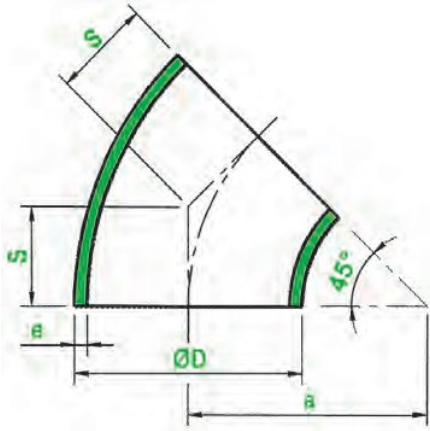


Elbows Short Radius

10 Bar

14 Bar

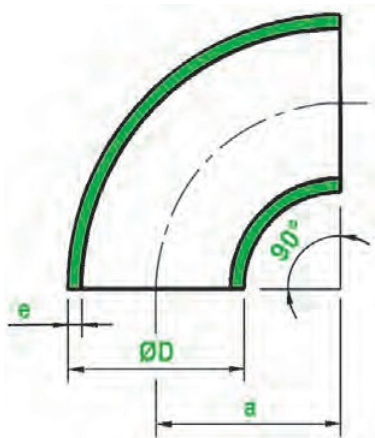
45°



Material : CuNi 90/10 | CuNi 70/30

Outside Diameter of Pipe - ØD		DIN 86090							
		10 Bar				14 Bar			
Nominal (Inch)	Actual (mm)	e (mm)	a (mm)	s (mm)	kg /pc	e (mm)	a (mm)	s (mm)	kg /pc
SEAMLESS									
1/2	20	1.0	22.4	8.92	0.007	1.5	22.4	8.92	0.009
3/4	25	1.5	24.6	9.77	0.01	1.5	24.6	9.77	0.01
1	30	1.5	30.0	12	0.02	2.0	30.0	12	0.027
1¼	38	1.5	32.5	14	0.04	2.0	32.5	14	0.053
1½	44.5	1.5	40	17	0.06	2.0	40	17	0.08
2	57	1.5	52.5	22	0.10	2.0	52.5	22	0.133
2½	76.1	2.0	70	29	0.22	2.0	70	29	0.22
3	88.9	2.0	82.5	34	0.32	2.5	82.5	34	0.40
4	108	2.5	100	41	0.58	2.5	100	41	0.58
5	133	2.5	125	52	0.90	3.0	125	52	1.08
6	159	2.5	150	62	1.30	3.0	150	62	1.56
7	193.7	2.5	180	75	1.90	3.5	180	75	2.66
8	219.1	3.0	210	87	3.00	3.5	210	87	3.50
10	267	3.0	255	106	4.40	4.0	255	106	5.87
12	323.9	4.0	305	126	8.60	5.0	305	126	10.75
SEAM WELDED									
14	368	4.0	352.5	146	11.30	5.5	352.5	146	15.54
16	419.1	4.0	400	166	16.40	6.0	400	166	21.87
18	457.2	4.0	455	188	20.40	6.0	455	188	30.60
20	508	4.5	505	209	28.10	6.5	505	209	42.15
24	610	5.0	610	253	40.90	8.0	610	253	65.45

90°



Material : CuNi 90/10 | CuNi 70/30

SEAMLESS									
1/2	20	1.0	22.4	-	0.014	1.5	22.4	-	0.021
3/4	25	1.5	24.6	-	0.02	1.5	24.6	-	0.02
1	30	1.5	30.0	-	0.04	2.0	30.0	-	0.053
1¼	38	1.5	32.5	-	0.08	2.0	32.5	-	0.107
1½	44.5	1.5	40	-	0.12	2.0	40	-	0.16
2	57	1.5	52.5	-	0.20	2.0	52.5	-	0.27
2½	76.1	2.0	70.0	-	0.44	2.0	70	-	0.44
3	88.9	2.0	82.5	-	0.64	2.5	114.5	-	0.80
4	108	2.5	100	-	1.16	2.5	100	-	1.16
5	133	2.5	125	-	1.80	3.0	181	-	2.16
6	159	2.5	150	-	2.60	3.0	216	-	3.12
7	193.7	2.5	180	-	3.80	3.5	270	-	5.32
8	219.1	3.0	210	-	6.00	3.5	305	-	7.00
10	267	3.0	255	-	8.80	4.0	378	-	11.74
12	323.9	4.0	305	-	17.20	5.0	457	-	21.50
SEAM WELDED									
14	368	4.0	352.5	-	22.60	5.5	533.5	-	31.08
16	419.1	4.0	400	-	32.80	6.0	609.5	-	43.74
18	457.2	4.0	455	-	40.80	6.0	686	-	61.20
20	508	4.5	505	-	56.20	6.5	762	-	84.30
24	610	5.0	610	-	81.80	8.0	915	-	130.90



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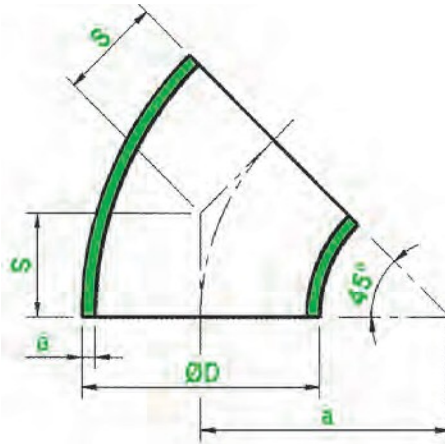
45° Elbows Long Radius

10 Bar

14 Bar

16 Bar

20 Bar



Material : CuNi 90/10 | CuNi 70/30

Outside Diameter of Pipe - ØD		DIN 86090								EEMUA 146							
		10 Bar				14 Bar				16 Bar				20 Bar			
Nominal (Inch)	Actual (mm)	e (mm)	a (mm)	s (mm)	kg /pc	e (mm)	a (mm)	s (mm)	kg /pc	e (mm)	a (mm)	s (mm)	kg /pc	e (mm)	a (mm)	s (mm)	kg /pc
SEAMLESS																	
1/2	20	1.0	25	10.4	0.01	1.5	25	10.4	0.015	-	-	-	-	-	-	-	-
3/4	25	1.5	27.5	11.4	0.02	1.5	27.5	11.4	0.02	2.0	31.2	18	0.026	2.0	31.2	18	0.026
1	30	1.5	33.5	14	0.03	2.0	33.5	14	0.04	2.5	38	22	0.06	2.5	38	22	0.06
1¼	38	1.5	45	19	0.05	2.0	45	19	0.066	2.5	48	25	0.09	2.5	48	25	0.09
1½	44.5	1.5	51	21	0.07	2.0	51	21	0.092	2.5	57	29	0.13	2.5	57	29	0.13
2	57	1.5	72	30	0.13	2.0	72	30	0.171	2.5	76	35	0.23	2.5	76	35	0.23
2½	76.1	2.0	95	39	0.30	2.0	95	39	0.30	2.5	95	44	0.38	2.5	95	44	0.38
3	88.9	2.0	114.5	47	0.43	2.5	114.5	47	0.54	2.5	114	51	0.54	2.5	114	51	0.54
4	108	2.5	142.5	59	0.82	2.5	142.5	59	0.82	3.0	152	64	1.05	3.0	152	64	1.05
5	133	2.5	181	75	1.29	3.0	181	75	1.55	-	-	-	-	-	-	-	-
6	159	2.5	216	89	1.85	3.0	216	89	2.22	3.0	229	95	2.35	3.5	229	95	2.74
7	193.7	2.5	270	112	2.82	3.5	270	112	3.94	-	-	-	-	-	-	-	-
8	219.1	3.0	305	126	4.33	3.5	305	126	5.04	4.0	305	127	5.75	4.5	305	127	6.47
10	267	3.0	378	157	6.55	4.0	378	157	8.73	4.5	381	159	9.85	5.5	381	159	12.04
12	323.9	4.0	457	189	12.80	5.0	457	189	16.00	5.5	457	190	17.53	7.0	457	190	22.30
SEAM WELDED																	
14	368	4.0	533.5	221	17.00	5.5	533.5	221	23.37	6.5	533	222	27.46	8.0	533	222	33.80
16	419.1	4.0	609.5	252	29.90	6.0	609.5	252	33.20	7.0	610	254	38.50	9.0	610	254	49.50
18	457.2	4.0	686	284	30.70	6.0	686	284	46.05	8.0	686	286	54.10	9.5	686	286	64.25
20	508	4.5	762	316	41.90	6.5	762	316	62.85	8.5	762	318	70.93	11.0	762	318	91.80
24	610	5.0	915	379	60.62	8.0	915	379	97.00	10.5	914	381	126.42	13.0	914	381	156.60
28	711	-	-	-	-	-	-	-	-	12.0	1067	438	196.30	15.0	1067	438	245.40
32	813	-	-	-	-	-	-	-	-	13.5	1219	502	288.00	17.0	1219	502	363.85
36	914	-	-	-	-	-	-	-	-	15.5	1372	565	418.60	19.0	1372	565	513.13



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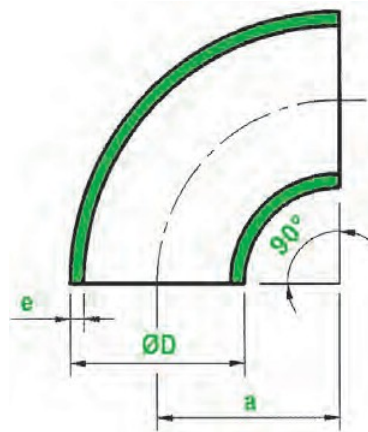
90° Elbows Long Radius

10 Bar

14 Bar

16 Bar

20 Bar



Material : CuNi 90/10 | CuNi 70/30

Outside Diameter of Pipe - ØD		DIN 86090						EEMUA 146					
Nominal (Inch)	Actual (mm)	10 bar			14 Bar			16 Bar			20 Bar		
		e (mm)	a (mm)	kg /pc	e (mm)	a (mm)	kg /pc	e (mm)	a (mm)	kg /pc	e (mm)	a (mm)	kg /pc
SEAMLESS													
1/2	20	1.0	25	0.02	1.5	25.0	0.03	-	-	-	-	-	-
3/4	25	1.5	27.5	0.04	1.5	27.5	0.053	2.0	31.20	0.076	2.0	31.20	0.076
1	30	1.5	33.5	0.06	2.0	33.5	0.08	2.5	38	0.12	2.5	38	0.12
1¼	38	1.5	45	0.10	2.0	45.0	0.133	2.5	48	0.18	2.5	48	0.18
1½	44.5	1.5	51	0.14	2.0	51.0	0.187	2.5	57	0.26	2.5	57	0.26
2	57	1.5	72	0.26	2.0	72.0	0.347	2.5	76	0.46	2.5	76	0.46
2½	76.1	2.0	95	0.61	2.0	95.0	0.61	2.5	95	0.76	2.5	95	0.76
3	88.9	2.0	114.5	0.87	2.5	114.5	1.08	2.5	114	1.08	2.5	114	1.08
4	108	2.5	142.5	1.64	2.5	142.5	1.64	3.0	152	2.10	3.0	152	2.10
5	133	2.5	181	2.58	3.0	181	3.10	-	-	-	-	-	-
6	159	2.5	216	3.70	3.0	216	4.44	3.0	229	4.70	3.5	229	5.48
7	193.7	2.5	270	5.65	3.5	270	7.88	-	-	-	-	-	-
8	219.1	3.0	305	8.66	3.5	305	10.08	4.0	305	11.50	4.5	305	12.94
10	267	3.0	378	13.10	4.0	378	17.46	4.5	381	19.70	5.5	381	24.08
12	323.9	4.0	457	25.61	5.0	457	32.00	5.5	457	35.06	7.0	457	44.60
SEAM WELDED													
14	368	4.0	533.5	34.00	5.5	533.5	46.74	6.5	533	54.92	8.0	533	67.60
16	419.1	4.0	609.5	39.40	6.0	609.5	66.40	7.0	610	77.00	9.0	610	99.00
18	457.2	4.0	686	48.40	6.0	686	72.63	8.0	686	108.20	9.5	686	128.50
20	508	4.5	762	75.62	6.5	762	125.70	8.5	762	141.86	11.0	762	183.60
24	610	5.0	915	121.24	8.0	915	194.00	10.5	914	252.94	13.0	914	313.30
28	711	-	-	-	-	-	-	12.0	1067	392.60	15.0	1067	490.80
32	813	-	-	-	-	-	-	13.5	1219	577.90	17.0	1219	727.70
36	914	-	-	-	-	-	-	15.5	1372	837.20	19.0	1372	1026.26



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