# Vic-Boltless® Coupling

#### **STYLE 791**

Vic-Boltless Style 791 coupling is a one-piece hinged coupling that features locking pin installation with a separate tool (Style 792) design for assembly and disassembly. The Style 791 coupling provides a secure, tamper resistant, low profile joint.

Utilized on standard Victaulic® roll or cut grooved pipe, the one-piece housing surrounds the standard gasket and engages into the grooves. A separate lever-type assembly tool mates the open housing ends and aligns the pin holes. A single notched drive pin is set with a hammer completing installation. The assembly tool is removed.

The new pin-locking design provides pressure ratings up to 700 psi/4826 kPa (depending on size.) The notched, tapered steel pin creates a wedge-like seat in the ductile housing and resists removal without re-application of the assembly tool. Removal and re-use however, can easily be achieved with the assembly tool and a drive pin punch.

Performance data presented in this document is based on use with standard wall, carbon steel pipe. For use with stainless steel pipe, please reference document 17.09 for pressure ratings and end loads. When used on light wall stainless steel pipe, the Victaulic RX roll set must be used to roll groove the pipe. For further information regarding roll grooving stainless steel, refer to document 17.01.





#### MATERIAL SPECIFICATIONS

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

Housing Coating: Orange enamel

• Optional: Hot dipped galvanized 4"/100 mm and up only and others

#### Coupling Gasket (specify choice\*):

# • Grade "E" EPDM

EPDM (Green color code). Temperature range –30°F to +230°F/–34°C to +110°C. Recommended for cold and hot water service within the specified temperature range plus a varietyof dilute acids, oil-free air and many chemical services. UL classified in accordance with ANSI/NSF 61 for cold +86°F/+30°C and hot +180°F/+82°C potable water service. NOT RECOMMENDED FOR PETROLEUM SERVICES.

# • Grade "T" nitrile

Nitrile (Orange color code). Temperature range  $-20^{\circ}F$  to  $+180^{\circ}F/-29^{\circ}C$  to  $+82^{\circ}C$ . Recommended for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range. Not recommended for hot water services over  $+150^{\circ}F/+66^{\circ}C$ ) or for hot dry air over  $+140^{\circ}F/+60^{\circ}C$ .

\* Services listed are General Service Recommendations only. It should be noted that there are services for which these gaskets are not recommended. Reference should always be made to the latest Victaulic Gasket Selection Guide for specific gasket service recommendations and for a listing of services which are not recommended.

Hinge Pin/Locking Pin: Cold rolled steel conforming to AISI-1212, zinc electroplated.

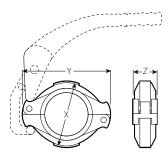
| JOB OWNER | CONTRACTOR   | ENGINEER       |
|-----------|--------------|----------------|
| System No | Submitted By | Spec Sect Para |
| Location  | Date         | Approved       |
|           |              | Date           |

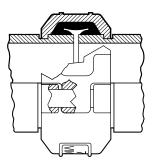


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## **DIMENSIONS**





Exaggerated for clarity

| Siz                             | ze  | Max. Work<br>Pressure * | Max. End<br>Load * | Allow. Pipe<br>End Sep. * | Deflec<br>CL         |                         | Locking<br>Pin Size        |              | imension<br>nches/mn |            | Approx.<br>Wgt.<br>Each |
|---------------------------------|---|-------------------------|--------------------|---------------------------|----------------------|-------------------------|----------------------------|--------------|----------------------|------------|-------------------------|
| Nominal<br>Size<br>Inches<br>mm | Actual<br>Outside<br>Dia.<br>Inches<br>mm | psi<br>kPa              | Lbs.<br>N          | Inches<br>mm              | Per<br>Cplg.<br>Deg. | Pipe<br>In./Ft.<br>mm/m | Dia. ×<br>Length<br>Inches | X            | Y                    | Z          | Lbs.<br>kg              |
| 2<br>50                         | 2.375<br>60.3                             | 700<br>4825             | 3,100<br>13795     | 0 – 0.06<br>0 – 1.6       | 1° - 31′             | 0.32<br>26              | 5/16 × 1 1/8               | 3.56<br>90   | 4.71<br>120          | 1.84<br>47 | 1.8<br>0.8              |
| 2½<br>65                        | 2.875<br>73.0                             | 700<br>4825             | 4,540<br>20205     | 0 – 0.06<br>0 – 1.6       | 1° - 15′             | 0.26<br>22              | ³⁄8 × 1 7⁄8                | 4.09<br>104  | 5.48<br>139          | 1.84<br>47 | 2.7<br>1.2              |
| 3<br>80                         | 3.500<br>88.9                             | 700<br>4825             | 6,730<br>29950     | 0 – 0.06<br>0 – 1.6       | 1° - 2′              | 0.22<br>18              | 3/8 × 1 7/8                | 4.72<br>120  | 6.15<br>156          | 1.84<br>47 | 2.6<br>1.2              |
| 4<br>100                        | 4.500<br>114.3                            | 700<br>4825             | 11,130<br>49530    | 0 – 0.13<br>0 – 3.2       | 1° - 36′             | 0.34<br>28              | 7/16 × 2                   | 6.06<br>154  | 7.62<br>194          | 1.93<br>49 | 4.8<br>2.2              |
| 6<br>150                        | 6.625<br>168.3                            | 600<br>4135             | 20,675<br>92005    | 0 – 0.13<br>0 – 3.2       | 1° - 5′              | 0.23<br>18              | ½ × 2½6                    | 8.24<br>209  | 10.18<br>259         | 2.06<br>51 | 6.3<br>2.9              |
| 8<br>200                        | 8.625<br>219.1                            | 500<br>3450             | 29,200<br>129940   | 0 – 0.13<br>0 – 3.2       | 0° - 50′             | 0.18<br>14              | ½ × 25/16                  | 10.52<br>267 | 12.50<br>318         | 2.31<br>59 | 12.0<br>5.4             |

Complete coupling includes one-piece hinged housing, gasket and locking pin only. Assembly Tool Style 792 is required for assembly (one tool fits all size couplings).

\* 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.

WARNING: FOR ONE TIME FIELD TEST ONLY, the Maximum Joint Working Pressure may be increased to  $1\frac{1}{2}$  times the figures shown.

\* 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; 25% for 4"/100 mm and larger.

Number of bolts required equals number of housing segments.

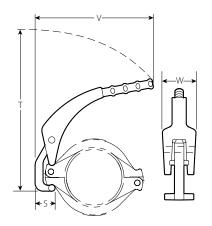
Metric thread size bolts are available (color coded gold) for all coupling sizes upon request. Contact Victaulic for details.

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

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## **DIMENSIONS**



| Size                            |  | Style 792 Tool<br>Dimensions – Inches/mm |       |      |      |  |
|---------------------------------|--|--|-------|------|------|--|
| Nominal<br>Size<br>Inches<br>mm | Actual<br>Outside Dia.<br>Inches<br>mm | s  |       |      | w    |  |
| 2                               | 2.375                                  | 1.55                                     | 13.05 | 9.24 | 2.63 |  |
| 50                              | 60.3                                   | 40                                       | 332   | 235  | 67   |  |
| 2½                              | 2.875                                  | 1.55                                     | 13.05 | 9.24 | 2.63 |  |
| 65                              | 73.0                                   | 40                                       | 332   | 235  | 67   |  |
| 3                               | 3.500                                  | 1.55                                     | 13.05 | 9.24 | 2.63 |  |
| 80                              | 88.9                                   | 40                                       | 332   | 235  | 67   |  |
| 4                               | 4.500                                  | 1.55                                     | 13.05 | 9.24 | 2.63 |  |
| 100                             | 114.3                                  | 40                                       | 332   | 235  | 67   |  |
| 6                               | 6.625                                  | 1.55                                     | 13.05 | 9.24 | 2.63 |  |
| 150                             | 168.3                                  | 40                                       | 332   | 235  | 67   |  |
| 8                               | 8.625                                  | 1.55                                     | 13.05 | 9.24 | 2.63 |  |
| 200                             | 219.1                                  | 40                                       | 332   | 235  | 67   |  |

Complete coupling includes one-piece hinged housing, gasket and locking pin only. Assembly Tool Style 792 is required for assembly (one tool fits all size couplings).

# WARRANTY

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

## 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.