


Can be ordered with *Vic-Ring* that permits joining of pipe and fittings each with a different outside diameter. See illustration below.



4.0 DIMENSIONS

Style 152A



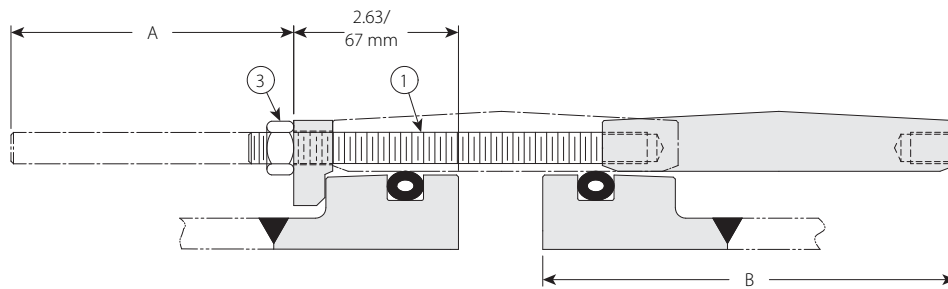
Typical for all sizes

Size		Bolt/Nut		Dimensions		Weight
Nominal inches DN	Actual Outside Diameter inches mm	Qty. No.	Bolt Size and Length inches	X inches mm	Y inches mm	Approximate (Each) lb kg
10 DN250	10.750 273.0	28	½ – 13 x 1 ½	14.25 362	6.94 176	117 53.1
12 DN300	12.750 323.9	32	½ – 13 x 1 ½	16.25 413	7.06 179	133 60.3
14 DN350	14.000 355.6	32	½ – 13 x 1 ½	17.50 445	7.19 183	147 66.7
16 DN400	16.000 406.4	36	½ – 13 x 1 ½	19.50 495	7.25 184	168 76.2
18 DN450	18.000 457.2	40	½ – 13 x 1 ½	21.50 546	7.38 187	190 86.2
	480.0	40	½ – 13 x 1 ½	22.31 567	7.44 189	203 92.1
20 DN500	20.000 508.0	44	½ – 13 x 1 ½	23.50 597	7.50 191	213 97.7
	530.0	44	½ – 13 x 1 ½	24.75 628	7.57 192	225 102.1
22 DN550	22.000 559.0	48	½ – 13 x 1 ½	25.50 648	7.62 194	236 107.0
	580.0	48	½ – 13 x 1 ½	26.38 670	7.70 196	245 111.2
24 DN600	24.000 609.6	52	½ – 13 x 1 ½	27.50 698	7.75 197	257 116.6
	630.0	52	½ – 13 x 1 ½	28.31 719	7.82 199	268 121.6
26 DN650	26.000 660.4	56	½ – 13 x 1 ½	29.50 749	7.88 200	281 127.5
	680.0	56	½ – 13 x 1 ½	30.50 775	7.94 201	293 132.9
27	27.000 685.8	56	½ – 13 x 1 ½	30.50 775	8.00 203	257 116.6
28 DN700	28.000 711.2	60	½ – 13 x 1 ½	31.50 800	8.00 203	305 138.3
30 DN750	30.000 762.0	64	½ – 13 x 1 ½	33.50 851	8.12 206	329 149.2
	780.0	64	½ – 13 x 1 ½	34.25 870	8.23 209	350 158.8

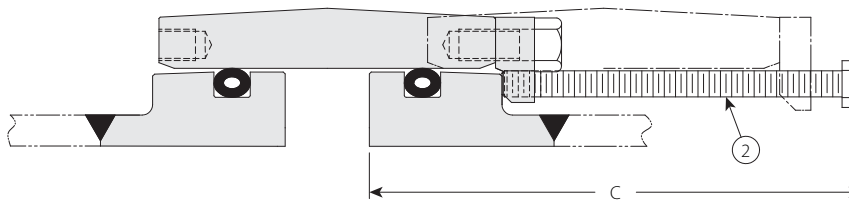
4.1 DIMENSIONS

Assembly/Dis-assembly

Size		Dimensions			Size		Dimensions		
Nominal inches DN	Actual Outside Diameter inches mm	A inches mm	B inches mm	C inches mm	Nominal inches mm	Actual Outside Diameter inches mm	A inches mm	B inches mm	C inches mm
10 DN250	10.750 273.0	6.50 165	6.13 156	8.88 226		580.0	7.00 178	6.88 175	8.88 226
12 DN300	12.750 323.9	6.50 165	6.25 159	8.88 226	24 DN600	24.000 609.6	7.00 178	7.00 178	8.88 226
14 DN350	14.000 355.6	6.50 165	6.38 162	8.88 226		630.0	7.00 178	7.00 178	8.88 226
16 DN400	16.000 406.4	6.50 165	6.50 165	8.88 226	26 DN650	26.000 660.4	7.50 190	7.13 181	8.88 226
18 DN450	18.000 457.2	6.50 165	6.63 168	8.88 226		680.0	7.50 190	7.13 181	8.88 226
	480.0	7.00 178	6.75 171	8.88 226	27	27.000 685.8	7.50 190	7.25 184	8.88 226
20 DN500	20.000 508.0	7.00 178	6.75 171	8.88 226	28 DN700	28.000 711.2	7.50 190	7.25 184	8.88 226
	530.0	7.00 178	6.88 175	8.88 226	30 DN750	30.000 762.0	7.50 190	7.38 187	8.88 226
22 DN550	22.000 559.0	7.00 178	6.88 175	8.88 226		780.0	7.50 190	7.50 190	8.88 226



Expansion Joint Coupling Field Assembly Clearance Requirements



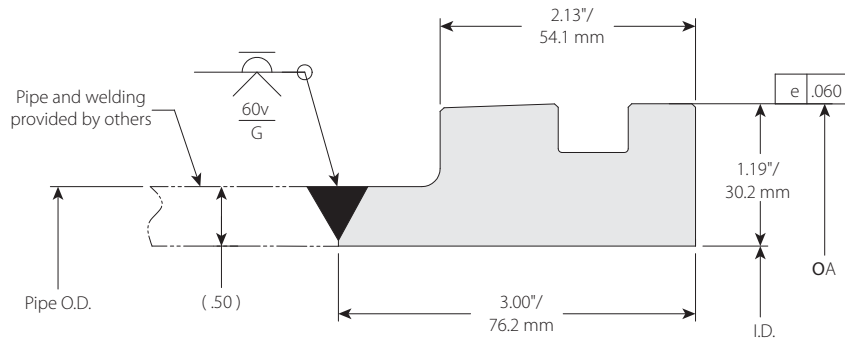
Expansion Joint Coupling Field Dis-Assembly Clearance Requirements

Installation Kit Hardware (appropriate size complete hardware kit provided with each coupling order)

Bill of Material		Quantity/Size/Length							
Item	Description	Qty	10-12"	Qty	14-18"	Qty	480mm-24"	Qty	630mm-780mm
1	Threaded Rod, 1/2" - 13UNC	4	6-1/2" Lg 165mm	6	6-1/2" Lg 165mm	6	7" Lg 178mm	6	7-1/2" Lg 191mm
2	Hex Head Bolt, fully threaded 3/8" - 16UNC	4	6" Lg 152mm	4	6" Lg 152mm	4	6" Lg 152mm	4	6" Lg 152mm
3	Hex Nut, 1/2" - 13UNC	4	-	6	-	6	-	6	-

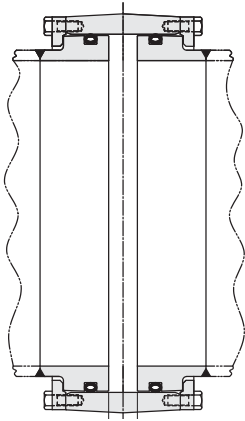
4.2 DIMENSIONS

Vic-Ring Weld Detail

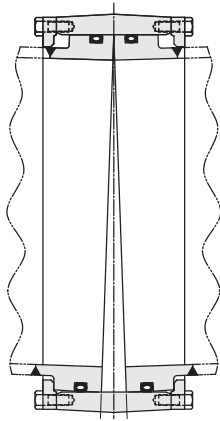


Size		Dimensions		Size		Dimensions	
Nominal inches DN	Actual Outside Diameter inches mm	A inches mm		Nominal inches DN	Actual Outside Diameter inches mm	A inches mm	
10 DN250	10.750 273.0	12.13 308.1			580.0		
12 DN300	12.750 323.9	14.13 358.9		24 DN600	24.000 609.6	25.38 644.7	
14 DN350	14.000 355.6	15.38 390.7			630.0	26.18 665.0	
16 DN400	16.000 406.4	17.38 441.5		26 DN650	26.000 660.4	27.38 695.5	
18 DN450	18.000 457.2	19.38 492.3			680.0	28.15 715.0	
	480.0	20.28 515.1		27	27.000 685.8	28.38 720.9	
20 DN500	20.000 508.0	21.38 543.1		28 DN700	28.000 711.2	29.38 746.3	
	530.0	22.25 565.2		30 DN750	30.000 762.0	31.38 797.1	
22 DN550	22.000 559.0	23.38 593.9			780.0	32.09 815.1	

5.0 PERFORMANCE



Maximum Separation
Expansion Allowance



4° Maximum
Angular Deflection

Size		Maximum Working Pressure ¹	Maximum End Load ¹	Expansion Allow. ²	Deflection from Centerline ²	
Nominal inches DN	Actual Outside Diameter inches mm				psi kPa	lb N
10 DN250	10.750 273.0	50 345	5778 25,703	.920 23.4	4°	.838 69.8
12 DN300	12.750 323.9	50 345	7841 34,878	1.04 26.4	4°	.838 69.8
14 DN350	14.000 355.6	50 345	9289 41,322	1.10 27.9	4°	.838 69.8
16 DN400	16.000 406.4	50 345	11862 52,767	1.23 31.2	4°	.838 69.8
18 DN450	18.000 457.2	50 345	14749 65,610	1.35 34.3	4°	.838 69.8
	480.0	50 345	16151 71,845	1.34 34.0	4°	.838 69.8
20 DN500	20.000 508.0	50 345	17950 79,851	1.48 37.6	4°	.838 69.8
	530.0	50 345	19441 86,482	1.48 37.6	4°	.838 69.8
22 DN550	22.000 559.0	50 345	21466 95,489	1.60 40.6	4°	.838 69.8
	580.0	50 345	23036 102,474	1.62 41.1	4°	.838 69.8
24 DN600	24.000 609.6	50 345	25295 112,524	1.72 43.7	4°	.838 69.8
	630.0	50 345	26915 119,730	1.75 44.5	4°	.838 69.8
26 DN650	26.000 660.4	50 345	29439 130,958	1.85 47.0	4°	.838 69.8
	680.0	50 345	31118 138,427	1.90 48.3	4°	.838 69.8
27	27.000 685.8	50 345	31629 140,698	1.98 50.3	4°	.838 69.8
28 DN700	28.000 711.2	50 345	33897 150,788	1.98 50.3	4°	.838 69.8
30 DN750	30.000 762.0	50 345	38669 172,016	2.10 53.3	4°	.838 69.8
	780.0	50 345	40439 179,888	2.18 55.4	4°	.838 69.8

¹ Working Pressure and End Load are total from all internal and external loads.

² Allowable Pipe End Separation and Deflection figures show the maximum nominal range of movement available at each joint. Maximum allowable linear movement and maximum angular deflection are not simultaneously available.

6.0 NOTIFICATIONS

 WARNING					
					
<ul style="list-style-type: none">• Read and understand all instructions before attempting to install, remove, adjust, or maintain any Victaulic piping products.• Depressurize and drain the piping system before attempting to install, remove, adjust, or maintain any Victaulic piping products.• Wear safety glasses, hardhat, and foot protection. <p>Failure to follow these instructions could result in death or serious personal injury and property damage.</p>					

7.0 REFERENCE MATERIALS

[26.01: Victaulic® Design Data](#)

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

[I-152A: Victaulic® Expansion Joint Coupling Style 152A](#)

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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