

FIG. 7050 6D

Long Radius Elbows

- 6D long radius elbows are available in sizes up to 24". Sizes 4" and below are provided with a 4" (101.6 mm) long integral tangent. Remaining sizes are provided with integral tangents with lengths equal to the nominal pipe size.
- Grooved or plain-end available.
- Material: standard wall steel pipe to ASTM A 53, Grade B. (Other materials available on request).

- Bends to conform to above radii.
- C to E tolerances: 2" through 6" $\pm 1/8"$ (3.2 mm); 8" through 16" $\pm 1/4"$ (6.4 mm); 18" through 24" $\pm 3/8"$ (9.5 mm).
- All weights are approximate, based on calculated weight of pipe.

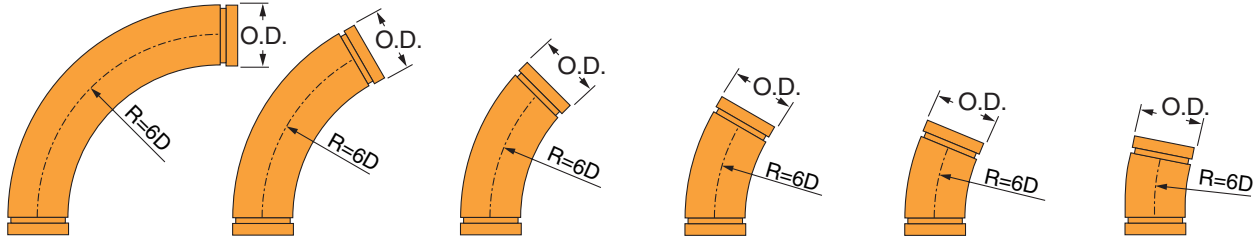


Fig. 7050-6D, 90° Elbow
 Fig. 7057-6D, 60° Elbow
 Fig. 7051-6D, 45° Elbow
 Fig. 7058-6D, 30° Elbow
 Fig. 7052-6D, 22½° Elbow
 Fig. 7053-6D, 11¼° Elbow

FIGURE 7050-6D 90° ELBOW				FIG. 7057-6D 60° ELBOW		FIG. 7051-6D 45° ELBOW		FIG. 7058-6D 30° ELBOW		FIG. 7052-6D 22½° ELBOW		FIG. 7053-6D 11¼° ELBOW	
Nominal Size	O.D.	Center to End	Approx. Wt. Ea.	Center to End	Approx. Wt. Ea.	Center to End	Approx. Wt. Ea.	Center to End	Approx. Wt. Ea.	Center to End	Approx. Wt. Ea.	Center to End	Approx. Wt. Ea.
In./DN(mm)	In./mm	In./mm	Lbs./Kg	In./mm	Lbs./Kg	In./mm	Lbs./Kg	In./mm	Lbs./Kg	In./mm	Lbs./Kg	In./mm	Lbs./Kg
2	2.375	16	8.2	11	6.3	9	5.3	7¼	4.3	6½	3.9	5¼	3.2
50	60.3	406	3.7	279	2.9	229	2.4	184	2.0	165	1.8	133	1.5
2½	2.875	19	15.2	12¾	11.4	10¼	9.5	8	7.7	7	6.7	5½	5.3
65	73	483	6.9	324	5.2	260	4.3	203	3.5	178	3.0	140	2.4
3	3.500	22	22.9	14½	17.0	11½	14.0	8¾	11.0	7½	9.5	5¾	7.3
80	88.9	559	10.4	368	7.7	292	6.4	222	5.0	191	4.3	146	3.3
3½	4.000	25	31.1	16¼	22.8	12¾	18.6	9¾	14.4	8¼	12.3	6	9.2
90	101.6	635	14.1	413	10.3	324	8.4	248	6.5	210	5.6	152	4.2
4	4.500	28	41.1	18	29.8	14	24.1	10½	18.5	8¾	15.7	6½	11.4
100	114.3	711	18.6	457	13.5	356	10.9	267	8.4	222	7.1	165	5.2
5	5.563	35	69.6	22¼	50.5	17½	40.9	13	31.3	11	26.5	8	19.4
125	141.3	889	31.6	565	22.9	445	18.6	330	14.2	279	12.0	203	8.8
6	6.625	42	108.4	26¾	78.6	21	63.7	15¾	48.8	13¼	41.3	9½	30.1
150	168.3	1067	49.2	679	35.7	533	28.9	400	22.1	337	18.7	241	13.7
8	8.625	56	217.5	35¾	157.7	28	127.8	21	97.9	17½	82.9	12¾	60.5
200	219.1	1422	98.7	908	71.5	711	58.0	533	44.4	445	37.6	324	27.4
10	10.750	70	385.4	44¾	279.4	35	226.4	26	173.4	22	146.9	16	107.2
250	273.1	1778	174.8	1137	126.7	889	102.7	660	78.7	559	66.6	406	48.6
12	12.750	84	566.2	53½	410.5	41¾	332.7	31¼	254.8	26¼	215.9	19	157.5
300	323.9	2134	256.8	1359	186.2	1060	150.9	794	115.6	667	97.9	483	71.4
14	14.000	98	727.4	62½	527.3	48¾	427.3	36½	327.3	30¾	277.3	22¼	202.3
350	355.6	2489	329.9	1588	239.2	1238	193.8	927	148.5	781	125.8	565	91.8
16	16.000	112	953.3	71½	691.1	55¾	560.1	41¾	429.0	35¼	363.5	25½	265.2
400	406.4	2845	432.4	1816	313.5	1416	254.1	1060	194.6	895	164.9	648	120.3
18	18.000	126	1,209.7	80½	877.1	62¾	710.7	47	544.4	39½	461.3	28¾	336.5
450	457.2	3200	548.7	2045	397.8	1594	322.4	1194	246.9	1003	209.2	730	152.6
20	20	140	1,496.6	89¼	1,085.1	69¾	879.3	52¼	673.5	44	570.7	31¾	416.3
500	508	3556	678.8	2267	492.2	1772	398.8	1327	305.5	1118	258.9	806	188.8
24	24	168	2,162.0	107¼	1,567.5	83¾	1,270.3	62½	973.0	52.34	824.4	38¼	601.4
600	609.6	4267	980.7	2724	711.0	2127	576.2	1588	441.3	1329	373.9	972	272.8

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:			

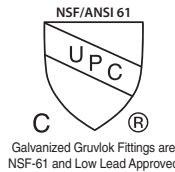
Gruvlok fittings are available through 24" nominal pipe size in a variety of styles. Use the Fitting Size Table to convert nominal pipe size to corresponding pipe O.D.

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	7.8
18	18.000	0.375	28.9	14.5	70.0	28.9
450	457.2	9.5	8.8	4.5	26.6	8.8
20	20.000	0.375	32.2	16.1	78.0	32.2
500	508.0	9.5	9.8	5.0	29.7	9.8
24	24.000	0.375	38.9	19.4	93.0	38.9
600	609.6	9.5	11.9	6.0	34.4	11.9

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.