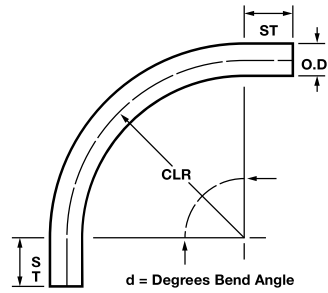


Tube Bending Capabilities

Pipe and tube bends of up to 180 degrees are readily available in aluminum, stainless, carbon steel and galvanized in the sizes listed below. Other centerline radii are available but not shown. Special shapes, "U" bends, offsets, and bifurcated bends available upon request.



For PNEUMATIC SYSTEMS ... Short and Long Radius

TUBE SIZE	PIPE SIZE	OUTSIDE DIAMETER		COMMON CENTERLINE RADII (CLR) INCHES	STD. TANGENT (ST)
		INCHES	MILLIMETERS		
1"		1.0	25.4	3, 4, 6, 12	4"
	1"	1.315	33.4	3, 5	4"
1-1/4"		1.25	31.8	3, 7, 25	4"
	1-1/4"	1.660	42.2	3.5, 4, 6, 25	4"
1-1/2"		1.5	38.1	2.5, 6, 7.5, 9, 12, 15, 18, 24, 30, 36	4"
1-3/4"		1.75	44.5	2.5, 8, 9, 12, 15, 24, 30, 36, 48	4"
	1-1/2"	1.9	48.3	5, 6, 7.5, 9, 10, 12, 18, 24, 30, 36, 48	4"
2"		2.0	50.8	2.5, 3, 3.5, 4, 5, 6, 8, 8.5, 9, 10, 12, 15, 18, 24, 30, 36, 48	4"
2-1/8"		2.125	54.0	3, 5, 12, 24, 30, 36	4-1/4"
2-1/4"		2.25	57.2	3, 9, 12, 15, 17, 24, 30, 36	4-1/2"
	2"	2.375	60.2	6, 7.5, 10, 12, 15, 17, 24, 30, 36, 48	4"
2-1/2"		2.5	63.5	4, 6, 9, 12, 15, 17, 24, 30, 36, 48	5"
2-3/4"		2.75	69.9	2.75, 4, 17, 30, 36, 48	5-1/2"
	2-1/2"	2.875	73.0	12, 12.5, 15, 17, 24, 30, 36, 60	5"
3"		3.0	76.2	4, 4.5, 7.5, 9, 10, 12, 15, 18, 24, 30, 36, 48, 60	6"
3-1/4"		3.25	82.6	17, 30, 36	6-1/2"
3-1/2"	3"	3.5	88.9	3.5, 4.5, 6, 8.75, 12, 15, 16, 18, 24, 30, 36, 48	7" (6" - pipe)
3-3/4"		3.75	95.3	17, 24, 32, 36	7-1/2"
4"	3-1/2"	4.0	101.6	4, 5, 6, 7.75, 10, 12, 16, 18, 20, 24, 30, 32, 36, 48, 60	8" (7" - pipe)
4-1/4"		4.25	107.9	16, 30, 36, 48, 60	8-1/2"
4-1/2"	4"	4.5	114.3	6, 9, 12, 16, 18, 20, 24, 30, 32, 36, 48, 60	9" (8" - pipe)
4-3/4"		4.75	120.7	36	9-1/2"
5"		5.0	127.0	5.5, 7.5, 12.5, 17, 22, 24, 30, 36, 42, 48, 60	10"
	5"	5.563	141.3	15, 20, 24, 30, 36, 42, 48, 60, 72	10"
5-1/2"		5.5	139.7	30, 36	11"
6"		6.0	152.4	9, 15, 18, 24, 30, 36, 42, 48, 60, 72	12"
	6"	6.625	168.2	18, 24, 30, 36, 42, 48, 60, 72	12"
8"		8.0	203.2	12, 20, 32, 48, 60, 72	16"
	8"	8.625	219.1	24, 32, 40, 42, 48, 60, 72	16"
	10"	10.75	273.1	40, 48, 50	20"

Capabilities subject to change without notice.

ORDER BENDS: By O.D., wall thickness, alloy, degree of bend, centerline radius and tangent.

WALL THICKNESS: 16 ga. (.063), 14 ga. (.083), and 11 ga. (.120) in tubing. Schedules 5, 10 and 40 pipe. Other wall thicknesses on request.

MATERIALS: Aluminum is 6063-T1 extruded. Stainless is T304 ASTM A312 for pipe and T304 ASTM A249 for tubing. Carbon steel ASTM A53 for pipe; A513 for tubing. Galvanized A53 for galvanized-coated pipe and A513 for galvanized-coated tubing. Aluminized tubing is ASTM A787.

STOCK TUBE BENDS

All Line Components, LLC maintains an extensive inventory of tube bends available for 24-hour shipment. Most popular bend sizes are stocked in carbon steel, aluminum and stainless materials.



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www.alllinecomponentsllc.com
e-mail: sales@alllinecomponents.com

Call All Line Components, LLC for all your pneumatic conveying line needs.

PIPE DIMENSIONS AND WEIGHTS

PIPE SIZE	O.D. IN INCHES	PIPE SCHEDULES																				
		5s	5	10s	10	20	+	30	40s & STD.	40	⊕	60	80s & E.H.	80	100	120	140	160	DBL. E.H.			
1/8	.405		.035 .1383	.049 .1863	.049 .1863				.068 .2447	.068 .2447 .0850			.095 .3145	.095 .3145 .1090	BLACK WALL THICKNESS IN INCHES				RED STEEL WEIGHT PER FOOT IN POUNDS		BLUE ALUMINUM WEIGHT PER FOOT IN POUNDS	
1/4	.540		.049 .2570	.065 .3297	.065 .3297				.088 .4248	.088 .4248 .1470			.119 .5351	.119 .5351 .1850								
3/8	.675		.049 .3276	.065 .4235	.065 .4235				.091 .5676	.091 .5676 .1960			.126 .7388	.126 .7388 .2560								
1/2	.840	.065 .5383	.065 .5383 .1860	.083 .6710	.083 .6710 .2320				.109 .8510	.109 .8510 .2940			.147 .1088	.147 .1088 .3760					.187 .1304 .4510	.294 .1714		
3/4	1.050	.065 .6838	.065 .6838 .2370	.083 .8572	.083 .8572 .2970				.113 .1131	.113 .1131 .3910			.154 .1474	.154 .1474 .5100					.218 .1937 .6700	.308 .2441		
1	1.315	.065 .8678	.065 .8678 .3000	.109 .1404	.109 .1404 .4860				.133 .1679	.133 .1679 .5810			.179 .2172	.179 .2172 .7510					.250 .2844 .9840	.358 .3659		
1 1/4	1.660	.065 .1107	.065 .1107 .3830	.109 .1806	.109 .1806 .6250				.140 .2273	.140 .2273 .7860			.191 .2997	.191 .2997 .1037					.250 .3765 .1302	.382 .5214		
1 1/2	1.900	.065 .1274	.065 .1274 .4410	.109 .2085	.109 .2085 .7210				.145 .2718	.145 .2718 .9400			.200 .3631	.200 .3631 .1256					.281 .4859 .1681	.400 .6408		
2	2.375	.065 .1604	.065 .1604 .5550	.109 .2638	.109 .2638 .9130				.154 .3653	.154 .3653 .1264			.218 .5022	.218 .5022 .1737					.344 .7462 .2575	.436 .9029		
2 1/2	2.875	.083 .2475	.083 .2475 .8560	.120 .3531	.120 .3531 .1221				.203 .5793	.203 .5793 .2004			.276 .7661	.276 .7661 .2650					.375 .1001 .3464	.552 .1370		
3	3.500	.083 .3029	.083 .3029 .1048	.120 .4332	.120 .4332 .1498				.216 .7576	.216 .7576 .2621			.300 .1025	.300 .1025 .3547					.438 .1432 .4945	.600 .1858		
3 1/2	4.000	.083 .3472	.083 .3472 .1201	.120 .4937	.120 .4937 .1720				.226 .9109	.226 .9109 .3151			.318 .1251	.318 .1251 .4326						.636 .2285		
4	4.500	.083 .3915	.083 .3915 .1354	.120 .5613	.120 .5613 .1942				.237 .1079	.237 .1079 .3733			.337 .1498	.337 .1498 .5183		.438 .1900 .6560			.531 .2251 .7786	.674 .2754		
4 1/2	5.000								.247 .1254				.355 .1761									
5	5.563	.109 .6349	.109 .6349 .2196	.134 .7770	.134 .7770 .2688				.258 .1462	.258 .1462 .5057			.375 .2078	.375 .2078 .7188		.500 .2704 .9353			.625 .3296 .1140	.750 .3855		
6	6.625	.109 .7585	.109 .7585 .2624	.134 .9290	.134 .9289 .3213				.280 .1897	.280 .1897 .6564			.432 .2857	.432 .2857 .9884		.562 .3639 .1259			.719 .4335 .1567	.864 .5316		
7	7.625								.301 .2354				.500 .3804							.875 .6308		
8	8.625	.109 .9914	.109 .9914 .3429	.148 .1340	.148 .1340 .4635	.250 .2236	.175 .5463	.277 .2470 .8543	.322 .2855	.322 .2855 .9878			.406 .3564 .1233	.500 .4339 .1501	.500 .4339 .1760	.594 .6071 .2097	.719 .6776 .2344	.812 .7479 .2584	.906 .7479 .2584	.875 .7242		
9	9.625								.342 .3391				.500 .4873									
10	10.75	.134 .1519	.134 .1519 .5256	.165 .1865	.165 .1870 .6453	.250 .2804 .9698	.279 .1079	.307 .3424 .1134	.365 .4048	.365 .4048 .1400			.500 .5474 .1893	.500 .5474 .2225	.594 .6443 .2261	.719 .7703 .2661	.844 .8229	1.000 .1041	1.125 .1156	1.000 .1041		
11	11.75								.375 .4556				.500 .6008									
12	12.75	.156 .2107	.165 .2218	.180 .2416	.180 .2416 .8359	.250 .3338 .1155	.375 .1714	.330 .4377 .1514	.375 .4956	.406 .5352 .1852	.500 .2263		.562 .7315 .2531	.500 .6542	.688 .8863 .3062	.844 .107.3	1.000 .125.5	1.125 .136.7	1.312 .160.3	1.000 .125.5		
14	14.00	.156 .2307		.188 .27.73	.250 .36.71	.312 .45.61		.375 .54.57	.375 .54.57	.438 .63.44			.594 .85.05	.500 .72.09	.938 .106.1	1.094 .130.9	1.250 .150.8	1.406 .170.2	1.406 .189.1			
16	16.00	.165 .27.90		.188 .31.75	.250 .42.05	.312 .52.27		.375 .62.58	.375 .62.58	.500 .82.77			.656 .107.5	.500 .82.77	.844 .136.6	1.031 .164.8	1.219 .192.4	1.438 .223.6	1.594 .245.3			
18	18.00	.165 .31.43		.188 .35.76	.250 .47.39	.312 .58.94		.438 .82.15	.375 .70.59	.562 .104.7			.750 .138.2	.500 .93.45	.938 .170.9	1.156 .208.0	1.375 .244.1	1.562 .274.2	1.781 .308.5			
20	20.00	.188 .39.78		.218 .46.05	.250 .52.73	.375 .78.60		.500 .104.1	.375 .78.60	.594 .123.1			.812 .166.4	.500 .104.1	1.031 .208.9	1.281 .256.1	1.500 .296.4	1.750 .341.1	1.969 .379.2			

TUBING DIMENSIONS

TUBE GAUGE	18	17	16	15	14	13	12	11	1/8	10	9	5/32	8	7	3/16	6	5	4	1/4	2
WALL THICK.	.049	.058	.065	.075	.083	.095	.109	.120	.125	.134	.148	.156	.165	.180	.188	.203	.220	.238	.250	.280



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