

FITTINGS

NPS ½ through 60

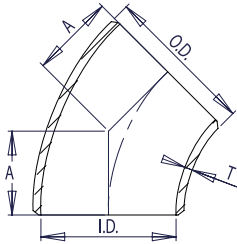
- Schedule **Standard (STD)**
- Schedule **Extra-Strong (XS)**
- Schedule **40**
- Schedule **80**
- Schedule **160**
- Schedule **Double Extra-Strong (XXS)**



All Products Backed by the Hisea Marine Warranty

45° ELBOWS

LONG RADIUS SCHEDULE STD



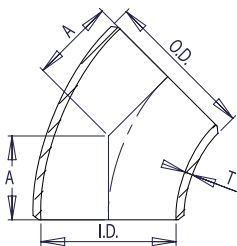
NOTES

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	A		
1/2	21.3	15.76	2.77	16	40	0.04
3/4	26.7	20.96	2.87	19	40	0.05
1	33.4	26.64	3.38	22	40	0.10
1 1/4	42.2	35.08	3.56	25	40	0.15
1 1/2	48.3	40.94	3.68	29	40	0.20
2	60.3	52.48	3.91	35	40	0.39
2 1/2	73.0	62.68	5.16	44	40	0.77
3	88.9	77.92	5.49	51	40	1.13
3 1/2	101.6	90.12	5.74	57	40	1.54
4	114.3	102.26	6.02	64	40	2.04
5	141.3	128.20	6.55	79	40	3.40
6	168.3	154.08	7.11	95	40	5.31
8	219.1	202.74	8.18	127	40	10.57
10	273.0	254.46	9.27	159	40	18.55
12	323.8	304.74	9.53	190	*	27.85
14	355.6	336.54	9.53	222	30	35.43
16	406.4	387.34	9.53	254	30	45.81
18	457.0	437.94	9.53	286	*	58.06
20	508.0	488.94	9.53	318	20	72.12
24	610.0	590.94	9.53	381	20	104.78
30	762.0	742.94	9.53	470	*	162.39
36	914.0	894.94	9.53	565	*	234.96
42	1067.0	1047.94	9.53	660	*	320.69
48	1219.0	1199.94	9.53	759	*	453.59

LONG RADIUS SCHEDULE XS



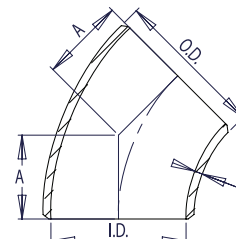
NOTES

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.

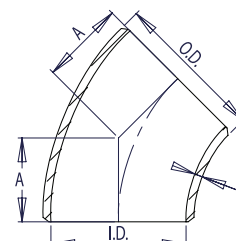
Pipe Size	Outside Diameter	Inside Diameter	Wall Thickness	Center to End	Pipe Schedule Number	Approx. Weight in Kilograms
NPS	O.D.	I.D.	T	A		
1/2	21.34	13.868	3.734	15.75	80	0.07
3/4	26.67	18.847	3.912	19.05	80	0.07
1	33.53	24.435	4.547	22.35	80	0.13
1 1/4	42.16	32.461	4.851	25.40	80	0.20
1 1/2	48.26	38.100	5.080	28.45	80	0.28
2	60.45	49.378	5.537	35.05	80	0.54
2 1/2	73.15	59.131	7.010	44.45	80	0.91
3	88.90	73.660	7.620	50.80	80	1.50
3 1/2	101.60	85.446	8.077	57.15	80	2.04
4	114.30	97.180	8.560	63.50	80	2.81
5	141.22	122.174	9.525	79.25	80	4.76
6	168.15	146.202	10.973	95.25	80	7.71
8	218.95	193.548	12.700	127.00	80	15.56
10	273.05	247.650	12.700	158.75	60	24.27
12	323.85	298.450	12.700	190.50	*	35.20
14	355.60	330.200	12.700	222.25	*	45.36
16	406.40	381.000	12.700	254.00	40	60.78
18	457.20	431.800	12.700	285.75	*	77.11
20	508.00	482.600	12.700	317.50	30	94.80
24	609.60	584.200	12.700	381.00	*	136.98
30	762.00	736.600	12.700	469.90	20	215.50
36	914.40	889.000	12.700	565.15	20	311.21
42	1066.80	1041.400	12.700	660.40	*	424.61
48	1219.20	1193.800	12.700	758.95	*	566.99

Pipe Size	Outside Diameter	Inside Diameter	Wall Thickness	Center to End	Pipe Schedule Number	Approx. Weight in Kilograms
NPS	O.D.	I.D.	T	A		
1/2	21.3	15.76	2.77	16	40	0.04
3/4	26.7	20.96	2.87	19	40	0.05
1	33.4	26.64	3.38	22	40	0.10
1 1/4	42.2	35.08	3.56	25	40	0.15
1 1/2	48.3	40.94	3.68	29	40	0.20
2	60.3	52.48	3.91	35	40	0.39
2 1/2	73.0	62.68	5.16	44	40	0.77
3	88.9	77.92	5.49	51	40	1.13
3 1/2	101.6	90.12	5.74	57	40	1.54
4	114.3	102.26	6.02	64	40	2.04
5	141.3	128.20	6.55	79	40	3.40
6	168.3	154.08	7.11	95	40	5.31
8	219.1	202.74	8.18	127	40	10.57
10	273.0	254.46	9.27	159	40	18.55
12	323.8	303.18	10.31	190	40	29.48
14	355.6	333.34	11.13	222	40	36.29
16	406.4	381.00	12.70	254	40	47.63
18	457.0	428.46	14.27	286	40	58.97
20	508.0	477.82	15.09	318	40	74.84
24	610.0	575.04	17.48	381	40	106.59

**LONG RADIUS
SCHEDULE 40**

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.

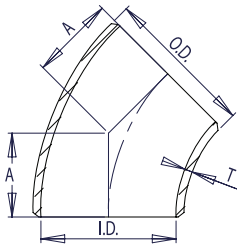
Pipe Size	Outside Diameter	Inside Diameter	Wall Thickness	Center to End	Pipe Schedule Number	Approx. Weight in Kilograms
NPS	O.D.	I.D.	T	A		
1/2	21.3	13.84	3.73	16	80	0.07
3/4	26.7	18.88	3.91	19	80	0.07
1	33.4	24.30	4.55	22	80	0.13
1 1/4	42.2	32.50	4.85	25	80	0.20
1 1/2	48.3	38.14	5.08	29	80	0.28
2	60.3	49.22	5.54	35	80	0.54
2 1/2	73.0	58.98	7.01	44	80	0.91
3	88.9	73.66	7.62	51	80	1.50
3 1/2	101.6	85.44	8.08	57	80	2.04
4	114.3	97.18	8.56	64	80	2.81
5	141.3	122.24	9.53	79	80	4.76
6	168.3	146.36	10.97	95	80	7.71
8	219.1	193.70	12.70	127	80	15.56
10	273.0	242.82	15.09	159	80	24.95
12	323.8	288.84	17.48	190	80	36.29
14	355.6	317.50	19.05	222	80	45.36
16	406.4	363.52	21.44	254	80	61.23
18	457.0	409.34	23.83	286	80	79.38
20	508.0	455.62	26.19	318	80	95.25
24	610.0	548.08	30.96	381	80	138.34

**LONG RADIUS
SCHEDULE 80**

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.

45° ELBOWS

LONG RADIUS SCHEDULE 160



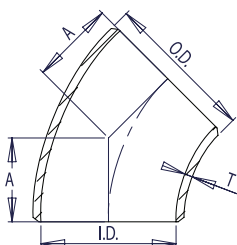
NOTES

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	A		
1/2	21.3	11.74	4.78	16	160	0.82
3/4	26.7	15.58	5.56	19	160	0.91
1	33.4	20.70	6.35	22	160	1.36
1 1/4	42.2	29.50	6.35	25	160	1.59
1 1/2	48.3	34.02	7.14	29	160	1.68
2	60.3	42.82	8.74	35	160	2.27
2 1/2	73.0	53.94	9.53	44	160	1.68
3	88.9	66.64	11.13	51	160	2.54
4	114.3	87.32	13.49	64	160	2.54
5	141.3	109.54	15.88	79	160	6.80
6	168.3	131.78	18.26	95	160	12.70
8	219.1	173.08	23.01	127	160	21.77
10	273.0	215.84	28.58	159	160	32.66
12	323.8	257.16	33.32	190	160	44.45
14	355.6	284.18	35.71	222	160	58.97
16	406.4	325.42	40.49	254	160	81.65
18	457.0	366.52	45.24	286	160	117.93
20	508.0	407.98	50.01	318	160	176.90
24	610.0	490.92	59.54	381	160	254.01

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	A		
1/2	21.3	6.36	7.47	16	*	0.82
3/4	26.7	11.06	7.82	19	*	0.91
1	33.4	15.22	9.09	22	*	1.36
1 1/4	42.2	22.80	9.70	25	*	1.59
1 1/2	48.3	28.00	10.15	29	*	1.68
2	60.3	38.16	11.07	35	*	2.27
2 1/2	73.0	44.96	14.02	44	*	1.68
3	88.9	58.42	15.24	51	*	2.72
4	114.3	80.06	17.12	64	*	4.72
5	141.3	103.20	19.05	79	*	8.71
6	168.3	124.40	21.95	95	*	13.61
8	219.1	174.64	22.23	127	*	22.68
10	273.0	222.20	25.40	159	140	34.02
12	323.8	273.00	25.40	190	120	43.09