



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

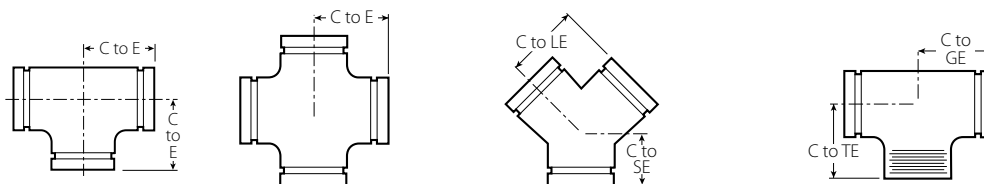
Flanged Adapter Nipple Coating: (specify choice)

Standard: None (Unfinished)

Optional: Orange enamel, hot dip galvanized and others

4.3 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
3/4 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
1 1/4 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
1 1/2 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
2 1/2	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
DN65	3.000 76.1	3.75 95	5.2 2.4	—	—	—	—	—	3.75 95	3.75 (sw) 95	5.2 2.4
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
3 1/2 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
	4.250 108.0	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
	5.000 127.0	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
	5.250 133.0	5.50 140	17.8 8.1	—	—	—	—	—	5.50 140	5.50 (sw) 140	17.8 8.1
DN125	5.500 139.7	5.50 140	17.8 8.1	—	—	—	—	—	5.50 140	5.50 (sw) 140	17.8 8.1
5	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
	6.250 159.0	6.50 165	27.1 12.3	—	—	—	—	—	6.50 165	6.50 (sw) 165	27.1 12.3
	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)

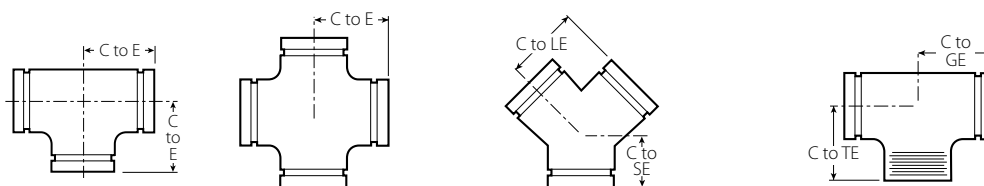
(sw) = Carbon Steel Segmentally Welded

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 Dimeter 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).