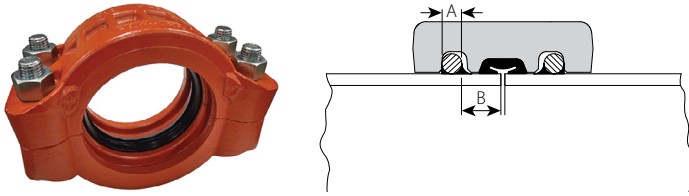


# High Pressure Coupling for Ring Systems

## Style 809



### 1.0 PRODUCT DESCRIPTION

**Available Sizes**

- 4 – 10"/100 – 250 mm

**Maximum Working Pressure**

- 3000 psi/20700 kPa on Schedule 80 or heavier carbon steel pipe.
- Contact Victaulic for use on other pipe materials or wall thicknesses.

**Application**

- Exclusively for use on Schedule 80 or heavier wall carbon steel pipe.
- This product is designed for use in high-pressure and/or hydraulic applications.

**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**

- Style 809 couplings engage directly onto rings welded to the O.D. of the pipe.
- Ring clamps are available to hold the rings in proper position to facilitate installation.

**Ring Clamps provided to hold ring in place during welding**



Ring Clamp for 10"/273mm Pipe Size

Ring Clamp for 6 – 8"/150 – 200 mm Pipe Sizes

### 2.0 CERTIFICATION/LISTINGS

Not applicable - contact Victaulic with any questions.

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 A-536, Grade 65-45-12.

**Housing Coating: (specify choice)**

Standard: Orange enamel.

Optional: Hot dipped galvanized.

Optional: Others, contact Victaulic with your requirements.

**Coupling Gasket<sup>1</sup>:**

**Grade “HMT” High Modulus Nitrile**

Specially compounded with excellent oil resistance and a high modulus for resistance to extrusion. Temperature range is -20°F to +180°F/ -29°C to +82°C. Recommended for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range. Not recommended for hot water services over +150°F/+66°C or for hot dry air over +140°F/+60°C. For maximum gasket life under pressure extremes, the temperature should be limited to +120°F/+49°C.

<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 Gasket Selection Guide](#) for specific gasket service guidelines and for a listing of services which are not compatible.

**Ring Material:** Carbon Steel AISI 1018 or equivalent.

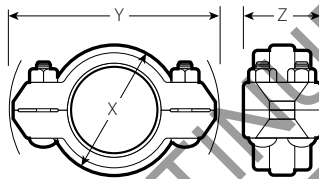
**Bolts/Nuts:**

Standard: Carbon steel oval neck track bolts meeting the mechanical property requirements of ASTM A449.

Carbon steel heavy hex nuts meeting the mechanical property requirements of ASTM A563 Grade B. Track bolts and heavy hex nuts are zinc electroplated per ASTM B633 ZN/FE5, finish Type III (imperial) or Type II (metric).

### 4.0 DIMENSIONS

**Style 809**



Typical for all sizes

Nominal Size inches DN	Actual Outside Diameter inches mm	Dimensions			Bolt/Nut		Bolt Torque lb N-m	B, C Max. Deflection From Center Line		Allow. Pipe End Separation inches mm	Approx. Weight (Each) lb kg
		X inches mm	Y inches mm	Z inches mm	Qty.	Size		Degrees Per Cplg.	In./Ft. mm/m		
4 DN100	4.500 114.3	7.04 179	9.81 249	5 127	4	¾ x 4 ¼ M20 x 108	250 339	1.55	0.326 27	0 - 0.125 3.2	30.0 13.6
6 DN150	6.625 168.3	9.75 248	12.88 327	6.38 162	4	1 x 5 M24 x 127	450 610	1.08	0.23 18	0 - 0.125 3.2	61.0 27.7
8 DN200	8.625 219.1	11.75 299	15.75 400	7.25 184	4	1 ½ x 6 M27 x 152.4	500 678	0.83	0.18 14	0 - 0.125 3.2	83.0 37.7
10 DN250	10.750 273.0	14.00 356	18.00 457	7.25 184	4	1 ½ x 6 M27 x 152.4	500 678	0.67	0.14 12	0 - 0.125 3.2	106.0 48.1

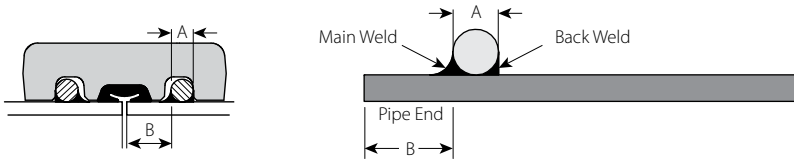
Published figures are maximum allowable deflection of pipe from centerline, subject to tolerances (see Design Data). See Note B.1

**NOTES**

- Minimum Pipe Movement will be reduced by deflection.
- Refer to Design Data for information on tolerances and pipe gap settings.

## 5.0 PERFORMANCE

### Style 809



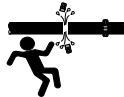
Nominal Size inches DN	Actual Outside Diameter inches mm	Nominal Steel Pipe Dimension		Maximum Joint Working Pressure psi kPa	Maximum Permiss. End Load lb N	Pipe Prep			
		Pipe Wall Thickness inches mm	ANSI Schedule			A Ring Size inches mm	B Pipe End inches mm	Main Weld Size inches mm	Back Weld Size inches mm
4 DN100	4.500 114.3	0.318 8.08	80	3000 20690	47713 212238	0.38 9.7	1.00 25.4	0.188 5	0.094 2
6 DN150	6.625 168.3	0.432 11.0	80	3000 20690	103445 460012	0.50 13	1.22 31	0.25 6	0.13 3
8 DN200	8.625 219.1	0.500 12.7	80	3000 20690	175279 779680	0.50 13	1.22 31	0.25 6	0.13 3
10 DN250	10.750 273.0	0.593 15.1	80	3000 20690	226907 1008475	0.63 16	1.22 31	0.31 8	0.16 4

#### NOTES

- Pipe wall thickness schedule as established by ASME B36.10M.
- Maximum line pressure, including surge, to which a joint shall be subjected. Working pressure ratings are based on pipe prepared in accordance with Victaulic ring specifications. Maximum allowable working pressures for other pipe schedules or grades must be determined by applicable code requirements.
- ONE TIME FIELD TEST ONLY. The Maximum Joint Working Pressure may be increased to 1 1/2 times the figures shown.
- Maximum end load from all internal and/or external forces to which the joint should be subjected under working conditions.
- The main fillet weld shall be no greater than half the ring size and the back fillet weld shall be half the main weld size. Any excess weld material at the back weld must be ground flush to the ring surface.

## 6.0 NOTIFICATIONS

### WARNING



- 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 required personal protective equipment during the welding process, and follow all jobsite regulations regarding welding safety.
- Wear safety glasses, hardhat, and foot protection during the coupling installation process.

Failure to follow these instructions could result in death or serious personal injury and property damage.

## 7.0 REFERENCE MATERIALS

[I-809: Style 809 High-Pressure Coupling for Ring Systems Installation Manual](#)

DISCONTINUED PRODUCT REPLACED BY STYLE 809N COUPLING REQUEST PUBLICATION 15.03

### 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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