☐ FIG. 7050

90° Elbow*

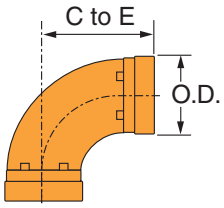

FIGURE 7050
90° ELBOW*

Nominal Size	O.D.	Center to End	Approx. Wt. Ea.
In./DN(mm)	In./mm	In./mm	Lbs./Kg
1 25	1.315 33.4	2¼ C 57	0.6 0.3
1¼ 32	1.660 42.2	2¾ C 70	1.0 0.5
1½ 40	1.900 48.3	2¾ C 70	1.2 0.5
2 50	2.375 60.3	3¼ C 83	1.7 0.8
2½ 65	2.875 73.0	3¾ C 95	2.6 1.2
3 O.D. 76.1	2.996 76.1	4 C 102	3.6 1.6
3 80	3.500 88.9	4¼ C 108	4.0 1.8
3½ 90	4.000 101.6	4½ C 114	5.5 2.5
4¼ O.D. 108.0	4.250 108.0	4¾ C 121	7.7 3.5
4 100	4.500 114.3	5 C 127	7.7 3.5
5¼ O.D. 133.0	5.236 133.0	5¼ C 133	10.4 4.7
5½ O.D. 139.7	5.500 139.7	5¼ C 133	10.9 4.9
5 125	5.563 141.3	5½ C 140	11.1 5.0
6¼ O.D. 159.0	6.259 159.0	6 C 152	15.2 6.9
6½ O.D. 165.1	6.500 165.1	6½ C 165	17.4 7.9
6 150	6.625 168.3	6½ C 165	16.5 7.5
8 200	8.625 219.1	7¾ C 197	30.6 13.9
10 250	10.750 273.1	9 C 229	53.5 24.3
12 300	12.750 323.9	10 C 254	82 37.2
14* 350	14.000 355.6	21 C 533	176.0 79.8
16* 400	16.000 406.4	24 C 610	230.0 104.3
18* 450	18.000 457.2	27 C 686	293.0 132.9
20* 500	20.000 508.0	30 C 762	362.0 164.2
24* 600	24.000 609.6	36 C 914	520.0 235.9

☐ FIG. 7051

45° Elbow*

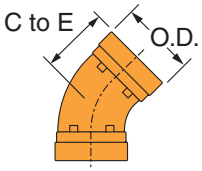

FIGURE 7051
45° ELBOW*

Nominal Size	O.D.	Center to End	Approx. Wt. Ea.
In./DN(mm)	In./mm	In./mm	Lbs./Kg
1 25	1.315 33.4	1¾ C 44	0.5 0.2
1¼ 32	1.660 42.2	1¾ C 44	0.7 0.3
1½ 40	1.900 48.3	1¾ C 44	0.9 0.4
2 50	2.375 60.3	2 C 51	1.5 0.7
2½ 65	2.875 73.0	2¼ C 57	1.9 0.9
3 O.D. 76.1	2.996 76.1	2½ C 64	2.2 1.0
3 80	3.500 88.9	2½ C 64	3.3 1.5
3½ 90	4.000 101.6	2¾ C 70	4.3 2.0
4¼ O.D. 108.0	4.250 108.0	2⅞ C 83	4.4 2.0
4 100	4.500 114.3	3 C 76	5.4 2.4
5¼ O.D. 133.0	5.236 133.0	3¼ C 83	7.3 3.3
5½ O.D. 139.7	5.500 139.7	3¼ C 83	7.8 3.5
5 125	5.563 141.3	3¼ C 83	9.0 4.1
6¼ O.D. 159.0	6.259 159.0	3½ C 89	10.1 4.6
6½ O.D. 165.1	6.500 165.1	3½ C 89	11.1 5.0
6 150	6.625 168.3	3½ C 89	11.2 5.1
8 200	8.625 219.1	4¼ C 108	19.8 9.0
10 250	10.750 273.1	4¾ C 121	34.3 15.6
12 300	12.750 323.9	5¼ C 133	50.0 22.7
14* 350	14.000 355.6	8¾ C 222	89.0 40.4
16* 400	16.000 406.4	10 C 254	125.0 56.7
18* 450	18.000 457.2	11¼ C 286	158.0 71.7
20* 500	20.000 508.0	12½ C 317	194.0 88.0
24* 600	24.000 609.6	15 C 381	277.0 125.6

☐ FIG. 7052

22 ½° Elbow

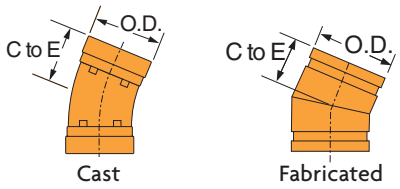

FIGURE 7052
22½° ELBOW*

Nominal Size	O.D.	Center to End	Approx. Wt. Ea.
In./DN(mm)	In./mm	In./mm	Lbs./Kg
1 25	1.315 33.4	3¼ 83	0.5 0.2
1¼ 32	1.660 42.2	1¾ 44	0.7 0.3
1½ 40	1.900 48.3	1¾ 44	0.8 0.4
2 50	2.375 60.3	1⅞ C 48	1.5 0.7
2½ 65	2.875 73.0	2 51	1.9 0.9
3 80	3.500 88.9	2¼ C 57	3.2 1.5
3½ 90	4.000 101.6	2½ 64	4.0 1.8
4 100	4.500 114.3	2⅝ C 67	5.3 2.4
5 125	5.563 141.3	2⅞ 73	7.2 3.3
6 150	6.625 168.3	3⅛ C 79	8.2 3.7
8 200	8.625 219.1	3⅞ C 98	17.8 8.1
10 250	10.750 273.1	4⅜ 111	30.0 13.6
12 300	12.750 323.9	4⅞ 124	40.4 18.3
14 350	14.000 355.6	5 127	46.0 20.9
16 400	16.000 406.4	5 127	52.2 23.7
18 450	18.000 457.2	5½ 140	65.0 29.5
20 500	20.000 508.0	6 152	80.0 36.3
24 600	24.000 609.6	7 178	112.0 50.8

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For Listings/Approval Details and Limitations, visit our website at www.anvilintl.com or contact an Anvil® Sales Representative.

C - Cast ductile iron, all others are fabricated steel.
* 14"-24" Standard Radius 90° & 45° Elbows are 1½ Long Radius.
Center to end dimensions and weights may differ from those shown in chart, contact an Anvil Representative for more information.

PROJECT INFORMATION	APPROVAL STAMP
Project:	☐ **Approved**
Address:	☐ **Approved as noted**
Contractor:	☐ **Not approved**
Engineer:	**Remarks:**
Submittal Date:	
Notes 1:	
Notes 2:	

Gruvlok fittings are available through 24" nominal pipe size in a variety of styles. Use the Fitting Size Table to convert nominal pipe size to corresponding pipe O.D.

These fittings are designed to provide minimum pressure drop and uniform strength.

Depending on styles and size, Gruvlok fittings are provided in various materials including ductile iron, forged steel or fabricated steel.

Pressure ratings of Gruvlok standard fittings conform to those of Fig. 7001 Gruvlok coupling.

NSF/ANSI 61 UPC C ®
Galvanized Gruvlok Fittings are NSF-61 and Low Lead Approved

c UL us LISTED FM APPROVED
For Listings/Approval Details and Limitations, visit our website at www.anvilintl.com or contact an Anvil® Sales Representative.

FLOW DATA – FRICTIONAL RESISTANCE (EXPRESSED AS EQUIVALENT STRAIGHT PIPE)

Nom. Size	O.D.	Pipe Wall Thickness	Elbow		Tee	
			90°	45°	Branch	Run
In./DN(mm)	*In./mm*	*In./mm*	*Ft./m*	*Ft./m*	*Ft./m*	*Ft./m*
1 *25*	1.315 *33.4*	0.133 *3.4*	1.7 *0.5*	0.9 *0.3*	4.4 *1.3*	1.7 *0.5*
1¼ *32*	1.660 *42.2*	0.140 *3.6*	2.3 *0.7*	1.2 *0.4*	5.8 *1.8*	2.3 *0.7*
1½ *40*	1.900 *48.3*	0.145 *3.7*	2.7 *0.8*	1.3 *0.4*	6.7 *2.0*	2.7 *0.8*
2 *50*	2.375 *60.3*	0.154 *3.9*	3.4 *1.0*	1.7 *0.5*	8.6 *2.6*	3.4 *1.0*
2½ *65*	2.875 *73.0*	0.203 *5.2*	4.1 *1.2*	2.1 *0.6*	10.3 *3.1*	4.1 *1.2*
3 O.D. 76.1	*2.996* 76.1	*0.197* 5.0	*4.3* 1.3	*2.2* 0.7	*10.8* 3.3	*4.3* 1.3
3 *80*	3.500 *88.9*	0.216 *5.5*	5.1 *1.6*	2.6 *0.8*	12.8 *3.9*	5.1 *1.6*
4¼ O.D. 108.0	*4.250* 108.0	*0.220* 5.6	*6.4* 2.0	*3.2* 1.0	*16.1* 4.9	*6.4* 2.0
4 *100*	4.500 *114.3*	0.237 *6.0*	6.7 *2.0*	3.4 *1.0*	16.8 *5.1*	6.7 *2.0*
5¼ O.D. 133.0	*5.236* 133.0	*0.248* 6.3	*8.0* 2.4	*4.0* 1.2	*20.1* 6.1	*8.0* 2.4
5½ O.D. 139.7	*5.500* 139.7	*0.248* 6.3	*8.3* 2.5	*4.2* 1.3	*20.9* 6.4	*8.3* 2.5
5 *125*	5.563 *141.3*	0.258 *6.6*	8.4 *2.6*	4.2 *1.3*	21.0 *6.4*	8.4 *2.6*
6¼ O.D. 159.0	*6.259* 159.0	*0.280* 7.1	*9.7* 3.0	*4.9* 1.5	*24.3* 7.4	*9.7* 3.0
6½ O.D. 165.1	*6.500* 165.1	*0.280* 7.1	*10.0* 3.0	*5.0* 1.5	*24.9* 7.6	*10.0* 3.0
6 *150*	6.625 *168.3*	0.280 *7.1*	10.1 *3.1*	5.1 *1.6*	25.3 *7.7*	10.1 *3.1*
8 *200*	8.625 *219.1*	0.322 *8.2*	13.3 *4.1*	6.7 *2.0*	33.3 *10.1*	13.3 *4.1*
10 *250*	10.750 *273.1*	0.365 *9.3*	16.7 *5.1*	8.4 *2.6*	41.8 *12.7*	16.7 *5.1*
12 *300*	12.750 *323.9*	0.375 *9.5*	20.0 *6.1*	10.0 *3.0*	50.0 *15.2*	20.0 *6.1*
14 *350*	14.000 *355.6*	0.375 *9.5*	22.2 *6.8*	17.7 *5.4*	64.2 *19.6*	22.9 *7.0*
16 *400*	16.000 *406.4*	0.375 *9.5*	25.5 *7.8*	20.4 *6.2*	73.9 *22.5*	26.4 *8.0*
18 *450*	18.000 *457.2*	0.375 *9.5*	28.9 *8.8*	23.1 *7.0*	87.2 *26.6*	31.1 *9.5*
20 *500*	20.000 *508.0*	0.375 *9.5*	32.2 *9.8*	25.7 *7.8*	97.3 *29.7*	34.8 *10.6*
24 *600*	24.000 *609.6*	0.375 *9.5*	38.9 *11.9*	31.1 *9.5*	113.0 *34.4*	40.4 *12.3*

For the reducing tee and branches, use the value that is corresponding to the branch size. For example: for 6" x 6" x 3" tee, the branch value of 3" is 12.8 ft (3.9).

MATERIAL SPECIFICATIONS

CAST FITTINGS:
Ductile iron conforming to ASTM A 536, Grade 65-45-12
Malleable iron conforming to ASTM A 47

FABRICATED FITTINGS:
1-12" Carbon steel, Schedule 40, conforming to ASTM A 53, Grade B
14-24" Carbon steel, 0.375 wall, conforming to ASTM A 53, Grade B

COATINGS:
Rust inhibiting paint – Color: ORANGE (standard)
Hot Dipped Zinc Galvanized conforming to ASTM A 153 (optional)
Other Colors Available (IE: RAL3000 and RAL9000)

FITTING SIZE

Nominal Size	O.D.	Nominal Size	O.D.
In./DN(mm)	*In./mm*	*In./DN(mm)*	*In./mm*
1 *25*	1.315 *33.4*	5 *140*	5.563 *141.3*
1¼ *32*	1.660 *42.4*	*6¼ O.D.* 159.0	*6.259* 159.0
1½ *40*	1.900 *48.3*	*6½ O.D.* 165.1	*6.500* 165.1
2 *50*	2.375 *60.3*	6 *150*	6.625 *168.3*
2½ *65*	2.875 *73.0*	8 *200*	8.625 *219.1*
3 O.D. 76.1	*2.996* 76.1	10 *250*	10.750 *273.0*
3 *80*	3.500 *88.9*	12 *300*	12.750 *323.9*
3½ *90*	4.000 *101.6*	14 *350*	14.000 *355.6*
4¼ O.D. 108.0	*4.250* 108.0	16 *400*	16.000 *406.4*
4 *100*	4.500 *114.3*	18 *450*	18.000 *457.2*
5¼ O.D. 133.0	*5.236* 133.0	20 *500*	20.000 *508.0*
5½ O.D. 139.7	*5.500* 139.7	24 *600*	24.000 *609.6*

The Fitting Size Chart is used to determine the O.D. of the pipe that the fittings is to be used with. Gruvlok Fittings are identified by either the Nominal size in inches or the Pipe O.D. in/mm.