



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)

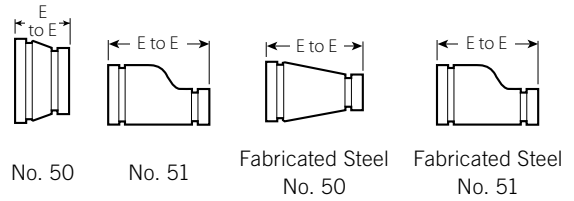
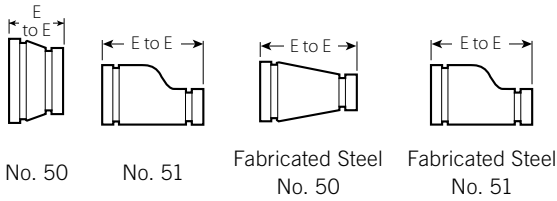
Optional: Orange enamel, hot dip galvanized and others

4.15 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	2.50 64	1.8 0.8	3.50 89	7.0 3.2
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

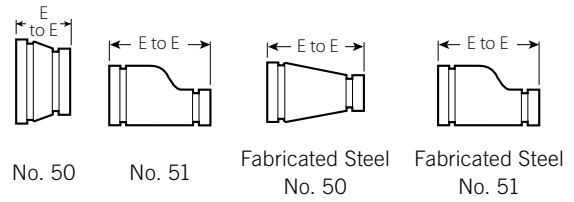
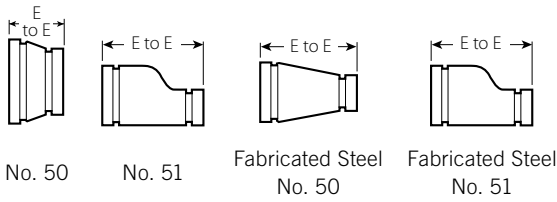
Size	No. 50 Concentric Reducer			No. 51 Eccentric Reducer	
	Nominal inches DN	E to E inches mm	Approx. Weight (Each) lb kg	E to E inches mm	Approx. Weight (Each) lb kg
5	1 1/4 DN32	+	4.6 2.1	—	—
	1 1/2 DN40	3.00 (sw) 76	2.6 1.2	10.00 (sw) 254	8.1 3.7
	2 DN50	3.00 76	2.4 1.1	4.00 102	3.3 1.5
	2 1/2	3.00 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	2 DN50	11.00 (sw) 279	9.0 4.1	11.00 (sw) 279
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	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	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).