

Victaulic® Snap-Joint® Coupling

Style 78



1.0 PRODUCT DESCRIPTION

Available Sizes

- 1 – 8"/DN25 – DN200

Pipe Material

- Carbon steel
- For exceptions reference section 6.0 Notifications

NOTE

- For use on stainless steel pipe, please reference [publication 17.09](#): Victaulic Grooved Couplings Performance Data for Stainless Steel Pipe. When used on light wall stainless steel pipe, the Victaulic RX roll set must be used to roll groove the pipe. For more information regarding roll grooving stainless steel, refer to [publication 17.01](#): Victaulic Pipe Preparation for Use on Stainless Steel Pipe with Victaulic Products.

Maximum Working Pressure

- Accommodates pressures ranging from full vacuum (29.9 in Hg/760 mm Hg) up to 300 psi/2068 kPa

Operating Temperature

- Dependent on gasket selection from section 3.0

Function

- Joins carbon steel pipe
- Designed for quick disconnect service

Pipe Preparation

- Original Groove System (OGS), Cut grooved, Roll grooved

2.0 CERTIFICATION/LISTINGS



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



3.0 SPECIFICATIONS – MATERIAL

Housing: Ductile iron conforming to ASTM A-395, Grade 65-45-15 and ASTM A-536, Grade 65-45-12.

Housing Coating: (specify choice)

- ☐ Standard: Orange enamel.
- ☐ Optional: Hot dipped galvanized.

Gasket: (specify choice¹)

☐ **Grade "E" EPDM**

E (Green stripe color code). 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). May be specified for oil related services, including air with oil vapor, this gasket may be specified for temperatures rated up to +180°F/+82°C. For water related services, this gasket may be specified for temperatures rated up to +150°F/+66°C. For oil free, dry air services, this gasket may be specified for temperatures rated up to +140°F/+60°C. NOT COMPATIBLE FOR USE WITH HOT WATER SERVICES OR STEAM 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 Seal Selection Guide](#) for specific gasket service guidelines and for a listing of services which are not compatible.

Locking Handle:

- ☐ **Sizes 1 – 1½"/DN25 – DN40:** Electroplated, heat treated carbon steel, conforming to ASTM A109.
- ☐ **Sizes 2 – 4"/DN50 – DN100:** Electroplated, malleable iron conforming to ASTM A47.
- ☐ **Sizes 5 – 8"/DN125 – DN200:** Painted malleable iron conforming to ASTM A47.

Toggle Links: Electroplated hot-rolled carbon steel conforming to AISI 1010 or AISI 1020.

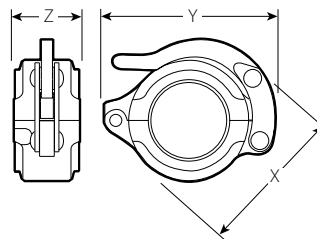
Eye Bolt Assembly: 5 – 8"/DN125 – DN200: Electroplated heat-treated carbon steel conforming to AISI C-1040.

Hinge Pin: Cold-drawn, case-hardened steel conforming to AISI C-1212.

Rivets: Cold-drawn steel conforming to AISI C-1010.

4.0 DIMENSIONS

Style 78 Snap-Joint® Coupling



Size		Pipe End Separation ²	Deflect. Fr. Cl. ²		Dimensions			Weight
Nominal inches DN	Actual Outside Diameter inches mm	Allowable inches mm	Per Cplg. Deg.	Pipe in/ft mm/m	X inches mm	Y inches mm	Z inches mm	Approximate (Each) lb kg
1 DN25	1.315 33.7	0 - 0.06 0 - 1.6	2° - 43	0.57 48	2.75 70	3.25 83	1.75 44	0.8 0.4
1 ¼ DN32	1.660 42.2	0 - 0.06 0 - 1.6	2° - 10	0.45 38	3.13 79	3.75 95	1.88 48	1.1 0.5
1 ½ DN40	1.900 48.3	0 - 0.06 0 - 1.6	1° - 56	0.40 33	3.50 89	4.50 114	1.88 48	1.7 0.8
2 DN50	2.375 60.3	0 - 0.06 0 - 1.6	1° - 31	0.32 26	4.00 102	4.75 121	1.88 48	1.7 0.8
2 ½	2.875 73.0	0 - 0.06 0 - 1.6	1° - 15	0.26 22	4.75 121	5.88 149	1.88 48	2.5 1.1
3 DN80	3.500 88.9	0 - 0.06 0 - 1.6	1° - 2	0.22 18	5.38 137	6.25 159	1.88 48	2.8 1.3
4 DN100	4.500 114.3	0 - 0.13 0 - 3.2	1° - 36	0.34 28	6.88 175	7.75 197	2.13 54	5.5 2.5
5	5.563 141.3	0 - 0.13 0 - 3.2	1° - 18	0.27 23	8.75 222	9.50 241	2.13 54	9.8 4.4
6 DN150	6.625 168.3	0 - 0.13 0 - 3.2	1° - 5	0.23 18	9.88 251	10.63 270	2.13 54	10.7 4.9
8 DN200	8.625 219.1	0 - 0.13 0 - 3.2	0° - 50	0.18 14	12.25 311	13.00 330	2.38 60	15.3 6.9

² 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 - 3½"/20 - 90 mm and 25% for 4"/100 mm and larger.

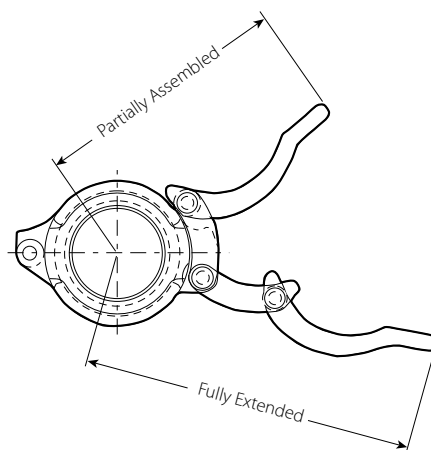
NOTE

- WARNING: Piping systems must always be depressurized and drained before attempting disassembly and removal of any Victaulic piping products.

4.1 DIMENSIONS

Style 78 Snap-Joint® Coupling

Design Considerations



Size			
Nominal		Partially Assembled	Fully Extended
inches			
mm			
1		3.38	4.50
25		85.6	114.3
1 ¼		3.80	4.88
32		96.5	123.9
1 ½		5.50	7.63
40		140.0	193.8
2		6.25	7.75
50		158.8	196.9
2 ½		7.16	10.72
65		181.9	272.3
3		7.88	10.25
80		200.1	260.4
4		10.63	12.88
100		270.0	327.2
5		13.66	16.88
125		347.0	428.7
6		14.88	18.38
150		377.9	466.8
8		15.38	18.91
200		390.6	480.3

NOTES

- Style 78 couplings are not designed for eccentric loadings.
- Style 78 couplings are not recommended for use at the end of concrete pumping booms or on vertical risers above 30 feet. Sound anchoring and lashing practices should always be employed.

5.0 PERFORMANCE

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Size		Maximum Working Pressure ³	Maximum End Load ³
Nominal inches DN	Actual Outside Diameter inches mm		
1 DN25	1.315 33.7	300 2065	410 1825
1 ¼ DN32	1.660 42.2	300 2065	650 2890
1 ½ DN40	1.900 48.3	300 2065	850 3780
2 DN50	2.375 60.3	300 2065	1,330 5920
2 ½	2.875 73.0	300 2065	1,950 8680
3 DN80	3.500 88.9	300 2065	2,885 12840
4 DN100	4.500 114.3	300 2065	4,770 21225
5	5.563 141.3	300 2065	7,290 32440
6 DN150	6.625 168.3	300 2065	10,350 46060
8 DN200	8.625 219.1	300 2065	17,500 77875

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. Maximum Working Pressure rating based on larger pipe size. Maximum End Load rating based on smaller pipe size.

NOTE

- WARNING: FOR ONE-TIME FIELD TEST ONLY, the Maximum Joint Working Pressure may be increased to 1 ½ times the figures shown.

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, 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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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 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

[05.01: Victaulic Seal Selection Guide Elastomeric Seal Construction](#)

[17.01: Victaulic Stainless Steel Pipe End Preparation](#)

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

[I-100: Victaulic Field Installation Handbook](#)

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