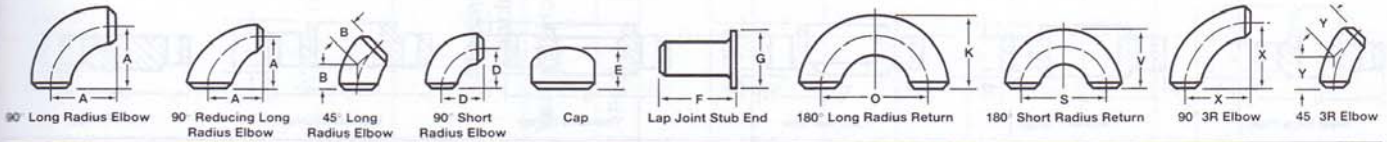


# Steel fitting dimensions



Nom. Pipe Size	Pipe O.D. (In.)	WALL THICKNESS														A	B	D	E	F		G	O	K	S	V	X	Y	Nom. Pipe Size
		Light Wall	SCH 20	SCH 30	STD	SCH 40	SCH 60	X STG	SCH 80	SCH 100	SCH 120	SCH 140	SCH 160	XX STG	ANSI MSS														
															ANSI					MSS									
1/2	.84				.109	.109	.147	.147				.188	.294	1.50	.62		1.00	3.00	2.00	1.38	3.00	1.88							1/2
3/4	1.05				.113	.113	.154	.154				.219	.308	1.12	.44		1.00	3.00	2.00	1.69	2.25	1.69							3/4
1	1.32				.133	.133	.179	.179				.250	.358	1.50	.88	1.00	1.50	4.00	2.00	2.00	3.00	2.19	2.00	1.62					1
1 1/4	1.66				.140	.140	.191	.191				.250	.382	1.88	1.00	1.25	1.50	4.00	2.00	2.50	3.75	2.75	2.50	2.06					1 1/4
1 1/2	1.90				.145	.145	.200	.200				.281	.400	2.25	1.12	1.50	1.50	4.00	2.00	2.88	4.50	3.25	3.00	2.44					1 1/2
2	2.38				.154	.154	.218	.218				.344	.436	3.00	1.38	2.00	1.50	6.00	2.50	3.62	6.00	4.19	4.00	3.19	6.00	2.50			2
2 1/2	2.88				.203	.203	.276	.276				.375	.552	3.75	1.75	2.50	1.50	6.00	2.50	4.12	7.50	5.19	5.00	3.94					2 1/2
3	3.50	.188			.216	.216	.300	.300				.438	.600	4.50	2.00	3.00	2.00	6.00	2.50	5.00	9.00	6.25	6.00	4.75	9.00	3.75			3
3 1/2	4.00				.266	.266	.318	.318						5.25	2.25	3.50	2.00	6.00	3.00	5.50	10.50	7.25	7.00	5.50					3 1/2
4	4.50	.188			.237	.237	.337	.337			.438			6.00	2.50	4.00	2.50	6.00	3.00	6.19	12.00	8.25	8.00	6.25	12.00	5.00			4
5	5.56				.258	.258	.375	.375			.500			.625	.750	7.50	3.12	5.00	3.00	8.00	3.00	7.31	15.00	10.31	10.00	7.75			5
6	6.62	.219			.280	.280	.432	.432			.562			.719	.864	9.00	3.75	6.00	3.50	8.50	18.00	12.31	12.00	9.31	18.00	7.50			6
8	8.62	.219	.250	.277	.322	.322	.406	.500	.500	.594	.719	.844	1.000	1.125	1.000	15.00	6.25	10.00	5.00	10.00	5.00	12.75	30.00	20.38	20.00	15.38	30.00	12.50	10
10	10.75	.219	.250	.307	.365	.365	.500	.500	.594	.719	.844	1.000	1.125	1.000	15.00	6.25	10.00	5.00	10.00	5.00	12.75	30.00	20.38	20.00	15.38	30.00	12.50	10	
12	12.75	.250	.250	.330	.375	.406	.562	.500	.688	.844	1.000	1.125	1.312	1.000	18.00	7.50	12.00	6.00	10.00	6.00	15.00	36.00	24.38	24.00	18.38	36.00	15.00	12	
14	14.00	.250	.312	.375	.375	.438	.594	.500	.750	.938	1.094	1.250	1.406		21.00	8.75	14.00	6.50	12.00	6.00	16.25	42.00	28.00	28.00	21.00	42.00	17.50	14	
16	16.00	.250	.312	.375	.375	.500	.656	.500	.844	1.031	1.219	1.438	1.594		24.00	10.00	16.00	7.00	12.00	6.00	18.50	48.00	32.00	32.00	24.00	48.00	19.88	16	
18	18.00	.250	.312	.438	.375	.562	.750	.500	.938	1.156	1.375	1.562	1.781		27.00	11.25	18.00	8.00	12.00	6.00	21.00	54.00	36.00	36.00	27.00	54.00	22.38	18	
20	20.00	.250	.375	.500	.375	.594	.812	.500	1.031	1.281	1.500	1.750	1.969		30.00	12.50	20.00	9.00	12.00	6.00	23.00	60.00	40.00	40.00	30.00	60.00	24.88	20	
24	24.00	.250	.375	.562	.375	.688	.969	.500	1.219	1.531	1.812	2.062	2.344		36.00	15.00	24.00	10.50	12.00	6.00	27.25	72.00	48.00	48.00	36.00	72.00	29.81	24	
30	30.00	.312	.500	.625	.375		.500								45.00	18.50	30.00	10.50			90.00	60.00	60.00	45.00	90.00	37.25	30		
36	36.00	.312	.500	.625	.375	.750	.500								54.00	22.25	36.00	10.50					72.00	54.00	108.00	44.75	36		
42	42.00				.375		.500								63.00	26.00	42.00	12.00							126.00	52.19	42		
48	48.00				.375		.500								72.00	29.88	48.00	13.50							144.00	59.69	48		



Nom. Pipe Size	Run	Outlet	C	M	H	Nom. Pipe Size			Nom. Pipe Size			Nom. Pipe Size			Nom. Pipe Size					
						Run	Outlet	C	M	H	Run	Outlet	C	M	H	Run	Outlet	C	M	H
3/4	3/4	1/2	1.12		1.50	3 1/2	3 1/2	3.75	3.62	4.00	12	12	10.00	9.50	8.00	24	24	17.00	17.00	20.00
		1/2	1.12	1.12	1.50		3	3.75	3.62	4.00		10	10.00	9.50	8.00		22	17.00	17.00	20.00
1	1	3/4	1.50		2.00	4	4	4.12	4.00	4.00	14	14	11.00	11.00	13.00	30	30	22.00	21.00	24.00
		1/2	1.50	1.50	2.00		3 1/2	4.12	4.00	4.00		12	11.00	10.62	13.00		24	22.00	21.00	24.00
1 1/4	1 1/4	1	1.88		2.00	5	5	4.88	4.62	5.00	16	16	12.00	12.00	14.00	36	36	26.50	25.00	24.00
		3/4	1.88	1.88	2.00		4	4.88	4.50	5.00		12	12.00	11.62	14.00		30	26.50	25.00	24.00
1 1/2	1 1/2	1	2.25		2.50	6	6	5.62	5.38	5.50	18	18	13.50	13.00	15.00	42	42	30.00	28.00	24.00
		3/4	2.25	2.25	2.50		5	5.62	5.12	5.50		12	13.50	12.62	15.00		36	30.00	28.00	24.00
2	2	1 1/4	2.50		3.00	8	8	7.00	6.62	6.00	20	20	15.00	14.50	20.00	48	48	35.00	32.00	28.00
		1	2.50	2.00	3.00		7	7.00	6.38	6.00		14	15.00	14.00	20.00		42	35.00	31.00	30.00
2 1/2	2 1/2	1 1/2	3.00		3.50	10	10	8.50	8.00	7.00	48	48	15.00	13.62	20.00	48	48	35.00	31.00	30.00
		1	3.00	2.50	3.50		9	8.50	7.50	7.00		12	15.00	13.12	20.00		42	35.00	30.00	28.00
3	3	2 1/2	3.38		3.50	10	10	8.50	8.00	7.00	48	48	15.00	12.75	20.00	48	48	35.00	31.00	30.00
		1 1/4	3.38	2.75	3.50		9	8.50	7.25	7.00		10	15.00	13.12	20.00		42	35.00	30.00	28.00

**NOTES:**

Fittings are to ASTM A234 WPB with dimensions to ANSI B16.9 except that short radius elbows and returns are to ANSI B16.28 and 3R elbows are to MSS-SP75.

Other types, sizes and thicknesses of fittings on application.