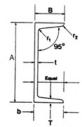


Imperial Series

Designation				Thickness					Web	Ratios for Local Buckling		Moment of inertia	
Serial size	Mass per metre	Depth of Section D	Width of Section B	Web t	Flange T	Distance of Cy	Root radius r ₁	Toe radius r ₂	Depth between fillets d	Flange b/T	Web d/t	Axis x-x	Axis y-y
mm	kg	mm	mm	mm	mm	cm	mm	mm	mm			cm4	cm4
432 x 102	65.54	431.8	101.6	12.2	16.8	2.32	15.2	4.8	362.5	6.05	29.7	21399	628.6
381 x 102	55.10	381.0	101.6	10.4	16.3	2.52	15.2	4.8	312.6	6.23	30.0	14894	579.7
305 x 102	46.18	304.8	101.6	10.2	14.8	2.66	15.2	4.8	239.3	6.86	23.5	8214	499.5
305 x 89	41.69	304.8	88.9	10.2	13.7	2.18	13.7	3.2	245.4	6.49	24.1	7061	325.4
254 x 89	35.74	254.0	88.9	9.1	13.6	2.42	13.7	3.2	194.7	6.54	21.4	4448	302.4
254 x 76	28.29	254.0	75.2	8.1	10.9	1.86	12.2	3.2	203.9	6.99	25.2	3367	162.6
229 x 89	32.76	228.6	88.9	8.6	13.3	2.53	13.7	3.2	169.9	6.68	19.7	3387	285.0
229 x 76	26.06	228.6	76.2	11.2	2.00	12.2	3.2	177.8	6.80	23.4	2610	158.7	
203 x 89	29.78	203.2	88.9	8.1	12.9	2.65	13.7	3.2	145.2	6.89	17.9	2491	264.4
203 x 76	23.82	203.2	76.2	7.1	11.2	2.13	12.2	3.2	152.4	6.80	21.5	1950	151.3
178 x 89	26.81	177.8	88.9	7.6	12.3	2.76	13.7	3.2	121.0	7.23	15.9	1753	241.0
178 x 76	20.84	177.8	76.2	6.6	10.3	2.20	12.2	3.2	128.8	7.40	19.5	1337	134.0
152 x 89	23.84	152.4	88.9	7.1	11.6	2.86	13.7	3.2	96.9	7.66	13.7	1166	215.1
152 x 76	17.88	152.4	76.2	6.4	9.0	2.21	12.2	2.4	105.9	8.47	16.5	851.5	113.8
127 x 64	14.90	127.0	63.5	6.4	9.2	1.94	10.7	2.4	84.0	6.90	13.1	482.5	67.23
100 x 50	9.36	100.0	50.0	5.0	7.5	1.55	8	-	-	-	-	189	26.9
75 x 40	6.92	75.0	40.0	5.0	7.0	1.57	8	4	_	-	-	75.9	12.4





Imperial Series

Radius of gyration		Elastic modulus		Plastic modulus							Desig	gnation
Axis x-x	Axis y-y	Axis x-x	Axis y-y	Axis x-x	Axis y-y	Buckling Parameter u	Torsional Index x	Warping Constant H	Torsional Constant	Area of Section	Mass per metre	Serial size
cm	cm	cm ³	cm ³	cm ³	cm ³			dm ⁶	cm	cm²	kg	mm
16.0 14.6	2.74 2.87	991.1 781.8	80.14 75.86	1207 932.7	153.1 144.4	0.876 0.895	24.6 22.7	0.217 0.153	61.0 46.0	83.49 70.19	65.54 55.10	432 x 10 381 x 10
11.8 11.5	2.91	539.0 463.3	66.59 48.49	638.3 557.1	128.1 92.60	0.900 0.887	18.9 20.4	0.0842 0.0551	35.4 27.6	58.83 53.11	46.18 41.69	305 x 10
9.88 9.67	2.58 2.12	350.2 265.1	46.70 28.21	414.4 317.4	89.56 54.14	0.906 0.886	17.1 21.2	0.0347 0.0194	22.9 12.3	45.52 36.03	35.74 28.29	254 x 89
9.01 8.87	2.61 2.19	296.4 228.3	44.82 28.22	348.4 270.3	86.38 54.24	0.912	15.5 18.8	0.0263 0.0151	20.4 11.4	41.73 33.20	32.76 26.06	229 x 89
8.10 8.02	2.64	245.2 192.0	42.34 27.59	286.6 225.2	81.62 53.32	0.915	14.1 16.7	0.0192 0.0112	17.8 10.4	37.94 30.34	29.78 23.82	203 x 89
7.16 7.10	2.66 2.25	197.2 150.4	39.29 24.72	229.6 175.4	75.44 48.07	0.915 0.911	12.7 15.5	0.0134 0.00764	15.1 8.13	34.15 26.54	26.81 20.84	178 x 89
6.20 6.11	2.66 2.24	153.0 . 111.8	35.70 21.05	177.7 130.0	68.12 41.26	0.909	11.3 14.5	0.00881 0.00486	12.4 5.94	30.36 22.77	23.84 17.8	152 x 89
5.04	1.88	75.99	15.25	89.4	29.31	0.910	11.7	0.00187	4.92	18.98	14.90	127 x 6
3.98	1.50	37.8	7.82	-	-	-	-	-	-	11.92	9.36	100 x 5
2.93	1.19	20.2	4.54	-	-	-	-	-	-	8.21	5.92	75 x 4