



180° RETURNS LONG RADIUS SHORT RADIUS

Standard, Weight & Extra Strong
Carbon and ferritic alloy steel, ASTM A-234,
ASME/ANSI B16.9
ASME/ANSI B16.28

NPS DN	Outside Diameter O.D.	LONG RADIUS		SHORT RADIUS		STANDARD WEIGHT				EXTRA STRONG				
		Center to Center Nominal H	Back to Face Nominal J	Center to Center Nominal K	Back to Face Nominal L	Inside Diameter I.D.	Wall Thickness T	Long Radius Approx. Weight	Short Radius Approx. Weight	Inside Diameter I.D.	Wall Thickness T	Long Radius Approx. Weight	Short Radius Approx. Weight	
1/2	15	.840 21	.300 76	1.88 48	(1) - -	.622 15.80	.109 2.77	.25 .11	(1) - (1) -	.546 13.87	.147 3.73	.45 .20	(1) - (1) -	
3/4	20	1.050 27	2.25 57	1.69 43	(1) - (1) -	.824 20.93	.113 2.87	.33 .15	(1) - (1) -	.742 18.85	.154 3.91	.45 .20	(1) - (1) -	
1	25	1.315 33	3.00 76	2.19 56	2.0 51	1.62 41	1.049 26.64	.133 3.38	.75 34	.50 .23	.957 24.31	.179 4.55	1.0 .45	(1) - (1) -
1 1/4	32	1.660 42	3.75 95	2.75 70	2.5 64	2.06 52	1.380 35.05	.140 3.56	1.0 .45	.75 .34	1.278 32.46	.191 4.85	1.5 .68	(1) - (1) -
1 1/2	40	1.900 48	4.50 114	3.25 83	3.0 76	2.44 62	1.610 40.89	.145 3.68	1.5 .68	1.0 .45	1.500 38.10	.200 5.08	2.0 .90	1.5 .68
2	50	2.375 60	6.00 152	4.19 106	4.0 102	3.19 81	2.067 52.50	.154 3.91	3.0 1.35	1.8 .81	1.939 49.25	.213 5.54	4.4 2.0	3.0 1.35
2 1/2	65	2.875 73	7.50 191	5.19 132	5.0 127	3.94 100	2.469 62.71	.203 5.16	6.0 2.70	3.5 1.58	2.323 59.00	.276 7.01	7.5 3.38	4.5 2.03
3	80	3.500 89	9.00 229	6.25 159	6.0 152	4.75 121	3.068 77.93	.216 5.49	9.0 4.05	6.0 2.70	2.900 73.66	.300 7.62	12.0 5.40	7.5 3.38
3 1/2	90	4.000 102	10.50 267	7.25 184	7.0 178	5.5 140	3.548 90.12	.226 5.74	12.5 5.63	8.0 3.60	3.364 85.45	.318 8.08	17.0 7.65	11.0 5
4	100	4.500 114	12.0 305	8.25 210	8.0 203	6.25 159	4.026 102.26	.237 6.02	17.0 7.65	12.0 5.40	3.826 97.18	.337 8.56	23.5 10.6	15.5 7
5	125	5.563 141	15.0 381	10.31 262	10.0 254	7.75 197	5.047 128.19	.258 6.55	28.5 12.83	19.0 8.55	4.813 122.25	.375 9.53	40.0 18	27.0 12
6	150	6.625 168	18.0 457	12.31 313	12.0 305	9.31 237	6.065 154.05	.280 7.11	46 20.70	31.0 14	5.761 146.33	.432 10.97	67 30	45.0 20
8	200	8.625 219	24.0 610	16.31 414	16.0 406	12.31 313	7.981 202.72	.322 8.18	90 40.50	62 28	7.625 193.68	.500 12.70	138 62	92 41
10	250	10.750 273	30.0 762	20.38 518	20.0 508	15.38 391	10.02 254.5	.365 9.27	156 70.20	110 49.5	9.750 247.65	.500 12.70	215 62	142 41
12	300	12.750 324	36.0 914	24.38 619	24.0 610	18.38 467	12.00 304.8	.375 9.53	236 106.20	156 70	11.750 298.45	.500 12.70	300 135	200 90
14	350	14.000 356	42.0 1067	28.0 711	28.0 711	21.0 533	13.25 336.6	.395 9.53	294 132.30	208 94	13.00 330.2	.500 12.70	376 236	264 144
16	400	16.000 406	48.0 1219	32.0 813	32.0 813	24.0 610	15.25 387.4	.375 9.53	404 181.80	236 106	15.00 381.0	.500 12.70	524 236	320 144
18	450	18.000 457	54.0 1372	36.0 914	36.0 914	27.0 686	17.25 438.2	.375 9.53	512 230.4	296 133	17.00 431.8	.500 12.70	676 304	388 175
20	500	20.000 508	60.0 1524	40.0 1081	40.0 1016	30.0 762	19.25 489.0	.375 9.53	617 277.7	420 189	19.00 482.6	.500 12.70	824 371	560 252
22	550	22.000 559	66.0 1676	44.0 1118	(2) - (2) -	- -	21.25 539.8	.375 9.53	787 354.2	(2) - (2) -	21.00 533.4	.500 12.70	1040 468	(2) - (2) -
24	600	24.000 610	72.0 1829	48.0 1219	48.0 1219	36.0 914.4	23.25 590.6	.375 9.53	890 400.5	576 259	23.00 584.2	.500 12.70	1183 468	740 (2) -
(3)26	(3)650	26.000 660	78.0 1981	52.0 1321	(2) - (2) -	- -	25.25 641.4	.375 9.53	1100 495.0	(2) - (2) -	25.00 635.0	.500 12.70	1458 656	(2) - (2) -
(3)30	(3)750	30.000 762	90.0 2286	60.0 1524	60.0 1524	45.0 1143	29.25 743.0	.375 9.53	1441 648.5	960 432	29.00 736.6	.500 12.70	1910 860	1272 572

(1) These sizes of short Radius Returns are not available.

(2) Available by special order only.

(3) These sizes not covered by ASME/ANSI B16.9 or ASME/ANSI B16.28.

Particulars and specifications of Long Radius, Sch 160 and XXS. And Short Radius XXS available on request

These fittings are also available in other sizes and/or wall thicknesses

INCHES	POUNDS
MILLIMETRES	KILOGRAMS