## Victaulic ${ }^{\circledR}$ Grooved End Fittings



No. 20 Tee


No. 10 Elbow

### 1.0 PRODUCT DESCRIPTION

## Available Sizes

- $3 / 4$ - 60"/DN20 - DN1500


## Maximum Working Pressure

- Pressure ratings for Victaulic standard fittings conform to the ratings of Victaulic Style 177 N couplings (refer to publication 06.24 for more information).


## Application

- Connects pipe, provides change in direction and adapts sizes or components
- Supplied with Victaulic OGS grooves
- Exclusively for use with Victaulic couplings, valves, accessories and pipe which feature ends formed with the Victaulic OGS groove profile


## Pipe Materials

- Carbon steel or stainless steel

NOTE

- These fittings are not intended for use with Victaulic plain end couplings. Intended for use only in grooved piping systems. When connecting wafer or lug type butterfly valves directly to Victaulic fittings using Style 741 or Style 743 flange adapters, be sure to check disc clearance dimensions with I.D. dimension of fitting.

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 |  |

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### 2.0 CERTIFICATION/LISTINGS



## NOTES

- When supplied as "hot dip galvanized" the following fittings are UL Classified in accordance with ANSI/NSF 61 and for use on cold $+86^{\circ} \mathrm{F} /+30^{\circ} \mathrm{C}$ potable water service and ANSI/NSF 372: No. $1090^{\circ}$ Elbow, No. $1145^{\circ}$ Elbow, No. $1222 \frac{1}{2} 2^{\circ}$ Elbow, No. $1311 \frac{1}{4^{\circ}}$ Elbow, No. $10090^{\circ}$ Long Radius Elbow, No. $11045^{\circ}$ Long Radius Elbow, No. 20 Tee, No. 25 Tee with Grooved Branch, No. $3045^{\circ}$ Lateral, No. 60 Cap, No. 50 Concentric Reducers, No. 51 Eccentric Reducers.
- The following Victaulic fittings are VdS approved: No. $1090^{\circ}$ Elbow, No. $1145^{\circ}$ Elbow, No. 20 Tee and No. 60 Cap.
- The following Victaulic fittings are LPCB approved: No. $1090^{\circ}$ Elbow, No. $1145^{\circ}$ Elbow, No. 1222 ½ Elbow, No. $1311 \frac{114^{\circ} \text { Elbow, No. } 3045^{\circ} \text { Lateral, No. } 30-R ~}{\text { R }}$ Reducing Lateral, No. 100 Long Radius Elbow, No. 110 Long Radius Elbow, No. 20 Tee, No. 35 Cross, No. 60 Cap, No. 25 Reducing Tee, No. 33 True Wye, No. 50 Concentric Reducer, No. 51 Eccentric Reducer and No.29M Tee with Threaded Branch.
- The following Victaulic fittings are FM approved: No. $1090^{\circ}$ Elbow, No. $1145^{\circ}$ Elbow, No. $12221 / 2$ Elbow, No. $131114^{\circ}$ Elbow, No. $3045^{\circ}$ Lateral, No. 100 Long Radius Elbow, No. 20 Tee, No. 35 Cross, No. 60 Cap, No. 25 Reducing Tee and No. 50 Concentric Reducer.


### 3.0 SPECIFICATIONS - MATERIAL

## Fitting: (specify choice)

Standard: Ductile iron conforming to ASTM A536, Grade 65-45-12.Optional: Segmentally welded steel as shown under nipples
## Nipples: (specify choice)

$\square$ 3/4-4"/DN20 - DN100: Carbon steel, Schedule 40, conforming to ASTM A53, Type F
$\square 5-6 " / D N 125$ - DN150: Carbon steel, Schedule 40, conforming to ASTM A53, Type E or S, Gr. B8 - 12"/DN200 - DN300: Carbon steel, Schedule 30 or 40, conforming to ASTM A53, Type E or S, Gr. B

## Flanged Adapter Nipples: (specify choice)

$\square$ Class 125 Flange: Cast iron conforming to ANSI B16.1Class 150 Flange: Carbon steel conforming to ANSI B16.5, raised or flat faceClass 300 Flange: Carbon steel conforming to ANSI B16.5, raised or flat face

## Fitting Coating: (specify choice)

$\square$ Standard: Orange enamelOptional: Hot dip galvanized and others. Some fittings supplied electroplated as standard - see product specifications

## Flanged Adapter Nipple Coating: (specify choice)

Standard: None (Unfinished)Optional: Orange enamel, hot dip galvanized and others
### 4.13 DIMENSIONS

## Female Threaded Adapter

No. 80


No. 80

| Size |  | No. 80 Female Threaded Adapter |  |
| :---: | :---: | :---: | :---: |
| Nominal inches DN | Actual Outside Diameter inches mm | E to E inches mm | Approx. Weight (Each) lb kg |
| $\begin{gathered} 3 / 4 \\ \text { DN20 } \end{gathered}$ | $\begin{gathered} 1.050 \\ 26.9 \end{gathered}$ | $\begin{gathered} 2.00 \\ 51 \end{gathered}$ | $\begin{aligned} & 1.0 \\ & 0.5 \end{aligned}$ |
| $\begin{gathered} 1 \\ \text { DN25 } \end{gathered}$ | $\begin{gathered} 1.315 \\ 33.7 \end{gathered}$ | $\begin{gathered} 2.06 \\ 52 \end{gathered}$ | $\begin{aligned} & 1.0 \\ & 0.5 \end{aligned}$ |
| $\begin{gathered} 11 / 4 \\ \text { DN32 } \end{gathered}$ | $\begin{gathered} 1.660 \\ 42.4 \end{gathered}$ | $\begin{gathered} 2.31 \text { (sw) } \\ 59 \end{gathered}$ | $\begin{aligned} & 1.5 \\ & 0.7 \end{aligned}$ |
| $\begin{gathered} 11 / 2 \\ \text { DN40 } \end{gathered}$ | $\begin{gathered} 1.900 \\ 48.3 \end{gathered}$ | $\begin{gathered} 2.31(\mathrm{sw}) \\ 59 \\ \hline \end{gathered}$ | $\begin{aligned} & 1.5 \\ & 0.7 \\ & \hline \end{aligned}$ |
| $\begin{gathered} 2 \\ \text { DN50 } \end{gathered}$ | $\begin{gathered} 2.375 \\ 60.3 \end{gathered}$ | $\begin{gathered} 2.50 \\ 64 \end{gathered}$ | $\begin{aligned} & 1.4 \\ & 0.6 \end{aligned}$ |
| 21/2 | $\begin{array}{r} 2.875 \\ 73.0 \\ \hline \end{array}$ | $\begin{gathered} 2.75 \\ 70 \\ \hline \end{gathered}$ | $\begin{aligned} & 1.5 \\ & 0.7 \\ & \hline \end{aligned}$ |
| $\begin{gathered} 3 \\ \text { DN80 } \end{gathered}$ | $\begin{gathered} 3.500 \\ 88.9 \end{gathered}$ | $\begin{gathered} 2.75 \\ 70 \end{gathered}$ | $\begin{gathered} 2.9 \\ 1.3 \\ \hline \end{gathered}$ |
| $\begin{gathered} 4 \\ \text { DN100 } \end{gathered}$ | $\begin{gathered} 4.500 \\ 114.3 \end{gathered}$ | $\begin{gathered} 3.25 \\ 83 \\ \hline \end{gathered}$ | $\begin{aligned} & 4.5 \\ & 2.0 \end{aligned}$ |

$(\mathrm{s})=$ Carbon Steel Direct Roll Groove (OGS)
$(\mathrm{sw})=$ Carbon Steel Segmentally Welded

## notes

- Available with British Standard Pipe Threads, specify "BSP" clearly on order.
- All fittings are ductile iron unless otherwise noted with an (sw) or (s).


### 4.14 DIMENSIONS

## Hose Nipple

No. 48


No. 48

| Size |  | No. 48 Hose Nipple (s) |  |
| :---: | :---: | :---: | :---: |
| Nominal inches DN | Actual Outside Diameter inches mm | E to E inches mm | Approx. Weight (Each) lb kg |
| $\begin{gathered} 3 / 4 \\ \text { DN20 } \end{gathered}$ | $\begin{gathered} 1.050 \\ 26.9 \end{gathered}$ | $\begin{gathered} 3.12 \\ 79 \end{gathered}$ | $\begin{aligned} & 0.3 \\ & 0.1 \end{aligned}$ |
| $\begin{gathered} 1 \\ \text { DN25 } \end{gathered}$ | $\begin{gathered} 1.315 \\ 33.7 \end{gathered}$ | $\begin{gathered} 3.38 \\ 86 \end{gathered}$ | $\begin{gathered} 0.4 \\ 0.2 \end{gathered}$ |
| $\begin{gathered} 11 / 4 \\ \text { DN32 } \end{gathered}$ | $\begin{gathered} 1.660 \\ 42.4 \end{gathered}$ | $\begin{gathered} 3.88 \\ 98 \end{gathered}$ | $\begin{aligned} & 0.6 \\ & 0.3 \end{aligned}$ |
| $\begin{gathered} 11 / 2 \\ \text { DN40 } \end{gathered}$ | $\begin{gathered} 1.900 \\ 48.3 \end{gathered}$ | $\begin{gathered} 3.88 \\ 98 \end{gathered}$ | $\begin{gathered} 0.8 \\ 0.4 \end{gathered}$ |
| $\begin{gathered} 2 \\ \text { DN50 } \end{gathered}$ | $\begin{gathered} 2.375 \\ 60.3 \end{gathered}$ | $\begin{array}{r} 4.50 \\ 114 \end{array}$ | $\begin{aligned} & 1.1 \\ & 0.5 \end{aligned}$ |
| 21/2 | $\begin{gathered} 2.875 \\ 73.0 \end{gathered}$ | $\begin{array}{r} 5.38 \\ 137 \end{array}$ | $\begin{gathered} 2.0 \\ 0.9 \end{gathered}$ |
| $\begin{gathered} 3 \\ \text { DN80 } \end{gathered}$ | $\begin{gathered} 3.500 \\ 88.9 \end{gathered}$ | $\begin{array}{r} 5.75 \\ 146 \end{array}$ | $\begin{array}{r} 3.2 \\ 1.5 \end{array}$ |
| $\begin{gathered} 4 \\ \text { DN100 } \end{gathered}$ | $\begin{gathered} 4.500 \\ 114.3 \end{gathered}$ | $\begin{array}{r} 7.00 \\ 178 \end{array}$ | $\begin{aligned} & 4.9 \\ & 2.2 \end{aligned}$ |
| 5 | $\begin{gathered} 5.563 \\ 141.3 \end{gathered}$ | $\begin{array}{r} 8.75 \\ 222 \\ \hline \end{array}$ | $\begin{aligned} & 8.0 \\ & 3.6 \end{aligned}$ |
| $\begin{gathered} 6 \\ \text { DN150 } \end{gathered}$ | $\begin{gathered} 6.625 \\ 168.3 \end{gathered}$ | $\begin{gathered} 10.13 \\ 257 \end{gathered}$ | $\begin{array}{r} 14.3 \\ 6.5 \end{array}$ |
| $\begin{gathered} 8 \\ \text { DN200 } \end{gathered}$ | $\begin{gathered} 8.625 \\ 219.1 \end{gathered}$ | $\begin{gathered} 11.88 \\ 302 \end{gathered}$ | $\begin{gathered} 24.7 \\ 11.2 \end{gathered}$ |
| $\begin{gathered} 10 \\ \text { DN250 } \end{gathered}$ | $\begin{array}{r} 10.750 \\ 273.0 \end{array}$ | $\begin{gathered} 12.50 \\ 318 \end{gathered}$ | $\begin{aligned} & 40.1 \\ & 18.2 \end{aligned}$ |
| $\begin{gathered} 12 \\ \text { DN300 } \end{gathered}$ | $\begin{array}{r} 12.750 \\ 323.9 \\ \hline \end{array}$ | $\begin{gathered} 14.50 \\ 368 \end{gathered}$ | $\begin{aligned} & 62.0 \\ & 28.1 \end{aligned}$ |

$(\mathrm{s})=$ Carbon Steel Direct Roll Groove (OGS)
$(\mathrm{sw})=$ Carbon Steel Segmentally Welded

## NOTE

- All fittings are ductile iron unless otherwise noted with an (sw) or (s).

