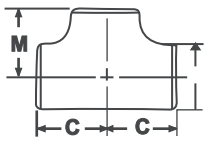
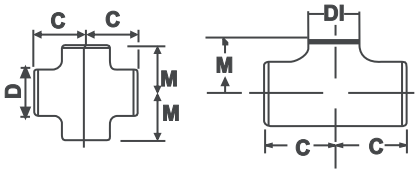
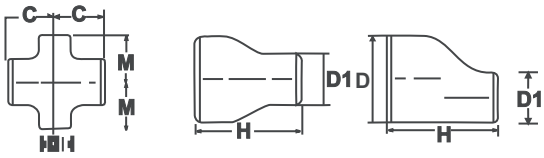
EQUAL TEE & CROSS



UNEQUAL TEE & CROSS



CONCENTRIC & ECCENTRIC REDUCERS



Nominal Pipe Size Inches	Center to End Run	Center to End Branch	Length
DxD1	C	M	H
1x1	38	38	
1x1/2	38	38	51
1x3/4	38	38	51
1 1/4x1	48	48	51
1 1/2x1	48	48	51
1 3/4x1	48	48	51
1 1/2x1	48	48	51
1 1/2x1 1/2	57	57	-
1 1/2x1 1/2	57	57	64
1 3/4x2	57	57	64
1 1/2x1	57	57	64
1 1/2x1 1/4	57	57	64
2x2	64	64	-
2x3/4	64	44	76
2x1	64	51	76
2x1 1/4	64	57	76
2x1 1/2	64	60	76
2 1/2x2 1/2	76	76	-
2 1/2x1	76	57	89
2 1/2x1 1/4	76	64	89
2 1/2x1 1/2	76	67	89
2 1/2x2	76	70	89
3x3	86	86	-
3x1 1/4	86	70	89
3x1 1/2	86	73	89
3x2	86	76	89
3x2 1/2	86	83	89
3 1/2x3 1/2	95	95	-
3 1/2x1 1/2	95	79	102
3 1/2x2	95	83	102
3 1/2x2 1/2	95	89	102
3 1/2x3	95	92	102
4x4	105	105	-
4x1 1/2	105	86	102
4x2	105	89	102
4x2 1/2	105	95	102
4x3	105	98	102
4x3 1/2	105	102	102

Nominal Pipe Size Inches	Center to End Run	Center to End Branch	Length
DxD1	C	M	H
5x5	124	124	-
5x2	124	105	127
5x2 1/2	124	108	127
5x3	124	111	127
5x3 1/2	124	114	127
5x4	124	117	127
6x6	143	143	-
6x2 1/2	143	121	140
6x3	143	124	140
6x3 1/2	143	127	140
6x4	143	130	140
6x5	143	137	140
8x8	178	178	-
8x6	178	168	152
8x5	178	162	152
8x4	178	156	152
8x3 1/2	178	152	152
10x10	216	216	-
10x8	216	203	178
10.6	216	194	178
10x5	216	191	178
10x4	216	184	178
12x12	254	254	-
12x10	254	241	203
12x8	254	229	203
12x6	254	219	203
12x5	254	216	203
14x14	279	279	-
14x12	279	270	330
14x10	279	257	330
14x8	279	248	330
14x6	279	238	330
16x16	305	305	-
16x14	305	305	356
16x12	305	295	356
16x10	305	283	356
16x8	305	273	356
16x6	305	264	(356)

Nominal Pipe Size Inches	Center to End Run	Center to End Branch	Length
DxD1	C	M	H
18x18	343	343	-
18x16	343	330	381
18x14	343	330	381
18x12	343	321	381
18x10	343	308	381
18x8	343	298	(381)
20x20	381	381	-
20x18	381	368	508
20x16	381	356	508
20x14	381	356	508
20x12	381	346	508
20x10	381	333	(508)
20x8	381	324	(508)
22x22	419	419	-
22x20	419	406	508
22x18	419	394	508
22x16	419	381	508
22x14	419	381	508
22x12	419	371	(508)
22x10	419	359	(508)
24x24	432	432	-
24x22	432	432	508
24x20	432	432	508
24x18	432	419	508
24x16	432	406	508
24x14	432	406	(508)
24x12	432	397	(508)
24x10	432	384	(508)
26x26	495	495	-
26x24	495	483	610
26x22	495	470	610
26x20	495	457	610
26x18	495	444	610
26x16	495	432	(610)
26x14	495	432	(610)
26x12	495	422	(610)
28x28	521	521	-
28x26	521	521	610
28x24	521	508	610
28x22	521	495	610
28x20	521	483	610
28x18	521	470	(610)
28x16	521	457	(610)
28x14	521	457	(610)
28x12	521	448	(610)

Nominal Pipe Size Inches	Center to End Run	Center to End Branch	Length
DxD1	C	M	H
30x30	559	559	-
30x28	559	546	610
30x26	559	546	610
30x24	559	533	610
30x22	559	521	610
30x20	559	(508)	(610)
30x18	559	(495)	(610)
30x16	559	(483)	(610)
30x14	559	(483)	(610)
30x12	559	(473)	(610)
30x10	559	460	(610)
32x32	597	597	-
32x30	597	584	610
32x28	597	572	610
32x26	597	572	610
32x24	597	559	610
32x22	597	546	(610)
32x20	597	533	(610)
32x18	597	521	(610)
32x16	597	508	(610)
32x14	597	508	(610)
34x34	635	635	-
34x32	635	622	610
34x30	635	610	610
34x28	635	597	610
34x26	635	597	610
34x24	635	584	(610)
34x22	635	572	(610)
34x20	635	559	(610)
34x18	635	546	(610)
34x16	635	533	(610)
36x36	673	673	-
36x34	673	660	610
36x32	673	648	610
36x30	673	635	610
36x28	673	622	610
36x26	673	622	610
36x24	673	610	(610)
36x22	673	597	(610)
36x20	673	584	(610)
36x18	673	572	(610)
36x16	673	559	(610)

Nominal Pipe Size Inches	Center to End Run	Center to End Branch	Length
DxD1	C	M	H
38x38	711	711	-
38x36	711	711	610
38x34	711	698	610
38x32	711	686	610
38x30	711	673	610
38x28	711	648	610
38x26	711	648	610
38x24	711	635	(610)
38x22	711	622	(610)
38x20	711	610	(610)
38x18	711	597	(610)
40x40	749	749	-
40x38	749	749	610
40x36	749	737	610
40x34	749	724	610
40x32	749	711	610
40x30	749	698	610
40x28	749	673	(610)
40x26	749	673	(610)
40x24	749	660	(610)
40x22	749	648	(610)
40x20	749	635	(610)
40x18	749	622	(610)
42x42	762	711	-
42x40	762	711	610
42x38	762	711	610
42x36	762	711	610
42x34	762	711	610
42x32	762	711	610
42x30	762	711	610
42x28	762	698	(610)
42x26	762	698	(610)
42x24	762	660	(610)
42x22	762	660	(610)
42x20	762	660	(610)
42x18	762	648	(610)
42x16	762	635	(610)

Nominal Pipe Size Inches	Center to End Run	Center to End Branch	Length
DxD1	C	M	H
44x44	813	762	-
44x42	813	762	610
44x40	813	749	610
44x38	813	737	610
44x36	813	724	610
44x34	813	724	(610)
44x32	813	711	(610)
44x30	813	711	(610)
44x28	813	698	(610)
44x26	813	698	(610)
44x24	813	698	(610)
44x22	813	686	(610)
44x20	813	686	(610)
46x46	851	800	-
46x44	851	800	711
46x42	851	787	711
46x40	851	775	711
46x38	851	762	711
46x36	851	762	(711)
46x34	851	749	(711)
46x32	851	749	(711)
46x30	851	737	(711)
46x28	851	737	(711)
46z26	851	737	(711)
46x24	851	724	(711)
46x22	851	724	(711)
48x48	889	838	-
48x46	889	838	711
48x44	889	838	711
48x42	889	813	711
48x40	889	813	711
48x38	889	813	(711)
48x36	889	787	(711)
48x34	889	787	(711)
48x32	889	787	(711)
48x30	889	762	(711)
48x28	889	762	(711)
48x26	889	762	(711)
48x24	889	737	(711)
48x22	889	737	(711)