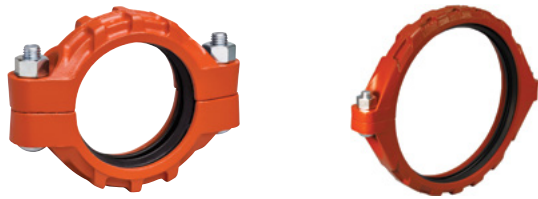


# Victaulic® Standard Flexible Coupling Style 77



¾ – 12"/DN20 – DN300 sizes    14 – 24"/DN350 – DN600 sizes

## 1.0 PRODUCT DESCRIPTION

### Available Sizes

- ¾ – 24"/DN20 – DN600

### Pipe Material

- Carbon Steel
- For use on stainless steel pipe, reference [Publication 17.09](#): *Victaulic Grooved Couplings Performance Data for Stainless Steel Pipe* and [Publication 17.01](#): *Stainless Steel Pipe End Preparation*

### Maximum Working Pressure

- Accommodates pressures ranging from full vacuum (29.9 in Hg / 760 mm Hg) up to 1000 psi / 6894 kPa / 69 bar
- Working pressure dependent on material, wall thickness and size of pipe

### Operating Temperature:

- Dependent on gasket selection – reference [Section 3.0](#)

### Pipe Preparation:

- Cut or roll grooved in accordance with [Publication 25.01](#): *Victaulic Original Groove System (OGS) Specifications*

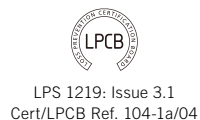
### Application

- Joins carbon steel pipe, fittings, valves, and accessories prepared to *Victaulic OGS Specifications*
- Provides a flexible pipe joint that allows for expansion, contraction and deflection
- Exclusively for use with pipe and *Victaulic* products which feature ends formed with the *Victaulic OGS* groove profile (see [Section 7.0](#) Reference Materials)

### Codes and Requirements:

- For hanger support spacing for flexible systems, reference the [I-100](#): *Field Installation Handbook*.

## 2.0 CERTIFICATIONS/LISTINGS



### NOTE

- Reference [Publication 02.06](#): *Victaulic Potable Water Approvals NSF/ANSI/CAN* for potable water approvals, if applicable.
- Reference [Publication 10.01](#) for Fire Protection Certifications/Listings Reference Guide.

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

### 3.0 MATERIAL SPECIFICATIONS

**Housing:** Ductile Iron conforming to ASTM A536, Grade 65-45-12

**Housing Coating: (specify choice)**

- ☐ Standard: Orange Enamel
- ☐ Optional: Hot Dipped Galvanized and Others
- ☐ Optional: Contact Victaulic with your requirements for other coatings.

**Gasket: (specify choice<sup>1</sup>)**

☐ **Grade "E" EPDM**

EPDM (Green Stripe color code); Temperature range -30°F to +230°F/-34°C to +110°C. May be specified for cold and 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 PETROLEUM SERVICES OR STEAM SERVICES.

☐ **Grade "T" Nitrile**

Nitrile (Orange Stripe color code); Temperature range -20°F to +180°F/-29°C to +82°C. May be specified for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range. Not compatible for hot water services over +150°F/+66°C or for hot dry air over +140°F/+60°C.

☐ **Others**

For alternate gasket selection, reference [Publication 05.01: Victaulic Seal Selection Guide - Elastomeric Seal Construction](#).

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

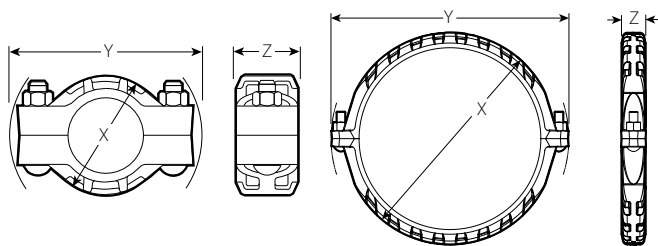
**Bolts/Nuts: (specify choice<sup>2</sup>)**

- ☐ **Standard:** Carbon steel oval neck track bolts meeting the mechanical property requirements of (imperial) ASTM A449 or (metric) ISO 898-1 Class 9.8 (M10-M16) or Class 8.8 (M20 and greater). Carbon steel hex nuts meeting the mechanical property requirements of (imperial heavy hex nuts) ASTM A563 Grade B or (metric hex nuts) ISO 898-2 Class 10 (M12-M16) or Class 8 (M20 and greater). Track bolts and hex nuts are zinc electroplated per ASTM B633 Fe/Zn5 finish (imperial) Type III or (metric) Type II.
- ☐ **Optional:** Stainless steel oval neck track bolts meeting the mechanical property requirements of ASTM F593, Group 2 (316 stainless steel), condition CW. Stainless steel heavy hex nuts meeting the mechanical property requirements of ASTM F594, Group 2 (316 stainless steel), condition CW, with galling reducing coating.

<sup>2</sup> Optional bolts/nuts are available in imperial size only.

## 4.0 DIMENSIONS

### Style 77



$\frac{3}{4}$  – 12"/DN20 – DN300 sizes      14 – 24"/DN350 – DN600 sizes

| Size                    |                                               | Pipe End Separation <sup>3</sup> | Deflection from Centerline <sup>3</sup> |                            | Bolt/Nut |                                   | Dimensions        |                   |                   | Weight                        |
|-------------------------|-----------------------------------------------|----------------------------------|-----------------------------------------|----------------------------|----------|-----------------------------------|-------------------|-------------------|-------------------|-------------------------------|
| Nominal<br>inches<br>DN | Actual<br>Outside<br>Diameter<br>inches<br>mm | Allowable<br>inches<br>mm        | Per Cplg.<br>Degrees                    | Pipe<br>inches/ft.<br>mm/m | Qty.     | Size<br>inches                    | X<br>inches<br>mm | Y<br>inches<br>mm | Z<br>inches<br>mm | Approx.<br>(Each)<br>lb<br>kg |
| $\frac{3}{4}$<br>DN20   | 1.050<br>26.9                                 | 0–0.06<br>0–1.5                  | 3°–24'                                  | 0.72<br>60                 | 2        | $\frac{3}{8} \times 2$            | 2.13<br>54        | 4.00<br>102       | 1.75<br>44        | 1.1<br>0.5                    |
| 1<br>DN25               | 1.315<br>33.7                                 | 0–0.06<br>0–1.5                  | 2°–43'                                  | 0.57<br>47                 | 2        | $\frac{3}{8} \times 2$            | 2.38<br>60        | 4.12<br>104       | 1.75<br>44        | 1.2<br>0.5                    |
| 1 $\frac{1}{4}$<br>DN32 | 1.660<br>42.4                                 | 0–0.06<br>0–1.5                  | 2°–10'                                  | 0.45<br>37                 | 2        | $\frac{1}{2} \times 2\frac{1}{2}$ | 2.65<br>68        | 5.00<br>128       | 1.88<br>48        | 2.0<br>0.9                    |
| 1 $\frac{1}{2}$<br>DN40 | 1.900<br>48.3                                 | 0–0.06<br>0–1.5                  | 1°–56'                                  | 0.40<br>33                 | 2        | $\frac{1}{2} \times 2\frac{1}{2}$ | 3.13<br>80        | 5.38<br>136       | 1.88<br>48        | 2.1<br>1.0                    |
|                         | 2.244<br>57.0                                 | 0–0.06<br>0–1.5                  | 1°–34'                                  | 0.33<br>27                 | 2        | $\frac{1}{2} \times 2\frac{1}{2}$ | 3.43<br>88        | 5.73<br>146       | 1.90<br>48        | 3.0<br>1.4                    |
| 2<br>DN50               | 2.375<br>60.3                                 | 0–0.06<br>0–1.5                  | 1°–31'                                  | 0.32<br>27                 | 2        | $\frac{1}{2} \times 2\frac{1}{2}$ | 3.63<br>92        | 5.88<br>150       | 1.88<br>48        | 2.6<br>1.2                    |
| 2 $\frac{1}{2}$         | 2.875<br>73.0                                 | 0–0.06<br>0–1.5                  | 1°–15'                                  | 0.26<br>22                 | 2        | $\frac{1}{2} \times 2\frac{3}{4}$ | 4.25<br>108       | 6.50<br>166       | 1.88<br>48        | 3.1<br>1.4                    |
| DN65                    | 3.000<br>76.1                                 | 0–0.06<br>0–1.5                  | 1°–12'                                  | 0.26<br>22                 | 2        | $\frac{1}{2} \times 2\frac{3}{4}$ | 4.38<br>112       | 6.63<br>168       | 1.88<br>48        | 3.2<br>1.5                    |
| 3<br>DN80               | 3.500<br>88.9                                 | 0–0.06<br>0–1.5                  | 1°–2'                                   | 0.22<br>18                 | 2        | $\frac{1}{2} \times 2\frac{3}{4}$ | 5.00<br>128       | 7.13<br>182       | 1.88<br>48        | 3.7<br>1.7                    |
| 3 $\frac{1}{2}$<br>DN90 | 4.000<br>101.6                                | 0–0.06<br>0–1.5                  | 0°–54'                                  | 0.19<br>16                 | 2        | $\frac{5}{8} \times 3\frac{1}{4}$ | 5.63<br>144       | 8.25<br>210       | 1.88<br>48        | 5.6<br>2.5                    |
|                         | 4.250<br>108.0                                | 0–0.13<br>0–3.3                  | 1°–41'                                  | 0.35<br>29                 | 2        | M16 $\times$ 83                   | 6.00<br>152       | 8.63<br>220       | 2.13<br>54        | 6.2<br>2.8                    |
| 4<br>DN100              | 4.500<br>114.3                                | 0–0.13<br>0–3.3                  | 1°–36'                                  | 0.34<br>28                 | 2        | $\frac{5}{8} \times 3\frac{1}{4}$ | 6.13<br>156       | 8.88<br>226       | 2.13<br>54        | 6.7<br>3.0                    |
| 4 $\frac{1}{2}$         | 5.000<br>127.0                                | 0–0.13<br>0–3.3                  | 1°–26'                                  | 0.30<br>25                 | 2        | $\frac{3}{4} \times 4\frac{1}{4}$ | 7.25<br>184       | 10.13<br>258      | 2.13<br>54        | 10.0<br>4.5                   |
|                         | 5.250<br>133.0                                | 0–0.13<br>0–3.3                  | 1°–21'                                  | 0.28<br>23                 | 2        | M20 $\times$ 108                  | 7.63<br>194       | 10.38<br>264      | 2.13<br>54        | 10.0<br>4.5                   |
| DN125                   | 5.500<br>139.7                                | 0–0.13<br>0–3.3                  | 1°–18'                                  | 0.28<br>23                 | 2        | M20 $\times$ 108                  | 8.63<br>220       | 10.65<br>270      | 2.13<br>54        | 10.0<br>4.5                   |
| 5                       | 5.563<br>141.3                                | 0–0.13<br>0–3.3                  | 1°–18'                                  | 0.27<br>22                 | 2        | $\frac{3}{4} \times 4\frac{1}{4}$ | 7.75<br>196       | 10.65<br>270      | 2.13<br>54        | 10.6<br>4.8                   |
|                         | 6.250<br>159.0                                | 0–0.13<br>0–3.3                  | 1°–9'                                   | 0.24<br>20                 | 2        | M20 $\times$ 108                  | 8.63<br>220       | 11.50<br>292      | 2.13<br>54        | 13.2<br>6.0                   |
|                         | 6.500<br>165.1                                | 0–0.13<br>0–3.3                  | 1°–6'                                   | 0.23<br>19                 | 2        | $\frac{3}{4} \times 4\frac{1}{4}$ | 8.88<br>226       | 11.63<br>296      | 2.13<br>54        | 13.2<br>6.0                   |
| 6<br>DN150              | 6.625<br>168.3                                | 0–0.13<br>0–3.3                  | 1°–5'                                   | 0.23<br>19                 | 2        | $\frac{3}{4} \times 4\frac{1}{4}$ | 8.63<br>220       | 11.88<br>302      | 2.13<br>54        | 12.0<br>5.4                   |

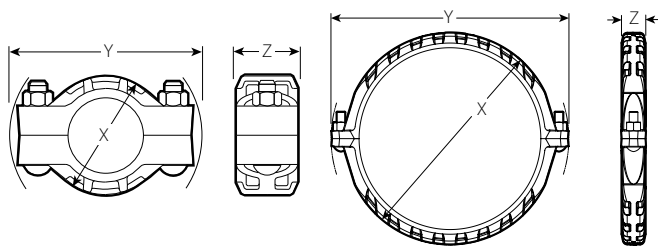
<sup>3</sup> Allowable Pipe End Separation and Deflection figures show the maximum nominal range of movement available at each joint for standard **roll**-grooved pipe. Figures for standard **cut**-grooved pipe may be doubled. These figures are maximums; for design and installation purposes these figures should be reduced by: 50% for  $\frac{3}{4}$  – 3  $\frac{1}{2}$ "/DN20 – DN90; 25% for 4"/DN100 and larger.

#### NOTE

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

## 4.0 DIMENSIONS (CONTINUED)

## Style 77



¾ – 12"/DN20 – DN300 sizes

14 – 24"/DN350 – DN600 sizes

| Size                      |                                               | Pipe End Separation <sup>3</sup>                                                                                                                               | Deflection from Centerline <sup>3</sup> |                            | Bolt/Nut |                | Dimensions        |                   |                   | Weight                        |
|---------------------------|-----------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------|----------------------------|----------|----------------|-------------------|-------------------|-------------------|-------------------------------|
| Nominal<br>inches<br>DN   | Actual<br>Outside<br>Diameter<br>inches<br>mm | Allowable<br>inches<br>mm                                                                                                                                      | Per Cplg.<br>Degrees                    | Pipe<br>inches/ft.<br>mm/m | Qty.     | Size<br>inches | X<br>inches<br>mm | Y<br>inches<br>mm | Z<br>inches<br>mm | Approx.<br>(Each)<br>lb<br>kg |
| 8 <sup>4</sup><br>DN200   | 8.625<br>219.1                                | 0–0.13<br>0–3.3                                                                                                                                                | 0°–50'                                  | 0.18<br>15                 | 2        | 7/8 × 5        | 11.00<br>280      | 14.75<br>374      | 2.50<br>64        | 20.8<br>9.4                   |
| 10 <sup>4</sup><br>DN250  | 10.750<br>273.0                               | 0–0.13<br>0–3.3                                                                                                                                                | 0°–40'                                  | 0.14<br>12                 | 2        | 1 × 6          | 13.63<br>346      | 17.13<br>436      | 2.63<br>66        | 27.8<br>12.5                  |
| 12 <sup>4</sup><br>DN300  | 12.750<br>323.9                               | 0–0.13<br>0–3.3                                                                                                                                                | 0°–34'                                  | 0.12<br>10                 | 2        | 1 × 6½         | 15.63<br>398      | 19.25<br>488      | 2.63<br>66        | 31.1<br>14.0                  |
| 14 <sup>5</sup><br>DN350  | 14.000<br>355.6                               | 0–0.13<br>0–3.3                                                                                                                                                | 0°–31'                                  | 0.11<br>9                  | 2        | 1 × 3½         | 16.75<br>426      | 20.25<br>514      | 3.00<br>76        | 39.2<br>18.0                  |
|                           | 14.843<br>377.0                               | 0–0.13<br>0–3.3                                                                                                                                                | 0°–31'                                  | 0.11<br>9                  | 2        | 1 × 3½         | 17.39<br>442      | 20.96<br>532      | 2.80<br>72        | 48.8<br>22.0                  |
| 16 <sup>5</sup><br>DN400  | 16.000<br>406.4                               | 0–0.13<br>0–3.3                                                                                                                                                | 0°–27'                                  | 0.10<br>8                  | 2        | 1 × 3½         | 18.75<br>476      | 22.25<br>566      | 3.00<br>76        | 45<br>20.5                    |
|                           | 16.772<br>426.0                               | 0–0.13<br>0–3.3                                                                                                                                                | 0°–27'                                  | 0.10<br>8                  | 2        | 1 × 3½         | 19.69<br>500      | 22.92<br>582      | 2.92<br>74        | 56.7<br>25.5                  |
| 18 <sup>5</sup><br>DN450  | 18.000<br>457.2                               | 0–0.13<br>0–3.3                                                                                                                                                | 0°–24'                                  | 0.08<br>7                  | 2        | 1½ × 4         | 21.56<br>548      | 25.00<br>636      | 3.13<br>80        | 64.1<br>29.0                  |
|                           | 18.898<br>480.0                               | 0–0.13<br>0–3.3                                                                                                                                                | 0°–24'                                  | 0.08<br>7                  | 2        | 1½ × 4         | 22.38<br>568      | 25.86<br>656      | 3.04<br>78        | 77.2<br>35.0                  |
| 20 <sup>5</sup><br>DN500  | 20.000<br>508.0                               | 0–0.13<br>0–3.3                                                                                                                                                | 0°–22'                                  | 0.08<br>7                  | 2        | 1½ × 4         | 23.63<br>600      | 27.00<br>686      | 3.13<br>80        | 74.8<br>34.0                  |
|                           | 20.866<br>530.0                               | 0–0.13<br>0–3.3                                                                                                                                                | 0°–22'                                  | 0.08<br>7                  | 2        | 1½ × 4         | 24.29<br>616      | 27.80<br>706      | 3.07<br>78        | 91.7<br>41.5                  |
| 22 <sup>5</sup><br>DN550  | 22.000<br>558.8                               | 0–0.13<br>0–3.3                                                                                                                                                | 0°–19'                                  | 0.07<br>6                  | 2        | 1½ × 4         | 25.63<br>652      | 29.13<br>740      | 3.13<br>80        | 82.6<br>37.5                  |
|                           | 22.835<br>580.0                               | 0–0.13<br>0–3.3                                                                                                                                                | 0°–19'                                  | 0.07<br>6                  | 2        | 1½ × 4         | 26.76<br>680      | 30.01<br>762      | 3.12<br>80        | 92.8<br>42.0                  |
| 24 <sup>5</sup><br>DN600  | 24.000<br>609.6                               | 0–0.13<br>0–3.3                                                                                                                                                | 0°–18'                                  | 0.07<br>6                  | 2        | 1½ × 4         | 27.75<br>704      | 31.00<br>788      | 3.19<br>82        | 89.6<br>40.5                  |
|                           | 24.803<br>630.0                               | 0–0.13<br>0–3.3                                                                                                                                                | 0°–18'                                  | 0.07<br>6                  | 2        | 1½ × 4         | 28.42<br>722      | 32.16<br>816      | 3.12<br>80        | 96.8<br>44.0                  |
| 14–72<br>DN350–<br>DN1800 | 14.000–72.0<br>355.6–1828.8                   | AGS See Style W77, refer to Victaulic <a href="#">Publication 20.03</a><br> |                                         |                            |          |                |                   |                   |                   |                               |

<sup>3</sup> 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 – 3 ½"/DN20 – DN90; 25% for 4"/DN100 and larger.

<sup>4</sup> Couplings 8, 10, 12"/DN200, DN250, DN300 sizes available to JIS standards. Refer to Victaulic [Publication 06.17](#) for details.

<sup>5</sup> For 14 – 72"/DN350 – DN1800 Roll Groove systems, Victaulic offers the Advanced Groove System (AGS) line of products. Refer to Victaulic [Publication 20.03](#) for information on the Style W77 flexible AGS coupling.

## NOTE

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

## 5.0 PERFORMANCE

### Style 77

| Size                    |                                               | Working Pressure <sup>6</sup> | End Load <sup>6</sup> |
|-------------------------|-----------------------------------------------|-------------------------------|-----------------------|
| Nominal<br>inches<br>DN | Actual<br>Outside<br>Diameter<br>inches<br>mm | Maximum<br>psi<br>kPa         | Maximum<br>lb<br>N    |
| ¾<br>DN20               | 1.050<br>26.9                                 | 1000<br>6895                  | 865<br>3848           |
| 1<br>DN25               | 1.315<br>33.7                                 | 1000<br>6895                  | 1360<br>6050          |
| 1¼<br>DN32              | 1.660<br>42.4                                 | 1000<br>6895                  | 2160<br>9608          |
| 1½<br>DN40              | 1.900<br>48.3                                 | 1000<br>6895                  | 2835<br>12,610        |
|                         | 2.244<br>57.0                                 | 1000<br>6895                  | 4430<br>19,706        |
| 2<br>DN50               | 2.375<br>60.3                                 | 1000<br>6895                  | 3955<br>17,592        |
| 2½                      | 2.875<br>73.0                                 | 1000<br>6895                  | 6490<br>28,868        |
| DN65                    | 3.000<br>76.1                                 | 1000<br>6895                  | 7070<br>31,448        |
| 3<br>DN80               | 3.500<br>88.9                                 | 1000<br>6895                  | 9620<br>42,792        |
| 3½<br>DN90              | 4.000<br>101.6                                | 1000<br>6895                  | 12,565<br>55,892      |
|                         | 4.250<br>108.0                                | 1000<br>6895                  | 14,180<br>63,076      |
| 4<br>DN100              | 4.500<br>114.3                                | 1000<br>6895                  | 15,900<br>70,726      |
| 4½                      | 5.000<br>127.0                                | 1000<br>6895                  | 19,650<br>87,408      |
|                         | 5.250<br>133.0                                | 1000<br>6895                  | 21,635<br>96,238      |
| DN125                   | 5.500<br>139.7                                | 1000<br>6895                  | 23,745<br>105,624     |
| 5                       | 5.563<br>141.3                                | 1000<br>6895                  | 24,300<br>108,092     |
|                         | 6.250<br>159.0                                | 1000<br>6895                  | 30,665<br>136,404     |
|                         | 6.500<br>165.1                                | 1000<br>6895                  | 33,185<br>147,614     |

<sup>6</sup> 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 1½ times the figures shown.

## 5.0 PERFORMANCE (CONTINUED)

## Style 77

| Size                     |                                               | Working Pressure <sup>6</sup>                                                                                                                                    | End Load <sup>6</sup> |
|--------------------------|-----------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------|
| Nominal<br>inches<br>DN  | Actual<br>Outside<br>Diameter<br>inches<br>mm | Maximum<br>psi<br>kPa                                                                                                                                            | Maximum<br>lb<br>N    |
| 6<br>DN150               | 6.625<br>168.3                                | 1000<br>6895                                                                                                                                                     | 34,470<br>153,330     |
| 8 <sup>4</sup><br>DN200  | 8.625<br>219.1                                | 800<br>5516                                                                                                                                                      | 46,740<br>207,910     |
| 10 <sup>4</sup><br>DN250 | 10.750<br>273.0                               | 800<br>5516                                                                                                                                                      | 73,280<br>325,966     |
| 12 <sup>4</sup><br>DN300 | 12.750<br>323.9                               | 800<br>5516                                                                                                                                                      | 102,000<br>453,718    |
| 14 <sup>5</sup><br>DN350 | 14.000<br>355.6                               | 300<br>2068                                                                                                                                                      | 46,180<br>205,418     |
|                          | 14.843<br>377.0                               | 300<br>2068                                                                                                                                                      | 51,875<br>230,752     |
| 16 <sup>5</sup><br>DN400 | 16.000<br>406.4                               | 300<br>2068                                                                                                                                                      | 60,320<br>268,316     |
|                          | 16.772<br>426.0                               | 300<br>2068                                                                                                                                                      | 66,245<br>294,672     |
| 18 <sup>5</sup><br>DN450 | 18.000<br>457.2                               | 300<br>2068                                                                                                                                                      | 76,340<br>339,578     |
|                          | 18.898<br>480.0                               | 300<br>2068                                                                                                                                                      | 84,105<br>374,118     |
| 20 <sup>5</sup><br>DN500 | 20.000<br>508.0                               | 300<br>2068                                                                                                                                                      | 94,000<br>418,132     |
|                          | 20.866<br>530.0                               | 300<br>2068                                                                                                                                                      | 102,500<br>455,940    |
| 22 <sup>5</sup><br>DN550 | 22.000<br>558.8                               | 300<br>2068                                                                                                                                                      | 114,000<br>507,098    |
|                          | 22.835<br>580.0                               | 300<br>2068                                                                                                                                                      | 122,850<br>546,464    |
| 24 <sup>5</sup><br>DN600 | 24.000<br>609.6                               | 250<br>1724                                                                                                                                                      | 113,000<br>502,650    |
|                          | 24.803<br>630.0                               | 250<br>1724                                                                                                                                                      | 102,790<br>457,232    |
| 14–72<br>DN350–DN1800    | 14.000–72.000<br>355.6–1828.8                 | AGS See Style W77, refer to Victaulic <a href="#">Publication 20.03</a><br> |                       |

<sup>4</sup> Couplings 8, 10, 12"/DN200, DN250, DN300 sizes available to JIS standards. Refer to *Victaulic Publication 06.17* for details.

<sup>5</sup> For 14 – 72"/DN350 – DN1800 Roll Groove systems Victaulic offers the Advanced Groove System (AGS) line of products. Refer to *Victaulic Publication 20.03* for information on the Style W77 flexible AGS coupling.

<sup>6</sup> 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 1½ times the figures shown.

## 6.0 NOTIFICATIONS

- For 14 – 72"/DN350 – DN1800 flexible roll-groove systems, Victaulic recommends Style W77 AGS Couplings. For more information, refer to Victaulic [Publication 20.03](#).

|  <b>WARNING</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |  |  |  |  |  |
| <ul style="list-style-type: none"> <li>Read and understand all instructions before attempting to install any Victaulic® products.</li> <li>Always verify that the piping system has been completely depressurized and drained immediately prior to installation, removal, adjustment, or maintenance of any <i>Victaulic</i> products.</li> <li>Confirm that any equipment, branch lines, or sections of piping that may have been isolated for/during testing or due to valve closures/positioning are identified, depressurized, and drained immediately prior to installation, removal, adjustment, or maintenance of any <i>Victaulic</i> products.</li> <li>Wear safety glasses, hardhat, foot protection, and hearing protection.</li> <li>Always read and follow the <a href="#">I-ENDCAP</a>, <i>Victaulic</i> End Cap Installation Safety Instructions, which can be downloaded at Victaulic.com.</li> </ul> <p>Failure to follow these instructions could result in death or serious personal injury and property damage.</p> |                                                                                   |                                                                                   |                                                                                   |                                                                                     |                                                                                     |

|  <b>WARNING</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <p><b>FOR STYLE 77 COUPLINGS USED ON STAINLESS STEEL:</b></p> <ul style="list-style-type: none"> <li>Victaulic® RX roll sets shall be used when grooving light-wall/thin-wall stainless steel pipe. Victaulic® RX grooving rolls must be ordered separately. They are identified by a silver color and the designation RX on the front of the roll sets.</li> <li>It is the system designer's responsibility to verify suitability of stainless steel components for use with the intended fluid media within the piping system and external environment.</li> <li>The material specifier shall evaluate the effect of chemical composition, pH level, operating temperature, chloride level, oxygen level, and flow rate on stainless steel components to confirm system life will be acceptable for the intended service.</li> <li>Always reference <i>Victaulic</i> <a href="#">Publication 17.01</a> for stainless steel pipe end preparation and grooving roll set requirements.</li> </ul> <p>Failure to follow these instructions may cause joint failure, resulting in death or serious personal injury and property damage.</p> |

## 7.0 REFERENCE MATERIALS

[I-100: Victaulic Field Installation Handbook](#)  
[02.06: Victaulic Potable Water Approvals NSF/ANSI/CAN](#)  
[05.01: Victaulic Seal Selection Guide](#)  
[06.15: Victaulic Pressure Ratings and End Loads for Victaulic Couplings on Steel Pipe](#)  
[06.17: Victaulic Couplings and Fittings for JIS Pipe](#)  
[10.01: Victaulic Certification Reference Guide—General Catalog Products](#)  
[17.01: Victaulic Stainless Steel Pipe End Preparation](#)  
[17.09: Victaulic Grooved Couplings Performance Data for Stainless Steel Pipe](#)  
[20.03: Victaulic AGS Flexible Coupling Style W77/W77B](#)  
[25.01: Victaulic Original Groove System \(OGS\) Groove Specifications](#)  
[26.01: Victaulic Design Data](#)  
[26.04: Victaulic Couplings Vibration Attenuation Characteristics](#)  
[29.01: Victaulic Terms and Conditions of Sale/Warranty](#)  
[I-ENDCAP: Victaulic End Cap Installation Safety Instructions](#)

### User Responsibility for Product Selection and Suitability

Each user bears final responsibility for determining the suitability of Victaulic products for their end-use application, in accordance with industry standards, project specifications, and Victaulic's published performance, maintenance, and safety data, as well as all warnings and installation 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, warranty, installation instructions, or this disclaimer.

### Installation

Always refer to and follow the [Victaulic Installation Handbook](#) or installation instructions for 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 [victaulic.com](http://victaulic.com).

### Warranty

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

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### Note

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