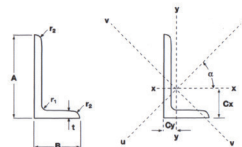


# Unequal Angles

Dimensions and properties to BS EN 10056 - 1: 1999

100 x 65 x 7 - 200 x 150 x 18

\*These sizes are in addition to our standard range to BS EN 10056-1: 1999 Specification



Designation Serial Size	Mass per metre  kg/m	Root Radius  r1 mm	Toe Radius  r2 mm	Area of Section  cm <sup>2</sup>	Distance of centre of gravity		Second Moment of Area				Radius of Gyration				Elastic Modulus		Angle Axis x-x to Axis y-y Tan α	Torsional Constant  J cm <sup>4</sup>	Equivalent Slenderless Coefficient		Mono Symmetry Index  Ψ α	
					Cx cm	Cy cm	Axis x-x  cm <sup>4</sup>	Axis y-y  cm <sup>4</sup>	Axis u-u  cm <sup>4</sup>	Axis v-v  cm <sup>4</sup>	Axis x-x  cm <sup>4</sup>	Axis y-y  cm <sup>4</sup>	Axis u-u  cm <sup>4</sup>	Axis v-v  cm <sup>4</sup>	Axis x-x  Cx cm <sup>3</sup>	Axis y-y  Cy cm <sup>3</sup>			Min. φ α	Max. φ α		
																						Min. φ α
<b>100 x 65</b> x 7	8.80	10.00	5.00	11.20	3.23	1.51	113.00	37.60	128.00	22.00	3.17	1.83	3.39	1.40	16.60	7.53	0.42	2.02	3.58	5.00	7.85	
	x 8	9.90	10.00	5.00	12.70	3.27	1.55	127.00	42.20	144.00	24.80	3.16	1.83	3.37	1.40	18.90	8.54	0.41	2.96	3.14	4.35	6.86
	x 10	12.30	10.00	5.00	15.60	3.36	1.63	154.00	51.00	175.00	30.10	3.14	1.81	3.35	1.39	23.20	10.50	0.41	5.61	2.62	3.43	5.45
<b>100 x 75</b> x 8	10.60	10.00	5.00	13.50	3.10	1.87	133.00	64.10	162.00	34.60	3.14	2.18	3.47	1.60	19.30	11.40	0.55	3.13	3.18	4.08	5.24	
	x 10	13.00	10.00	5.00	16.60	3.19	1.95	162.00	77.60	197.00	42.20	3.12	2.16	3.45	1.59	23.80	14.00	0.54	5.95	2.54	3.22	4.17
	x 12	15.40	10.00	5.00	19.70	3.27	2.03	189.00	90.20	230.00	49.50	3.10	2.14	3.42	1.59	28.00	16.50	0.54	10.05	2.10	2.64	3.46
<b>125 x 75</b> x 8	12.20	11.00	5.50	15.50	4.15	1.68	247.00	67.60	274.00	40.90	4.00	2.09	4.21	1.63	29.60	11.60	0.36	3.62	4.00	5.75	9.43	
	x 10	15.00	11.00	5.50	19.10	4.23	1.75	302.00	82.10	334.00	49.90	3.97	2.07	4.18	1.61	36.50	14.30	0.36	6.87	3.21	4.55	7.50
	x 12	17.80	11.00	5.50	22.70	4.31	1.84	354.00	95.50	391.00	58.50	3.95	2.05	4.15	1.61	43.20	16.90	0.35	11.60	2.66	3.73	6.23
<b>150 x 75</b> x 10	17.00	12.00	6.00	21.70	5.31	1.61	501.00	85.40	531.00	55.10	4.81	1.99	4.95	1.60	51.70	14.50	0.26	7.80	3.95	5.83	10.40	
	x 12	20.20	12.00	6.00	25.70	5.40	1.69	589.00	99.60	623.00	64.70	4.78	1.97	4.92	1.59	61.30	17.10	0.26	13.20	3.30	4.79	8.60
	x 15	24.80	12.00	6.00	31.70	5.52	1.81	713.00	119.00	753.00	78.60	4.75	1.94	4.88	1.58	75.20	21.00	0.25	25.10	2.62	3.74	6.84
<b>150 x 90</b> x 10	18.20	12.00	6.00	23.20	5.00	2.04	533.00	146.00	591.00	88.30	4.80	2.51	5.05	1.95	53.30	21.00	0.36	8.30	3.89	5.56	9.03	
	x 12	21.60	12.00	6.00	27.50	5.08	2.12	627.00	171.00	694.00	104.00	4.78	2.49	5.02	1.94	63.30	24.80	0.36	14.10	3.24	4.58	7.50
	x 15	26.60	12.00	6.00	26.60	5.21	2.23	761.00	205.00	841.00	126.00	4.74	2.46	4.98	1.93	77.70	30.40	0.35	26.80	2.58	3.59	5.96

<b>200 x 100</b>	<b>x 10</b>	23.00	15.00	7.50	29.20	6.93	2.01	1219.00	210.00	1290.00	135.00	6.46	2.68	6.65	2.15	93.30	26.30	0.26	10.66	5.26	7.92	13.90
	<b>x 12</b>	27.30	15.00	7.50	34.80	7.03	2.10	1441.00	247.00	1530.00	159.00	6.43	2.67	6.63	2.14	111.00	31.30	0.26	18.00	4.42	6.57	11.50
	<b>x 15</b>	33.70	15.00	7.50	43.00	7.16	2.22	1759.00	299.00	1860.00	193.00	6.40	2.64	6.59	2.12	137.00	38.40	0.26	34.30	3.54	5.17	9.19
<b>200 x 150</b>	<b>x 12</b>	32.00	15.00	7.50	40.80	6.08	3.61	1653.00	803.00	2030.00	430.00	6.36	4.44	7.04	3.25	119.00	70.50	0.55	20.90	4.43	5.70	6.97
	<b>x 15</b>	39.60	15.00	7.50	50.50	6.21	3.73	2023.00	979.00	2480.00	526.00	6.33	4.40	7.00	3.23	119.00	86.90	0.55	39.90	3.53	4.50	5.55
	<b>x 18</b>	47.10	15.00	7.50	60.00	6.33	3.85	2376.00	1146.00	2904.00	618.00	6.29	4.37	6.97	3.22	174.00	103.00	0.55	67.90	2.93	3.72	4.60

