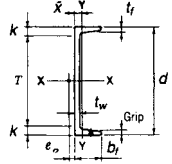


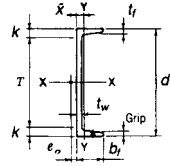
Standard Channels

Dimensions

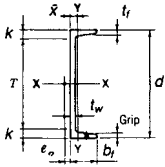


Shapes	Area A	Depth d	Web			Flange				Distance		Grip	Max. Fige. Fastener
			Thickness t_w		$\frac{t_w}{2}$	Width b_f		Thickness t_f		T	k		
			in.			in.		in.		in.	in.		
C 3 x 4.1	1.21	3.0	0.170	3/16	1/16	1.410	1 3/8	0.273	1/4	1 5/8	1 1/16	—	—
x 5	1.47	3.0	0.258	1/4	1/8	1.498	1 1/2	0.273	1/4	1 5/8	1 1/16	—	—
x 6	1.76	3.0	0.356	3/8	3/16	1.596	1 5/8	0.273	1/4	1 5/8	1 1/16	—	—
C 4 x 5.4	1.59	4.0	0.184	3/16	1/16	1.584	1 5/8	0.296	5/16	2 5/8	1 1/16	5/16	5/8
x 7.25	2.13	4.0	0.321	5/16	3/16	1.721	1 3/4	0.296	5/16	2 5/8	1 1/16	—	—
C 5 x 6.7	1.97	5.0	0.190	3/16	1/8	1.750	1 3/4	0.320	5/16	3 1/2	3/4	5/16	5/8
x 9	2.64	5.0	0.325	5/16	3/16	1.885	1 7/8	0.320	5/16	3 1/2	3/4	—	—
C 6 x 8.2	2.40	6.0	0.200	3/16	1/8	1.920	1 7/8	0.343	5/16	4 3/8	13/16	5/16	5/8
x 10.5	3.09	6.0	0.314	5/16	3/16	2.034	2	0.343	5/16	4 3/8	13/16	3/8	5/8
x 13	3.83	6.0	0.437	7/16	3/16	2.157	2 1/8	0.343	5/16	4 3/8	13/16	5/16	5/8
C 7 x 9.8	2.87	7.0	0.210	3/16	1/8	2.090	2 1/8	0.366	3/8	5 1/4	7/8	3/8	5/8
x 12.25	3.60	7.0	0.314	5/16	3/16	2.194	2 1/4	0.366	3/8	5 1/4	7/8	3/8	5/8
x 14.75	4.33	7.0	0.419	7/16	3/16	2.299	2 1/4	0.336	3/8	5 1/4	7/8	3/8	5/8
C 8 x 11.5	3.38	8.0	0.220	1/4	1/8	2.260	2 1/4	0.390	3/8	6 1/8	15/16	3/8	3/4
x 13.75	4.04	8.0	0.303	5/16	1/8	2.343	2 3/8	0.390	3/8	6 1/8	15/16	3/8	3/4
x 18.75	5.51	8.0	0.487	1/2	1/4	2.527	2 1/2	0.390	3/8	6 1/8	15/16	3/8	3/4
C 9 x 13.4	3.94	9.0	0.233	1/4	1/8	2.433	2 3/8	0.413	7/16	7 1/8	15/16	7/16	3/4
x 15	4.41	9.0	0.285	5/16	1/8	2.485	2 1/2	0.413	7/16	7 1/8	15/16	7/16	3/4
x 20	5.88	9.0	0.448	7/16	1/4	2.648	2 5/8	0.413	7/16	7 1/8	15/16	7/16	3/4
C 10 x 15.3	4.49	10.0	0.240	1/4	1/8	2.600	2 5/8	0.436	7/16	8	1	7/16	3/4
x 20	5.88	10.0	0.379	3/8	3/16	2.739	2 3/4	0.436	7/16	8	1	7/16	3/4
x 25	7.35	10.0	0.526	1/2	1/4	2.886	2 7/8	0.436	7/16	8	1	7/16	3/4
x 30	8.82	10.0	0.673	1 1/16	5/16	3.033	3	0.436	7/16	8	1	7/16	3/4
C 12 x 20.7	6.09	12.0	0.282	5/16	1/8	2.942	3	0.501	1/2	9 3/4	1 1/8	1/2	7/8
x 25	7.35	12.0	0.387	3/8	3/16	3.047	3	0.501	1/2	9 3/4	1 1/8	1/2	7/8
x 30	8.82	12.0	0.510	1/2	1/4	3.170	3 3/8	0.501	1/2	9 3/4	1 1/8	1/2	7/8
C 15 x 33.9	9.96	15.0	0.400	3/8	3/16	3.400	3 3/8	0.650	5/8	12 1/8	1 7/16	5/8	1
x 40	11.8	15.0	0.520	1/2	1/4	3.520	3 1/2	0.650	5/8	12 1/8	1 7/16	5/8	1
x 50	14.7	15.0	0.716	1 1/16	3/8	3.716	3 3/4	0.650	5/8	12 1/8	1 7/16	5/8	1

Channels Miscellaneous Dimensions



Shapes	Area A	Depth d	Web			Flange				Distance		Grip	Max. Flge. Fas- ten- er
			Thickness t_w	$\frac{t_w}{2}$	Width b_f	Thickness t_f	T	k	in.	in.			
											in.		
MC 3 x 7.1	2.09	3.00	0.310	$\frac{5}{16}$	$\frac{1}{8}$	1.940	$1\frac{7}{8}$	0.350	$\frac{3}{8}$				
MC 4 x 13.8	4.02	4.00	0.500	$\frac{1}{2}$	$\frac{1}{4}$	2.500	$2\frac{1}{2}$	0.500	$\frac{1}{4}$				
MC 6 x 12	3.53	6.00	0.310	$\frac{5}{16}$	$\frac{1}{8}$	2.497	$2\frac{1}{2}$	0.375	$\frac{3}{8}$	$4\frac{3}{8}$	$1\frac{3}{16}$	$\frac{3}{8}$	$\frac{5}{8}$
MC 6 x 15.1 x 16.3	4.44	6.00	0.316	$\frac{5}{16}$	$\frac{3}{16}$	2.941	3	0.475	$\frac{1}{2}$	$3\frac{7}{8}$	$1\frac{1}{16}$	$\frac{1}{2}$	$\frac{3}{4}$
	4.79	6.00	0.375	$\frac{3}{8}$	$\frac{3}{16}$	3.000	3	0.475	$\frac{1}{2}$	$3\frac{7}{8}$	$1\frac{1}{16}$	$\frac{1}{2}$	$\frac{3}{4}$
MC 6 x 15.3 x 18	4.50	6.00	0.340	$\frac{5}{16}$	$\frac{3}{16}$	3.500	$3\frac{1}{2}$	0.385	$\frac{3}{8}$	$4\frac{1}{4}$	$\frac{7}{8}$	$\frac{3}{8}$	$\frac{7}{8}$
	5.29	6.00	0.379	$\frac{3}{8}$	$\frac{3}{16}$	3.504	$3\frac{1}{2}$	0.475	$\frac{1}{2}$	$3\frac{7}{8}$	$1\frac{1}{16}$	$\frac{1}{2}$	$\frac{7}{8}$
MC 7 x 19.1 x 22.7	5.61	7.00	0.352	$\frac{3}{8}$	$\frac{3}{16}$	3.452	$3\frac{1}{2}$	0.500	$\frac{1}{2}$	$4\frac{3}{4}$	$1\frac{1}{8}$	$\frac{1}{2}$	$\frac{7}{8}$
	6.67	7.00	0.503	$\frac{1}{2}$	$\frac{1}{4}$	3.603	$3\frac{5}{8}$	0.500	$\frac{1}{2}$	$4\frac{3}{4}$	$1\frac{1}{8}$	$\frac{1}{2}$	$\frac{7}{8}$
MC 8 x 8.5	2.50	8.00	0.179	$\frac{3}{16}$	$\frac{1}{16}$	1.874	$1\frac{7}{8}$	0.311	$\frac{5}{16}$	$6\frac{1}{2}$	$\frac{3}{4}$	$\frac{5}{16}$	$\frac{5}{8}$
MC 8 x 1 8.7 x 20	5.50	8.00	0.353	$\frac{3}{8}$	$\frac{3}{16}$	2.978	3	0.500	$\frac{1}{2}$	$5\frac{3}{4}$	$1\frac{1}{8}$	$\frac{1}{2}$	$\frac{7}{8}$
	5.88	8.00	0.400	$\frac{3}{8}$	$\frac{3}{16}$	3.025	3	0.500	$\frac{1}{2}$	$5\frac{3}{4}$	$1\frac{1}{8}$	$\frac{1}{2}$	$\frac{7}{8}$
MC 8 x 21.4 x 22.8	6.28	8.00	0.375	$\frac{3}{8}$	$\frac{3}{16}$	3.450	$3\frac{1}{2}$	0.525	$\frac{1}{2}$	$5\frac{5}{8}$	$1\frac{3}{16}$	$\frac{1}{2}$	$\frac{7}{8}$
	6.70	8.00	0.427	$\frac{7}{16}$	$\frac{3}{16}$	3.502	$3\frac{1}{2}$	0.525	$\frac{1}{2}$	$5\frac{5}{8}$	$1\frac{3}{16}$	$\frac{1}{2}$	$\frac{7}{8}$
MC 9 x 23.9 x 25.4	7.02	9.00	0.400	$\frac{3}{8}$	$\frac{3}{16}$	3.450	$3\frac{1}{2}$	0.550	$\frac{9}{16}$	$6\frac{5}{8}$	$1\frac{3}{16}$	$\frac{9}{16}$	$\frac{7}{8}$
	7.47	9.00	0.450	$\frac{7}{16}$	$\frac{1}{4}$	3.500	$3\frac{1}{2}$	0.550	$\frac{9}{16}$	$6\frac{5}{8}$	$1\frac{3}{16}$	$\frac{9}{16}$	$\frac{7}{8}$
MC 10 x 6.5	1.91	10.00	0.152	$\frac{1}{8}$	$\frac{1}{16}$	1.127	$1\frac{1}{8}$	0.202	$\frac{3}{16}$	$9\frac{1}{8}$	$\frac{7}{16}$	—	—
MC 10 x 8.4	2.46	10.00	0.170	$\frac{3}{16}$	$\frac{1}{16}$	1.500	$1\frac{1}{2}$	0.280	$\frac{1}{4}$	$8\frac{5}{8}$	$1\frac{1}{16}$	—	—
MC 10 x 22 x 25	6.45	10.00	0.290	$\frac{5}{16}$	$\frac{1}{8}$	3.315	$3\frac{3}{8}$	0.575	$\frac{9}{16}$	$7\frac{1}{2}$	$1\frac{1}{4}$	$\frac{9}{16}$	$\frac{7}{8}$
	7.35	10.00	0.380	$\frac{3}{8}$	$\frac{3}{16}$	3.405	$3\frac{3}{8}$	0.575	$\frac{9}{16}$	$7\frac{1}{2}$	$1\frac{1}{4}$	$\frac{9}{16}$	$\frac{7}{8}$
MC 10 x 2 8.5 x 33.6 x 41.1	8.47	10.00	0.425	$\frac{7}{16}$	$\frac{3}{16}$	3.950	4	0.575	$\frac{9}{16}$	$7\frac{1}{2}$	$1\frac{1}{4}$	$\frac{9}{16}$	$\frac{7}{8}$
	9.87	10.00	0.575	$\frac{9}{16}$	$\frac{5}{16}$	4.100	$4\frac{1}{8}$	0.575	$\frac{9}{16}$	$7\frac{1}{2}$	$1\frac{1}{4}$	$\frac{9}{16}$	$\frac{7}{8}$
	12.1	10.00	0.796	$1\frac{3}{16}$	$\frac{3}{8}$	4.321	$4\frac{3}{8}$	0.575	$\frac{9}{16}$	$7\frac{1}{2}$	$1\frac{1}{4}$	$\frac{9}{16}$	$\frac{7}{8}$
MC 12 x 10.6	3.1	12.00	0.190	$\frac{3}{16}$	$\frac{1}{8}$	1.500	$1\frac{1}{2}$	0.309	$\frac{5}{16}$	$10\frac{5}{8}$	$1\frac{1}{16}$	—	—



Channels

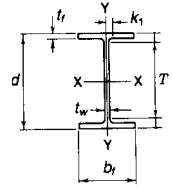
Miscellaneous

Dimensions

Shapes	Area A	Depth d	Web			Flange				Distance		Grip	Max. Fge. Faste-ner
			Thickness t_w	$\frac{t_w}{2}$	Width b_f	Thickness t_f	T	k					
									in.	in.	in.		
MC 12 x 31	9.12	12.00	0.370	$\frac{3}{8}$	$\frac{3}{16}$	3.670	$3\frac{5}{8}$	.0700	$1\frac{1}{16}$	$9\frac{5}{8}$	$1\frac{5}{16}$	$1\frac{1}{16}$	1
x 35	10.3	12.00	0.467	$\frac{7}{16}$	$\frac{1}{4}$	3.767	$3\frac{3}{4}$	.0700	$1\frac{1}{16}$	$9\frac{5}{8}$	$1\frac{5}{16}$	$1\frac{1}{16}$	1
x 40	11.8	12.00	0.590	$\frac{9}{16}$	$\frac{5}{16}$	3.890	$3\frac{7}{8}$	.0700	$1\frac{1}{16}$	$9\frac{5}{8}$	$1\frac{5}{16}$	$1\frac{1}{16}$	1
x 45	13.2	12.00	0.712	$1\frac{1}{16}$	$\frac{3}{8}$	4.012	4	.0700	$1\frac{1}{16}$	$9\frac{5}{8}$	$1\frac{5}{16}$	$1\frac{1}{16}$	1
x 50	14.7	12.00	0.835	$1\frac{3}{16}$	$\frac{7}{16}$	4.135	$4\frac{1}{8}$	.0700	$1\frac{1}{16}$	$9\frac{5}{8}$	$1\frac{5}{16}$	$1\frac{1}{16}$	1
MC 13 x 31.8	9.35	13.00	0.375	$\frac{3}{8}$	$\frac{3}{16}$	4.000	4	0.610	$\frac{5}{8}$	$10\frac{1}{4}$	$1\frac{3}{8}$	$\frac{9}{16}$	1
x 35	10.3	13.00	0.447	$\frac{7}{16}$	$\frac{1}{4}$	4.072	$4\frac{1}{8}$	0.610	$\frac{5}{8}$	$10\frac{1}{4}$	$1\frac{3}{8}$	$\frac{9}{16}$	1
x 40	11.8	13.00	0.560	$\frac{9}{16}$	$\frac{1}{4}$	4.185	$4\frac{1}{8}$	0.610	$\frac{5}{8}$	$10\frac{1}{4}$	$1\frac{3}{8}$	$\frac{9}{16}$	1
x 50	14.7	13.00	0.787	$1\frac{3}{16}$	$\frac{3}{8}$	4.412	$4\frac{3}{8}$	0.610	$\frac{5}{8}$	$10\frac{1}{4}$	$1\frac{3}{8}$	$\frac{5}{8}$	1
MC 18 x 42.7	12.6	18.00	0.450	$\frac{7}{16}$	$\frac{1}{4}$	3.950	4	0.625	$\frac{5}{8}$	$15\frac{1}{4}$	$1\frac{3}{8}$	$\frac{5}{8}$	1
x 45.8	13.5	18.00	0.500	$\frac{1}{2}$	$\frac{1}{4}$	4.000	4	0.625	$\frac{5}{8}$	$15\frac{1}{4}$	$1\frac{3}{8}$	$\frac{5}{8}$	1
x 51.9	15.3	18.00	0.600	$\frac{5}{8}$	$\frac{5}{16}$	4.100	$4\frac{1}{8}$	0.625	$\frac{5}{8}$	$15\frac{1}{4}$	$1\frac{3}{8}$	$\frac{5}{8}$	1
x 58	17.1	18.00	0.800	$1\frac{1}{16}$	$\frac{3}{8}$	4.200	$4\frac{1}{4}$	0.625	$\frac{5}{8}$	$15\frac{1}{4}$	$1\frac{3}{8}$	$\frac{5}{8}$	1

M Shapes

Dimensions



Shapes	Area A	Depth d	Web			Flange			Distance		Grip	Max. Flge. Faste-ner	
			Thickness t_w		$\frac{t_w}{2}$	Width b_f		Thickness t_f		T			k
	in. ²	in.	in.	in.	in.	in.	in.	in.	in.	in.	in.		
M 5 x 18.9	5.55	5.00	5	0.316	$\frac{5}{16}$	$\frac{3}{16}$	5.003	5	0.416	$\frac{7}{16}$	$\frac{3}{4}$	$\frac{7}{16}$	$\frac{7}{8}$
M 6 x 4.4	1.29	6.00	6	0.114	$\frac{1}{8}$	$\frac{1}{16}$	1.844	$1\frac{7}{8}$	0.171	$\frac{3}{16}$	$5\frac{1}{8}$	$\frac{3}{16}$	—
M 8 x 6.5	1.92	8.00	8	0.135	$\frac{1}{8}$	$\frac{1}{16}$	2.281	$2\frac{1}{4}$	0.189	$\frac{3}{16}$	7	$\frac{3}{16}$	—
M 10 x 7.5	2.21	9.99	10	0.130	$\frac{1}{8}$	$\frac{1}{16}$	2.690	$2\frac{3}{4}$	0.173	$\frac{3}{16}$	$9\frac{1}{8}$	$\frac{3}{16}$	$\frac{3}{8}$
x 8	2.35	9.95	10	0.141	$\frac{3}{16}$	$\frac{1}{16}$	2.690	$2\frac{3}{4}$	0.182	$\frac{3}{16}$	$9\frac{1}{8}$	$\frac{3}{16}$	$\frac{3}{8}$
x 9	2.65	10.00	10	0.157	$\frac{3}{16}$	$\frac{1}{8}$	2.690	$2\frac{3}{4}$	0.206	$\frac{3}{16}$	$8\frac{7}{8}$	$\frac{3}{16}$	—
M 12 x 10	2.94	11.97	12	0.149	$\frac{3}{16}$	$\frac{1}{16}$	3.250	$3\frac{1}{4}$	0.180	$\frac{3}{16}$	11	$\frac{3}{16}$	$\frac{1}{2}$
x 10.8	3.18	11.97	12	0.160	$\frac{3}{16}$	$\frac{1}{16}$	3.065	$3\frac{1}{8}$	0.210	$\frac{1}{4}$	11	$\frac{1}{4}$	$\frac{1}{2}$
x 11.8	3.47	12.00	12	0.177	$\frac{3}{16}$	$\frac{1}{8}$	3.065	$3\frac{1}{8}$	0.225	$\frac{1}{4}$	$10\frac{7}{8}$	$\frac{1}{4}$	—
M 14 x 18	5.10	14.00	14	0.215	$\frac{3}{16}$	$\frac{1}{8}$	4.000	4	0.270	$\frac{1}{4}$	$12\frac{3}{4}$	$\frac{1}{4}$	$\frac{3}{4}$