



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	

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

4.11 DIMENSIONS

Flanged Adapter Nipple

No. 41 ANSI Class 125

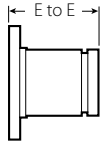
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No. 45R ANSI Class 150 Raised Face

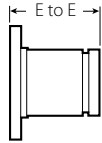
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No. 46R ANSI Class 300 Raised Face

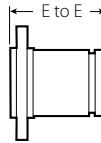
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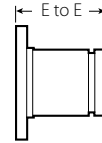
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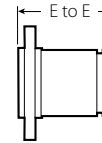
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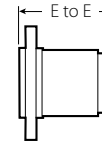
No. 45R



No. 46F



No. 46R



No. 45RE

Size		No. 41 ANSI 125 Flange Adapter Nipple		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	E to E inches mm	Approx. Weight (Each) lb kg
¾ DN20	1.050 26.9	3.00 76	—	3.00 76	2.3 1.0	3.00 76	3.3 1.5	—	—
1 DN25	1.315 33.7	3.00 76	2.5 1.1	3.00 76	2.7 1.2	3.00 76	3.9 1.8	—	—
1¼ DN32	1.660 42.4	4.00 102	3.0 1.4	4.00 102	3.3 1.5	4.00 102	4.8 2.2	—	—
1½ DN40	1.900 48.3	4.00 102	3.5 1.6	4.00 102	3.9 1.8	4.00 102	6.9 3.1	—	—
2 DN50	2.375 60.3	4.00 102	5.5 2.5	4.00 102	6.0 2.7	4.00 102	8.2 3.7	2.50 64	5.3 2.4
2½	2.875 73.0	4.00 102	8.0 3.6	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	9.5 4.3	4.00 102	11.7 5.3	4.00 102	16.5 7.5	2.50 64	8.2 3.7
3½ DN90	4.000 101.6	4.00 102	12.0 5.4	4.00 102	15.1 6.8	4.00 102	20.1 9.1	—	—
4 DN100	4.500 114.3	6.00 152	16.7 7.6	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	21.5 9.8	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	26.5 12.0	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	39.0 17.7	6.00 152	41.3 18.8	6.00 152	70.3 31.9	—	—
10 DN250	10.750 273.0	8.00 203	57.0 25.9	8.00 203	59.3 27.1	8.00 203	100.8 45.7	—	—
12 DN300	12.750 323.9	8.00 203	41.0 18.6	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	+	8.00 203	+	—	—
16 ² DN400	16.000 406.4	8.00 203	—	8.00 203	+	8.00 203	+	—	—
18 ² DN450	18.000 457.0	8.00 203	—	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

No. 41 ANSI Class 125

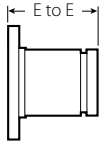
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No. 45R ANSI Class 150 Raised Face

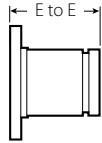
No. 46F ANSI Class 300 Flat Face

No. 46R ANSI Class 300 Raised Face

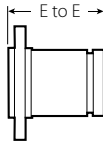
No. 45RE PN10/PN16 Raised Face



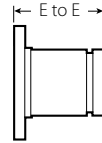
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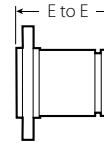
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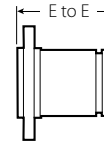
No. 45R




No. 46F



No. 46R



No. 45RE

Size		No. 41 ANSI 125 Flange Adapter Nipple		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	E to E inches mm	Approx. Weight (Each) lb kg
20 ² DN500	20.000 508.0	8.00 203	—	8.00 203	+	8.00 203	+	—	—
24 ² DN600	24.000 610.0	8.00 203	—	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).