



No. 20 Tee



No. 10 Elbow

1.0 PRODUCT DESCRIPTION

Available Sizes

- ¾ – 60"/DN20 – DN1500

Maximum Working Pressure

- Pressure ratings for Victaulic standard fittings conform to the ratings of Victaulic Style 177N 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 | |

1.0 PRODUCT DESCRIPTION (CONTINUED)

Other Fitting Styles



AGS - Advanced Groove System
from 14 – 60"/DN350 – DN1500
[Publication 20.05](#)



Ductile Iron for AWWA size pipe
[Publication 23.05](#)



Stainless Steel
[Publication 17.16](#)



XL fittings for abrasive services
[Publication 07.07](#)



Galvanized
[Publication 07.01](#) for Original Groove Fittings
[Publication 20.05](#) for AGS Fittings



Aluminum
[Publication 21.03](#)



Extra Heavy EndSeal "ES"
[Publication 07.03](#)



Shouldered Ends
[Publication 07.06](#)



Copper
[Publication 22.04](#)



Plain End
[Publication 14.04](#)

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°F/+30°C potable water service and ANSI/NSF 372: No. 10 90° Elbow, No. 11 45° Elbow, No. 12 22 ½° Elbow, No. 13 11 ¼° Elbow, No. 100 90° Long Radius Elbow, No. 110 45° Long Radius Elbow, No. 20 Tee, No. 25 Tee with Grooved Branch, No. 30 45° Lateral, No. 60 Cap, No. 50 Concentric Reducers, No. 51 Eccentric Reducers.
- The following Victaulic fittings are VdS approved: No.10 90° Elbow, No.11 45° Elbow, No.20 Tee and No.60 Cap.
- The following Victaulic fittings are LPCB approved: No.10 90° Elbow, No.11 45° Elbow, No.12 22 ½° Elbow, No.13 11 ¼° Elbow, No.30 45° Lateral, No.30-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.10 90° Elbow, No.11 45° Elbow, No.12 22 ½° Elbow, No.13 11 ¼° Elbow, No.30 45° 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)

¾ – 4"/DN20 – DN100: Carbon steel, Schedule 40, conforming to ASTM A53, Type F

5 – 6"/DN125 – DN150: Carbon steel, Schedule 40, conforming to ASTM A53, Type E or S, Gr. B

8 – 12"/DN200 – DN300: Carbon steel, Schedule 30 or 40, conforming to ASTM A53, Type E or S, Gr. B

Flanged Adapter Nipples: (specify choice)

Class 125 Flange: Cast iron conforming to ANSI B16.1

Class 150 Flange: Carbon steel conforming to ANSI B16.5, raised or flat face

Class 300 Flange: Carbon steel conforming to ANSI B16.5, raised or flat face

Fitting Coating: (specify choice)

Standard: Orange enamel

Optional: 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

4.0 DIMENSIONS

Elbows

No. 10 90° Elbow

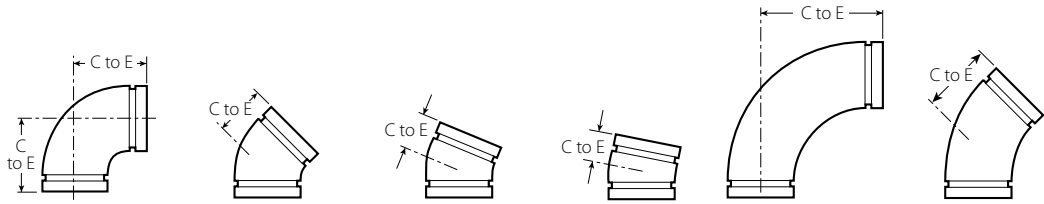
No. 11 45° Elbow

No. 12 22 ½° Elbow

No. 13 11 ¼° Elbow

No. 100 90° Long Radius Elbow

No. 110 45° Long Radius Elbow



Standard and GSNK

| Size | | No. 10 90° Elbow | | No. 11 45° Elbow | | No. 12 22 ½° Elbow | | No. 13 11 ¼° Elbow | | No. 100 90° Long Radius Elbow | | No. 110 45° Long Radius Elbow | |
|--------------|-------------------------|---------------------|---------------------|---------------------|---------------------|--------------------------|---------------------|-----------------------|---------------------|-------------------------------------|---------------------|-------------------------------------|---------------------|
| Nominal | Actual Outside Diameter | C to E | Approx. Wgt. (Each) | C to E | Approx. Wgt. (Each) | C to E | Approx. Wgt. (Each) | C to E | Approx. Wgt. (Each) | C to E | Approx. Wgt. (Each) | C to E | Approx. Wgt. (Each) |
| inches DN | inches mm | inches mm | lb kg | inches mm | lb kg | inches mm | lb kg | inches mm | lb kg | inches mm | lb kg | inches mm | lb kg |
| ¾ DN20 | 1.050 26.9 | 2.25 57 | 0.5 0.2 | 1.50 38 | 0.5 0.2 | 1.63 (sw) 41 | — | 1.38 (sw) 35 | — | 2.50 (sw) 64 | 0.4 0.2 | 1.88 (sw) 48 | 0.3 0.1 |
| 1 DN25 | 1.315 33.7 | 2.25 57 | 0.6 0.3 | 1.75 44 | 0.6 0.3 | 3.25 ¹ 83 | 0.6 0.3 | 1.38 (sw) 35 | 0.3 0.1 | 2.88 (sw) 73 | 0.6 0.3 | 2.25 (sw) 57 | 0.5 0.2 |
| 1 ¼ DN32 | 1.660 42.4 | 2.75 70 | 1.0 0.5 | 1.75 44 | 0.9 0.4 | 1.75 44 | 0.8 0.4 | 1.38 (sw) 35 | 0.5 0.2 | 3.25 (sw) 83 | 1.1 0.5 | 2.38 (sw) 60 | 0.7 0.3 |
| 1 ½ DN40 | 1.900 48.3 | 2.75 70 | 1.2 0.5 | 1.75 44 | 0.9 0.4 | 1.75 44 | 0.8 0.4 | 1.38 (sw) 35 | 0.5 0.2 | 3.63 (sw) 92 | 2.2 1.0 | 2.50 (sw) 64 | 1.3 0.6 |
| 2 DN50 | 2.375 60.3 | 3.25 83 | 1.8 0.8 | 2.00 51 | 1.3 0.6 | 1.88 48 | 1.2 0.5 | 1.38 35 | 1.0 0.5 | 4.38 111 | 2.5 1.1 | 2.75 70 | 1.8 0.8 |
| 2 ½ DN65 | 2.875 73.0 | 3.75 95 | 3.2 1.5 | 2.25 57 | 2.2 1.0 | 4.00 ¹ 102 | 2.3 1.0 | 1.50 38 | 1.1 0.5 | 5.13 130 | 3.4 1.5 | 3.00 76 | 2.8 1.3 |
| 3 DN80 | 3.000 76.1 | 3.75 95 | 3.7 1.7 | 2.25 57 | 3.4 1.5 | 2.25 57 | — | 1.50 38 | — | — | — | — | — |
| 3 ½ DN90 | 3.500 88.9 | 4.25 108 | 4.5 2.0 | 2.50 64 | 3.1 1.4 | 4.50 ¹ 114 | 3.1 1.4 | 1.50 38 | 2.1 1.0 | 5.88 149 | 6.0 2.7 | 3.38 86 | 4.9 2.2 |
| 4 DN100 | 4.000 101.6 | 4.50 114 | 5.6 2.5 | 2.75 70 | 4.3 2.0 | 2.50 (sw) 64 | 4.0 1.8 | 1.75 (sw) 44 | 2.7 1.2 | — | — | — | — |
| | 4.500 114.3 | 5.00 127 | 7.1 3.2 | 3.00 76 | 5.6 2.5 | 2.88 73 | 5.6 2.5 | 1.75 44 | 3.6 1.6 | 7.50 191 | 12.3 5.6 | 4.00 102 | 7.3 3.3 |
| | 4.250 108.0 | 5.00 127 | 11.0 5.0 | 3.00 76 | 5.6 2.5 | — | — | — | — | — | — | — | — |
| | 5.000 127.0 | 5.25 (sw) 133 | 10.0 4.5 | 3.13 (sw) 79 | 6.0 2.7 | 3.50 (sw) 89 | 6.6 3.0 | 1.88 (sw) 48 | 4.2 1.9 | — | — | — | — |
| 5 | 5.563 141.3 | 5.50 140 | 11.7 5.3 | 3.25 83 | 8.3 3.8 | 2.88 (sw) 73 | 7.8 3.5 | 2.00 (sw) 51 | 5.0 2.2 | 9.25 (sw) 235 | 18.0 8.2 | 4.88 (sw) 124 | 14.8 6.7 |
| | 5.250 133.0 | 5.50 140 | 11.7 5.3 | 3.25 83 | 8.3 3.8 | — | — | — | — | — | — | — | — |
| DN125 | 5.500 139.7 | 5.50 140 | 11.7 5.3 | 3.25 83 | 8.3 3.8 | 2.88 73 | — | 2.00 51 | — | — | — | — | — |
| 6 DN150 | 6.625 168.3 | 6.50 165 | 17.2 7.8 | 3.50 89 | 10.8 4.9 | 6.25 ¹ 159 | 12.2 5.5 | 2.00 51 | 7.0 3.2 | 10.75 273 | 30.4 13.8 | 5.50 140 | 17.4 7.9 |
| | 6.250 159.0 | 6.50 165 | 18.6 8.4 | 3.50 89 | 10.8 4.9 | — | — | — | — | — | — | — | — |
| | 6.500 165.1 | 6.50 165 | 15.5 7.0 | 3.50 89 | 9.8 4.4 | 3.13 79 | 11.4 5.2 | 2.00 51 | 7.4 3.4 | 10.75 (sw) 273 | 29.0 13.2 | 5.50 (sw) 140 | 19.0 8.6 |

¹ Gooseneck design, end-to-end dimension fittings in this size, contact your nearest Victaulic sales representative.

(s) = Carbon Steel Direct Roll Groove (OGS)

(sw) = Carbon Steel Segmentally Welded

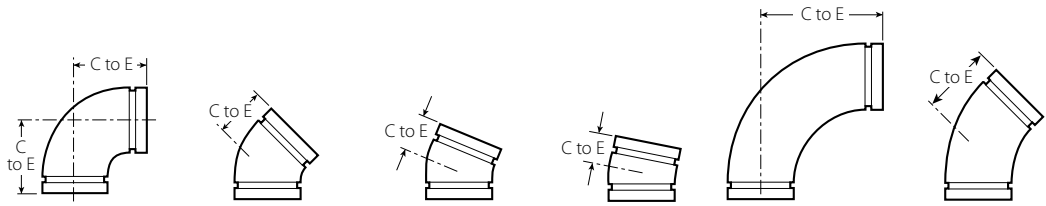
NOTE

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

4.0 DIMENSIONS (CONTINUED)

Elbows

- No. 10 90° Elbow
- No. 11 45° Elbow
- No. 12 22 ½° Elbow
- No. 13 11 ¼° Elbow
- No. 100 90° Long Radius Elbow
- No. 110 45° Long Radius Elbow



Standard and GSNK

| Size | | No. 10 90° Elbow | | No. 11 45° Elbow | | No. 12 22 ½° Elbow | | No. 13 11 ¼° Elbow | | No. 100 90° Long Radius Elbow | | No. 110 45° Long Radius Elbow | |
|---------------------------|--|------------------|---------------------|------------------|---------------------|--------------------------|-------------------|--------------------|---------------------|-------------------------------|---------------------|-------------------------------|---------------------|
| Nominal | Actual Outside Diameter | C to E | Approx. Wgt. (Each) | C to E | Approx. Wgt. (Each) | C to E | Approx. Wgt. Each | C to E | Approx. Wgt. (Each) | C to E | Approx. Wgt. (Each) | C to E | Approx. Wgt. (Each) |
| inches DN | inches mm | inches mm | lb kg | inches mm | lb kg | inches mm | lb kg | inches mm | lb kg | inches mm | lb kg | inches mm | lb kg |
| 8 DN200 | 8.625 219.1 | 7.75 197 | 29.9 13.6 | 4.25 108 | 20.4 9.3 | 7.75 ¹ 197 | 20.0 9.1 | 2.00 51 | 10.1 4.6 | 14.25 362 | 66.0 30.0 | 7.25 184 | 36.0 16.3 |
| 10 DN250 | 10.750 273.0 | 9.00 229 | 63.3 28.7 | 4.75 121 | 37.5 17.0 | 4.38 (sw) 111 | 30.0 13.6 | 2.13 54 | 11.8 5.3 | 15.00 381 | 107.0 48.5 | 6.25 159 | 57.0 25.9 |
| 12 DN300 | 12.750 323.9 | 10.00 254 | 74.0 33.6 | 5.25 133 | 66.7 30.3 | 4.88 (sw) 124 | 40.0 18.1 | 2.25 57 | 29.3 13.3 | 18.00 457 | 156.0 70.8 | 7.50 191 | 90.0 40.8 |
| 14 ² DN350 | 14.000 355.6 | 14.00 356 | 136.0 61.7 | 5.75 146 | 65.0 29.5 | 5.00 (sw) 127 | 46.0 20.9 | 3.50 (sw) 89 | 32.0 14.5 | 21.00 (s) 533 | 164.0 74.4 | 8.75 222 | 82.0 37.2 |
| | 14.843 377.0 | 14.84 377 | 149.3 67.7 | 6.13 156 | 82.0 37.2 | — | — | — | — | — | — | — | — |
| 16 ² DN400 | 16.000 406.5 | 16.00 406 | 171.0 77.6 | 6.63 168 | 88.0 39.3 | 5.00 (sw) 127 | 58.0 26.3 | 4.00 (sw) 102 | 42.0 19.1 | 24.00 (s) 610 | 210.0 95.3 | 10.00 (s) 254 | 100.0 45.4 |
| | 16.773 426.0 | 16.75 425 | 198.6 90.1 | 7.00 178 | 101.3 45.9 | — | — | — | — | — | — | — | — |
| 18 ² DN450 | 18.000 457.2 | 18.00 457 | 228.0 103.4 | 7.50 190 | 108.0 50.0 | 5.50 (sw) 140 | 65.0 29.5 | 4.50 (sw) 144 | 53.2 24.1 | 27.00 (s) 686 | 273.0 123.8 | 11.25 (s) 286 | 135.0 61.2 |
| | 18.898 480.0 | 18.88 480 | 291.0 132.0 | 7.83 200 | 141.7 64.3 | — | — | — | — | — | — | — | — |
| 20 ² DN500 | 20.000 508.0 | 20.00 508 | 298.0 135.2 | 8.25 210 | 138.0 62.6 | 6.00 (sw) 152 | 78.6 36.0 | 5.00 (sw) 127 | 65.0 29.5 | 30.00 (s) 762 | 343.0 155.6 | 12.50 (s) 318 | 174.0 78.9 |
| | 20.866 530.0 | 20.88 530 | 355.0 161.0 | 8.63 219 | 179.0 81.2 | — | — | — | — | — | — | — | — |
| 24 ² DN600 | 24.000 609.6 | 24.00 610 | 438.0 198.7 | 10.00 254 | 221.0 100.2 | 7.00 (sw) 178 | 140.0 63.5 | 6.00 (sw) 152 | 60.0 27.2 | 36.00 (s) 914 | 516.0 234.1 | 15.00 (s) 381 | 251.0 113.9 |
| | 24.803 630.0 | 24.80 630 | 545.0 247.2 | 10.25 261 | 255.2 115.7 | — | — | — | — | — | — | — | — |
| 14 – 60 DN350 – DN1500 | For AGS fitting information, see publication 20.05 | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

¹ Gooseneck design, end-to-end dimension fittings in this size, contact your nearest Victaulic sales representative.

² For 14"/DN350 and larger roll grooved systems, Victaulic offers the Advanced Groove System (AGS). For pricing and availability of cut groove fittings in this size, contact your nearest Victaulic sales representative.

(s) = Carbon Steel Direct Roll Groove (OGS)

(sw) = Carbon Steel Segmentally Welded

NOTE

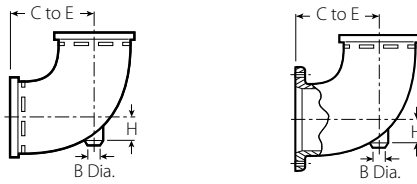
- All fittings are ductile iron unless otherwise noted with an (sw) or (s).

4.1 DIMENSIONS

Reducing Base Support Elbow

No. R-10G Grv. x Grv.

No. R-10F Grv. x Flange



| Size | | No. R-10 Reducing Base Support Elbow | | | Approx. Weight Each | | |
|-------------------------|---|---|-------------------|----------------------------|-------------------------|---------------------------|--------------|
| Nominal inches DN | x | C to E inches mm | H inches mm | B Diameter inches mm | Grv. x Grv. lb kg | Grv. x Flange lb kg | |
| 6 DN150 | x | 4 DN100 | 9.00 229 | 1.25 32 | 1.50 38 | 19.0 8.6 | 33.0 15.0 |
| | | 5 | 9.00 229 | 1.50 38 | 1.50 38 | 23.0 10.4 | 38.0 17.2 |
| 8 DN200 | x | 6 DN150 | 10.50 267 | 2.13 24 | 1.50 38 | 33.0 15.0 | 52.0 23.6 |
| 10 DN250 | x | 8 DN200 | 12.00 305 | 2.40 61 | 1.50 38 | 61.0 27.7 | 88.0 39.9 |

4.2 DIMENSIONS

Adapter Elbow

No. 18 90° Adapter Elbow

No. 19 45° Adapter Elbow



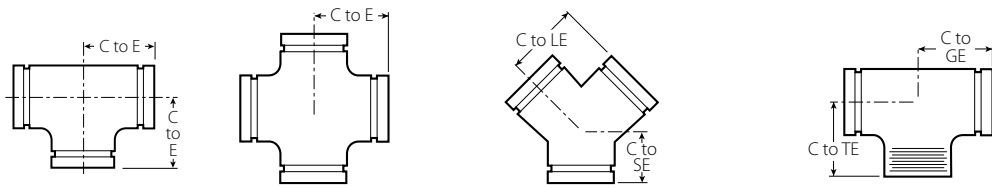
| Size | | No. 18 90° Adapter Elbow | | | No. 19 45° Adapter Elbow | | |
|-------------------------|---|-----------------------------|-------------------------|---|-----------------------------|-------------------------|---|
| Nominal inches DN | Actual Outside Diameter inches mm | C to GE inches mm | C to TE inches mm | Approximate Weight (Each) lb kg | C to GE inches mm | C to TE inches mm | Approx. Weight (Each) lb kg |
| ¾ DN20 | 1.050 26.9 | 2.25 57 | 2.25 57 | 0.5 0.2 | 1.50 38 | 1.50 38 | 0.5 0.2 |
| 1 DN25 | 1.315 33.7 | 2.25 57 | 2.25 57 | 0.5 0.2 | — | — | — |
| 1¼ DN32 | 1.660 42.4 | 2.75 70 | 2.75 70 | 0.9 0.4 | — | — | — |
| 1½ DN40 | 1.900 48.3 | 2.75 70 | 2.75 70 | 1.1 0.5 | 1.75 44 | 1.75 44 | 0.9 0.4 |
| 2 DN50 | 2.375 60.3 | 3.25 83 | 4.25 108 | 2.5 1.1 | — | — | — |
| 2½ | 2.875 73.0 | 3.75 95 | 3.75 95 | 3.0 1.4 | 2.25 57 | 2.25 57 | 2.3 1.0 |
| 3 DN80 | 3.500 88.9 | 4.25 108 | 6.00 152 | 5.8 2.6 | 2.50 64 | 4.25 108 | 5.0 2.3 |
| 3½ DN90 | 4.000 101.6 | 4.50 114 | 6.25 159 | 8.0 3.6 | 5.25 133 | 5.25 133 | 8.8 4.0 |
| 6 DN150 | 6.625 168.3 | 6.50 165 | 6.50 165 | 17.6 8.0 | 3.50 89 | 3.50 89 | 12.7 5.8 |

NOTE

- Available with British Standard Pipe Threads, specify "BSP" clearly on order.

4.3 DIMENSIONS

Tees, Crosses and True Wyes



| Size | | No. 20 Tee | | No. 35 Cross (sw) | | No. 33 True Wye (sw) | | | No. 29M Tee with Threaded Branch | | |
|----------------------|---|------------------------|-----------------------------------|------------------------|-----------------------------------|-------------------------|-------------------------|-----------------------------------|----------------------------------|-------------------------|-----------------------------------|
| Nominal inches DN | Actual Outside Diameter inches mm | C to E inches mm | Approx. Weight (Each) lb kg | C to E inches mm | Approx. Weight (Each) lb kg | C to LE inches mm | C to SE inches mm | Approx. Weight (Each) lb kg | C to GE inches mm | C to TE inches mm | Approx. Weight (Each) lb kg |
| ¾ DN20 | 1.050 26.9 | 2.25 57 | 0.6 0.3 | 2.25 57 | 0.9 0.4 | 2.25 57 | 2.00 51 | 0.7 0.3 | 2.25 57 | 2.25 (sw) 57 | 0.6 0.3 |
| 1 DN25 | 1.315 33.7 | 2.25 57 | 1.0 0.5 | 2.25 57 | 1.3 0.6 | 2.25 57 | 2.25 57 | 1.1 0.5 | 2.25 57 | 2.25 57 | 1.0 0.5 |
| 1¼ DN32 | 1.660 42.4 | 2.75 70 | 1.5 0.7 | 2.75 70 | 2.1 1.0 | 2.75 70 | 2.50 64 | 1.5 0.7 | 2.75 70 | 2.75 70 | 1.5 0.7 |
| 1½ DN40 | 1.900 48.3 | 2.75 70 | 2.0 0.9 | 2.75 70 | 2.5 1.1 | 2.75 70 | 2.75 70 | 1.8 0.8 | 2.75 70 | 2.75 70 | 2.0 0.9 |
| 2 DN50 | 2.375 60.3 | 3.25 83 | 3.0 1.4 | 3.25 83 | 3.8 1.7 | 3.25 83 | 2.75 70 | 2.5 1.1 | 3.25 83 | 4.25 108 | 3.0 1.4 |
| 2½ DN65 | 2.875 73.0 | 3.75 95 | 4.3 2.0 | 3.75 95 | 6.1 2.8 | 3.75 95 | 3.00 76 | 4.3 2.0 | 3.75 95 | 3.75 95 | 4.3 2.0 |
| 3 DN80 | 3.500 88.9 | 4.25 108 | 6.8 3.0 | 4.25 108 | 10.5 4.8 | 4.25 108 | 3.25 83 | 6.1 2.8 | 4.25 108 | 6.00 152 | 6.8 3.1 |
| 3½ DN90 | 4.000 101.6 | 4.50 (sw) 114 | 7.9 3.6 | 4.50 114 | 11.5 5.2 | 4.50 114 | 3.50 89 | 9.6 4.4 | 4.50 114 | 4.50 (sw) 114 | 7.9 3.6 |
| 4 DN100 | 4.250 108.0 | 5.00 127 | 15.5 7.0 | — | — | — | — | — | 5.00 127 | 5.00 (sw) 127 | 15.5 7.0 |
| 4 DN100 | 4.500 114.3 | 5.00 127 | 11.9 5.4 | 5.00 127 | 15.8 7.2 | 5.00 127 | 3.75 95 | 9.8 4.4 | 5.00 127 | 7.25 184 | 11.9 5.4 |
| 5 DN125 | 5.000 127.0 | 5.25 (sw) 133 | 15.0 6.8 | 5.25 133 | 18.5 8.4 | — | — | — | 5.25 133 | 5.25 (sw) 133 | 15.0 6.8 |
| 5 DN125 | 5.250 133.0 | 5.50 140 | 17.8 8.1 | — | — | — | — | — | 5.50 140 | 5.50 (sw) 140 | 17.8 8.1 |
| 5 DN125 | 5.500 139.7 | 5.50 140 | 17.8 8.1 | — | — | — | — | — | 5.50 140 | 5.50 (sw) 140 | 17.8 8.1 |
| 5 DN125 | 5.563 141.3 | 5.50 140 | 17.8 8.1 | 5.50 140 | 20.0 9.1 | 5.50 140 | 4.00 102 | 15.0 6.8 | 5.50 140 | 5.50 (sw) 140 | 17.8 8.1 |
| 6 DN150 | 6.250 159.0 | 6.50 165 | 27.1 12.3 | — | — | — | — | — | 6.50 165 | 6.50 (sw) 165 | 27.1 12.3 |
| 6 DN150 | 6.500 165.1 | 6.50 165 | 22.0 10.0 | 6.50 165 | 28.0 12.7 | — | — | — | 6.50 165 | 6.50 (sw) 165 | 22.0 10.0 |
| 6 DN150 | 6.625 168.3 | 6.50 165 | 25.7 11.7 | 6.50 165 | 28.0 12.7 | 6.50 165 | 4.50 114 | 22.3 10.1 | 6.50 165 | 6.50 (sw) 165 | 25.7 11.7 |
| 8 DN200 | 8.625 219.1 | 7.75 197 | 47.6 21.6 | 7.75 197 | 48.0 21.8 | 7.75 197 | 6.00 152 | 36.0 16.3 | 7.75 197 | 7.75 197 | 47.6 21.6 |
| 10 DN250 | 10.750 273.0 | 9.00 229 | 99.0 44.9 | 9.00 229 | 121.5 55.1 | 9.00 229 | 6.50 155 | 69.9 31.7 | 9.00 229 | 9.00 229 | 99.0 44.9 |
| 12 DN300 | 12.750 323.9 | 10.00 254 | 133.0 60.3 | 10.00 254 | 110.0 49.9 | 10.00 254 | 7.00 178 | 80.0 36.3 | 10.00 254 | 10.00 254 | 133.0 60.3 |

(s) = Carbon Steel Direct Roll Groove (OGS)

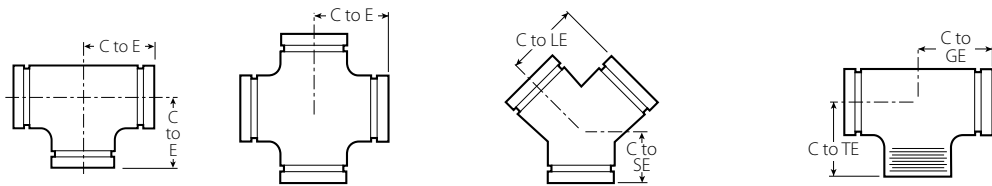
(sw) = Carbon Steel Segmentally Welded


NOTE

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

4.3 DIMENSIONS (CONTINUED)

Tees, Crosses and True Wyes



| Size | | No. 20 Tee | | No. 35 Cross (sw) | | No. 33 True Wye (sw) | | | No. 29M Tee with Threaded Branch | | |
|---------------------------|---|------------------------|-----------------------------------|------------------------|-----------------------------------|-------------------------|-------------------------|-----------------------------------|----------------------------------|-------------------------|-----------------------------------|
| Nominal inches DN | Actual Outside Diameter inches mm | C to E inches mm | Approx. Weight (Each) lb kg | C to E inches mm | Approx. Weight (Each) lb kg | C to LE inches mm | C to SE inches mm | Approx. Weight (Each) lb kg | C to GE inches mm | C to TE inches mm | Approx. Weight (Each) lb kg |
| 14 ² DN350 | 14.000 355.6 | 11.00 (sw) 279 | 145.0 65.8 | 11.00 279 | 198.0 89.8 | 11.00 279 | 7.50 191 | 134.2 60.8 | — | — | — |
| | 377.0 | 11.50 292 | 145.0 65.8 | — | — | — | — | — | — | — | — |
| 16 ² DN400 | 16.000 406.4 | 12.00 (sw) 305 | 186.0 84.4 | 12.00 305 | 250.0 113.4 | 12.00 305 | 8.00 203 | 167.0 75.7 | — | — | — |
| | 426.0 | 13.00 300 | 186.0 84.4 | — | — | — | — | — | — | — | — |
| 18 ² DN450 | 18.000 457.0 | 15.50 (sw) 394 | 260.0 117.9 | 15.50 394 | 350.0 158.8 | 15.50 394 | 8.50 216 | 234.0 106.1 | — | — | — |
| | 480.0 | 14.63 372 | 256.0 116.1 | — | — | — | — | — | — | — | — |
| 20 ² DN500 | 20.000 508.0 | 17.25 (sw) 438 | 336.0 152.4 | 17.25 438 | 452.0 205.0 | 17.25 438 | 9.00 229 | 281.0 127.5 | — | — | — |
| | 530.0 | 15.38 (sw) 391 | 339.0 153.8 | — | — | — | — | — | — | — | — |
| 24 ² DN600 | 24.000 610.0 | 20.00 (sw) 508 | 592.0 268.5 | 20.00 508 | 795.0 360.6 | 20.00 508 | 10.00 254 | 523.0 237.2 | — | — | — |
| | 630.0 | 17.38 (sw) 441 | 473.0 214.5 | — | — | — | — | — | — | — | — |
| 14 – 60 DN350 – DN1500 | For AGS fitting information, see publication 20.05  | | | | | | | | | | |

² For 14"/DN350 and larger roll grooved systems, Victaulic offers the Advanced Groove System (AGS). For pricing and availability of cut groove fittings in this size, contact your nearest Victaulic sales representative.

(s) = Carbon Steel Direct Roll Groove (OGS)

(sw) = Carbon Steel Segmentally Welded

NOTE

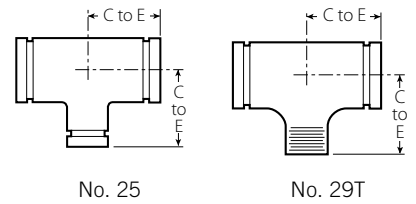
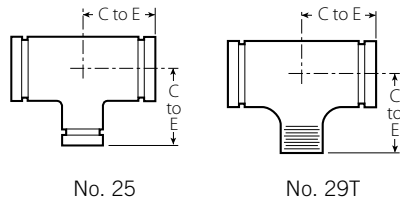
- All fittings are ductile iron unless otherwise noted with an (sw) or (s).

4.4 DIMENSIONS

Reducing Tee

No. 25 Grooved Branch

No. 29T Threaded Branch



| Size | | | No. 25 Std. | No. 29T w/ Thd. Branch | Approx. Weight (Each) lb kg | |
|-------------------|---|------------|------------------|------------------------|-----------------------------------|------------|
| Nominal inches DN | | | C to E inches mm | C to E inches mm | | |
| 1 DN25 | x | 1 DN25 | 2.25 (sw) 57 | 2.25 (sw) 57 | 1.0 0.5 | |
| 1 1/4 DN32 | x | 1 1/4 DN32 | 2.75 (sw) 70 | 2.75 (sw) 70 | 1.3 0.6 | |
| 1 1/2 DN40 | x | 1 1/2 DN40 | 3/4 DN20 | 2.75 (sw) 70 | 2.75 (sw) 70 | 1.5 0.7 |
| | | | 1 DN25 | 2.75 (sw) 70 | 2.75 (sw) 70 | 1.5 0.7 |
| | | | 1 1/4 DN32 | 2.75 (sw) 70 | 2.75 (sw) 70 | 1.7 0.8 |
| 2 DN50 | x | 2 DN50 | 3/4 DN20 | 3.25 83 | 3.25 83 | 2.5 1.1 |
| | | | 1 DN25 | 3.25 83 | 3.25 83 | 2.7 1.2 |
| | | | 1 1/4 DN32 | 3.25 (sw) 83 | 3.25 (sw) 83 | 1.8 0.8 |
| | | | 1 1/2 DN40 | 3.25 83 | 3.25 (sw) 83 | 3.0 1.4 |
| 2 1/2 | x | 2 1/2 | 3/4 DN20 | 3.75 (sw) 95 | 3.75 (sw) 95 | 3.9 1.8 |
| | | | 1 DN25 | 3.75 95 | 3.75 (sw) 95 | 3.8 1.7 |
| | | | 1 1/4 DN32 | 3.75 95 | 3.75 95 | 4.2 1.7 |
| | | | 1 1/2 DN40 | 3.75 95 | 3.75 95 | 3.9 1.8 |
| | | | 2 DN50 | 3.75 95 | 3.75 (sw) 95 | 4.5 2.0 |
| 3 DN80 | x | 3 DN80 | 3/4 DN20 | 4.25 (sw) 108 | 4.25 (sw) 108 | 5.7 2.6 |
| | | | 1 DN25 | 4.25 108 | 4.25 108 | 6.1 2.8 |
| | | | 1 1/4 DN32 | 4.25 108 | 4.25 108 | 8.0 3.6 |
| | | | 1 1/2 DN40 | 4.25 108 | 4.25 (sw) 108 | 6.5 2.9 |
| | | | 2 DN50 | 4.25 108 | 4.25 (sw) 108 | 6.2 2.8 |
| | | | 2 1/2 | 4.25 108 | 4.25 (sw) 108 | 6.4 2.9 |

(s) = Carbon Steel Direct Roll Groove (OGS)

(sw) = Carbon Steel Segmentally Welded

NOTE

- Cast fitting available. Contact Victaulic for details.

| Size | | | No. 25 Std. | No. 29T w/ Thd. Branch | Approx. Weight (Each) lb kg | | | | |
|-------------------|-------------|------------------|------------------|------------------------|-----------------------------------|--------------|------------------|------------------|-------------|
| Nominal inches DN | | | C to E inches mm | C to E inches mm | | | | | |
| 4 DN100 | x | 4 DN100 | 3/4 DN20 | 5.00 (sw) 127 | 5.00 (sw) 127 | 8.0 3.6 | | | |
| | | | 1 DN25 | 5.00 127 | 5.00 127 | 7.8 3.5 | | | |
| | | | 1 1/4 DN32 | 5.00 (sw) 127 | 5.00 (sw) 127 | 9.6 4.4 | | | |
| | | | 1 1/2 DN40 | 5.00 127 | 5.00 127 | 10.2 4.6 | | | |
| | | | 2 DN50 | 5.00 127 | 5.00 127 | 11.2 5.1 | | | |
| | | | 2 1/2 | 5.00 127 | 5.00 127 | 11.4 5.2 | | | |
| | | | 3 DN80 | 5.00 127 | 5.00 127 | 11.6 5.3 | | | |
| | | | 5 | x | 5 | 1 DN25 | 5.50 (sw) 140 | 5.50 (sw) 140 | 14.0 6.4 |
| | | | | | | 1 1/2 DN40 | 5.50 (sw) 140 | 5.50 (sw) 140 | 14.3 6.5 |
| | | | | | | 2 DN50 | 5.50 (sw) 140 | 5.50 (sw) 140 | 14.5 6.6 |
| 2 1/2 | 5.50 140 | 5.50 (sw) 140 | | | | 15.2 6.9 | | | |
| 3 DN80 | 5.50 140 | 5.50 (sw) 140 | | | | 16.6 7.5 | | | |
| 4 DN100 | 5.50 140 | 5.50 (sw) 140 | | | | 16.7 7.6 | | | |
| 6 DN150 | x | 6 DN150 | 1 DN25 | 6.50 (sw) 165 | 6.50 (sw) 165 | 23.0 10.4 | | | |
| | | | 1 1/2 DN40 | 6.50 (sw) 165 | 6.50 (sw) 165 | 24.0 10.9 | | | |
| | | | 2 DN50 | 6.50 165 | 6.50 165 | 21.6 9.8 | | | |
| | | | 2 1/2 | 6.50 165 | 6.50 165 | 21.4 11.7 | | | |
| | | | 3 DN80 | 6.50 165 | 6.50 165 | 26.5 12.0 | | | |
| | | | 4 DN100 | 6.50 165 | 6.50 165 | 25.0 11.3 | | | |
| 6 1/2 | x | 6 1/2 | 3 DN80 | 6.50 165 | 6.50 (sw) 165 | 24.0 10.9 | | | |
| | | | 4 DN100 | 6.50 165 | 6.50 (sw) 165 | 25.0 11.3 | | | |

(s) = Carbon Steel Direct Roll Groove (OGS)

(sw) = Carbon Steel Segmentally Welded

NOTE

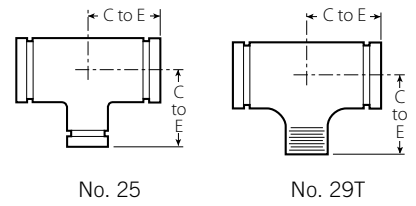
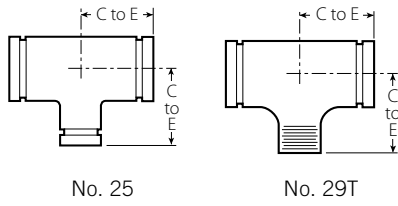
- Cast fitting available. Contact Victaulic for details.

4.4 DIMENSIONS (CONTINUED)

Reducing Tee

No. 25 Grooved Branch

No. 29T Threaded Branch



| Size | | | No. 25 Std. | No. 29T w/ Thd. Branch | Approx. Weight (Each) | | | | |
|-------------------|---------------|---------------|------------------|------------------------|-----------------------|------------|---------------|---------------|-----------|
| Nominal inches DN | | | C to E inches mm | C to E inches mm | lb kg | | | | |
| 8 DN200 | x | 8 DN200 | 1 1/2 DN40 | 7.75 (sw) 197 | 7.75 (sw) 197 | 33.0 15.0 | | | |
| | | | 2 DN50 | 7.75 (sw) 197 | 7.75 (sw) 197 | 33.5 15.2 | | | |
| | | | 2 1/2 | 7.75 (sw) 197 | 7.75 (sw) 197 | 39.0 17.7 | | | |
| | | | 3 DN80 | 7.75 (sw) 197 | 7.75 (sw) 197 | 33.6 15.2 | | | |
| | | | 4 DN100 | 7.75 197 | 7.75 197 | 41.8 19.0 | | | |
| | | | 5 | 7.75 (sw) 197 | 7.75 (sw) 197 | 34.0 15.4 | | | |
| | | | 6 DN150 | 7.75 197 | 7.75 197 | 42.3 19.2 | | | |
| | | | 165.1mm | 7.75 (sw) 197 | 7.75 (sw) 197 | 48.0 21.8 | | | |
| | | | 10 DN250 | x | 10 DN250 | 1 1/2 DN40 | 9.00 229 | 9.00 229 | 62.0 28.1 |
| | | | | | | 2 DN50 | 9.00 (sw) 229 | 9.00 (sw) 229 | 62.0 28.1 |
| 2 1/2 | 9.00 (sw) 229 | 9.00 (sw) 229 | | | | 62.4 28.3 | | | |
| 3 DN80 | 9.00 (sw) 229 | 9.00 (sw) 229 | | | | 60.0 27.2 | | | |
| 4 DN100 | 9.00 (sw) 229 | 9.00 (sw) 229 | | | | 61.0 27.7 | | | |
| 5 | 9.00 (sw) 229 | 9.00 (sw) 229 | | | | 52.0 23.6 | | | |
| 6 DN150 | 9.00 (sw) 229 | 9.00 (sw) 229 | | | | 59.0 26.8 | | | |
| 8 DN200 | 9.00 (sw) 229 | 9.00 (sw) 229 | | | | 64.7 29.3 | | | |

(s) = Carbon Steel Direct Roll Groove (OGS)

(sw) = Carbon Steel Segmentally Welded

NOTE

- Cast fitting available. Contact Victaulic for details.

| Size | | | No. 25 Std. | No. 29T w/ Thd. Branch | Approx. Weight (Each) | | | | |
|-----------------------|----------------|----------------|-----------------------|------------------------|-----------------------|------------|----------------|----------------|------------|
| Nominal inches DN | | | C to E inches mm | C to E inches mm | lb kg | | | | |
| 12 DN300 | x | 12 DN300 | 1 DN25 | 10.00 (sw) 254 | 10.00 (sw) 254 | 77.0 34.9 | | | |
| | | | 2 DN50 | 10.00 (sw) 254 | 10.00 (sw) 254 | 80.0 36.3 | | | |
| | | | 2 1/2 | 10.00 (sw) 254 | 10.00 (sw) 254 | 78.0 35.4 | | | |
| | | | 3 DN80 | 10.00 (sw) 254 | 10.00 (sw) 254 | 82.0 37.2 | | | |
| | | | 4 DN100 | 10.00 (sw) 254 | 10.00 (sw) 254 | 80.0 36.3 | | | |
| | | | 5 | 10.00 (sw) 254 | 10.00 (sw) 254 | 75.0 34.0 | | | |
| | | | 6 DN150 | 10.00 (sw) 254 | 10.00 (sw) 254 | 75.0 34.0 | | | |
| | | | 8 DN200 | 10.00 (sw) 254 | 10.00 (sw) 254 | 80.0 36.3 | | | |
| | | | 10 DN250 | 10.00 (sw) 254 | 10.00 (sw) 254 | 84.0 38.1 | | | |
| | | | 14 ² DN350 | x | 14 DN350 | 4 DN100 | 11.00 (sw) 279 | 11.00 (sw) 279 | 102.0 46.3 |
| 6 DN150 | 11.00 (sw) 279 | 11.00 (sw) 279 | | | | 108.2 49.1 | | | |
| 8 DN200 | 11.00 279 | 11.00 279 | | | | 112.0 50.8 | | | |
| 10 DN250 | 11.00 279 | 11.00 279 | | | | 120.0 54.4 | | | |
| 12 DN300 | 11.00 279 | 11.00 279 | | | | 129.1 58.6 | | | |
| 16 ² DN400 | x | 16 DN400 | | | | 4 DN100 | 12.00 305 | 12.00 305 | 130.0 59.0 |
| | | | | | | 6 DN150 | 12.00 (sw) 305 | 12.00 (sw) 305 | 133.5 60.6 |
| | | | 8 DN200 | 12.00 305 | 12.00 305 | 145.0 65.8 | | | |
| | | | 10 DN250 | 12.00 305 | 12.00 305 | 149.5 67.8 | | | |
| | | | 12 DN300 | 12.00 305 | 12.00 305 | 154.0 69.9 | | | |
| | | | 14 DN350 | 12.00 (sw) 305 | — | 167.0 75.8 | | | |

² For 14"/DN350 and larger roll grooved systems, Victaulic offers the Advanced Groove System (AGS). For pricing and availability of cut groove fittings in this size, contact your nearest Victaulic sales representative.

(s) = Carbon Steel Direct Roll Groove (OGS)

(sw) = Carbon Steel Segmentally Welded

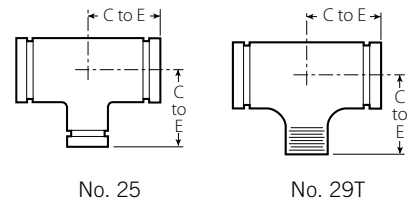
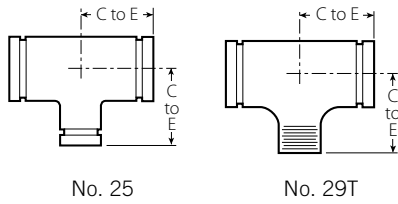
NOTE

- Cast fitting available. Contact Victaulic for details.

4.4 DIMENSIONS (CONTINUED)

Reducing Tee

No. 25 Grooved Branch
 No. 29T Threaded Branch



| Size | | No. 25 Std. | No. 29T w/ Thd. Branch | Approx. Weight (Each) | | | |
|--------------------------|---------------|--------------------------|------------------------|-----------------------|----------------|--------------|----------------|
| Nominal inches | DN | C to E inches | C to E inches | lb | | | |
| | | mm | mm | kg | | | |
| 18 ² DN450 | x 18 DN450 | 4 DN100 | 15.50 (sw) 394 | 15.50 (sw) 394 | 194.0 88.0 | | |
| | | 6 DN150 | 15.50 (sw) 394 | 15.50 (sw) 394 | 200.0 90.7 | | |
| | | 8 DN200 | 15.50 (sw) 394 | 15.50 (sw) 394 | 202.0 91.6 | | |
| | | 10 DN250 | 15.50 394 | 15.50 394 | 212.0 96.2 | | |
| | | 12 DN300 | 15.50 394 | 15.50 394 | 222.6 101.0 | | |
| | | 14 DN350 | 15.50 394 | — | 230.1 104.4 | | |
| | | 16 DN400 | 15.50 394 | — | 247.6 112.3 | | |
| | | 20 ² DN500 | x 20 DN500 | 6 DN150 | 17.25 438 | 17.25 438 | 240.0 108.9 |
| | | | | 8 DN200 | 17.25 438 | 17.25 438 | 244.0 110.7 |
| | | | | 10 DN250 | 17.25 438 | 17.25 438 | 256.0 116.1 |
| 12 DN300 | 17.25 438 | | | 17.25 438 | 264.0 119.8 | | |
| 14 DN350 | 17.25 438 | | | — | 275.0 124.7 | | |
| 16 DN400 | 17.25 438 | | | — | 288.6 130.9 | | |
| 18 DN450 | 17.25 438 | | | — | 297.0 134.7 | | |

| Size | No. 25 Std. | No. 29T w/ Thd. Branch | Approx. Weight (Each) | | |
|--------------------------|---------------|-------------------------|-----------------------|--------------|--|
| Nominal inches | C to E inches | C to E inches | lb | | |
| DN | mm | mm | kg | | |
| 24 ² DN600 | x 24 DN600 | 8 DN200 | 20.00 508 | 20.00 508 | 340.0 154.2 |
| | | 10 DN250 | 20.00 508 | 20.00 508 | 343.9 156.0 |
| | | 12 DN300 | 20.00 508 | 20.00 508 | 352.8 160.0 |
| | | 14 DN350 | 20.00 508 | — | 360.0 163.3 |
| | | 16 DN400 | 20.00 508 | — | 378.0 171.5 |
| | | 18 DN450 | 20.00 508 | — | 380.0 172.4 |
| | | 20 DN500 | 20.00 508 | — | 373.0 169.2 |
| | | 14 – 60 DN350 – 1500 | | | For AGS fitting information, see publication 20.05 |
| | | | | | |

² For 14"/DN350 and larger roll grooved systems, Victaulic offers the Advanced Groove System (AGS). For pricing and availability of cut groove fittings in this size, contact your nearest Victaulic sales representative.

(s) = Carbon Steel Direct Roll Groove (OGS)
 (sw) = Carbon Steel Segmentally Welded

NOTES

- No. 29T Threaded Outlet Reducing Tees are supplied NPT and are available with British Standard threads. For British Standard specify "BSP" clearly on order.
- All fittings are ductile iron unless otherwise noted with an (sw) or (s).
- Cast fitting available. Contact Victaulic for details.

² For 14"/DN350 and larger roll grooved systems, Victaulic offers the Advanced Groove System (AGS). For pricing and availability of cut groove fittings in this size, contact your nearest Victaulic sales representative.

(s) = Carbon Steel Direct Roll Groove (OGS)
 (sw) = Carbon Steel Segmentally Welded

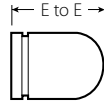
NOTE

- Cast fitting available. Contact Victaulic for details.

4.5 DIMENSIONS

Bull Plug

No. 61



No. 61

| Size | | No. 61 Bull Plug (s) | |
|-------------------------|---|------------------------|---|
| Nominal inches DN | Actual Outside Diameter inches mm | E to E inches mm | Approx. Weight (Each) lb kg |
| 2 DN50 | 2.375 60.3 | 4.00 102 | 2.5 1.1 |
| 2 ½ | 2.875 73.0 | 5.00 127 | 3.0 1.4 |
| 3 DN80 | 3.500 88.9 | 6.00 152 | 4.5 2.0 |
| 4 DN100 | 4.500 114.3 | 7.00 178 | 7.5 3.4 |
| 5 | 5.563 141.3 | 8.00 203 | 12.0 5.4 |
| 6 DN150 | 6.625 168.5 | 10.00 254 | 17.0 7.7 |

(s) = Carbon Steel Direct Roll Groove (OGS)

(sw) = Carbon Steel Segmentally Welded

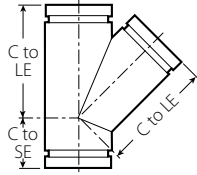
NOTES

- Steel dish caps available through 24"/DN600, contact Victaulic.
- No. 61 Bull Plugs should be used in vacuum service with Style 72 or 750 couplings.
- All fittings are ductile iron unless otherwise noted with an (sw) or (s).

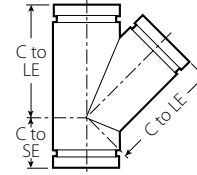
4.6 DIMENSIONS

45° Lateral

No. 30



No. 30



No. 30

| Size | | No. 30 45° Lateral | | Weight |
|-------------------------|---|-------------------------|-------------------------|-------------------------------|
| Nominal inches DN | Actual Outside Diameter inches mm | C to LE inches mm | C to SE inches mm | Approx. (Each) lb kg |
| ¾ DN20 | 1.050 26.9 | 4.50 (sw) 114 | 2.00 (sw) 51 | 1.0 0.5 |
| 1 DN25 | 1.315 33.7 | 5.00 (sw) 127 | 2.25 (sw) 57 | 1.7 0.8 |
| 1¼ DN32 | 1.660 42.4 | 5.75 146 | 2.50 64 | 2.5 (d) 1.1 |
| 1½ DN40 | 1.900 48.3 | 6.25 (sw) 159 | 2.75 (sw) 70 | 3.5 1.6 |
| 2 DN50 | 2.375 60.3 | 7.00 (sw) 178 | 2.75 (sw) 70 | 5.0 2.3 |
| 2½ | 2.875 73.0 | 7.75 (sw) 197 | 3.00 (sw) 76 | 9.0 4.1 |
| DN65 | 3.000 76.1 | 8.50 (sw) 216 | 3.25 (sw) 83 | 11.0 5.0 |
| 3 DN80 | 3.500 88.9 | 8.50 216 | 3.25 83 | 11.7 (d) 5.4 |
| 3½ DN90 | 4.000 101.6 | 10.00 (sw) 254 | 3.50 (sw) 89 | 17.8 8.1 |
| 4 DN100 | 4.500 114.3 | 10.50 267 | 3.75 95 | 22.2 (d) 10.1 |
| 5 | 5.563 141.3 | 12.50 (sw) 318 | 4.00 (sw) 102 | 21.8 9.9 |

(s) = Carbon Steel Direct Roll Groove (OGS)

(sw) = Carbon Steel Segmentally Welded

| Size | | No. 30 45° Lateral | | Weight |
|---------------------------|--|-------------------------|-------------------------|-------------------------------|
| Nominal inches DN | Actual Outside Diameter inches mm | C to LE inches mm | C to SE inches mm | Approx. (Each) lb kg |
| | 6.500 165.1 | 14.00 (sw) 356 | 4.50 (sw) 114 | 43.6 19.8 |
| 6 DN150 | 6.625 168.3 | 14.00 (sw) 356 | 4.50 (sw) 114 | 43.6 19.8 |
| 8 DN200 | 8.625 219.1 | 18.00 (sw) 457 | 6.00 (sw) 152 | 72.0 32.7 |
| 10 DN250 | 10.750 273.0 | 20.50 (sw) 521 | 6.50 (sw) 165 | 105.0 47.6 |
| 12 DN300 | 12.750 323.9 | 23.00 (sw) 584 | 7.00 (sw) 178 | 165.0 74.8 |
| 14² DN350 | 14.000 355.6 | 26.50 (sw) 673 | 7.50 (sw) 191 | 276.0 125.2 |
| 16² DN400 | 16.000 406.4 | 29.00 (sw) 737 | 8.00 (sw) 203 | 344.2 156.1 |
| 18² DN450 | 18.000 457.0 | 32.00 (sw) 813 | 8.50 (sw) 216 | 429.0 194.6 |
| 20² DN500 | 20.000 508.0 | 35.00 (sw) 889 | 9.00 (sw) 229 | 500.0 226.8 |
| 24² DN600 | 24.000 610.0 | 40.00 (sw) 1016 | 10.00 (sw) 254 | 715.0 324.3 |
| 14 – 60 DN350 – DN1500 | For AGS fitting information, see publication 20.05 | | | |



² For 14"/DN350 and larger roll grooved systems, Victaulic offers the Advanced Groove System (AGS). For pricing and availability of cut groove fittings in this size, contact your nearest Victaulic sales representative.

(s) = Carbon Steel Direct Roll Groove (OGS)

(sw) = Carbon Steel Segmentally Welded

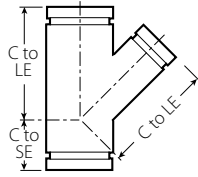
NOTE

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

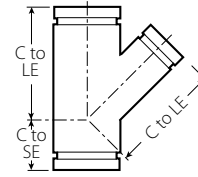
4.7 DIMENSIONS

45° Reducing Lateral

No. 30-R




No. 30-R



No. 30-R

| Size | | | No 30-R 45° Reducing Lateral | | | | |
|-------------------------|---|-------------------------|---------------------------------|-------------|--------------|--------------|---|
| Nominal inches DN | x | Nominal inches DN | x | DN | C to LE | C to SE | Approx. Weight (Each) lb kg |
| | | | | | inches mm | inches mm | |
| 3 DN80 | x | 3 DN80 | x | 2 DN50 | 8.50 216 | 3.25 83 | 9.8 4.4 |
| | | | | 2½ | 8.50 216 | 3.25 83 | 9.8 4.4 |
| 4 DN100 | x | 4 DN100 | x | 2 DN50 | 10.50 267 | 3.75 95 | 10.0 4.5 |
| | | | | 2½ | 10.50 267 | 3.75 95 | 10.0 4.5 |
| | | | | 3 DN80 | 10.50 267 | 3.75 95 | 18.3 8.3 |
| 5 | x | 5 | x | 2 DN50 | 12.50 318 | 4.00 102 | 24.0 10.9 |
| | | | | 3 DN80 | 12.50 318 | 4.00 102 | 27.0 12.2 |
| | | | | 4 DN100 | 12.50 318 | 4.00 102 | 26.5 12.0 |
| 6 DN150 | x | 6 DN150 | x | 3 DN80 | 14.00 356 | 4.50 114 | 37.0 16.8 |
| | | | | 4 DN100 | 14.00 356 | 4.50 114 | 36.0 16.3 |
| | | | | 5 | 14.00 356 | 4.50 114 | 44.7 20.3 |
| 8 DN200 | x | 8 DN200 | x | 4 DN100 | 18.00 457 | 6.00 152 | 62.0 28.1 |
| | | | | 5 | 18.00 457 | 6.00 152 | 75.5 34.2 |
| | | | | 6 DN150 | 18.00 457 | 6.00 152 | 82.0 37.2 |
| 10 DN250 | x | 10 DN250 | x | 4 DN100 | 20.50 521 | 6.50 165 | 104.8 47.5 |
| | | | | 5 | 20.50 521 | 6.50 165 | 99.0 44.9 |
| | | | | 6 DN150 | 20.50 521 | 6.50 165 | 105.8 48.0 |
| | | | | 8 DN200 | 20.50 521 | 6.50 165 | 118.0 53.5 |
| 12 DN300 | x | 12 DN300 | x | 5 | 23.00 584 | 7.00 178 | 122.0 55.3 |
| | | | | 6 DN150 | 23.00 584 | 7.00 178 | 137.0 62.1 |
| | | | | 8 DN200 | 23.00 584 | 7.00 178 | 147.0 66.7 |
| | | | | 10 DN250 | 23.00 584 | 7.00 178 | 167.0 75.8 |

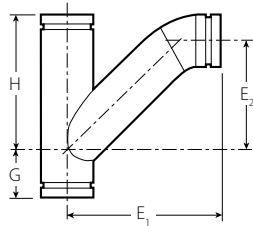
| Size | | | No 30-R 45° Reducing Lateral | | | | |
|---------------------------|---|-------------------------|---------------------------------|-------------|--|--------------|---|
| Nominal inches DN | x | Nominal inches DN | x | DN | C to LE | C to SE | Approx. Weight (Each) lb kg |
| | | | | | inches mm | inches mm | |
| 14 ² DN350 | x | 14 DN350 | x | 4 DN100 | 26.50 673 | 7.50 191 | 172.0 78.0 |
| | | | | 6 DN150 | 26.50 673 | 7.50 191 | 187.0 84.8 |
| | | | | 8 DN200 | 26.50 673 | 7.50 191 | 205.8 93.4 |
| | | | | 10 DN250 | 26.20 673 | 7.50 191 | 235.0 106.6 |
| | | | | 12 DN300 | 26.50 673 | 7.50 191 | 250.0 113.4 |
| 16 ² DN400 | x | 16 DN400 | x | 6 DN150 | 29.00 737 | 8.00 203 | 215.0 97.5 |
| | | | | 8 DN200 | 29.00 737 | 8.00 203 | 252.5 114.5 |
| | | | | 10 DN250 | 29.00 737 | 8.00 203 | 265.0 120.2 |
| | | | | 12 DN300 | 29.00 737 | 8.00 203 | 295.0 133.8 |
| | | | | 14 DN350 | 29.00 737 | 8.00 203 | 305.0 138.3 |
| 18 ² DN450 | x | 18 DN450 | x | 6 DN150 | 32.00 813 | 8.50 216 | 274.0 124.3 |
| | | | | 8 DN200 | 32.00 813 | 8.50 216 | 275.0 124.7 |
| | | | | 12 DN300 | 32.00 813 | 8.50 216 | 347.0 157.4 |
| | | | | 14 DN350 | 32.00 813 | 8.50 216 | 350.0 158.8 |
| | | | | 16 DN400 | 32.00 813 | 8.50 216 | 362.0 164.2 |
| 20 ² DN500 | x | 20 DN500 | x | 12 DN300 | 35.00 889 | 9.00 229 | 415.0 188.2 |
| | | | | 14 DN350 | 35.00 889 | 9.00 229 | 420.0 190.5 |
| | | | | 16 DN400 | 35.00 899 | 10.00 229 | 425.0 192.8 |
| | | | | 20 DN600 | 40.00 1016 | 10.00 254 | 425.0 192.8 |
| 24 ² DN600 | x | 24 DN600 | x | 16 DN400 | 40.00 1016 | 10.00 254 | 425.0 192.8 |
| | | | | 20 DN600 | 40.00 1016 | 10.00 254 | 570.0 258.6 |
| 14 – 60 DN350 – DN1500 | | | | | For AGS fitting information, see publication 20.05  | | |

² For 14"/DN350 and larger roll grooved systems, Victaulic offers the Advanced Groove System (AGS). For pricing and availability of cut groove fittings in this size, contact your nearest Victaulic sales representative.

4.8 DIMENSIONS

Tee Wye

No. 32



No. 32

| Size | | | No. 32 Tee Wye (sw) | | | | Approx. Weight (Each) |
|-------------------|---|----------|---------------------|-------------|--------------|--------------|-----------------------|
| Nominal inches DN | | | G inches mm | H inches mm | E1 inches mm | E2 inches mm | |
| 2 DN50 | x | 2 DN50 | 2.75 70 | 7.00 178 | 9.00 229 | 4.63 118 | 6.4 2.9 |
| 2 1/2 | x | 2 1/2 | 3.00 76 | 7.75 197 | 10.50 267 | 5.75 146 | 11.5 5.2 |
| 3 DN80 | x | 3 DN80 | 3.25 83 | 8.50 216 | 11.50 292 | 6.50 165 | 14.3 6.5 |
| 3 1/2 | x | 3 1/2 | 3.25 89 | 10.00 254 | 13.00 330 | 7.75 197 | 22.9 10.4 |
| 4 DN100 | x | 4 DN100 | 3.75 95 | 10.50 267 | 13.63 346 | 8.13 207 | 26.0 11.8 |
| 5 | x | 5 | 4.00 102 | 12.50 318 | 16.13 410 | 10.00 254 | 48.0 21.8 |
| 6 DN150 | x | 6 DN150 | 4.50 114 | 14.00 356 | 18.25 464 | 11.50 292 | 60.5 27.4 |
| 8 DN200 | x | 8 DN200 | 6.00 152 | 18.00 457 | 23.25 591 | 15.25 387 | 127.1 57.7 |
| 10 DN250 | x | 10 DN250 | 6.50 165 | 20.50 521 | 27.25 692 | 18.00 457 | 190.0 86.2 |
| 12 DN300 | x | 12 DN300 | 7.00 178 | 23.00 584 | 31.00 787 | 20.50 521 | 240.0 108.9 |

(s) = Carbon Steel Direct Roll Groove (OGS)
 (sw) = Carbon Steel Segmentally Welded

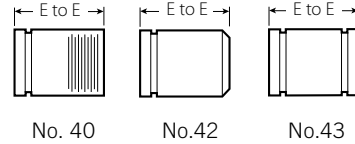
4.9 DIMENSIONS

Adapter Nipple

No. 40¹² Grv. x Thd.

No. 42 Grv. x Bev.

No. 43 Grv. x Grv.



| Size | | No. 40, 42, 43 Adapter Nipple (s) | |
|-------------------|-----------------------------------|-----------------------------------|-----------------------------|
| Nominal inches DN | Actual Outside Diameter inches mm | E to E inches mm | Approx. Weight (Each) lb kg |
| 3/4 DN20 | 1.050 26.9 | 3.00 76 | 0.3 0.1 |
| 1 25 | 1.315 33.7 | 3.00 76 | 0.4 0.2 |
| 1 1/4 DN32 | 1.660 42.4 | 4.00 102 | 0.8 0.4 |
| 1 1/2 40 | 1.900 48.3 | 4.00 102 | 0.9 0.4 |
| 2 DN50 | 2.375 60.3 | 4.00 102 | 1.2 0.5 |
| 2 1/2 | 2.875 73.0 | 4.00 102 | 1.9 0.9 |
| 3 DN80 | 3.500 88.9 | 4.00 102 | 2.5 1.1 |
| 3 1/2 DN90 | 4.000 101.6 | 4.00 102 | 2.1 0.9 |
| 4 DN100 | 4.500 114.3 | 6.00 152 | 5.5 2.5 |
| 5 | 5.563 141.3 | 6.00 152 | 7.4 3.4 |
| 6 DN150 | 6.625 168.3 | 6.00 152 | 9.5 4.3 |
| 8 DN200 | 8.625 219.1 | 6.00 152 | 14.2 6.4 |
| 10 DN250 | 10.750 273.0 | 8.00 203 | 27.0 12.2 |
| 12 DN300 | 12.750 323.9 | 8.00 203 | 33.0 15.0 |

(s) = Carbon Steel Direct Roll Groove (OGS)
 (sw) = Carbon Steel Segmentally Welded

NOTES

- All fittings are ductile iron unless otherwise noted with an (sw) or (s).
- For pump package nipples with 1 1/2"/40 mm hole cut to receive Style 923 Vic-Let or Style 924 Vic-O-Well request special No. 40, 42 or 43 nipples and specify No. 40-H, 42-H or 43-H on order. NOTE: 4 – 12"/DN100 – DN300 diameter — 8"/200mm minimum length required.
- For roll grooved systems, Victaulic offers the Advanced Groove System (AGS). For pricing and availability of cut groove fittings in this size, contact your nearest Victaulic sales representative.
- Available with British Standard Pipe Threads, specify "BSP" clearly on order.

4.10 DIMENSIONS

Cap

No. 60



No. 60



No. 60

| Size | | No. 60 Cap | |
|--------------|-------------------------|---------------|-----------------------|
| Nominal | Actual Outside Diameter | "T" Thickness | Approx. Weight (Each) |
| inches DN | inches mm | inches mm | lb kg |
| ¾ DN20 | 1.050 26.9 | 0.88 22 | 0.2 0.1 |
| 1 25 | 1.315 33.7 | 0.88 22 | 0.3 0.1 |
| 1 ¼ DN32 | 1.660 42.4 | 0.88 22 | 0.3 0.1 |
| 1 ½ DN40 | 1.900 48.3 | 0.88 22 | 0.5 0.2 |
| 2 DN50 | 2.375 60.3 | 0.88 22 | 0.6 0.3 |
| 2 ½ | 2.875 73.0 | 0.88 22 | 1.0 0.5 |
| DN65 | 3.000 76.1 | 0.88 22 | 1.2 0.5 |
| 3 DN80 | 3.500 88.9 | 0.88 22 | 1.2 0.5 |
| 3 ½ DN90 | 4.000 101.6 | 0.88 22 | 2.5 1.1 |
| | 4.250 108.0 | 1.00 25 | 2.3 1.0 |
| 4 DN100 | 4.500 114.3 | 1.00 25 | 2.5 1.1 |
| | 5.250 133.0 | 1.00 25 | 4.5 2.0 |
| DN125 | 5.500 139.7 | 1.00 25 | 4.5 2.0 |
| 5 | 5.563 141.3 | 1.00 25 | 4.6 2.1 |

| Size | | No. 60 Cap | |
|---------------------------|--|------------------|-----------------------|
| Nominal | Actual Outside Diameter | "T" Thickness | Approx. Weight (Each) |
| inches DN | inches mm | inches mm | lb kg |
| | 6.250 159.0 | 1.00 25 | 6.8 3.1 |
| | 6.500 165.1 | 1.00 25 | 7.3 3.3 |
| 6 DN150 | 6.625 168.3 | 1.00 25 | 6.1 2.8 |
| 8 DN200 | 8.625 219.1 | 1.19 30 | 13.1 5.9 |
| 10 DN250 | 10.750 273.0 | 1.25 32 | 21.0 9.5 |
| 12 DN300 | 12.750 323.9 | 1.25 32 | 35.6 16.2 |
| 14 ² DN350 | 14.000 355.6 | 9.50 (s) 241 | + |
| 16 ² DN400 | 16.000 406.4 | 10.00 (s) 254 | + |
| 18 ² DN450 | 18.000 457.0 | 11.00 (s) 279 | + |
| 20 ² DN500 | 20.000 508.0 | 12.00 (s) 305 | + |
| 24 ² DN600 | 24.000 610.0 | 13.50 (s) 343 | + |
| 14 – 60 DN350 – DN1500 | For AGS fitting information, see publication 20.05 | | |



² For 14"/DN350 and larger roll grooved systems, Victaulic offers the Advanced Groove System (AGS). For pricing and availability of cut groove fittings in this size, contact your nearest Victaulic sales representative.

(s) = Carbon Steel Direct Roll Groove (OGS)

(sw) = Carbon Steel Segmentally Welded

+ Contact Victaulic for details.

NOTES

- No. 60 cap is not suitable for use in vacuum service with Style 72 or 750 couplings. No. 61 bull plugs should be used.
- All fittings are ductile iron unless otherwise noted with an (sw) or (s).

4.11 DIMENSIONS

Flanged Adapter Nipple

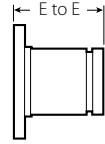
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No. 45R ANSI Class 150 Raised Face

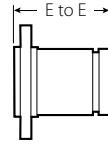
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No. 46R ANSI Class 300 Raised Face

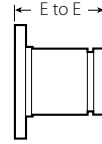
No. 45RE PN10/PN16 Raised Face



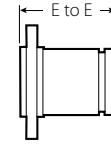
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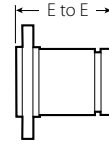
No. 45R



No. 46F



No. 46R



No. 45RE

| Size | | No. 45F and No. 45R ANSI 150 Flanged Adapter Nipple (s) | | No. 46F and No. 46R ANSI 300 Flanged Adapter Nipple (s) | | No. 45RE Flanged Adapter Nipple | |
|--------------------------|--|---|--------------------------------------|---|--------------------------------------|------------------------------------|--------------------------------------|
| Nominal inches DN | Actual Outside Diameter inches mm | E to E inches mm | Approx. Weight (Each) lb kg | E to E inches mm | Approx. Weight (Each) lb kg | E to E inches mm | Approx. Weight (Each) lb kg |
| 3/4 DN20 | 1.050 26.9 | 3.00 76 | 2.3 1.0 | 3.00 76 | 3.3 1.5 | — | — |
| 1 DN25 | 1.315 33.7 | 3.00 76 | 2.7 1.2 | 3.00 76 | 3.9 1.8 | — | — |
| 1 1/4 DN32 | 1.660 42.4 | 4.00 102 | 3.3 1.5 | 4.00 102 | 4.8 2.2 | — | — |
| 1 1/2 DN40 | 1.900 48.3 | 4.00 102 | 3.9 1.8 | 4.00 102 | 6.9 3.1 | — | — |
| 2 DN50 | 2.375 60.3 | 4.00 102 | 6.0 2.7 | 4.00 102 | 8.2 3.7 | 2.50 64 | 5.3 2.4 |
| 2 1/2 | 2.875 73.0 | 4.00 102 | 9.9 4.5 | 4.00 102 | 11.9 5.4 | — | — |
| DN65 | 3.000 76.1 | — | — | — | — | 2.50 64 | 6.5 2.9 |
| 3 DN80 | 3.500 88.9 | 4.00 102 | 11.7 5.3 | 4.00 102 | 16.5 7.5 | 2.50 64 | 8.2 3.7 |
| 3 1/2 DN90 | 4.000 101.6 | 4.00 102 | 15.1 6.8 | 4.00 102 | 20.1 9.1 | — | — |
| 4 DN100 | 4.500 114.3 | 6.00 152 | 18.5 8.4 | 6.00 152 | 27.4 12.4 | 2.75 70 | 10.0 45 |
| 5 | 5.563 141.3 | 6.00 152 | 21.3 9.7 | 6.00 152 | 35.3 16.0 | — | — |
| DN125 | 5.500 139.7 | — | — | — | — | 2.75 70 | 16.3 7.4 |
| 6 DN150 | 6.625 168.3 | 6.00 152 | 27.5 12.5 | 6.00 152 | 47.5 21.5 | 2.75 70 | 16.3 7.4 |
| | 6.500 165.1 | — | — | — | — | — | — |
| 8 DN200 | 8.625 219.1 | 6.00 152 | 41.3 18.8 | 6.00 152 | 70.3 31.9 | — | — |
| 10 DN250 | 10.750 273.0 | 8.00 203 | 59.3 27.1 | 8.00 203 | 100.8 45.7 | — | — |
| 12 DN300 | 12.750 323.9 | 8.00 203 | 40.0 40.0 | 8.00 203 | 146.2 66.3 | — | — |
| 14 ² DN350 | 14.000 355.6 | 8.00 203 | + | 8.00 203 | + | — | — |
| 16 ² DN400 | 16.000 406.4 | 8.00 203 | + | 8.00 203 | + | — | — |
| 18 ² DN450 | 18.000 457.0 | 8.00 203 | + | 8.00 203 | + | — | — |

² For 14"/DN350 and larger roll grooved systems, Victaulic offers the Advanced Groove System (AGS). For pricing and availability of cut groove fittings in this size, contact your nearest Victaulic sales representative.

(s) = Carbon Steel Direct Roll Groove (OGS)

(sw) = Carbon Steel Segmentally Welded

4.11 DIMENSIONS (CONTINUED)

Flanged Adapter Nipple

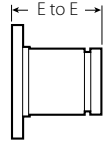
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No. 45R ANSI Class 150 Raised Face

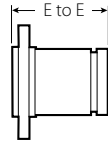
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No. 46R ANSI Class 300 Raised Face

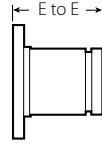
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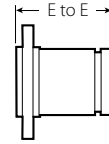
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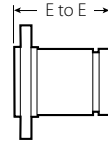
No. 45R




No. 46F



No. 46R



No. 45RE

| Size | | No. 45F and No. 45R ANSI 150 Flanged Adapter Nipple (s) | | No. 46F and No. 46R ANSI 300 Flanged Adapter Nipple (s) | | No. 45RE Flanged Adapter Nipple (s) | |
|---------------------------|--|---|--------------------------------------|---|--------------------------------------|--|--------------------------------------|
| Nominal inches DN | Actual Outside Diameter inches mm | E to E inches mm | Approx. Weight (Each) lb kg | E to E inches mm | Approx. Weight (Each) lb kg | E to E inches mm | Approx. Weight (Each) lb kg |
| 20 ² DN500 | 20.000 508.0 | 8.00 203 | + | 8.00 203 | + | — | — |
| 24 ² DN600 | 24.000 610.0 | 8.00 203 | + | 8.00 203 | + | — | — |
| 14 – 60 DN350 – DN1500 | For AGS fitting information, see publication 20.05  | | | | | | |

² For 14"/DN350 and larger roll grooved systems, Victaulic offers the Advanced Groove System (AGS). For pricing and availability of cut groove fittings in this size, contact your nearest Victaulic sales representative.

(s) = Carbon Steel Direct Roll Groove (OGS)

(sw) = Carbon Steel Segmentally Welded

+ Contact Victaulic for details

NOTE

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

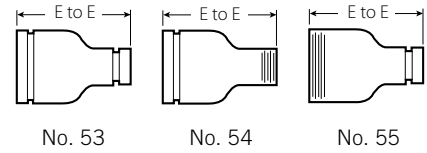
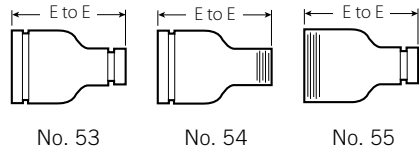
4.12 DIMENSIONS

Swaged Nipple

No. 53 Grv. x Grv.

No. 54 Grv. x Thd.

No. 55 Thd. x Grv.



| Size | | No. 53, 54, and 55 Swaged Nipples (s) | | |
|-------------------|---|---------------------------------------|-----------------------------|------------|
| Nominal inches DN | | E to E inches mm | Approx. Weight (Each) lb kg | |
| 2 DN50 | x | 1 DN25 | 6.50 165 | 2.0 0.9 |
| | | 1¼ DN32 | 6.50 165 | 2.0 0.9 |
| | | 1½ DN40 | 6.50 165 | 2.0 0.9 |
| | | | | |
| 2½ | x | 1 DN25 | 7.00 178 | 3.0 1.4 |
| | | 1¼ DN32 | 7.00 178 | 3.0 1.4 |
| | | 1½ DN40 | 7.00 178 | 3.0 1.4 |
| | | 2 DN50 | 7.00 178 | 3.0 1.4 |
| | | | | |
| 3 DN80 | x | 1 DN25 | 8.00 203 | 4.5 2.0 |
| | | 1¼ DN32 | 8.00 203 | 4.5 2.0 |
| | | 1½ DN40 | 8.00 203 | 4.5 2.0 |
| | | 2 DN50 | 8.00 203 | 4.5 2.0 |
| | | 2½ | 8.00 203 | 4.5 2.0 |
| | | | | |
| 3½ DN90 | x | 3 DN80 | 8.00 203 | 6.8 3.1 |
| 4 DN100 | x | 1 DN25 | 9.00 229 | 7.5 3.4 |
| | | 1¼ DN32 | 9.00 229 | 7.5 3.4 |
| | | 1½ DN40 | 9.00 229 | 7.5 3.4 |
| | | 2 DN50 | 9.00 229 | 7.5 3.4 |
| | | 2½ | 9.00 229 | 7.5 3.4 |
| | | 3 DN80 | 9.00 229 | 7.5 3.4 |
| | | 3½ DN90 | 9.00 229 | 7.5 3.4 |
| | | | | |
| | | | | |

| Size | | No. 53, 54, and 55 Swaged Nipples (s) | | |
|-------------------|---|---------------------------------------|-----------------------------|-------------|
| Nominal inches DN | | E to E inches mm | Approx. Weight (Each) lb kg | |
| 5 | x | 2 DN50 | 11.00 279 | 11.5 5.2 |
| | | 3 DN80 | 11.00 279 | 11.3 5.1 |
| | | 4 DN100 | 11.00 279 | 11.5 5.2 |
| | | | | |
| 6 DN150 | x | 1 DN25 | 12.00 305 | 17.0 7.7 |
| | | 1¼ DN32 | 12.00 305 | 17.0 7.7 |
| | | 1½ DN40 | 12.00 305 | 17.2 7.8 |
| | | 2 DN50 | 12.00 305 | 17.4 7.9 |
| | | 2½ | 12.00 305 | 17.4 7.9 |
| | | 3 DN80 | 12.00 305 | 17.4 7.9 |
| | | 3½ DN90 | 12.00 305 | 17.4 7.9 |
| | | 4 DN100 | 12.00 305 | 17.5 7.9 |
| | | 4½ | 12.00 305 | 17.5 7.9 |
| | | 5 | 12.00 305 | 17.5 7.9 |
| | | | | |
| 8 DN200 | x | 6 DN150 | + | 20.0 9.1 |

(s) = Carbon Steel Direct Roll Groove (OGS)

(sw) = Carbon Steel Segmentally Welded

+ Contact Victaulic for details

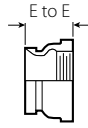
NOTE

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

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 |
| ¾ DN20 | 1.050 26.9 | 2.00 51 | 1.0 0.5 |
| 1 DN25 | 1.315 33.7 | 2.06 52 | 1.0 0.5 |
| 1 ¼ DN32 | 1.660 42.4 | 2.31 (sw) 59 | 1.5 0.7 |
| 1 ½ DN40 | 1.900 48.3 | 2.31 (sw) 59 | 1.5 0.7 |
| 2 DN50 | 2.375 60.3 | 2.50 64 | 1.4 0.6 |
| 2 ½ | 2.875 73.0 | 2.75 70 | 1.5 0.7 |
| 3 DN80 | 3.500 88.9 | 2.75 70 | 2.9 1.3 |
| 4 DN100 | 4.500 114.3 | 3.25 83 | 4.5 2.0 |

(s) = Carbon Steel Direct Roll Groove (OGS)

(sw) = Carbon Steel Segmentally Welded

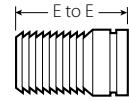
NOTES

- 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 |
| ¾ DN20 | 1.050 26.9 | 3.12 79 | 0.3 0.1 |
| 1 DN25 | 1.315 33.7 | 3.38 86 | 0.4 0.2 |
| 1 ¼ DN32 | 1.660 42.4 | 3.88 98 | 0.6 0.3 |
| 1 ½ DN40 | 1.900 48.3 | 3.88 98 | 0.8 0.4 |
| 2 DN50 | 2.375 60.3 | 4.50 114 | 1.1 0.5 |
| 2 ½ | 2.875 73.0 | 5.38 137 | 2.0 0.9 |
| 3 DN80 | 3.500 88.9 | 5.75 146 | 3.2 1.5 |
| 4 DN100 | 4.500 114.3 | 7.00 178 | 4.9 2.2 |
| 5 | 5.563 141.3 | 8.75 222 | 8.0 3.6 |
| 6 DN150 | 6.625 168.3 | 10.13 257 | 14.3 6.5 |
| 8 DN200 | 8.625 219.1 | 11.88 302 | 24.7 11.2 |
| 10 DN250 | 10.750 273.0 | 12.50 318 | 40.1 18.2 |
| 12 DN300 | 12.750 323.9 | 14.50 368 | 62.0 28.1 |

(s) = Carbon Steel Direct Roll Groove (OGS)

(sw) = Carbon Steel Segmentally Welded

NOTE

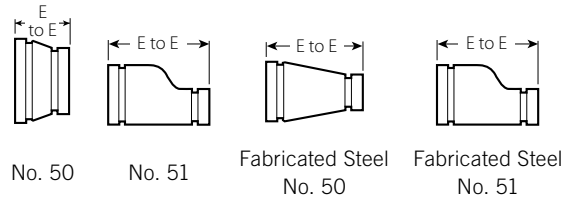
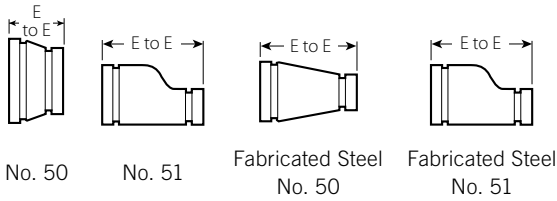
- All fittings are ductile iron unless otherwise noted with an (sw) or (s).

4.15 DIMENSIONS

Concentric/Eccentric Reducer

No. 50 Concentric

No. 51 Eccentric



| Size | No. 50 Concentric Reducer | | | No. 51 Eccentric Reducer | |
|-----------------------|---------------------------|------------------|-----------------------------|--------------------------|-----------------------------|
| | Nominal inches DN | E to E inches mm | Approx. Weight (Each) lb kg | E to E inches mm | Approx. Weight (Each) lb kg |
| 1 1/4 DN32 x 3/4 DN20 | + | 1.9 0.9 | — | — | |
| | 1 DN25 | + | 1.9 0.9 | — | — |
| 1 1/2 DN40 x 3/4 DN20 | + | 1.4 0.6 | — | — | |
| | 1 DN25 | 2.50 64 | 0.8 0.4 | 8.50 (sw) 216 | 4.5 2.0 |
| | 1 1/4 DN32 | 2.50 64 | 1.0 0.5 | — | — |
| 2 DN50 x 3/4 DN20 | 2.50 64 | 0.9 0.3 | 9.00 (sw) 229 | 2.0 0.9 | |
| | 1 DN25 | 2.50 64 | 0.7 0.3 | 9.00 (sw) 229 | 2.3 1.0 |
| | 1 1/4 DN32 | 2.50 64 | 1.2 0.5 | 9.00 (sw) 229 | 4.6 2.1 |
| | 1 1/2 DN40 | 2.50 64 | 1.0 0.5 | 3.50 89 | 1.1 0.5 |
| 2 1/2 x 3/4 DN20 | + | 1.3 0.6 | + | 3.3 1.5 | |
| | 1 DN25 | 2.50 64 | 1.1 0.5 | 9.50 241 | 3.5 1.6 |
| | 1 1/4 DN32 | 3.50 89 | 3.3 1.5 | 3.50 89 | 1.4 0.6 |
| | 1 1/2 DN40 | 2.50 64 | 3.6 1.6 | 9.50 (sw) 241 | 3.7 1.7 |
| | 2 DN50 | 2.50 64 | 3.9 1.8 | 3.50 89 | 4.3 2.0 |
| | 3 DN80 x 3/4 DN20 | + | 1.5 0.7 | + | 4.5 2.0 |
| 1 DN25 | 2.50 64 | 1.3 0.6 | 9.50 (sw) 241 | 4.8 2.2 | |
| | 1 1/4 DN32 | 2.50 64 | 1.4 0.6 | + | 4.8 2.2 |
| | 1 1/2 DN40 | 2.50 64 | 5.1 2.3 | 9.50 (sw) 241 | 5.1 2.3 |
| | 2 DN50 | 2.50 64 | 1.6 0.7 | 3.50 89 | 6.0 2.7 |
| | 2 1/2 DN50 | 2.50 64 | 1.8 0.8 | 3.50 89 | 7.0 3.2 |
| | DN65 | 2.50 64 | 2.1 1.0 | — | — |
| 3 1/2 DN90 x 3 DN80 | 2.50 64 | 2.0 0.9 | 9.50 (sw) 241 | 7.0 3.2 | |
| 4 DN100 x 1 DN25 | 3.00 76 | 3.0 1.4 | 13.00 (sw) 330 | 6.5 2.9 | |

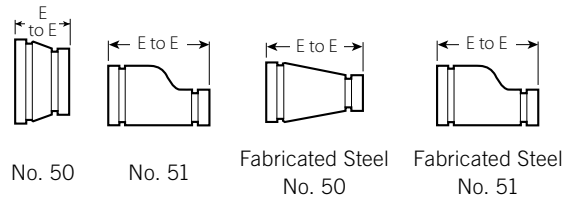
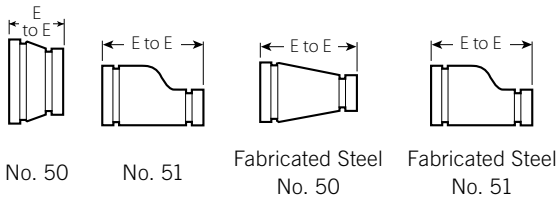
| Size | No. 50 Concentric Reducer | | | No. 51 Eccentric Reducer | |
|------------------|---------------------------|------------------|-----------------------------|--------------------------|-----------------------------|
| | Nominal inches DN | E to E inches mm | Approx. Weight (Each) lb kg | E to E inches mm | Approx. Weight (Each) lb kg |
| 1 1/4 DN32 | + | 4.6 2.1 | — | — | |
| | 1 1/2 DN40 | 3.00 (sw) 76 | 2.6 1.2 | 10.00 (sw) 254 | 8.1 3.7 |
| | 2 DN50 | 3.00 76 | 2.4 1.1 | 4.00 102 | 3.3 1.5 |
| | 2 1/2 | 3.00 76 | 2.7 1.2 | 4.00 102 | 3.4 1.5 |
| | 3 DN80 | 3.00 76 | 3.2 1.4 | 4.00 102 | 3.5 1.6 |
| | 3 1/2 DN90 | 3.00 76 | 2.9 1.3 | 10.00 (sw) 254 | 8.0 3.6 |
| | 5 x 2 DN50 | 11.00 (sw) 279 | 9.0 4.1 | 11.00 (sw) 279 | 5.2 2.4 |
| 2 1/2 | | 4.00 102 | 4.3 2.0 | 11.00 (sw) 279 | 10.8 4.9 |
| 3 DN80 | | 4.00 102 | 5.5 2.5 | 11.00 (sw) 279 | 11.1 5.0 |
| 4 DN100 | | 3.50 89 | 4.3 1.9 | 5.00 127 | 12.0 5.4 |
| 6 DN150 x 1 DN25 | 4.00 102 | 5.0 2.3 | 11.50 (sw) 292 | 14.5 6.6 | |
| | 1 1/2 DN40 | + | 5.5 2.5 | + | + |
| | 2 DN50 | 4.00 102 | 6.6 3.0 | 11.50 (sw) 292 | 14.5 6.6 |
| | 2 1/2 | 4.00 102 | 6.4 2.9 | 11.50 (sw) 292 | 14.2 6.4 |
| | 3 DN80 | 4.00 102 | 6.4 2.9 | 5.50 140 | 15.0 6.8 |
| | 4 DN100 | 4.00 102 | 6.5 2.9 | 5.50 140 | 17.0 7.7 |
| | 5 | 4.00 102 | 6.4 2.9 | 5.50 140 | 17.0 7.7 |
| | 8 DN200 x 2 1/2 | 16.00 406 | 7.9 3.6 | 12.00 (sw) 305 | 26.1 11.8 |
| 3 DN80 | 5.00 127 | 9.3 4.2 | 12.00 (sw) 305 | 22.0 10.0 | |
| | 4 DN100 | 5.00 127 | 10.4 4.8 | 12.00 (sw) 305 | 23.0 10.4 |
| | 5 | 5.00 127 | 11.6 5.2 | 12.00 (sw) 305 | 23.0 10.4 |
| | 6 DN150 | 5.00 127 | 11.9 5.4 | 6.00 152 | 24.0 10.9 |

4.15 DIMENSIONS (CONTINUED)

Concentric/Eccentric Reducer

No. 50 Concentric

No. 51 Eccentric



| Size | | No. 50 Concentric Reducer | | No. 51 Eccentric Reducer | |
|----------------------------|------------------|-----------------------------|-------------------|-----------------------------|--|
| Nominal inches DN | E to E inches mm | Approx. Weight (Each) lb kg | E to E inches mm | Approx. Weight (Each) lb kg | |
| 10 DN250 x | 4 DN100 | 19.7 8.9 | 13.00 (sw) 330 | 32.0 14.5 | |
| | 5 | 33.0 15.0 | + | 34.6 15.7 | |
| | 6 DN150 | 20.0 9.1 | 13.00 (sw) 330 | 36.9 16.7 | |
| | 8 DN200 | 22.0 10.0 | 7.00 178 | 21.6 9.8 | |
| 12 DN300 x | 4 DN100 | 44.0 20.0 | 14.00 (sw) 356 | 48.0 21.8 | |
| | 6 DN150 | 24.6 11.2 | 14.00 (sw) 356 | 50.0 22.7 | |
| | 8 DN200 | 52.0 23.6 | 14.00 (sw) 356 | 53.5 24.3 | |
| | 10 DN250 | 39.0 17.7 | 14.00 (sw) 356 | 57.0 25.9 | |
| 14 ² DN350 x | 6 DN150 | 65.0 29.5 | 13.00 330 | 60.0 27.2 | |
| | 8 DN200 | 65.0 29.5 | 13.00 330 | 60.0 27.2 | |
| | 10 DN250 | 66.0 29.9 | 13.00 330 | 65.0 29.5 | |
| | 12 DN300 | 68.0 30.8 | 13.00 330 | 66.0 29.9 | |
| | 14 DN350 | 73.0 33.1 | 14.00 355 | 73.0 33.1 | |
| 16 ² DN400 x | 8 DN200 | 73.0 33.1 | 14.00 355 | 73.0 33.1 | |
| | 10 DN250 | 73.0 33.1 | 14.00 355 | 73.0 33.1 | |
| | 12 DN300 | 73.0 33.1 | 14.00 355 | 73.0 33.1 | |
| | 14 DN350 | 73.0 33.1 | 14.00 355 | 73.0 33.1 | |
| 18 ² DN450 x | 10 DN250 | 91.0 41.3 | 15.00 381 | 91.0 41.3 | |
| | 12 DN300 | 91.0 41.3 | 15.00 381 | 91.0 41.3 | |
| | 14 DN350 | 91.0 41.3 | 15.00 381 | 91.0 41.3 | |
| | 16 DN400 | 91.0 41.3 | 15.00 381 | 91.0 41.3 | |

² For 14"/DN350 and larger roll grooved systems, Victaulic offers the Advanced Groove System (AGS). For pricing and availability of cut groove fittings in this size, contact your nearest Victaulic sales representative.

| Size | | No. 50 Concentric Reducer | | No. 51 Eccentric Reducer | |
|----------------------------|--|-----------------------------|------------------|-----------------------------|---------------|
| Nominal inches DN | E to E inches mm | Approx. Weight (Each) lb kg | E to E inches mm | Approx. Weight (Each) lb kg | |
| 20 ² DN500 x | 10 DN250 | 110.0 49.9 | 20.00 508 | 20.00 508 | 177.0 80.3 |
| | 12 DN300 | 120.0 54.4 | 20.00 508 | 20.00 508 | 120.0 54.4 |
| | 14 DN350 | 149.0 67.9 | 20.00 508 | 20.00 508 | 149.0 67.9 |
| | 16 DN400 | 120.0 54.4 | 20.00 508 | 20.00 508 | 120.0 54.4 |
| | 18 DN450 | 136.0 61.7 | 20.00 508 | 20.00 508 | 136.0 61.7 |
| 24 ² DN600 x | 10 DN250 | 142.0 64.4 | 20.00 508 | 20.00 508 | 142.0 64.4 |
| | 12 DN300 | 150.0 68.0 | 20.00 508 | 20.00 508 | 150.0 68.0 |
| | 14 DN350 | 162.0 73.5 | 20.00 508 | 20.00 508 | 162.0 73.5 |
| | 16 DN400 | 162.0 73.5 | 20.00 508 | 20.00 508 | 162.0 73.5 |
| | 18 DN450 | 162.0 73.5 | 20.00 508 | 20.00 508 | 162.0 73.5 |
| | 20 DN500 | 151.0 68.5 | 20.00 508 | 20.00 508 | 190.0 86.2 |
| 14 – 60 DN350 – DN1500 | For AGS fitting information, see publication 20.05 | | | | |



² For 14"/DN350 and larger roll grooved systems, Victaulic offers the Advanced Groove System (AGS). For pricing and availability of cut groove fittings in this size, contact your nearest Victaulic sales representative.

(s) = Carbon Steel Direct Roll Groove (OGS)

(sw) = Carbon Steel Segmentally Welded

+ Contact Victaulic for details.

NOTES

- Available with male threaded small end No. 52.
- Cast fitting available for JIS size. Contact Victaulic for details.
- Steel eccentric reducers available through 30"/DN750, contact Victaulic for dimensions.
- All fittings are ductile iron unless otherwise noted with an (sw) or (s).

4.16 DIMENSIONS

Small Threaded Reducer

No. 52

No. 52F



No. 52



No. 52F



No. 52



No. 52F

| Size | | No. 52 Small Threader Reducer | | No. 52F Concentric Reducer with BSPT Female Threaded End | |
|-------------------|--------------|-------------------------------|-----------------------------|--|--------------------------|
| Nominal inches DN | | E to E inches mm | Approx. Weight (Each) lb kg | E to E mm | Approx. Weight (Each) kg |
| 1 1/2 DN40 | x 1 DN25 | 2.50 64 | 0.8 0.4 | — | — |
| | 1/4 DN32 | 2.50 64 | 0.9 0.4 | — | — |
| 2 DN50 | x 3/4 DN20 | 2.50 64 | 0.9 0.4 | — | — |
| | 1 DN25 | 2.50 64 | 0.7 0.3 | — | — |
| | 1 1/4 DN32 | 2.50 64 | 1.2 0.5 | — | — |
| | 1 1/2 DN40 | 2.50 64 | 1.0 0.5 | — | — |
| 2 1/2 | x 1 DN25 | 2.50 64 | 1.1 0.5 | — | — |
| | 1 1/4 DN32 | 2.50 (sw) 64 | 1.2 0.5 | — | — |
| | 1 1/2 DN40 | 2.50 (sw) 64 | 1.3 0.6 | — | — |
| | 2 DN50 | 2.50 64 | 1.4 0.6 | — | — |
| DN65 | x 1 1/2 DN40 | 64 | 0.8 | 64 | 0.8 |
| | 2 DN50 | — | — | 64 | 0.9 |
| 3 DN80 | x 3/4 DN20 | +(sw) | 1.5 0.7 | — | — |
| | 1 DN25 | 2.50 64 | 1.3 0.6 | — | — |
| | 1 1/4 DN32 | 2.50 64 | 1.5 0.7 | — | — |
| | 1 1/2 DN40 | 2.50 (sw) 64 | 1.5 0.7 | — | — |
| | 2 DN50 | 2.50 64 | 1.5 0.7 | — | — |
| | 2 1/2 | 2.50 64 | 2.4 1.1 | — | — |
| 88.9mm | x 42.4mm | 64 | 0.9 | 64 | 0.8 |
| | 48.3mm | 64 | 0.9 | 64 | 0.9 |
| | 60mm | — | — | 64 | 0.9 |

(s) = Carbon Steel Direct Roll Groove (OGS)

(sw) = Carbon Steel Segmentally Welded

+ Contact Victaulic for details.

| Size | | No. 52 Small Threader Reducer | | No. 52F Concentric Reducer with BSPT Female Threaded End | |
|-------------------|------------|-------------------------------|-----------------------------|--|--------------------------|
| Nominal inches DN | | E to E inches mm | Approx. Weight (Each) lb kg | E to E mm | Approx. Weight (Each) kg |
| 4 DN100 | x 1 DN25 | 3.00 76 | 2.3 1.0 | — | — |
| | 1 1/2 DN40 | 3.00 76 | 2.7 1.2 | — | — |
| | 2 DN50 | 3.00 76 | 2.6 1.2 | — | — |
| | 2 1/2 | 3.00 76 | 2.6 1.2 | — | — |
| | 3 DN80 | 3.00 76 | 2.5 1.1 | — | — |
| 108.0mm | x 42.4mm | 76 | 1.3 | 76 | 1.3 |
| | 48.3mm | 76 | 1.3 | 76 | 1.4 |
| | 60mm | — | — | 76 | 1.4 |
| 114.3mm | x 42.4mm | 76 | 1.3 | 76 | 1.3 |
| | 48.3mm | 76 | 1.3 | 76 | 1.3 |
| | 60mm | 76 | 1.3 | 76 | 1.4 |
| 5 | x 4 DN100 | + | 4.5 2.0 | — | — |
| 133.0mm | x 60mm | — | — | 114 | 2.2 |
| 139.0mm | x 60mm | — | — | 114 | 2.3 |
| 6 DN150 | x 1 DN25 | 4.00 102 | 5.5 2.5 | — | — |
| | 2 DN50 | 4.00 102 | 5.7 2.6 | — | — |
| | 2 1/2 | 4.00 102 | 5.8 2.6 | — | — |
| | 3 DN80 | 4.00 102 | 5.8 2.6 | — | — |
| | 4 DN100 | +(sw) | 6.5 2.9 | — | — |
| | 5 | +(sw) | 2.0 0.9 | — | — |
| 159.0mm | x 42.4mm | 114 | 2.2 | 144 | 2.5 |
| | 48.3mm | 114 | 2.2 | 114 | 2.5 |
| | 60mm | — | — | 114 | 2.6 |

4.16 DIMENSIONS (CONTINUED)

Small Threaded Reducer

No. 52

No. 52F



No. 52



No 52F

| Size | No. 52 Small Threader Reducer | | No. 52F Concentric Reducer with BSPT Female Threaded End | | |
|------------------|-------------------------------|---------------------|--|-----------|-----------------------------|
| | Nominal inches DN | E to E inches mm | Approx. Weight (Each) lb kg | E to E mm | Approx. Weight (Each) kg |
| 165.1mm x 42.4mm | 48.3mm | 102mm | 2.4 | 102 | 2.9 |
| | 60mm | — | — | 102 | 3.0 |
| | 8 DN200 x 2 DN50 | 16.00 406 | 1.5 0.7 | — | — |
| | 2 ½ | 16.00 406 | 1.7 0.8 | — | — |

(s) = Carbon Steel Direct Roll Groove (OGS)

(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).

5.0 PERFORMANCE

Flow Data

(Frictional Resistance)

The chart expresses the frictional resistance of various Victaulic fittings as equivalent feet of straight pipe. Fittings not listed can be estimated from the data given, for example, a 22½° elbow is approximately one-half the resistance of a 45° elbow. Values of mid-sizes can be interpolated.

| Size | | Dimensions | | | | | |
|-------------------------|---|---|---|---|---|--------------------------|-----------------------|
| Nominal inches DN | Actual Outside Diameter inches mm | 90° Elbows | | 45° Elbows | | Tees | |
| | | No. 10 Std. Radius feet meters | No. 100 1 ½ D Long Radius feet meters | No. 11 Std. Radius feet meters | No. 110 1 ½ D Long Radius feet meters | Branch feet meters | Run feet meters |
| 1 DN25 | 1.315 33.7 | 1.7 0.5 | — | 0.8 0.2 | — | 4.2 1.3 | 1.7 0.5 |
| 2 DN50 | 2.375 60.3 | 3.5 1.1 | 2.5 0.8 | 1.8 0.5 | 1.1 0.3 | 8.5 2.6 | 3.5 1.1 |
| DN65 | 3.000 76.1 | 4.3 1.3 | — | 2.1 0.7 | — | 10.8 3.3 | 4.3 1.3 |
| 3 DN80 | 3.500 88.9 | 5.0 1.5 | 3.8 1.2 | 2.6 0.8 | 1.6 0.5 | 13.0 4.0 | 5.0 1.5 |
| | 4.250 108.0 | 6.4 2.0 | — | 3.2 0.9 | — | 15.3 4.7 | 6.4 2.0 |
| 4 DN100 | 4.500 114.3 | 6.8 2.1 | 5.0 1.5 | 3.4 1.0 | 2.1 0.6 | 16.0 4.9 | 6.8 2.1 |
| | 5.250 133.0 | 8.1 2.5 | — | 4.1 1.2 | — | 20.0 6.2 | 8.1 2.5 |
| DN125 | 5.500 139.7 | 8.5 2.6 | — | 4.2 1.3 | — | 21.0 6.4 | 8.5 2.6 |
| 5 | 5.563 141.3 | 8.5 2.6 | — | 4.2 1.3 | — | 21.0 6.4 | 8.5 2.6 |
| | 6.250 159.0 | 9.4 2.9 | — | 4.9 1.5 | — | 25.0 7.6 | 9.6 2.9 |
| | 6.500 165.1 | 9.6 2.9 | — | 5.0 1.5 | — | 25.0 7.6 | 10.0 3.0 |
| 6 DN150 | 6.625 168.3 | 10.0 3.0 | 7.5 2.3 | 5.0 1.5 | 3.0 0.9 | 25.0 7.6 | 10.0 3.0 |
| 8 DN200 | 8.625 219.1 | 13.0 4.0 | 9.8 3.0 | 6.5 2.0 | 4.0 1.2 | 33.0 10.1 | 13.0 4.0 |
| 10 DN250 | 10.750 273.0 | 17.0 5.2 | 12.0 3.7 | 8.3 2.5 | 5.0 1.5 | 41.0 12.5 | 17.0 5.2 |
| 12 DN300 | 12.750 323.9 | 20.0 6.1 | 14.5 4.4 | 10.0 3.0 | 6.0 1.8 | 50.0 15.2 | 20.0 6.1 |
| 14 DN350 | 14.000 355.6 | 24.5 ⁴ 7.5 | 15.8 4.8 | 18.5 ⁴ 5.6 | 11.0 3.4 | 70.0 21.3 | 23.0 7.0 |
| 16 DN400 | 16.000 406.4 | 28.0 ⁴ 8.5 | 18.0 5.5 | 21.0 ⁴ 6.4 | 13.0 4.0 | 80.0 24.4 | 27.0 8.2 |
| 18 DN450 | 18.000 457.0 | 31.0 ⁴ 9.5 | 20.0 6.1 | 23.5 ⁴ 7.2 | 14.0 4.3 | 90.0 27.4 | 30.0 9.1 |
| 20 DN800 | 20.000 508.0 | 34.0 ⁴ 10.4 | 22.5 6.9 | 25.5 ⁴ 7.8 | 16.0 4.9 | 100.0 30.5 | 33.0 10.1 |
| 24 DN600 | 24.000 610.0 | 42.0 ⁴ 12.8 | 27.0 8.2 | 29.5 ⁴ 9.0 | 19.0 5.8 | 120.0 36.6 | 40.0 12.2 |

AGS fittings available up to 60"/DN1500. Contact Victaulic for details.



⁴ Fitting flow data for 14-24"/DN350-DN600 size No. 10 and No. 11 Elbows is based on fittings for Style 07 and 77 couplings. For flow data on AGS fittings (No. W10 and No. W11 Elbows), refer to [publication 20.05](#).

User Responsibility for Product Selection and Suitability

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