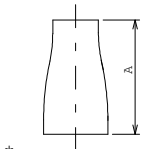


LINE PIPE

DIA .	O. DIA .	DIA .	O. DIA .	DIA .	O. DIA .	DIA .	O. DIA .	DIA .	O. DIA .	DIA .	O. DIA .
1/4"	13.720	3/4"	26.670	2"	60.330	6"	168.270	12"	323.840	18"	457.20
3/8"	17.150	1"	33.400	3"	88.900	8"	219.070	14"	355.600	20"	508.00
1/2"	21.340	1 1/2"	48.260	4"	114.300	10"	273.050	16"	406.400	24"	609.60

CONC. & ECC. REDUCERS

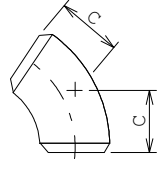
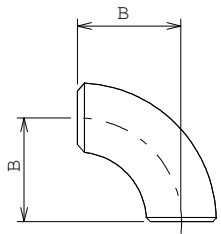
SIZE	A	SIZE	A	SIZE	A
2 x 1 1/2"	76	10 x 4"	178	16 x 6" *	356
3 x 1 1/2"	89	10 x 6"	178	16 x 8"	356
3 x 2"	89	10 x 8"	178	16 x 10"	356
4 x 1 1/2"	102	12 x 6"	203	16 x 12"	356
4 x 2"	102	12 x 8"	203	16 x 14"	356
4 x 3"	102	12 x 10"	203	18 x 8" *	381
6 x 3"	140	14 x 6"	330	18 x 10"	381
6 x 4"	140	14 x 8"	330	18 x 12"	381
8 x 4"	152	14 x 10"	330	18 x 14"	381
8 x 6"	152	14 x 12"	330	18 x 16"	381



* NON STANDARD NOT READY AVAILABLE

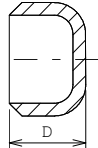
90° & 45° ELBOW

DIA	LONG RADIUS	
	B	C
	90°	45°
2"	76	35
3"	114	51
4"	152	64
6"	229	95
8"	305	127
10"	381	159
12"	457	191
14"	533	222
16"	610	254
18"	686	286
20"	762	318
24"	914	381



CAPS

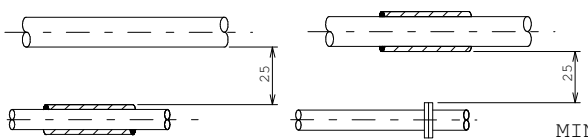
DIA .	D	DIA .	D	DIA .	D
2"	38	8"	102	16"	178
3"	51	10"	127	18"	203
4"	64	12"	152	20"	229
6"	89	14"	165	24"	267



REQUIRED SPACING BETWEEN CENTER LINE OF PIPES

SIZE	UNINSULATED LINES															SIZE	
	1"	1 1/2"	2"	3"	4"	6"	8"	10"	12"	14"	16"	18"	20"	24"	30"		
30"	475	475	500	550	575	625	650	725	750	750	775	800	825	875	950	175	1"
24"	450	450	450	525	525	550	575	625	650	675	700	725	750	800	175	175	1 1/2"
20"	375	375	425	425	450	500	525	550	575	600	625	650	675	200	175	175	2"
18"	350	350	400	400	425	450	500	525	550	575	600	625	250	225	200	200	3"
16"	325	350	375	375	400	425	475	500	525	550	575	275	250	225	225	225	4"
14"	325	325	350	350	375	400	450	475	475	500	325	300	275	250	250	250	6"
12"	300	300	325	350	350	375	400	450	475	400	375	350	325	325	275	275	8"
10"	275	275	300	300	325	350	375	400	475	450	425	400	375	350	300	300	10"
8"	250	250	275	275	300	325	350	525	500	475	425	425	400	375	325	325	12"
6"	225	225	225	250	250	275	575	550	525	500	475	450	425	375	350	350	14"
4"	200	200	200	225	225	625	600	575	550	525	475	475	425	400	375	350	16"
3"	175	175	175	200	675	650	625	600	575	550	500	475	450	425	375	375	18"
2"	150	150	175	725	700	675	650	625	600	550	525	500	475	450	400	400	20"
1 1/2"	150	150	850	800	775	750	725	700	675	650	600	575	550	475	475	475	24"
1"	150	1000	925	875	850	825	800	775	750	700	650	625	575	525	500	500	30"

INSULATED LINES



MIN.SPACING BETWEEN FINISHED EDGES OF PIPES OR FLANGES= 25

DIMENSIONS OF LINE PIPE REDUCERS, ELBOWS, CAPS & REQ'D SPACING BETWEEN LINES