Grooved End Fittings

SEE VICTAULIC PUBLICATION 10.01 FOR DETAILS

Victaulic offers a broad line of fittings in sizes through 48"/1200mm in a variety of straight and reducing styles. Most standard fittings are cast of durable ductile iron to precise tolerances. Victaulic standard fittings pressure ratings conform to the ratings of Victaulic Style 77 couplings.

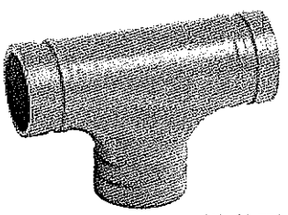
All fittings are supplied with grooves or shoulders to permit fast installation without field preparation. The grooved design permits flexibility for easy alignment. *These fittings are not intended for use with Victaulic couplings for plain end pipe (refer to Section 14.04 for fittings available for plain end applications).*

Fittings are provided in various materials including ductile iron, steel or segmentally welded steel depending on styles and size. Fittings are painted orange enamel with a galvanized finish available as an option, contact Victaulic for details.

Victaulic fittings are designed specifically for use in grooved piping systems. Fittings are provided grooved or with shoulders conforming to standard steel pipe outside diameters. When connecting wafer or lug-type butterfly valves directly to Victaulic fittings with 741 or 743 Vic-Flange® adapters, check disc clearance dimensions with I.D. dimension of fitting.

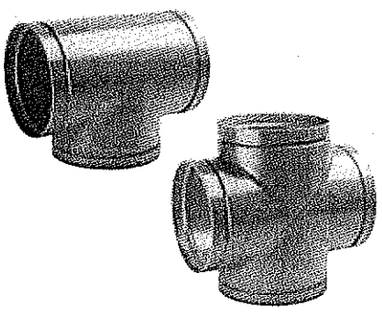
Note: The following Victaulic fittings are VdS approved: NO.10 90° Elbow, NO.11 45° Elbow, NO.20 Tee and NO.60 Cap.

Note: The following Victaulic fittings are LPCB approved: NO.10 90° Elbow, NO.11 45° Elbow, NO.12 22½° Elbow, NO.13 11¼° 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, NO.29M Tee with Threaded Branch, NO.27 Standpipe Tee, and NO.32 Tee Wye.



NO. 20 TEE

NO. 10 ELBOW



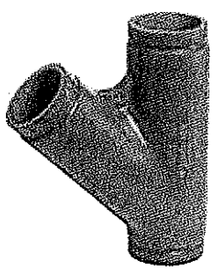
AGS – ADVANCED GROOVE SYSTEM

Advanced Groove System – For 14 – 24"/350 – 600mm piping systems, Victaulic now offers the Advanced Groove System (AGS). Refer to Section 20.05 for AGS fitting details.

Stainless Steel – Grooved end fittings are available in Schedule 10 Type 316 stainless steel (Schedule 5, 40 and Type 304 available as an option) in various sizes. Fitting center-to-end dimensions will vary depending upon type and schedule. Refer to Section 17.04 and 17.16 for details.

Aluminum – Grooved end fittings are available in aluminum alloy 356 T6, in sizes from 1 – 8"/25 – 200mm. Refer to Section 21.03 or contact Victaulic for details.

ALTERNATE STYLES



Extra Heavy EndSeal® "ES" Fittings – EndSeal fittings are available in 2 – 12"/50 – 300mm for use with "ES" grooved pipe and HP-70ES EndSeal couplings. "ES" fittings are painted black for easy identification. EndSeal (and standard) fittings may be easily internally coated (by others) for severe service requirements. Always specify "ES EndSeal fittings" when ordering. See Section 07.03 for information on EndSeal fittings.

Fittings Machined for Rubber or Urethane Lining (MRL) – For severe abrasive services, Victaulic fittings may be rubber or urethane lined (by others). Lining may be inside diameter/end (abrasion resistance) or wrap-around (corrosion and/or abrasion) machined. Refer to Section 25.03 or contact Victaulic for specific details.

Note: Fittings are available with a variety of coatings upon request such as hot dip galvanized, epoxy, glass lined and others.

JOB/OWNER

System No. _____

Location _____

CONTRACTOR

Submitted By _____

Date _____

ENGINEER

Spec Sect _____ Para _____

Approved _____

Date _____

www.victaulic.com

SHOP DRAWING REVIEW

THIS DRAWING HAS BEEN REVIEWED FOR GENERAL CONFORMANCE WITH THE DESIGN CONCEPT ONLY. SUCH REVIEW SHALL NOT RELIEVE THE CONTRACTOR OF HIS RESPONSIBILITY FOR ERRORS OR OMISSIONS OR OF MEETING THE REQUIREMENTS OF THE CONTRACT DOCUMENTS. NO RESPONSIBILITY IS ASSUMED FOR CORRECTNESS OF DIMENSIONS OR DETAILS.

✓	NO COMMENT
	SEE COMMENTS
	AMEND & RESUBMIT
	REJECTED

Submission No. 83

Project No. 078107

By GS

Date June 29/10

DILLON CONSULTING LIMITED

Grooved End Fittings

MATERIAL SPECIFICATIONS

Fitting: Ductile iron conforming to ASTM A-536, grade 65-45-12. Ductile iron conforming to ASTM A-395, grade 65-45-15, is available upon special request.

- Or: Segmentally welded steel as shown under nipples

Nipples: (adapter, swaged & hose)

- ¾ – 4"/20 – 100 mm: Carbon steel, Schedule 40, conforming to ASTM A-53, Type F
- 5 – 6"/125 – 150 mm: Carbon steel, Schedule 40, conforming to ASTM A-53, Type E or S, Gr. B
- 8 – 12"/200 – 300 mm: Carbon steel, Schedule 30 or 40, conforming to ASTM A-53, Type E or S, Gr. B

Flanged Adapter Nipples: (Nipple – see above)

- Class 125 Flange: Cast iron conforming to ANSI B-16.1
- Class 150 Flange: Carbon steel conforming to ANSI B-16.5, raised or flat face
- Class 300 Flange: Carbon steel conforming to ANSI B-16.5, raised or flat face

Fitting Coatings: Orange enamel

- Optional: Hot dip galvanized and others. Some fittings supplied electroplated as standard – see product specifications.

Flanged Adapter Nipple Coating: None (Unfinished)

- Optional: Orange enamel, hot dip galvanized and others.

Grooved End Fittings

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		Dimension – Feet/meters					
		Elbows				Tees	
		90° Elbows		45° Elbows			
Nominal Size In/mm	Actual Outside Dia In/mm	No. 10 Std Radius	No. 100 1½ D Long Radius	No. 11 Std Radius	No. 110 1½ D Long Radius	Branch	Run
1 25	1.315 33.7	1.7 0.5	—	0.8 0.2	—	4.2 1.3	1.7 0.5
2 50	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
76.1 mm	3.000 76.1	4.3 1.3	—	2.1 0.7	—	10.8 3.3	4.3 1.3
3 80	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
108.0 mm	4.250 108.0	6.4 2.0	—	3.2 0.9	—	15.3 4.7	6.4 2.0
4 100	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
133.0 mm	5.250 133.0	8.1 2.5	—	4.1 1.2	—	20.0 6.2	8.1 2.5
139.7 mm	5.500 139.7	8.5 2.6	—	4.2 1.3	—	21.0 6.4	8.5 2.6
5 125	5.563 141.3	8.5 2.6	—	4.2 1.3	—	21.0 6.4	8.5 2.6
159.0 mm	6.250 159.0	9.4 2.9	—	4.9 1.5	—	25.0 7.6	9.6 2.9
165.1 mm	6.500 165.1	9.6 2.9	—	5.0 1.5	—	25.0 7.6	10.0 3.0
6 150	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
8 200	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
10 250	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
12 300	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
14 350	14.000 355.6	24.5 § 7.5	15.8 4.8	18.5 § 5.6	11.0 3.4	70.0 21.3	23.0 7.0
16 400	16.000 406.4	28.0 § 8.5	18.0 5.5	21.0 § 6.4	13.0 4.0	80.0 24.4	27.0 8.2
18 450	18.000 457.0	31.0 § 9.5	20.0 6.1	23.5 § 7.2	14.0 4.3	90.0 27.4	30.0 9.1
20 800	20.000 508.0	34.0 § 10.4	22.5 6.9	25.5 § 7.8	16.0 4.9	100.0 30.5	33.0 10.1
24 600	24.000 610.0	42.0 § 12.8	27.0 8.2	29.5 § 9.0	19.0 5.8	120.0 36.6	40.0 12.2
26 650	26.000 660.4	#	28.0 8.5	#	20.5 6.3	130.0 39.6	43.0 13.1
30 750	30.000 762.0	#	34.0 10.4	#	24.0 7.3	150.0 45.7	50.0 15.2
36 900	36.000 914.0	#	40.5 12.3	#	28.5 8.7	180.0 54.9	60.0 18.3
42 1050	42.000 1067.0	#	47.0 14.3	#	33.0 10.1	210.0 64.0	70.0 21.3

Contact Victaulic for details.

For use on cut grooved systems only. 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 office.

§ Fitting flow data for 14-24"/350-600 mm 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 submittal 20.05.

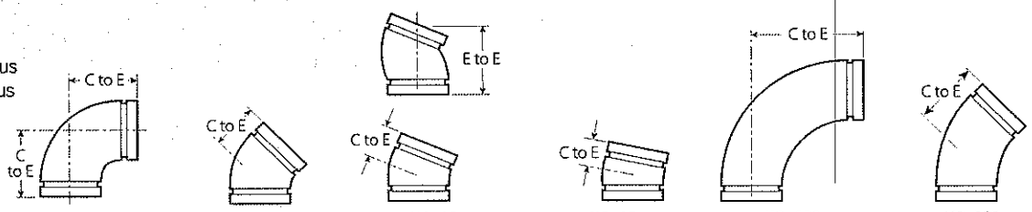
Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

Grooved End Fittings

DIMENSIONS

Elbows

NO. 10 90° Elbow
NO. 11 45° Elbow
NO. 12 22½° Elbow
NO. 13 11¼° Elbow
NO. 100 90° Long Radius
NO. 110 45° Long Radius

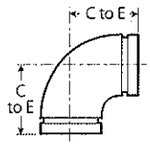


NO. 10 NO. 11 NO. 12 NO. 13 NO. 100 NO. 110

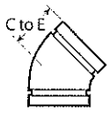
Size		No. 10 90° Elbow		No. 11 45° Elbow		No. 12 22½° Elbow (sw)		No. 13 11¼° Elbow (sw)		No. 100† 90° Long Radius Elbow (S)		No. 110† 45° Long Radius Elbow (S)	
Nominal Size Inches mm	Actual Outside Dia Inches mm	C to E Inches mm	Approx Wt. Each Lbs Kg	C to E Inches mm	Approx Wt. Each Lbs Kg	C to E Inches mm	Approx Wt. Each Lbs Kg	C to E Inches mm	Approx Wt. Each Lbs Kg	C to E Inches mm	Approx Wt. Each Lbs Kg	C to E Inches mm	Approx Wt. Each Lbs Kg
¾ 20	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	—	—	—	—	—
1 25	1.315 33.7	2.25 57	0.6 0.3	1.75 44	0.6 0.3	3.25 @ 83	0.6 0.3	1.38 sw 35	0.3 0.1	—	—	—	—
1¼ 32	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	—	—	—	—
1½ 40	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	—	—	—	—
2 50	2.375 60.3	3.25 83	1.8 0.8	2.00 51	1.3 0.6	3.75 @ 95	1.4 0.6	1.38 35	1.0 0.5	4.38 111	2.5 1.1	2.75 70	1.8 0.8
2½ 65	2.875 73.0	3.75 95	3.2 1.5	2.25 57	2.2 1.0	4.00 @ 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
76.1 mm	3.000 76.1	3.75 95	3.7 1.7	2.25 57	3.4 1.5	2.24 57	—	1.50 38	—	—	—	—	—
3 80	3.500 88.9	4.25 108	4.5 2.0	2.50 64	3.1 1.4	4.50 @ 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
3½ 90	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	—	—	—	—
4 100	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
108.0 mm	4.250 108.0	5.00 127	11.0 5.0	3.00 76	5.6 2.5	—	—	—	—	—	—	—	—
4½ 120	5.000 127.0	5.25 sw 133	10.0 4.5	3.13 sw 79	6.0 2.7	3.50 89	6.6 3.0	1.88 sw 48	4.2 1.9	—	—	—	—
5 125	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	+	18.2 8.3	+	14.8 6.7
133.0 mm	5.250 133.0	5.50 140	11.7 5.3	3.25 83	8.3 3.8	—	—	—	—	—	—	—	—
139.7 mm	5.500 139.7	5.50 140	11.7 5.3	3.25 83	8.3 3.8	2.87 73	—	2.00 51	—	—	—	—	—
6 150	6.625 168.3	6.50 165	17.2 7.8	3.50 89	10.8 4.9	6.25 @ 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
159.0 mm	6.250 159.0	6.50 165	18.6 8.4	3.50 89	10.8 4.9	—	—	—	—	—	—	—	—
165.1 mm	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	10.75 273	29.0 13.2	5.50 140	19.0 8.6

Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

Grooved End Fittings



NO. 10



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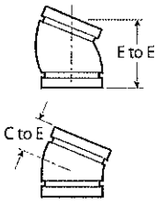

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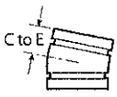

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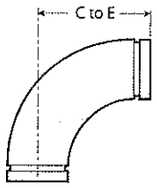
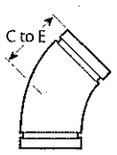


NO. 100



NO. 110

Size	No. 10 90° Elbow		No. 11 45° Elbow		No. 12 22½° Elbow (sw)		No. 13 11¼° Elbow (sw)		No. 100† 90° Long Radius Elbow (S)		No. 110† 45° Long Radius Elbow (S)	
8 200	8.625 219.1	7.75 197	29.9 13.6	4.25 108	20.4 9.3	7.75 @ 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
10 250	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 sw 54	11.8 5.3	15.00 381	107.0 48.5	6.25 159	57.0 25.9
12 300	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 sw 57	29.3 13.3	18.00 457	156.0 70.8	7.50 191	90.0 40.8
14 # 350	14.000 355.6	14.00 355.6	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 s 222	82.0 37.2
377.0 mm †	14.843 377.0	14.84 376.9	149.3 67.7	6.15 156.2	82.0 37.2	—	—	—	—	—	—	—	—
16 # 400	16.000 406.4	16.00 406.4	171.0 77.6	6.63 168	88.0 39.9	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
426.0 mm †	16.772 426.0	16.77 426.0	198.6 90.1	6.95 176.5	101.3 45.9	—	—	—	—	—	—	—	—
18 # 450	18.000 457.0	18.00 457.2	228.0 103.4	7.46 189	108.0 50.0	5.50 sw 140	65.0 29.5	4.50 sw 114	53.2 24.1	27.00 s 686	273.0 123.8	11.25 s 286	135.0 61.2
480.0 mm †	18.898 480.0	18.90 480.0	291.0 132.0	7.83 198.8	141.7 64.3	—	—	—	—	—	—	—	—
20 # 500	20.000 508.0	20.00 508.0	298.0 135.2	8.28 210	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
530.0 mm †	20.866 530.0	20.87 530.0	355.0 161.0	8.64 219.4	179.0 81.2	—	—	—	—	—	—	—	—
24 # 600	24.000 610.0	24.00 609.6	438.0 198.7	9.94 252	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
630.0 mm †	24.803 630.0	24.80 630.0	545.0 247.2	10.27 261.0	255.2 115.7	—	—	—	—	—	—	—	—
14 – 24 350 – 600	AGS™ For AGS fitting information, see publication 20.05												

@ Gooseneck design, end-to-end dimension

For use on cut grooved systems only. 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 office.

† Chinese standard sizes

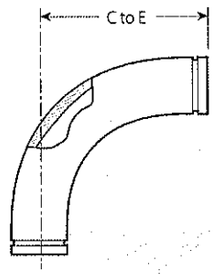
Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

Grooved End Fittings

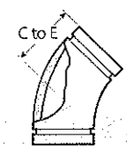
Long Radius Elbow 3D

With added wall thickness at bend for abrasive services.

NO. 100-3D 90° Long Radius Elbow 3D
NO. 110-3D 45° Long Radius Elbow 3D



NO. 100-3D



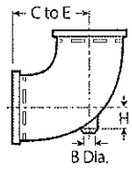
NO. 110-3D

Size		Wall Thickness – Inches/mm			No. 100-3D 90° Long Radius Elbow		No. 110-3D 45° Long Radius Elbow	
Nominal Size Inches mm	Actual Outside Diameter Inches mm	In Non-critical Area	At Back Wear Area	Extra	C to E Inches mm	Approx. Weight Each Lbs. Kg.	C to E Inches mm	Approx. Weight Each Lbs. Kg.
2 50	2.375 60.3	0.184 4.67	0.309 7.85	0.125 3.18	10.00 254	5.0 2.3	6.50 165	4.7 2.1
3 80	3.500 88.9	0.246 6.25	0.371 9.42	0.125 3.18	13.00 330	16.0 7.3	7.75 197	10.4 4.7
4 100	4.500 114.3	0.267 6.78	0.455 11.56	0.188 4.78	16.00 406	25.5 11.6	9.00 229	17.2 7.8
6 150	6.625 168.3	0.310 7.87	0.560 14.22	0.250 6.35	24.00 610	70.0 31.8	13.50 343	45.0 20.4

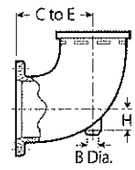
Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

Reducing Base Support Elbow

NO. R-10G Grv. × Grv.
NO. R-10F Grv. × Flange



NO. R-10G



NO. R-10F

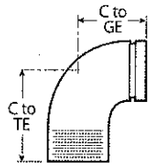
Size			No. R-10 Reducing Base Support Elbow			Approx. Weight Each	
Nominal Size Inches mm			C to E Inches mm	H Inches mm	B Diameter Inches mm	Grv. x Grv. Lbs. Kg.	Grv. x Flange Lbs. Kg.
6 150	×	4 100	9.00 229	1.25 32	1.50 38	19.0 8.6	33.0 15.0
		5 125	9.00 229	1.50 38	1.50 38	23.0 10.4	38.0 17.2
8 200	×	6 150	10.50 267	2.13 54	1.50 38	33.0 15.0	52.0 23.6
10 250	×	8 200	12.00 305	2.40 61	1.50 38	61.0 27.7	88.0 39.9

Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

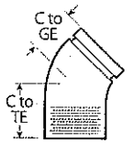
Grooved End Fittings

Adapter Elbow

NO. 18 90° Adapter Elbow
NO. 19 45° Adapter Elbow



NO. 18



NO. 19

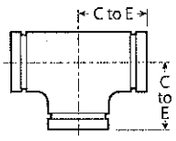
Size		No. 18 90° Adapter Elbow @			No. 19 45° Adapter Elbow @		
¾ 20	1.050 26.9	2.25 57	2.25 57	0.5 0.2	1.50 38	1.50 38	0.5 0.2
1 25	1.315 33.7	2.25 57	2.25 57	0.5 0.2	—	—	—
1 ¼ 32	1.660 42.4	2.75 70	2.75 70	0.9 0.4	—	—	—
1 ½ 40	1.900 48.3	2.75 70	2.75 70	1.1 0.5	1.75 44	1.75 44	0.9 0.4
2 50	2.375 60.3	3.25 83	4.25 108	2.5 1.1	—	—	—
2 ½ 65	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 80	3.500 88.9	4.25 108	6.00 152	5.8 2.6	2.50 64	4.25 108	5.0 2.3
3 ½ 90	4.000 101.6	4.50 114	6.25 159	8.0 3.6	5.25 133	5.25 133	8.8 4.0
6 150	6.625 168.3	6.50 165	6.50 165	17.6 8.0	3.50 89	3.50 89	12.7 5.8

@ Available with British Standard Pipe Threads, specify "BSP" clearly on order.
Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

Grooved End Fittings

Tees, Crosses and True Wyes

NO. 20 Tee
NO. 35 Cross
NO. 33 True Wye
NO. 29M Tee with Threaded Branch



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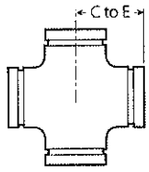

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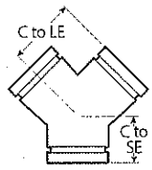
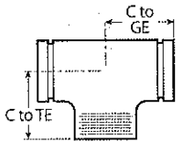


NO. 33

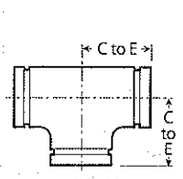


NO. 29M

Size		No. 20 Tee		No. 35 Cross (sw)		No. 33 True Wye (sw)			No. 29M Tee with Threaded Branch		
Nominal Size Inches mm	Actual Outside Dia. Inches mm	C to E Inches mm	Approx. Weight Each Lbs. Kg.	C to E Inches mm	Approx. Weight Each Lbs. Kg.	C to LE Inches mm	C to SE Inches mm	Approx. Weight Each Lbs. Kg.	C to GE Inches mm	C to TE Inches mm	Approx. Weight Each Lbs. Kg.
¾ 20	1.050 26.9	2.25 57	0.6 0.3	2.25 57	0.9 0.4	—	—	—	2.25 57	2.25 57	0.6 0.3
1 25	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 ¼ 32	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 ½ 40	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 50	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	3.00 1.4
2 ½ 65	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
76.1 mm	3.000 76.1	3.75 95	5.2 2.4	—	—	—	—	—	3.75 95	3.75 95	5.2 (sw) 2.4
3 80	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 ½ 90	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	4.50 114	7.9 (sw) 73.6
108.0 mm	4.250 108.0	5.00 127	15.5 7.0	—	—	—	—	—	5.00 127	5.00 127	15.5 7.0
4 100	4.500 114.3	5.00 127	11.9 5.4	5.00 127	15.8 7.2	5.00 127	3.75 95	10.0 4.5	5.00 127	7.25 184	11.9 5.4
4 ½ 120	5.000 127.0	5.25 (sw) 133	15.0 6.8	5.25 133	18.5 8.4	—	—	—	5.25 133	5.25 133	15.0 (sw) 6.8
133.0 mm	5.250 133.0	5.50 140	17.8 8.1	—	—	—	—	—	5.50 140	5.50 140	17.8 8.1
139.7 mm	5.500 139.7	5.50 140	17.8 8.1	—	—	—	—	—	5.50 140	5.50 140	17.8 8.1
5 125	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	5.50 140	17.8 (sw) 8.1
159.0 mm	6.250 159.0	6.50 165	27.1 12.3	—	—	—	—	—	6.50 165	6.50 165	27.1 12.3
165.1 mm	6.500 165.1	6.50 165	22.0 10.0	6.50 165	28.0 12.7	—	—	—	6.50 165	6.50 165	22.0 10.0
6 150	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	6.50 165	25.7 (sw) 11.7
8 200	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 (sw) 21.6
10 250	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	73.0 33.1
12 300	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	99.0 44.9

Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

Grooved End Fittings



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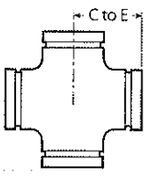

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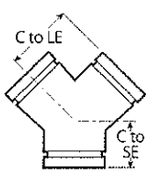

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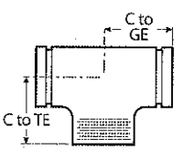


NO. 29M

Size	No. 20 Tee			No. 35 Cross (sw)		No. 33 True Wye (sw)			No. 29M Tee with Threaded Branch		
14 # 350	14.000 355.6	11.00 279	145.0 65.8	11.00 279	198.0 89.8	11.00 279	7.50 191	134.2 60.8	—	—	—
377.0 mm	14.000 355.6	11.00 279	145.0 65.8	—	—	—	—	—	—	—	—
16 # 400	16.000 406.4	12.00 305	186.0 84.4	12.00 305	250.0 113.4	12.00 305	8.00 203	167.0 75.7	—	—	—
426.0 mm †	16.000 406.4	12.00 305	186.0 84.4	—	—	—	—	—	—	—	—
18 # 450	18.000 457.0	14.00 356	256.0 116.1	15.50 394	350.0 158.8	15.50 394	8.50 216	234.0 106.1	—	—	—
480.0 mm†	18.000 457.0	14.00 356	256.0 116.1	—	—	—	—	—	—	—	—
20 # 500	20.000 508.0	15.00 381	339.0 153.8	17.25 438	452.0 205.0	17.25 438	9.00 229	281.0 127.5	—	—	—
530.0 mm †	20.000 508.0	15.00 381	339.0 153.8	—	—	—	—	—	—	—	—
24 # 600	24.000 610.0	17.00 432	473.0 214.5	20.00 508	795.0 360.6	20.00 508	10.00 254	523.0 237.2	—	—	—
630.0 mm †	24.000 610.0	17.00 432	473.0 214.5	—	—	—	—	—	—	—	—
14 – 24 350 – 600	AGS™ For AGS fitting information, see publication 20.05										

For use on cut grooved systems only. 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 office.

† Chinese standard sizes

Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

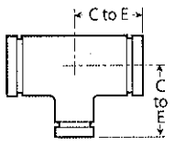
IMPORTANT NOTE:

Fittings size 26 – 48"/650 – 1050 mm are available roll grooved for installation with Style 770 large diameter pipe couplings, Contact Victaulic for details.

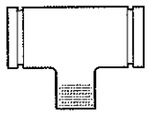
Grooved End Fittings

Reducing Tee

NO. 25 Grooved Branch
NO. 29T Threaded Branch



NO. 25



NO. 29T

Size					No. 25 Std.	No. 29T w/ Thd. Branch	Approx. Weight Each
Nominal Size Inches mm					C to E Inches mm	C to E Inches mm	Lbs Kg
1 25	×	1	×	¾ 20	+	+	1.0 0.5
1¼ 32	×	1¼ 32	×	1 25	+	+	1.3 0.6
1½ 40	×	1½ 40	×	¾ 20	+	+	1.5 0.7
				1 25	+	+	1.5 0.7
				1¼ 32	+	+	1.7 0.8
2 50	×	2 50	×	¾ 20	3.25 83	3.25 83	2.5 1.1
				1 25	3.25 83	3.25 83	2.7 1.2
				1¼ 32	+	+	1.8 0.8
				1½ 40	3.25 83	3.25 (sw) 83	3.0 1.4
2½ 65	×	2½ 65	×	¾ 20	+	+	3.9 1.8
				1 25	3.75 95	3.75 (sw) 95	3.8 1.7
				1¼ 32	+	+	4.2 1.7
				1½ 40	3.75 95	3.75 95	3.9 1.8
				2 50	3.75 95	3.75 (sw) 95	4.5 2.0
3 80	×	3 80	×	¾ 20	+	+	5.7 2.6
				1 25	4.25 108	4.25 108	6.1 2.8
				1¼ 32	+	+	8.0 3.6
				1½ 40	4.25 108	4.25 (sw) 108	6.5 2.9
				2 50	4.25 108	4.25 (sw) 108	6.2 2.8
				2½ 65	4.25 108	4.25 (sw) 108	6.4 2.9
4 100	×	4 100	×	¾ 20	+	+	8.0 3.6
				1 25	5.00 127	5.00 127	7.8 3.5
4 100	×	4 100	×	1¼ 32	+	+	9.6 4.4
				1½ 40	5.00 127	5.00 127	10.2 4.6
				2 50	5.00 127	5.00 127	11.2 5.1
				2½ 65	5.00 127	5.00 127	11.4 5.2
				3 80	5.00 127	5.00 127	11.6 5.3
5 125	×	5 125	×	1 25	+	+	14.0 6.4
				1½ 40	+	+	14.3 6.5
				2 50	5.50 (sw) 140	5.50 (sw) 140	14.5 6.6
				2½ 65	5.50 140	5.50 (sw) 140	15.2 6.9
				3 80	5.50 140	5.50 (sw) 140	16.6 7.5
				4 100	5.50 140	5.50 (sw) 140	16.7 7.6
6 150	×	6 150	×	1 25	+	+	23.0 10.4
				1½ 40	+	+	24.0 10.9
				2 50	6.50 165	6.50 165	21.6 9.8
				2½ 65	6.50 165	6.50 165	21.4 11.7
14 – 24 350 – 600					AGS For AGS fitting information, see publication 20.05		

+ Contact Victaulic for details.

Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

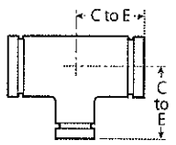
IMPORTANT NOTE:

No. 29T Threaded Outlet Reducing Tees are supplied NPT and are available with British Standard threads. For British Standard specify "BSP" clearly on order.

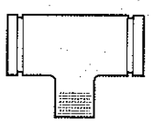
Grooved End Fittings

Reducing Tee

NO. 25 Grooved Branch
NO. 29T Threaded Branch



NO. 25



NO. 29T

Size									No. 25 Std.	No. 29T w/ Thd. Branch	Approx. Weight Each
6 150	×	6 150	×	3 80					6.50 165	6.50 165	26.5 12.0
				4 100					6.50 165	6.50 165	25.0 11.3
				5 125					6.50 165	6.50 165	23.2 10.5
6½ 165.1	×	6½ 165.1	×	3 80					6.50 165	6.50 (sw) 165	24.0 10.9
				4 100					6.50 165	6.50 (sw) 165	25.0 11.3
8 200	×	8 200	×	1½ 40					+	+	33.0 15.0
				2 50					7.75 (sw) 197	7.75 (sw) 197	33.5 15.2
				2½ 65					+	+	39.0 17.7
				3 80					7.75 (sw) 197	7.75 (sw) 197	33.6 15.2
				4 100					7.75 197	7.75 197	41.8 19.0
				5 125					7.75 (sw) 197	7.75 (sw) 197	34.0 15.4
				6 150					7.75 197	7.75 197	42.3 19.2
				165.1					7.75 (sw) 197	7.75 (sw) 197	48.0 21.8
10 250	×	10 250	×	1½ 40					+	+	62.0 28.1
				2 50					9.00 (sw) 229	9.00 (sw) 229	62.0 28.1
				2½ 65					+	+	62.4 28.3
				3 80					+	+	60.0 27.2
				4 100					9.00 (sw) 229	9.00 (sw) 229	61.0 27.7
				5 125					9.00 (sw) 229	9.00 (sw) 229	52.0 23.6
				6 150					9.00 (sw) 229	9.00 (sw) 229	59.0 26.8
				8 200					9.00 (sw) 229	9.00 (sw) 229	64.7 29.3
12 300	×	12 300	×	1 25					+	+	77.0 34.9
				2 50					+	+	80.0 36.3
				2½ 65					+	+	78.0 35.4
				3 80					10.00 (sw) 254	10.00 (sw) 254	82.0 37.2
				4 100					10.00 (sw) 254	10.00 (sw) 254	80.0 36.3
				5 125					10.00 (sw) 254	10.00 (sw) 254	75.0 34.0
				6 150					10.00 (sw) 254	10.00 (sw) 254	75.0 34.0
				8 200					10.00 (sw) 254	10.00 (sw) 254	80.0 36.3
				10 250					10.00 (sw) 254	10.00 (sw) 254	84.0 38.1
# 14 350	×	14 350	×	4 100					+	+	102.0 46.3
				6 150					+	+	108.2 49.1
				8 200					11.00 279	11.00 279	112.0 50.8
				10 300					11.00 279	11.00 279	120.0 54.4
				12 300					11.00 279	11.00 279	129.1 58.6
# 16 400	×	16 400	×	4 100					+	+	130.0 59.0
14 – 24 350 – 600									AGS For AGS fitting information, see publication 20.05		

+ Contact Victaulic for details.

Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

IMPORTANT NOTE:

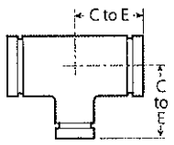
No. 29T Threaded Outlet Reducing Tees are supplied NPT and are available with British Standard threads. For British Standard specify "BSP" clearly on order.

For use on cut grooved systems only. 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 office.

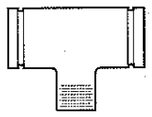
Grooved End Fittings

Reducing Tee

NO. 25 Grooved Branch
NO. 29T Threaded Branch



NO. 25



NO. 29T

Size				No. 25 Std.	No. 29T w/ Thd. Branch	Approx. Weight Each
Nominal Size Inches mm				C to E Inches mm	C to E Inches mm	Lbs Kg
# 16 400	×	16 400	× 6 150	+	+	133.5 60.6
			8 200	12.00 305	12.00 305	145.0 65.8
			10 250	12.00 305	12.00 305	149.5 67.8
			12 300	12.00 305	12.00 305	154.0 69.9
			14 350	+	+	167.0 75.8
# 18 450	×	18 450	× 4 100	+	+	194.0 88.0
			6 150	+	+	200.0 90.7
			8 200	+	+	202.0 91.6
			10 250	15.50 394	15.50 394	212.0 96.2
			12 300	15.50 394	15.50 394	222.6 101.0
			14 350	15.50 394	– –	230.1 104.4
			16 400	15.50 394	– –	247.6 112.3
# 20 500	×	20 500	× 6 150	+	+	240.0 108.9
			8 200	+	+	244.0 110.7
			10 250	+	+	256.0 116.1
			12 300	+	+	264.0 119.8
			14 350	17.25 438	—	275.0 124.7
# 20 500	×	20 500	16 400	17.25 438	—	288.6 130.9
			18 450	17.25 438	—	297.0 134.7
# 24 600	×	24 600	× 8 200	20.00 508	20.00 508	340.0 154.2
			10 250	20.00 508	20.00 508	343.9 156.0
			12 300	20.00 508	20.00 508	352.8 160.0
			14 § 350	20.00 508	—	360.0 163.3
			16 400	20.00 508	—	378.0 171.5
			18 § 450	20.00 508	—	380.0 172.4
			20 500	20.00 508	—	373.0 169.2
14 – 24 350 – 600				AGS™ For AGS fitting information, see publication 20.05		

+ Contact Victaulic for details.

Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

IMPORTANT NOTE:

No. 29T Threaded Outlet Reducing Tees are supplied NPT and are available with British Standard threads. For British Standard specify "BSP" clearly on order.

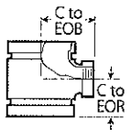
For use on cut grooved systems only. For roll grooved systems, Victaulic offers the Advanced Groove System (AGS). For pricing and availability of cut groove fittings in this size, contact your nearest Victaulic sales office.

§ Cast fitting available. Contact Victaulic for details.

Grooved End Fittings

Standpipe Tee

NO. 27



NO. 27

Size				No. 27 Standpipe Tee		
4	× 4	× 2½		3.25	4.00	9.1
100	× 100	× 65		83	102	4.1
6	× 6	× 2½		3.25	5.13	14.8
150	× 150	× 65		83	130	6.7

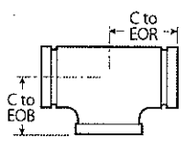
IMPORTANT NOTE:

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

Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

Bullhead Tee

NO. 21



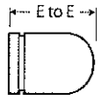
NO. 21

Size				No. 21 Bullhead Tee		
5	× 5	× 8		7.75	5.50	28.7
125	× 125	× 200		197	140	13.0
6	× 6	× 8		7.75	6.50	37.5
150	× 150	× 200		197	165	17.0

Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

Bull Plug

NO. 61



NO. 61

Size		No. 61 Bull Plug (S)	
2	2.375	4.00	2.5
50	60.3	102	1.1
2½	2.875	5.00	3.0
65	73.0	127	1.4
3	3.500	6.00	4.5
80	88.9	152	2.0
4	4.500	7.00	7.5
100	114.3	178	3.4
5	5.563	8.00	12.0
125	141.3	203	5.4
6	6.625	10.00	17.0
150	168.3	254	7.7

IMPORTANT NOTES:

Steel dish caps available through 24"/600 mm, contact Victaulic.

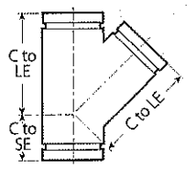
No. 61 Bull Plugs should be used in vacuum service with Style 72 or 750 couplings

Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

Grooved End Fittings

45° Lateral

NO. 30



NO. 30

Size		No. 30 45° Lateral (SW)		
Nominal Size Inches mm	Actual Outside Diameter Inches mm	C to LE Inches mm	C to SE Inches mm	Approx. Weight Each Lbs. Kg.
¾ 20	1.050 26.9	4.50 114	2.00 51	1.0 0.5
1 25	1.315 33.7	5.00 127	2.25 57	1.7 0.8
1 ¼ 32	1.660 42.4	5.75 146	2.50 64	2.5 (d) 1.1
1 ½ 40	1.900 48.3	6.25 159	2.75 70	3.5 1.6
2 50	2.375 60.3	7.00 178	2.75 70	4.6 (d) 2.1
2 ½ 65	2.875 73.0	7.75 197	3.00 76	9.0 94.1
76.1 mm	3.000 76.1	8.50 216	3.25 83	11.0 5.0
3 80	3.500 88.9	8.50 216	3.25 83	11.7 (d) 5.4
3 ½ 90	4.000 101.6	10.00 254	3.50 89	17.8 8.1
4 100	4.500 114.3	10.50 267	3.75 95	22.2 (d) 10.1
5 125	5.563 141.3	12.50 318	4.00 102	21.8 9.9
165.1 mm	6.500 165.1	14.00 356	4.50 114	43.6 19.8

Size		No. 30 45° Lateral (SW)		
Nominal Size Inches mm	Actual Outside Diameter Inches mm	C to LE Inches mm	C to SE Inches mm	Approx. Weight Each Lbs. Kg.
6 150	6.625 168.3	14.00 356	4.50 114	43.6 19.8
8 200	8.625 219.1	18.00 457	6.00 152	72.0 32.7
10 250	10.750 273.0	20.50 521	6.50 165	105.0 47.6
12 300	12.750 323.9	23.00 584	7.00 178	165.0 74.8
14 # 350	14.000 355.6	26.50 673	7.50 191	276.0 125.2
16 # 400	16.000 406.4	29.00 737	8.00 203	344.2 156.1
18 # 450	18.000 457.0	32.00 813	8.50 216	429.0 194.6
20 # 500	20.000 508.0	35.00 889	9.00 229	500.0 226.8
24 # 600	24.000 610.0	40.00 1016	10.00 254	715.0 324.3
14 – 24 350 – 600	AGS™ For AGS fitting information, see publication 20.05			

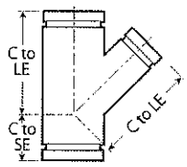
For use on cut grooved systems only. For roll grooved systems, Victaulic offers the Advanced Groove System (AGS). For pricing and availability of cut groove fittings in this size, contact your nearest Victaulic sales office.

Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

Grooved End Fittings

45° Reducing Lateral

NO. 30-R



NO. 30-R

Size					No. 30-R 45° Reducing Lateral (SW)		
3	x	3	x	2	8.50	3.25	9.8
80		80		50	216	83	4.4
				2½	8.50	3.25	9.8
				65	216	83	4.4
4	x	4	x	2	10.50	3.75	10.0
100		100		50	267	95	4.5
				2½	10.50	3.75	10.0
				65	267	95	4.5
				3	10.50	3.75	18.3
				80	267	95	8.3
5	x	5	x	2	12.50	4.00	24.0
125		125		50	318	102	10.9
				3	12.50	4.00	27.0
				80	318	102	212.2
				4	12.50	4.00	26.5
				100	318	102	12.0
6	x	6	x	3	14.00	4.50	37.0
150		150		80	356	114	16.8
				4	14.00	4.50	36.0
				100	356	114	16.3
				5	14.00	4.50	44.7
				125	356	114	20.3
8	x	8	x	4	18.00	6.00	62.0
200		200		100	457	152	28.1
				5	18.00	6.00	75.5
				125	457	152	34.2
				6	18.00	6.00	82.0
				150	457	152	37.2
10	x	10	x	4	20.50	6.50	104.8
250		250		100	521	165	147.5
				5	20.50	6.50	99.0
				125	521	165	44.9
				6	20.50	6.50	105.8
				150	521	165	48.0
				8	20.50	6.50	118.0
				200	521	165	53.5
12	x	12	x	5	23.00	7.00	122.0
300		300		125	584	178	55.3
				6	23.00	7.00	137.0
				150	584	178	62.1
				8	23.00	7.00	147.0
				200	584	178	66.7
				10	23.00	7.00	167.0
				250	584	178	75.8

Size					No. 30-R 45° Reducing Lateral (SW)		
# 14	x	14	x	4	26.50	7.50	172.0
350		350		100	673	191	78.0
				6	26.50	7.50	187.0
				150	673	191	84.8
				8	26.50	7.50	205.8
				200	673	191	93.4
				10	26.50	7.50	235.0
				250	673	191	106.6
				12	26.50	7.50	250.0
				300	673	191	113.4
# 16	x	16	x	6	29.00	8.00	215.0
400		400		150	737	203	97.5
				8	29.00	8.00	252.5
				200	737	203	114.5
				10	29.00	8.00	265.0
				250	737	203	120.2
				12	29.00	8.00	295.0
				300	737	203	133.8
				14	29.00	8.00	305.0
				350	737	203	138.3
# 18	x	18	x	6	32.00	8.50	274.0
450		450		150	813	216	124.3
				8	32.00	8.50	275.0
				200	813	216	124.7
				12	32.00	8.50	347.0
				300	813	216	157.4
				14	32.00	8.50	350.0
				350	813	216	158.8
				16	32.00	8.50	362.0
				400	813	216	164.2
# 20	x	20	x	12	35.00	9.00	415.0
500		500		300	889	229	188.2
				14	35.00	9.00	420.0
				350	889	229	190.5
				16	35.00	9.00	425.0
				400	889	229	192.8
# 24	x	24	x	16	40.00	10.00	425.0
600		600		400	1016	254	192.8
				20	40.00	10.00	570.0
				600	1016	254	258.6
14 – 24 350 – 600					AGS For AGS fitting information, see publication 20.05		

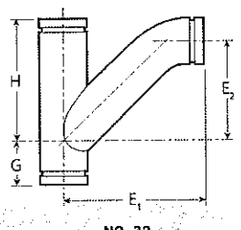
For use on cut grooved systems only. For roll grooved systems, Victaulic offers the Advanced Groove System (AGS). For pricing and availability of cut groove fittings in this size, contact your nearest Victaulic sales office.

Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

Grooved End Fittings

Tee Wye

NO. 32



NO. 32

Size				No. 32 Tee Wye (SW)				
Nominal Size Inches mm				G Inches mm	R Inches mm	E1 Inches mm	E2 Inches mm	Approx Wt. Each Lbs. Kg.
2 50	×	2 50	× 2 50	2.75 70	7.00 178	9.00 229	4.63 118	6.4 2.9
2½ 65	×	2½ 65	× 2½ 65	3.00 76	7.75 197	10.50 267	5.75 146	11.5 5.2
3 80	×	3 80	× 3 80	3.25 83	8.50 216	11.50 292	6.50 165	14.3 6.5
3½ 90	×	3½ 90	× 3½ 90	3.25 89	10.00 254	13.00 330	7.75 197	22.9 10.4
4 100	×	4 100	× 4 100	3.75 95	10.50 267	13.63 346	8.13 207	26.0 11.8

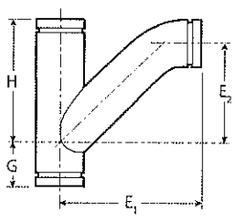
Size				No. 32 Tee Wye (SW)				
Nominal Size Inches mm				G Inches mm	R Inches mm	E1 Inches mm	E2 Inches mm	Approx Wt. Each Lbs. Kg.
5 125	×	5 125	× 5 125	4.00 102	12.50 318	16.13 410	10.00 254	48.0 21.8
6 150	×	6 150	× 6 150	4.50 114	14.00 356	18.25 464	11.50 292	60.5 27.4
8 200	×	8 200	× 8 200	6.00 152	18.00 457	23.25 591	15.25 387	127.1 57.7
10 250	×	10 250	× 10 250	6.50 165	20.50 521	27.25 692	18.00 457	190.0 186.2
12 300	×	12 300	× 12 300	7.00 178	23.00 584	31.00 787	20.50 521	240.0 108.9

Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

Grooved End Fittings

Reducing Tee Wye

NO. 32-R



NO. 32-R

Size					No. 32-R Reducing Tee Wye (SW)				
4 100	×	3 80	×	3 80	3.50 89	9.50 241	10.75 273	5.75 146	16.0 7.3
				4 100	3.75 95	10.50 267	13.63 346	8.13 206	16.0 7.3
4 100	×	4 100	×	3 80	3.75 95	10.50 267	12.88 327	7.88 200	23.0 10.4
5 125	×	3 80	×	3 80	1.25 32	9.75 248	11.50 292	7.63 194	25.0 11.3
				5 125	4.00 102	12.50 318	16.13 410	11.13 283	43.4 19.5
5 125	×	4 100	×	3 80	1.88 48	9.13 232	11.88 302	6.88 175	21.0 9.5
				4 100	1.88 48	9.13 232	12.75 324	7.25 184	25.0 11.3
5 125	×	5 125	×	3 80	4.00 102	12.50 318	14.25 362	9.25 235	29.0 13.2
				4 100	4.00 102	12.50 318	15.13 384	9.63 245	36.7 16.6
6 150	×	4 100	×	6 150	4.50 114	14.00 356	18.25 464	11.50 292	61.0 27.7
6 150	×	5 125	×	3 80	1.25 32	10.75 273	13.00 330	8.00 203	27.0 12.2
				4 100	1.25 32	10.75 273	13.88 352	8.38 213	31.0 14.1
6 150	×	6 150	×	3 80	4.50 114	14.00 356	15.31 389	10.31 262	37.3 16.9
				4 100	4.50 114	14.00 356	16.25 413	10.75 273	46.3 21.0
				5 125	4.50 114	14.00 356	17.25 438	11.13 283	55.0 24.9
8 200	×	6 150	×	4 100	1.00 25	12.00 304	14.75 375	9.25 235	45.0 20.4
				8 200	6.00 152	18.00 457	23.25 591	15.25 387	112.0 50.8
8 200	×	8 200	×	3 80	6.00 152	18.00 457	18.19 462	13.19 335	76.0 34.5
				4 100	6.00 152	18.00 457	19.00 483	13.50 343	76.4 34.7
				5 125	6.00 152	18.00 457	20.00 508	13.88 352	85.6 38.8
				6 150	6.00 152	18.00 457	21.13 537	14.38 365	112.0 50.8
10 250	×	10 250	×	3 80	6.50 165	20.50 521	19.88 505	14.88 378	96.0 43.5
				4 100	6.50 165	20.50 521	20.75 527	15.25 387	97.4 44.2
				5 125	6.50 165	20.50 521	21.88 556	15.75 400	115.0 52.2
10 250	×	10 250	×	6 150	6.50 165	20.50 521	22.88 581	16.13 410	133.1 60.4
				8 200	6.50 165	20.50 521	27.25 692	19.25 489	156.0 70.8

Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

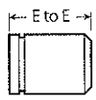
Grooved End Fittings

Adapter Nipple

NO. 40 Grv. x Thd.
NO. 42 Grv. x Bev.
NO. 43 Grv. x Grv.

NO. 40 *

NO. 43



NO. 42

Size		No. 40, 42, 43 Adapter Nipple (s)	
Nominal Size Inches mm	Actual Outside Diameter Inches mm	E to E Inches mm	Approx. Weight Each lbs. kg
¾ 20	1.050 26.9	3.00 76	0.3 0.1
1 25	1.315 33.7	3.00 76	0.4 0.2
1¼ 32	1.660 42.4	4.00 102	0.8 0.4
1½ 40	1.900 48.3	4.00 102	0.9 0.4
2 50	2.375 60.3	4.00 102	1.2 0.5
2½ 65	2.875 73.0	4.00 102	1.9 0.9
3 80	3.500 88.9	4.00 102	2.5 1.1
3½ 90	4.000 101.6	4.00 102	2.1 0.9
4 100	4.500 114.3	6.00 152	5.5 2.5
5 125	5.563 141.3	6.00 152	7.4 3.4
6 150	6.625 168.3	6.00 152	9.5 4.3
8 200	8.625 219.1	6.00 152	14.2 6.4
10 250	10.750 273.0	8.00 203	27.0 12.2
12 300	12.750 323.9	8.00 203	33.0 15.0

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

IMPORTANT NOTES:

For pump package nipples with 1 ½"/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"/100 – 300 mm diameter – 8"/200 mm minimum length required.

For use on cut grooved systems only. 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 office.

Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

Grooved End Fittings

Cap

NO. 60

NO. 60

Size		No. 60 Cap	
¾ 20	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 32	1.660 42.4	0.88 22	0.3 0.1
1 ½ 40	1.900 48.3	0.88 22	0.5 0.2
2 50	2.375 60.3	0.88 22	0.6 0.3
2½ 65	2.875 73.0	0.88 22	1.0 0.5
76.1 mm	3.000 76.1	0.88 22	1.2 0.5
3 80	3.500 88.9	0.88 22	1.2 0.5
3½ 90	4.000 101.6	0.88 22	2.5 1.1
108.0 mm	4.250 108.0	1.00 25	2.3 1.0
4 100	4.500 114.3	1.00 25	2.5 1.1
133.0 mm	5.250 133.0	1.00 25	4.5 2.0
139.7 mm	5.500 139.7	1.00 25	4.5 2.0
5 125	5.563 141.3	1.00 25	4.6 2.1
159.0 mm	6.250 159.0	1.00 25	6.8 3.1
165.1 mm	6.500 165.1	1.00 25	7.3 3.3

Size		No. 60 Cap	
6 150	6.625 168.3	1.00 25	6.1 2.8
8 200	8.625 219.1	1.19 30	13.1 5.9
10 250	10.750 273.0	1.25 32	21.0 9.5
12 300	12.750 323.9	1.25 32	35.6 16.2
14 # (s) 350	14.000 355.6	9.50 241	*
16 # (s) 400	16.000 406.4	10.00 254	*
18 # (s) 450	18.000 457.0	11.00 279	*
20 # (s) 500	20.000 508.0	12.00 305	*
24 # (s) 600	24.000 610.0	13.50 343	*
14 – 24 350 – 600	AGS™ For AGS fitting information, see publication 20.05		

IMPORTANT NOTES:

* Steel dish caps available through 24"/600 mm, contact Victaulic.

No. 60 cap is not suitable for use in vacuum service with Style 72 or 750 couplings. No. 61 bull plugs should be used, see pg. 35.

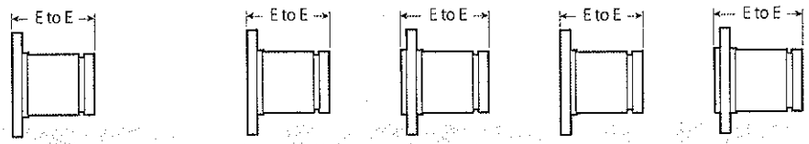
For use on cut grooved systems only. For roll grooved systems, Victaulic offers the Advanced Groove System (AGS). For pricing and availability of cut groove fittings in this size, contact your nearest Victaulic sales office.

Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

Grooved End Fittings

Flanged Adapter Nipple

NO. 41 ANSI Class 125 (Cast Iron)
NO. 45F ANSI Class 150 Flat Face
NO. 45R ANSI Class 150 Raised Face
NO. 46F ANSI Class 300 Flat Face
NO. 46R ANSI Class 300 Raised Face



NO. 41 | **NO. 45F** | NO. 45R | NO. 46F | NO. 46R

Size		No. 41 ANSI 125 Flange Adapter Nipple		No. 45F and No. 45R ANSI 150 Flange Adapter Nipple (S)		No. 46F and No. 46R ANSI 300 Flange Adapter Nipple (S)	
Nominal Size Inches mm	Actual Outside Diameter Inches mm	E to E Inches mm	Approx. Weight Each Lbs. Kg.	E to E Inches mm	Approx. Weight Each Lbs. Kg.	E to E Inches mm	Approx. Weight Each Lbs. Kg.
¾ 20	1.050 26.9	3 76	—	3 76	2.3 1.0	3 76	3.3 1.5
1 25	1.315 33.7	3 76	2.5 1.1	3 76	2.7 1.2	3 76	3.9 1.8
1¼ 32	1.660 42.4	4 102	3.0 1.4	4 102	3.3 1.5	4 102	4.8 2.2
1½ 40	1.900 48.3	4 102	3.5 1.6	4 102	3.9 1.8	4 102	6.9 3.1
2 50	2.375 60.3	4 102	5.5 2.5	4 102	6.2 2.8	4 102	8.2 3.7
2½ 65	2.875 73.0	4 102	8.0 3.6	4 102	9.9 4.5	4 102	11.9 5.4
3 80	3.500 88.9	4 102	9.5 4.3	4 102	11.4 5.2	4 102	16.5 7.5
3½ 90	4.00 101.6	4 102	12.0 5.4	4 102	15.1 6.8	4 102	20.1 9.1
4 100	4.500 114.3	6 152	16.7 7.6	6 152	18.4 8.3	6 152	27.4 12.4
5 125	5.563 141.3	6 152	21.5 9.8	6 152	21.3 9.7	6 152	35.3 16.0
6 150	6.625 168.3	6 152	26.5 12.0	6 152	27.5 12.5	6 152	47.5 21.5
8 200	8.625 219.1	6 152	39.0 17.7	6 152	41.3 18.8	6 152	70.3 31.9
10 250	10.750 273.0	8 203	57.0 25.9	8 203	59.8 27.1	8 203	100.8 45.7
12 300	12.750 323.9	8 203	41.0 18.6	8 203	88.2 40.0	8 203	146.2 66.3
14 # 350	14.000 355.6	8 203	—	8 203	+	8 203	+
16 # 400	16.000 406.4	8 203	—	8 203	+	8 203	+
18 # 450	18.000 457.0	8 203	—	8 203	+	8 203	+
20 # 500	20.000 508.0	8 203	—	8 203	+	8 203	+
24 # 600	24.000 610.0	8 203	—	8 203	+	8 203	+
14 – 24 350 – 600	AGS	For AGS fitting information, see publication 20.05					

IMPORTANT NOTES:

+ Contact Victaulic for details.

Flanged adapter nipples are supplied with standard rolled grooves.
Standard cut grooves or machining for rubber lining are optionally available. Contact Victaulic for details.

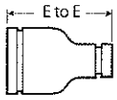
For use on cut grooved systems only. For roll grooved systems, Victaulic offers the Advanced Groove System (AGS). For pricing and availability of cut groove fittings in this size, contact your nearest Victaulic sales office.

Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

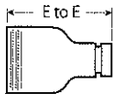
Grooved End Fittings

Swaged Nipple

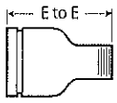
NO. 53 Grv. × Grv.
NO. 54 Grv. × Thd.
NO. 55 Thd. × Grv.



NO. 53



NO. 55



NO. 54

Size			No. 53, 54 and 55 Swaged Nipples (S)	
2	×	1	6.50	2.0
50		25	165	0.9
		1¼	6.50	2.0
		32	165	0.9
		1½	6.50	2.0
		40	165	0.9
2½	×	1	7.00	3.0
65		25	178	1.4
		1¼	7.00	3.0
		32	178	1.4
		1½	7.00	3.0
		40	178	1.4
		2	7.00	3.0
		50	178	1.4
3	×	1	8.00	4.5
80		25	203	2.0
		1¼	8.00	4.5
		32	203	2.0
		1½	8.00	4.4
		40	203	2.0
		2	8.00	4.5
		50	203	2.0
		2½	8.00	4.5
		65	203	2.0
3½	×	3	8.00	6.8
90		80	203	3.1
4	×	1	9.00	7.5
100		25	229	3.4
		1¼	9.00	7.5
		32	229	3.4
		1½	9.00	7.5
		40	229	3.4
		2	9.00	7.5
		50	229	3.4
4	×	2½	9.00	7.5
100		65	229	3.4

Size			No. 53, 54 and 55 Swaged Nipples (S)	
4	×	3	9.00	7.5
100		80	229	3.4
		3½	9.00	7.5
		90	229	3.4
5	×	2	11.00	11.5
125		50	279	5.2
		3	11.00	11.3
		80	279	5.1
		4	11.00	11.5
		100	279	5.2
6	×	1	12.00	17.0
150		25	305	7.7
		1¼	12.00	17.0
		32	305	7.7
		1½	12.00	17.2
		40	305	7.8
		2	12.00	17.4
		50	305	7.9
		2½	12.00	17.4
		65	305	7.9
		3	12.00	17.4
		80	305	7.9
		3½	12.00	17.4
		90	305	7.9
		4	12.00	17.5
		100	305	7.9
		4½	12.00	17.5
		120	305	7.9
		5	12.00	17.5
		125	305	7.9
8	×	6	+	20.0
200		150		9.1

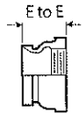
+ Contact Victaulic for details.

Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

Grooved End Fittings

Female Threaded Adapter

NO. 80



NO. 80

Size		No. 80 Female Threaded Adapter	
Nominal Size Inches mm	Actual Outside Diameter Inches mm	E to E Inches mm	Approx. Weight Each lbs kg
¾ 20	1.050 26.9	2.00 51	1.0 0.5
1 25	1.315 33.7	2.06 52	1.0 0.5
1 ¼ 32	1.660 42.4	2.31 (sw) 59	1.5 0.7
1 ½ 40	1.900 48.3	2.31 (sw) 59	1.5 0.7
2 50	2.375 60.3	2.50 64	1.4 0.6
2 ½ 65	2.875 73.0	2.75 70	1.5 0.7
3 80	3.500 88.9	2.75 70	2.9 1.3
4 100	4.500 114.3	3.25 83	4.5 2.0

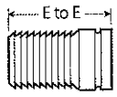
Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

IMPORTANT NOTE:

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

Hose Nipple

NO. 48



NO. 48

Size		No. 48 Hose Nipple (s)	
Nominal Size Inches mm	Actual Outside Diameter Inches mm	E to E Inches mm	Approx. Weight Each lbs kg
¾ 20	1.050 26.9	3.12 79	0.3 0.1
1 25	1.315 33.7	3.38 86	0.4 0.2
1 ¼ 32	1.660 42.4	3.88 98	0.6 0.3
1 ½ 40	1.900 48.3	3.88 98	0.8 0.4
2 50	2.375 60.3	4.50 114	1.1 0.5
2 ½ 65	2.875 73.0	5.38 137	2.0 0.9
3 80	3.500 88.9	5.75 146	3.2 1.5
4 100	4.500 114.3	7.00 178	4.9 2.2
5 125	5.563 141.3	8.75 222	8.0 3.6
6 150	6.625 168.3	10.12 257	14.3 6.5
8 200	8.625 219.1	11.88 302	24.7 11.2
10 250	10.750 273.0	12.50 318	40.1 18.2
12 300	12.750 323.9	14.50 368	62.0 28.1

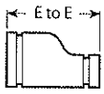
Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

Grooved End Fittings

Concentric/Eccentric Reducer

NO. 50 Concentric
NO. 51 Eccentric

NO. 50



NO. 51

Size		No. 50 Concentric Reducer		No. 51 Eccentric Reducer	
1¼ 32	¾ 20	+	1.9 0.9	—	—
	1 25	+	1.9 0.9	—	—
1½ 40	¾ 20	+	1.4 0.6	—	—
	1 25	2.50 64	0.8 0.4	8.50 (SW) 216	4.5 2.0
	1¼ 32	2.50 64	1.0 0.5	—	—
2 50	¾ 20	2.50 64	0.9 0.3	9.00 (SW) 229	2.0 0.9
	1 25	2.50 64	0.7 0.3	9.00 (SW) 229	2.3 1.0
	1¼ 32	2.50 64	1.2 0.5	9.00 (SW) 229	4.6 2.1
	1½ 40	3.50 89	1.0 0.5	3.50 89	1.1 0.5
2½ 65	¾ 20	+	1.3 0.6	+	3.3 1.5
	1 25	2.50 64	1.1 0.5	9.50 241	3.5 1.6
	1¼ 32	3.50 89	3.3 1.5	3.50 89	1.4 0.6
	1½ 40	2.50 64	3.6 1.6	9.50 (SW) 241	3.7 1.7
	2 50	2.50 64	3.9 1.8	9.50 (SW) 241	4.3 2.0
3 80	¾ 20	+	1.5 0.7	+	4.5 2.0
	1 25	2.50 241	1.3 0.6	9.50 (SW) 241	4.8 2.2
	1¼ 32	2.50 64	1.4 0.6	+	4.8 2.2
	1½ 40	2.50 64	5.1 2.3	9.50 (SW) 241	5.1 2.3
	2 50	2.50 64	1.6 0.7	3.50 89	6.0 2.7
	2½ 65	2.50 64	1.8 0.8	3.50 89	7.0 3.2
	76.1	2.50 64	2.1 1.0	—	—
3½ 90	3 80	2.50 64	2.0 0.9	9.50 (SW) 241	7.0 3.2
4 100	1 25	3.00 76	3.0 1.4	13.00 (SW) 330	6.5 2.9
	1¼ 32	+	4.6 2.1	—	—
	1½ 40	3.00 (SW) 76	2.6 1.2	10.00 (SW) 254	8.1 3.7
	2 50	3.00 76	2.4 1.1	4.00 102	3.3 1.5
	2½ 65	3.00 76	2.7 1.2	4.00 102	3.4 1.5
	3 80	3.00 76	3.2 1.4	4.00 102	3.5 1.6
	3½ 90	3.00 76	2.9 1.3	10.00 (SW) 254	8.0 3.6
5 125	2 50	11.00 (SW) 279	9.0 4.1	11.00 (SW) 279	5.2 2.4
	2½ 65	4.00 102	4.3 2.0	11.00 (SW) 279	10.8 4.9
	3 80	4.00 102	55 2.5	11.00 (SW) 279	11.1 5.0
	4 100	3.50 89	4.3 1.9	5.00 127	12.0 5.4
6 150	1 25	4.00 102	5.0 2.3	11.50 (SW) 292	14.5 6.6
	1½ 40	+	5.5 2.5	+	+
	2 50	4.00 102	6.6 3.0	11.50 (SW) 292	14.5 6.6
	2½ 65	4.00 102	6.4 2.9	11.50 (SW) 292	14.2 6.4
	3 80	4.00 102	6.4 2.9	5.50 140	15.0 6.8
	4 100	4.00 102	6.5 2.9	5.50 140	17.0 7.7
	5 125	4.00 102	6.4 2.9	5.50 140	17.0 7.7
8 200	2½ 65	16.00 406	7.9 3.6	12.00 (SW) 305	26.1 11.8
	3 80	5.00 127	9.3 4.2	12.00 (SW) 305	22.0 10.0

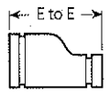
Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s".
SW= Segmentally Welded. S= Carbon Steel

Grooved End Fittings

Concentric/Eccentric Reducer

NO. 50 Concentric
NO. 51 Eccentric

NO. 50



NO. 51

Size Nominal Size Inches mm		No. 50 Concentric Reducer E to E Inches mm	Approx. Weight Each Lbs. Kg.	No. 51 Eccentric Reducer E to E Inches mm	Approx. Weight Each Lbs. Kg.
8 200	× 4 100	5.00 127	10.4 4.8	12.00 (SW) 305	23.0 10.4
	5 125	5.00 127	11.6 5.2	12.00 (SW) 305	23.0 10.4
	6 150	5.00 127	11.9 5.4	6.00 152	24.0 10.9
10 250	× 4 100	6.00 152	19.7 8.9	13.00 (SW) 330	32.0 14.5
	5 125	+	34.3 15.6	+	34.6 15.7
	6 150	6.00 152	20.0 9.1	13.00 (SW) 330	36.9 16.7
	8 200	6.00 152	22.0 10.0	7.00 178	21.6 9.8
12 300	× 4 100	+	44.0 20.0	14.00 (SW) 356	48.0 21.8
	6 150	7.00 178	24.6 11.2	14.00 (SW) 356	50.0 22.7
	8 200	7.00 178	52.0 23.6	14.00 (SW) 356	53.5 24.3
	10 250	7.00 178	39.0 17.7	14.00 (SW) 356	57.0 25.9
# 14 350	× 6 150	13.00 330	65.0 29.5	13.00 330	60.0 27.2
	8 200	13.00 330	65.0 29.5	13.00 330	60.0 27.2
	10 250	13.00 330	66.0 29.9	13.00 330	65.0 29.5
	12 300	13.00 330	68.0 30.8	13.00 330	66.0 29.9
# 16 400	× 8 200	14.00 356	73.0 33.1	14.00 355	73.0 33.1
	10 § 250	14.00 356	73.0 33.1	14.00 355	73.0 33.1
	12 300	14.00 356	73.0 33.1	14.00 355	73.0 33.1
	14 350	14.00 356	73.0 33.1	14.00 355	73.0 33.1
# 18 450	× 10 250	15.00 381	91.0 41.3	15.00 381	91.0 41.3
# 18 450	x 12 300	15.00 381	91.0 41.3	15.00 381	91.0 41.3
	14 350	15.00 381	91.0 41.3	15.00 381	91.0 41.3
	16 400	15.00 381	91.0 41.3	15.00 381	91.0 41.3
# 20 500	× 10 250	20.00 508	110.0 49.9	20.00 508	177.0 80.3
	12 300	20.00 508	120.0 54.4	20.00 508	120.0 54.4
	14 350	20.00 508	149.0 67.9	20.00 508	149.0 67.9
	16 400	20.00 508	120.0 54.4	20.00 508	120.0 54.4
	18 450	20.00 508	136.0 61.7	20.00 508	136.0 61.7
# 24 600	× 10 250	20.00 508	142.0 64.4	20.00 508	142.0 64.4
	12 300	20.00 508	150.0 68.0	20.00 508	150.0 68.0
	14 350	20.00 508	162.0 73.5	20.00 508	162.0 73.5
	16 400	20.00 508	162.0 73.5	20.00 508	162.0 73.5
	18 450	20.00 508	162.0 73.5	20.00 508	162.0 73.5
	20 500	20.00 508	151.0 68.5	20.00 508	190.0 86.2
14 – 24 350 – 600		AGS™ For AGS fitting information, see publication 20.05			

+ Contact Victaulic for details.

* Available with male threaded small end No. 52.

Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

IMPORTANT NOTE:

Steel eccentric reducers available through 30"/750 mm, contact Victaulic for dimensions.

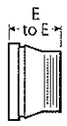
For use on cut grooved systems only. For roll grooved systems, Victaulic offers the Advanced Groove System (AGS). For pricing and availability of cut groove fittings in this size, contact your nearest Victaulic sales office.

§ Cast fitting available for JIS size. Contact Victaulic for details.

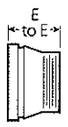
Grooved End Fittings

Small Threaded Reducer

NO. 52



NO. 52



NO. 52F

Size			No. 52 Small Threaded Reducer		No. 52F Concentric Reducer with BSPT Female Threaded End	
1 ½ 40	×	1 25	2.50 64	0.8 0.4	—	—
		1 ¼ 32	2.50 64	0.9 0.4	—	—
2 50	×	¾ 20	2.50 64	0.9 0.4	—	—
		1 25	2.50 64	0.7 0.3	—	—
		1 ¼ 32	2.50 64	1.2 0.5	—	—
		1 ½ 40	2.50 64	1.0 0.5	—	—
2 ½ 65	×	1 25	2.50 64	1.1 0.5	—	—
		1 ¼ 32	2.50 (sw) 64	1.2 0.5	—	—
		1 ½ 40	2.50 (sw) 64	1.3 0.6	—	—
		2 50	3.00 76	1.4 0.6	—	—
76.1	×	48.3	63.5	0.8	63.5	0.77
		60	—	—	63.5	0.85
3 80	×	¾ 20	+ (sw)	1.5 0.7	—	—
		1 25	2.50 64	1.3 0.6	—	—
		1 ¼ 32	2.50 64	1.5 0.7	—	—
		1 ½ 40	2.50 (sw) 64	1.5 0.7	—	—
		2 50	2.50 64	1.5 0.7	—	—
		2 ½ 65	2.50 64	2.4 1.1	—	—
88.9	×	42.4	63.5	0.9	63.5	0.82
		48.3	63.5	0.9	63.5	0.85
		60	—	—	63.5	0.89
4 100	×	1 25	3.00 76	2.3 1.0	—	—
		1 ½ 40	3.00 76	2.7 1.2	—	—
		2 50	3.00 76	2.6 1.2	—	—
4 100	×	2 ½ 65	3.00 76	2.6 1.2	—	—
		3 80	3.00 76	2.5 1.1	—	—
108	×	42.4	76.2	1.3	76.2	1.32
		48.3	76.2	1.3	76.2	1.35
		60	—	—	76.2	1.39
114.3	×	42.4	76.2	1.3	76.2	1.30
		48.3	76.2	1.3	76.2	1.34
		60	—	—	76.2	1.40
5 125	×	4 100	+	4.5 2.0	—	—
133	×	60	—	—	114.3	2.17
139	×	60	—	—	114.3	2.26
6 150	×	1 25	4.00 102	5.5 2.5	—	—
		2 50	4.00 102	5.7 2.6	—	—
		2 ½ 65	4.00 102	5.8 2.6	—	—
		3 80	4.00 102	5.8 2.6	—	—
		4 100	+ (sw)	6.5 2.9	—	—
		5 125	+ (sw)	2.0 0.9	—	—
159	x	42.4	114.3	2.2	114.3	2.45
		48.3	114.3	2.2	114.3	2.51
		60	—	—	114.3	2.60
165.1	x	42.4	101.6	2.4	101.6	2.90
		48.3	101.6	2.6	101.6	2.95
		60	—	—	101.6	3.00
8 200	×	2 50	16.00 406	1.5 0.7	—	—
		2 ½ 65	16.00 406	1.7 0.8	—	—

+ Contact Victaulic for details.

Note: All fittings are ductile iron unless otherwise noted with an "sw" or "s". SW= Segmentally Welded. S= Carbon Steel

IMPORTANT NOTE:

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

Grooved End Fittings

INSTALLATION

Reference should always be made to the I-100 Victaulic Field Installation Handbook for the product you are installing. Handbooks are included with each shipment of Victaulic products for complete installation and assembly data, and are available in PDF format on our website at www.victaulic.com.

WARRANTY

Refer to the Warranty section of the current Price List or contact Victaulic for details.

NOTE

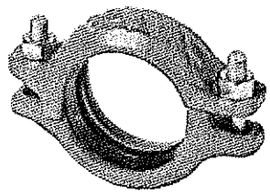
This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.

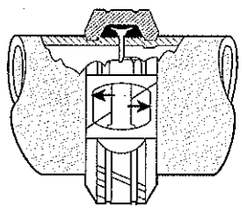
UPDATED 10/2009
07.01 1449 REV M

Zero-Flex® Rigid Coupling

STYLE 07

SEE VICTAULIC PUBLICATION 10.01 FOR DETAILS





Exaggerated for clarity

The unique angle-pad design of the Zero-Flex® Style 07 coupling adjusts to standard pipe and roll or cut groove tolerances, positively clamping the pipe to resist flexural and torsional loads. The wider key section fills more of the groove area.

The Victaulic standard rigid coupling offering for grade "EHP" or "T" gaskets is the Style 107 installation-ready rigid coupling. For all available sizes, the Style 107 is the standard rigid coupling Victaulic supplies in North America for piping systems using Grade "EHP" or "T" gaskets. Contact Victaulic for further details.

Style 07 couplings are rated up to 750 psi/5175 kPa, dependant on size, for 1 – 12"/25 – 300 mm piping systems. Rigid couplings provide rigidity for valve connections, machinery rooms, fire mains, and long straight runs. Support and hanging requirements correspond to ASME B31.1 Power Piping Code, ASME B31.9 Building Services Code and NFPA 13 Sprinkler Systems. Angle-pad design permits assembly by removing one nut/bolt and scissoring housing over gasket. This reduces the number of components to handle during assembly, speeds and eases installation.

For 14 – 24"/350 – 600 mm sizes Victaulic offers the Advanced Groove System (AGS) line of products. Request publication 20.02 for information on the rigid W07 AGS coupling.

MATERIAL SPECIFICATIONS

Housing: Ductile iron conforming to ASTM A-536, grade 65-45-12. Ductile iron conforming to ASTM A-395, grade 65-45-15, is available upon special request.

Housing Coating: Orange enamel.

- **Optional:** Hot dipped galvanized and others.

Coupling Gasket: (specify choice‡)

- **Grade "E" EPDM**
  EPDM (Green color code). Temperature range –30°F to +230°F/–34°C to +110°C. Recommended for cold and hot water service within the specified temperature range plus a variety of dilute acids, oil-free air and many chemical services. UL classified in accordance with ANSI/NSF 61 for cold +86°F/+30°C and hot +180°F/+82°C potable water service. NOT RECOMMENDED FOR PETROLEUM SERVICES.

- **Grade "T" nitrile**
  Nitrile (Orange color code). Temperature range –20°F to +180°F/–29°C to +82°C. Recommended for petroleum products, air with oil vapors, vegetable and mineral oils within the specified temperature range. Not recommended for hot water services over +150°F/+66°C or for hot dry air over +140°F/+60°C.

‡ Services listed are General Service Recommendations only. It should be noted that there are services for which these gaskets are not recommended. Reference should always be made to the latest Victaulic Gasket Selection Guide for specific gasket service recommendations and for a listing of services which are not recommended.

NOTE: Additional gasket styles are available. Contact Victaulic for details.

Bolts/Nuts: Heat-treated plated carbon steel, trackhead meeting the physical and chemical requirements of ASTM A-449 and physical requirements of ASTM A-183.

JOB/OWNER	CONTRACTOR	ENGINEER
System No. _____	Submitted By _____	Spec Sect _____ Para _____
Location _____	Date _____	Approved _____
		Date _____

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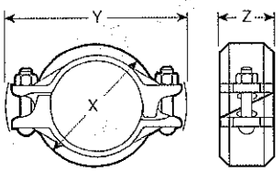
Zero-Flex® Rigid Coupling

STYLE 07

DIMENSIONS



TYPICAL 1 – 12"

Size		Max. Work Pressure *	Max. End Load *	Allow. Pipe End Sep. †	Bolt/Nut@ No – Size	Dimensions – Inches/mm			Approx. Wgt. Each
Nominal Size Inches mm	Actual Outside Diameter Inches mm	psi kPa	Lbs N	Inches mm	Inches	X	Y	Z	Lbs Kg
1 25	1.315 33.7	750 5175	650 2890	0.05 1.2	2 – ⅜ x 2	2.36 60	4.22 107	1.84 47	1.6 0.7
1 ¼ 32	1.660 42.4	750 5175	1,620 7210	0.05 1.2	2 – ⅜ x 2	2.69 68	4.62 117	1.84 47	1.6 0.7
1 ½ 40	1.900 48.3	750 5175	2,130 9480	0.05 1.2	2 – ⅜ x 2	2.94 75	5.81 148	1.84 47	1.6 0.7
2 50	2.375 60.3	750 5175	3,320 14775	0.07 1.7	2 – ½ x 2 ½	3.35 85	5.78 147	1.84 47	2.3 1.0
2 ½ 65	2.875 73.0	750 5175	4,875 21695	0.07 1.7	2 – ½ x 2 ¾	3.88 98	6.38 162	1.84 47	2.6 1.2
76.1 mm	3.000 76.1	750 5175	5,300 23585	0.07 1.7	2 – 12 x 70.0	4.21 107	6.61 168	1.84 47	3.6 1.6
3 80	3.500 88.9	750 5175	7,215 32105	0.07 1.7	2 – ½ x 2 ½	4.54 115	6.81 173	1.84 47	3.0 1.4
4 100	4.500 114.3	750 5175	11,925 53065	0.16 4.1	2 – ½ x 2 ¾	5.81 148	8.21 209	2.07 53	5.3 2.4
108.0 mm	4.250 108.0	750 5175	10,635 47325	0.16 4.1	2 – 12 x 70.0	5.56 141	7.98 203	2.07 53	5.2 2.4
5 125	5.563 141.3	750 5175	18,225 81100	0.16 4.1	2 – ⅝ x 3 ¼	7.03 179	9.89 251	2.07 53	7.4 3.4
133.0 mm	5.250 133.0	700 4825	15,145 67395	0.16 4.1	2 – 16 x 82.5	6.69 170	9.60 244	2.07 53	7.4 3.4
139.7 mm	5.500 139.7	700 4825	16,625 73980	0.16 4.1	2 – 16 x 82.5	6.94 176	9.82 249	2.07 53	7.6 3.4
6 150	6.625 168.3	700 4825	24,130 107380	0.16 4.1	2 – ⅝ x 3 ¼	8.26 210	10.83 275	2.07 53	8.3 3.8
159.0 mm	6.250 159.0	700 4825	21,465 95520	0.16 4.1	2 – 16 x 82.5	7.84 199	10.54 268	2.07 53	9.2 4.2
165.1 mm	6.500 165.1	700 4825	23,225 103305	0.16 4.1	2 – ⅝ x 3 ¼	8.13 207	10.84 275	2.07 53	8.3 3.8
8 § 200	8.625 219.1	600 4130	35,000 155750	0.19 4.8	2 – ¾ x 4 ¼	10.54 268	13.74 349	2.51 64	15.1 6.8
10 § 250	10.750 273.0	500 3450	45,400 202030	0.13 3.3	2 – ⅞ x 6 ½	12.86 327	16.98 431	2.56 65	23.5 10.7
12 § 300	12.750 323.9	400 2750	51,000 226950	0.13 3.3	2 – ⅞ x 6 ½	14.86 377	18.88 480	2.56 65	28.2 12.8
14 – 24 350 – 600	AGS™ **For 14 – 24"/350 – 600mm sizes Victaulic offers the Advanced Groove System (AGS) line of products. Request publication 20.02 for information on the rigid W07 AGS coupling.**								

§ Couplings 8, 10, 12"/200, 250, 300mm sizes available to JIS standard. Refer to section 06.17 for details.

* Working Pressure and End Load are total, from all internal and external loads, based on standard weight (ANSI) steel pipe, standard **roll** or **cut** grooved in accordance with Victaulic specifications. Contact Victaulic for performance on other pipe.

WARNING: FOR ONE TIME FIELD TEST ONLY, the Maximum Joint Working Pressure may be increased to 1½ times the figures shown.

† For field installation only on roll grooved pipe or cut grooved pipe. Zero-Flex Style 07 couplings are essentially rigid and do not permit expansion/contraction.

@ Number of bolts required equals number of housing segments.

Metric thread size bolts are available (color coded gold) for all coupling sizes upon request. Contact Victaulic for details.

Style 07 couplings must **not** be used to join PVC pipe.

Zero-Flex® Rigid Coupling

STYLE 07

Zero-Flex® Rigid Coupling

STYLE 07

INSTALLATION

Reference should always be made to the I-100 Victaulic Field Installation Handbook for the product you are installing. Handbooks are included with each shipment of Victaulic products for complete installation and assembly data, and are available in PDF format on our website at www.victaulic.com.

WARRANTY

Refer to the Warranty section of the current Price List or contact Victaulic for details.

NOTE

This product shall be manufactured by Victaulic or to Victaulic specifications. All products to be installed in accordance with current Victaulic installation/assembly instructions. Victaulic reserves the right to change product specifications, designs and standard equipment without notice and without incurring obligations.