

FIG. 7050

90° Elbow*

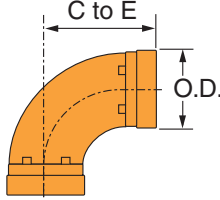


FIGURE 7050 90° ELBOW*			
Nominal Size	O.D.	Center to End	Approx. Wt. Ea.
In./DN(mm)	In./mm	In./mm	Lbs./Kg
1	1.315	2 1/4 C	0.6
25	33.4	57	0.3
1 1/4	1.660	2 3/4 C	1.0
32	42.2	70	0.5
1 1/2	1.900	2 3/4 C	1.2
40	48.3	70	0.5
2	2.375	3 1/4 C	1.7
50	60.3	83	0.8
2 1/2	2.875	3 3/4 C	2.6
65	73.0	95	1.2
3 O.D.	2.996	4 C	3.6
76.1	76.1	102	1.6
3	3.500	4 1/4 C	4.0
80	88.9	108	1.8
3 1/2	4.000	4 1/2 C	5.5
90	101.6	114	2.5
4 1/4 O.D.	4.250	4 3/4 C	7.7
108.0	108.0	121	3.5
4	4.500	5 C	7.7
100	114.3	127	3.5
5 1/4 O.D.	5.236	5 1/4 C	10.4
133.0	133.0	133	4.7
5 1/2 O.D.	5.500	5 1/4 C	10.9
139.7	139.7	133	4.9
5	5.563	5 1/2 C	11.1
125	141.3	140	5.0
6 1/4 O.D.	6.259	6 C	15.2
159.0	159.0	152	6.9
6 1/2 O.D.	6.500	6 1/2 C	17.4
165.1	165.1	165	7.9
6	6.625	6 1/2 C	16.5
150	168.3	165	7.5
8	8.625	7 3/4 C	30.6
200	219.1	197	13.9
10	10.750	9 C	53.5
250	273.1	229	24.3
12	12.750	10 C	82
300	323.9	254	37.2
14*	14.000	21	169.0
350	355.6	533	76.7
16*	16.000	24	222.0
400	406.4	610	100.7
18*	18.000	27	280.0
450	457.2	686	127.0
20*	20.000	30	344.0
500	508.0	762	156.0
24*	24.000	36	490.0
600	609.6	914	222.3

FIG. 7051

45° Elbow*

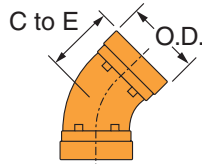


FIGURE 7051 45° ELBOW*			
Nominal Size	O.D.	Center to End	Approx. Wt. Ea.
In./DN(mm)	In./mm	In./mm	Lbs./Kg
1	1.315	1 3/4 C	0.5
25	33.4	44	0.2
1 1/4	1.660	1 3/4 C	0.7
32	42.2	44	0.3
1 1/2	1.900	1 3/4 C	0.9
40	48.3	44	0.4
2	2.375	2 C	1.5
50	60.3	51	0.7
2 1/2	2.875	2 1/4 C	1.9
65	73.0	57	0.9
3 O.D.	2.996	2 1/2 C	2.2
76.1	76.1	64	1.0
3	3.500	2 1/2 C	3.3
80	88.9	64	1.5
3 1/2	4.000	2 3/4 C	4.3
90	101.6	70	2.0
4 1/4 O.D.	4.250	2 3/4 C	4.4
108.0	108.0	83	2.0
4	4.500	3 C	5.4
100	114.3	76	2.4
5 1/4 O.D.	5.236	3 1/4 C	7.3
133.0	133.0	83	3.3
5 1/2 O.D.	5.500	3 1/4 C	7.8
139.7	139.7	83	3.5
5	5.563	3 1/4 C	9.0
125	141.3	83	4.1
6 1/4 O.D.	6.259	3 1/2 C	10.1
159.0	159.0	89	4.6
6 1/2 O.D.	6.500	3 1/2 C	11.1
165.1	165.1	89	5.0
6	6.625	3 1/2 C	11.2
150	168.3	89	5.1
8	8.625	4 1/4 C	19.8
200	219.1	108	9.0
10	10.750	4 3/4 C	34.3
250	273.1	121	15.6
12	12.750	5 1/4 C	50.0
300	323.9	133	22.7
14*	14.000	8 3/4	92.0
350	355.6	222	41.7
16*	16.000	10	117.0
400	406.4	254	53.1
18*	18.000	11 1/4	146.0
450	457.2	286	66.2
20*	20.000	12 1/2	179.0
500	508.0	317	81.2
24*	24.000	15	255.0
600	609.6	381	115.7

FIG. 7052

22 1/2° Elbow

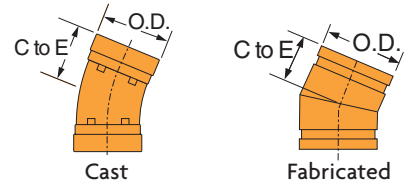


FIGURE 7052 22 1/2° ELBOW*			
Nominal Size	O.D.	Center to End	Approx. Wt. Ea.
In./DN(mm)	In./mm	In./mm	Lbs./Kg
1	1.315	3 1/4	0.5
25	33.4	83	0.2
1 1/4	1.660	1 3/4	0.7
32	42.2	44	0.3
1 1/2	1.900	1 3/4	0.8
40	48.3	44	0.4
2	2.375	1 1/2 C	1.5
50	60.3	48	0.7
2 1/2	2.875	2	1.9
65	73.0	51	0.9
3	3.500	2 1/4 C	3.2
80	88.9	57	1.5
3 1/2	4.000	2 1/2 C	4.0
90	101.6	64	1.8
4	4.500	2 5/8 C	5.3
100	114.3	67	2.4
5	5.563	2 3/4 C	7.2
125	141.3	73	3.3
6	6.625	3 1/8 C	8.2
150	168.3	79	3.7
8	8.625	3 3/8 C	17.8
200	219.1	98	8.1
10	10.750	4 3/8	30.0
250	273.1	111	13.6
12	12.750	4 7/8	40.4
300	323.9	124	18.3
14	14.000	5	46.0
350	355.6	127	20.9
16	16.000	5	52.2
400	406.4	127	23.7
18	18.000	5 1/2	65.0
450	457.2	140	29.5
20	20.000	6	80.0
500	508.0	152	36.3
24	24.000	7	112.0
600	609.6	178	50.8



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 1 1/2" 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:		<input type="checkbox"/> Approved	
Address:		<input type="checkbox"/> Approved as noted	
Contractor:		<input type="checkbox"/> Not approved	
Engineer:		Remarks:	
Submittal Date:			
Notes 1:			
Notes 2:			

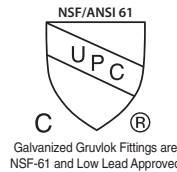
Gruvlok fittings are available through 24" nominal pipe size in a variety of styles. Use the Fitting Size Table to convert nominal pipe size to corresponding pipe O.D.

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.

Not for use in copper systems.



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	1.315	0.133	1.7	0.9	4.4	1.7
25	33.4	3.4	0.5	0.3	1.3	0.5
1¼	1.660	0.140	2.3	1.2	5.8	2.3
32	42.2	3.6	0.7	0.4	1.8	0.7
1½	1.900	0.145	2.7	1.3	6.7	2.7
40	48.3	3.7	0.8	0.4	2.0	0.8
2	2.375	0.154	3.4	1.7	8.6	3.4
50	60.3	3.9	1.0	0.5	2.6	1.0
2½	2.875	0.203	4.1	2.1	10.3	4.1
65	73.0	5.2	1.2	0.6	3.1	1.2
3 O.D.	2.996	0.197	4.3	2.2	10.8	4.3
76.1	76.1	5.0	1.3	0.7	3.3	1.3
3	3.500	0.216	5.1	2.6	12.8	5.1
80	88.9	5.5	1.6	0.8	3.9	1.6
4¼ O.D.	4.250	0.220	6.4	3.2	16.1	6.4
108.0	108.0	5.6	2.0	1.0	4.9	2.0
4	4.500	0.237	6.7	3.4	16.8	6.7
100	114.3	6.0	2.0	1.0	5.1	2.0
5¼ O.D.	5.236	0.248	8.0	4.0	20.1	8.0
133.0	133.0	6.3	2.4	1.2	6.1	2.4
5½ O.D.	5.500	0.248	8.3	4.2	20.9	8.3
139.7	139.7	6.3	2.5	1.3	6.4	2.5
5	5.563	0.258	8.4	4.2	21.0	8.4
125	141.3	6.6	2.6	1.3	6.4	2.6
6¼ O.D.	6.259	0.280	9.7	4.9	24.3	9.7
159.0	159.0	7.1	3.0	1.5	7.4	3.0
6½ O.D.	6.500	0.280	10.0	5.0	24.9	10.0
165.1	165.1	7.1	3.0	1.5	7.6	3.0
6	6.625	0.280	10.1	5.1	25.3	10.1
150	168.3	7.1	3.1	1.6	7.7	3.1
8	8.625	0.322	13.3	6.7	33.3	13.3
200	219.1	8.2	4.1	2.0	10.1	4.1
10	10.750	0.365	16.7	8.4	41.8	16.7
250	273.1	9.3	5.1	2.6	12.7	5.1
12	12.750	0.375	20.0	10.0	50.0	20.0
300	323.9	9.5	6.1	3.0	15.2	6.1
14	14.000	0.375	22.2	11.1	55.0	22.2
350	355.6	9.5	6.8	3.4	16.6	6.8
16	16.000	0.375	25.5	12.8	63.0	25.5
400	406.4	9.5	7.8	4.0	22.5	8.0
18	18.000	0.375	28.9	14.5	70.0	28.9
450	457.2	9.5	8.8	4.5	26.6	9.5
20	20.000	0.375	32.2	16.1	78.0	32.2
500	508.0	9.5	9.8	5.0	29.7	10.6
24	24.000	0.375	38.9	19.5	93.0	38.9
600	609.6	9.5	11.9	6.0	34.4	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	1.315	5	5.563
25	33.4	140	141.3
1¼	1.660	6¼ O.D.	6.259
32	42.4	159.0	159.0
1½	1.900	6½ O.D.	6.500
40	48.3	165.1	165.1
2	2.375	6	6.625
50	60.3	150	168.3
2½	2.875	8	8.625
65	73.0	200	219.1
3 O.D.	2.996	10	10.750
76.1	76.1	250	273.0
3	3.500	12	12.750
80	88.9	300	323.9
3½	4.000	14	14.000
90	101.6	350	355.6
4¼ O.D.	4.250	16	16.000
108.0	108.0	400	406.4
4	4.500	18	18.000
100	114.3	450	457.2
5¼ O.D.	5.236	20	20.000
133.0	133.0	500	508.0
5½ O.D.	5.500	24	24.000
139.7	139.7	600	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.