

FITTINGS

NPS ½ through 60

- Schedule Standard (STD)
- Schedule Extra-Strong (XS)
- Schedule 40
- Schedule 80
- Schedule 160
- Schedule Double Extra-Strong (XXS)

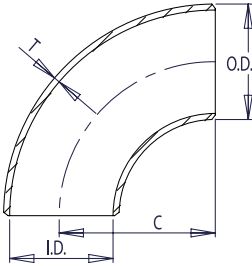


FITTINGS

All Products Backed by the Hisea Marine Warranty

90° ELBOWS

LONG RADIUS SCHEDULE STD



NOTES

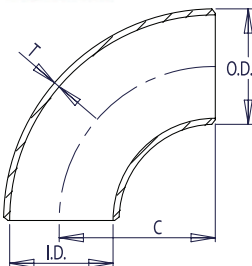
1. Conforms to ASME B16.9 & ASTM A234 WPB.
2. All dimensions are in millimeters.
3. For sizes larger than NPS 48 please call.
4. All weights are in kilograms and approximated or estimated.

* This size and thickness does not correspond to any pipe schedule number.

Pipe Size	Outside Diameter	Inside Diameter	Wall Thickness	Center to End	Pipe Schedule Number	Approx. Weight in Kilograms
NPS	O.D.	I.D.	T	C		
½	21.3	15.76	2.77	38	40	1.27
¾	26.7	20.96	2.87	38	40	1.69
1	33.4	26.64	3.38	38	40	2.50
1 ¼	42.2	35.08	3.56	48	40	3.39
1 ½	48.3	40.94	3.68	57	40	4.05
2	60.3	52.48	3.91	76	40	5.44
2 ½	73.0	62.68	5.16	95	40	8.63
3	88.9	77.92	5.49	114	40	11.29
3 ½	101.6	90.12	5.74	133	40	13.57
4	114.3	102.26	6.02	152	40	16.08
5	141.3	128.20	6.55	190	40	21.77
6	168.3	154.08	7.11	229	40	28.26
8	219.1	202.74	8.18	305	40	42.55
10	273.0	254.46	9.27	381	40	60.29
12	323.8	304.74	9.53	457	*	73.86
14	355.6	336.54	9.53	533	30	81.33
16	406.4	387.34	9.53	610	30	93.27
18	457.0	437.94	9.53	686	*	105.17
20	508.0	488.94	9.53	762	20	117.15
24	610.0	590.94	9.53	914	20	141.12
30	762.0	742.94	9.53	1143	*	176.85
36	914.0	894.94	9.53	1372	*	212.57
42	1067.0	1047.94	9.53	1600	*	248.53
48	1219.0	1199.94	9.53	1829	*	284.25

FITTINGS

LONG RADIUS SCHEDULE XS



NOTES

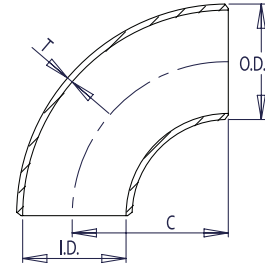
1. Conforms to ASME B16.9 & ASTM A234 WPB.
2. All dimensions are in millimeters.
3. For sizes larger than NPS 48 please call.
4. All weights are in kilograms and approximated or estimated.

* This size and thickness does not correspond to any pipe schedule number.

Pipe Size	Outside Diameter	Inside Diameter	Wall Thickness	Center to End	Pipe Schedule Number	Approx. Weight in Kilograms
NPS	O.D.	I.D.	T	C		
½	21.3	13.84	3.73	38	80	1.10
¾	26.7	18.88	3.91	38	80	1.62
1	33.4	24.30	4.55	38	80	3.24
1 ¼	42.2	32.50	4.85	48	80	4.47
1 ½	48.3	38.14	5.08	57	80	5.41
2	60.3	49.22	5.54	76	80	7.48
2 ½	73.0	58.98	7.01	95	80	11.41
3	88.9	73.66	7.62	114	80	15.27
3 ½	101.6	85.44	8.08	133	80	18.64
4	114.3	97.18	8.56	152	80	22.32
5	141.3	122.24	9.53	190	80	30.97
6	168.3	146.36	10.97	229	80	42.56
8	219.1	193.70	12.70	305	80	64.64
10	273.0	247.60	12.70	381	60	81.53
12	323.8	298.40	12.70	457	*	97.44
14	355.6	330.20	12.70	533	*	107.40
16	406.4	381.00	12.70	610	40	123.31
18	457.0	431.60	12.70	686	*	139.16
20	508.0	482.60	12.70	762	30	155.13
24	610.0	584.60	12.70	914	*	187.07
30	762.0	736.60	12.70	1143	20	234.68
36	914.0	888.60	12.70	1372	20	282.29
42	1067.0	1041.60	12.70	1600	*	330.21
48	1219.0	1193.60	12.70	1829	*	346.18

LONG RADIUS SCHEDULE 40

Pipe Size	Outside Diameter	Inside Diameter	Wall Thickness	Center to End	Pipe Schedule Number	Approx. Weight in Kilograms
NPS	O.D.	I.D.	T	C		
½	21.3	15.76	2.77	38	40	1.27
¾	26.7	20.96	2.87	38	40	1.69
1	33.4	26.64	3.38	38	40	2.50
1 ¼	42.2	35.08	3.56	48	40	3.39
1 ½	48.3	40.94	3.68	57	40	4.05
2	60.3	52.48	3.91	76	40	5.44
2 ½	73.0	62.68	5.16	95	40	8.63
3	88.9	77.92	5.49	114	40	11.29
3 ½	101.6	90.12	5.74	133	40	13.57
4	114.3	102.26	6.02	152	40	16.08
5	141.3	128.2	6.55	190	40	21.77
6	168.3	154.08	7.11	229	40	28.26
8	219.1	202.74	8.18	305	40	42.55
10	273.0	254.46	9.27	381	40	60.29
12	323.8	303.18	10.31	457	40	79.71
14	355.6	333.34	11.13	533	40	94.55
16	406.4	381.00	12.70	610	40	123.31
18	457.0	428.46	14.27	686	40	155.81
20	508.0	477.82	15.09	762	40	183.43
24	610.0	575.04	17.48	914	40	255.43



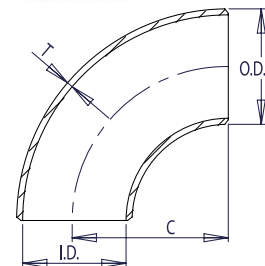
NOTES

1. Conforms to ASME B16.9 & ASTM A234 WPB.
2. All dimensions are in millimeters.
3. For sizes larger than NPS 24 please call.
4. All weights are in kilograms and approximated or estimated.

FITTINGS

LONG RADIUS SCHEDULE 80

Pipe Size	Outside Diameter	Inside Diameter	Wall Thickness	Center to End	Pipe Schedule Number	Approx. Weight in Kilograms
NPS	O.D.	I.D.	T	C		
½	21.3	15.76	2.77	38	40	1.27
¾	26.7	20.96	2.87	38	40	1.69
1	33.4	26.64	3.38	38	40	2.50
1 ¼	42.2	35.08	3.56	48	40	3.39
1 ½	48.3	40.94	3.68	57	40	4.05
2	60.3	52.48	3.91	76	40	5.44
2 ½	73.0	62.68	5.16	95	40	8.63
3	88.9	77.92	5.49	114	40	11.29
3 ½	101.6	90.12	5.74	133	40	13.57
4	114.3	102.26	6.02	152	40	16.08
5	141.3	128.20	6.55	190	40	21.77
6	168.3	154.08	7.11	229	40	28.26
8	219.1	202.74	8.18	305	40	42.55
10	273.0	254.46	9.27	381	40	60.29
12	323.8	303.18	10.31	457	40	79.71
14	355.6	333.34	11.13	533	40	94.55
16	406.4	381.00	12.70	610	40	123.31
18	457.0	428.46	14.27	686	40	155.81
20	508.0	477.82	15.09	762	40	183.43
24	610.0	575.04	17.48	914	40	255.43

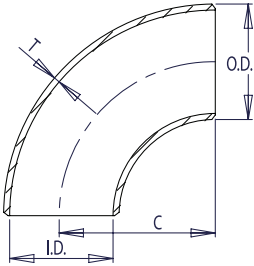


NOTES

1. Conforms to ASME B16.9 & ASTM A234 WPB.
2. All dimensions are in millimeters.
3. All weights are in kilograms and approximated or estimated.

90° ELBOWS

LONG RADIUS SCHEDULE 160



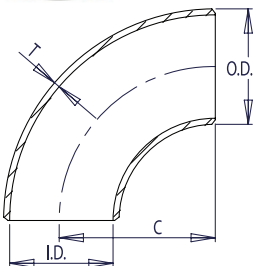
NOTES

1. Conforms to ASME B16.9 & ASTM A234 WPB.
2. All dimensions are in millimeters.
3. All weights are in kilograms and approximated or estimated.

Pipe Size	Outside Diameter	Inside Diameter	Wall Thickness	Center to End	Pipe Schedule Number	Approx. Weight in Kilograms
NPS	O.D.	I.D.	T	C		
1/2	21.3	11.74	4.78	38	160	1.95
3/4	26.7	15.58	5.56	38	160	2.90
1	33.4	20.7	6.35	38	160	4.24
1 1/4	42.2	29.5	6.35	48	160	5.61
1 1/2	48.3	34.02	7.14	57	160	7.25
2	60.3	42.82	8.74	76	160	11.11
2 1/2	73.0	53.94	9.53	95	160	14.92
3	88.9	66.64	11.13	114	160	21.35
4	114.3	87.32	13.49	152	160	33.54
5	141.3	109.54	15.88	190	160	49.12
6	168.3	131.78	18.26	229	160	67.57
8	219.1	173.08	23.01	305	160	111.27
10	273.0	215.84	28.58	381	160	172.27
12	323.8	257.16	33.32	457	160	238.69
14	355.6	284.18	35.71	533	160	281.72
16	406.4	325.42	40.49	610	160	365.38
18	457.0	366.52	45.24	686	160	459.39
20	508.0	407.98	50.01	762	160	564.85
24	610.0	490.92	59.54	914	160	808.27

FITTINGS

LONG RADIUS SCHEDULE XXS



NOTES

1. Conforms to ASME B16.9 & ASTM A234 WPB.
2. All dimensions are in millimeters.
3. All weights are in kilograms and approximated or estimated.

* This size and thickness does not correspond to any pipe schedule number.

Pipe Size	Outside Diameter	Inside Diameter	Wall Thickness	Center to End	Pipe Schedule Number	Approx. Weight in Kilograms
NPS	O.D.	I.D.	T	C		
1/2	21.3	6.36	7.47	38	*	2.55
3/4	26.7	11.06	7.82	38	*	3.64
1	33.4	15.22	9.09	38	*	5.45
1 1/4	42.2	22.80	9.70	48	*	7.77
1 1/2	48.3	28.00	10.15	57	*	9.55
2	60.3	38.16	11.07	76	*	13.44
2 1/2	73.0	44.96	14.02	95	*	20.39
3	88.9	58.42	15.24	114	*	27.68
4	114.3	80.06	17.12	152	*	41.03
5	141.3	103.20	19.05	190	*	57.43
6	168.3	124.40	21.95	229	*	79.22
8	219.1	174.64	22.23	305	*	107.93
10	273.0	222.20	25.40	381	140	155.10
12	323.8	273.00	25.40	457	120	186.92