

Copper - C101 HC / CW004A

Flat Bar
Properties

Stock		Chemical Properties	
Size (in)	Weight/m (Kg)	Element	Chemical composition %
6 x 12mm	0.65	Others (Total)	0.0 - 0.10
3/8 x 1/8	0.27	Copper (Cu)	Balance
3/8 x 3/16	0.40		
1/2 x 1/16	0.18		
1/2 x 1/8	0.36		
1/2 x 3/16	0.54		
1/2 x 1/4	0.72		
1/2 x 3/8	1.08		
15 x 6mm	0.24		
5/8 x 1/16	0.22		
5/8 x 1/8	0.45		
5/8 x 3/16	0.67		
5/8 x 1/4	0.90		
5/8 x 1/2	1.79		
16 x 5mm	0.71		
18 x 12mm	1.92		
3/4 x 1/16	0.27		
3/4 x 1/8	0.54		
3/4 x 3/16	0.80		
3/4 x 1/4	1.08		
3/4 x 3/8	1.61		
7/8 x 1/8	0.63		
20 x 3mm	0.54		
20 x 5mm	0.89		
20 x 6mm	1.07		
20 x 8mm	1.43		
20 x 10mm	1.79		
25 x 3mm	0.67		
25 x 5mm	1.12		
25 x 6mm	1.34		
25 x 10mm	2.22		
25 x 12mm	2.67		
1 x 1/16	0.36		
1 x 1/8	0.72		
1 x 3/16	1.08		
1 x 1/4	1.44		
1 x 3/8	2.15		
1 x 1/2	2.86		
1 x 3/4	4.08		
30 x 3mm	0.80		
30 x 5mm	1.34		
30 x 6mm	1.79		

Mechanical Properties	
Property	Value
Proof stress	50 - 340 MPa
Tensile strength	200 - 400 MPa
Elongation	5 - 50%
Hardness Vickers	40 to 120 HV
Mechanical properties vary widely according to condition (Soft/HH etc)	

Physical Properties	
Property	Value
Density	8.92 g/cm ³
Melting point	1083°C
Thermal expansion	16.9 x 10 ⁻⁶ /K
Modulus of elasticity	117 GPa
Thermal conductivity	391.1 W/m.K
Electrical resistivity	100% IACS / 0.0171 x 10 ⁻⁶ Ω.m

30 x 8mm	2.14
30 x 10mm	2.67
1 1/4 x 1/8	0.90
1 1/4 x 3/16	1.35
1 1/4 x 3/8	2.69
1 1/4 x 1/2	3.59
1 1/4 x 5/8	4.48
1 1/2 x 1/8	1.08
1 1/2 x 3/16	1.61
1 1/2 x 1/4	2.15
1 1/2 x 5/16	2.67
1 1/2 x 3/8	3.23
1 1/2 x 1/2	4.30
1 1/2 x 3/4	6.44
40 x 3mm	1.07
40 x 5mm	1.79
40 x 6mm	2.14
40 x 8mm	2.86
40 x 10mm	3.57
45 x 10mm	4.02
1 3/4 x 3/16	1.89
1 3/4 x 1/4	2.51
50 x 5mm	2.23
50 x 6mm	2.68
50 x 6.3mm	2.81
50 x 8mm	3.57
50 x 10mm	4.45
50 x 12mm	5.34
2 x 1/8	1.44
2 x 3/16	2.15
2 x 1/4	2.87
2 x 5/16	3.59
2 x 3/8	4.31
2 x 1/2	5.73
2 x 3/4	8.60
2 x 1	11.50
2 1/4 x 1/4	3.23
60 x 5mm	2.68
60 x 6mm	3.22
60 x 8mm	4.28
60 x 10mm	5.34
63 x 5mm	3.22
63 x 12.5mm	1.79
2 1/2 x 3/16	2.68
2 1/2 x 1/4	3.23
2 1/2 x 3/8	5.37
2 1/2 x 1/2	7.17
65 x 6mm	3.48
75 x 6mm	4.02
75 x 10mm	6.67
76 x 6mm	4.06

3 x 1/8	2.14
3 x 1/4	4.30
3 x 3/8	6.56
3 x 1/2	8.60
3 x 3/4	12.80
3 x 1	17.20
3 x 1 1/2	25.80
80 x 5mm	3.56
80 x 6mm	4.26
80 x 8mm	5.72
80 x 10mm	7.12
80 x 12mm	8.93
3 1/4 x 1/4	4.65
3 1/2 x 1/4	5.01
3 1/2 x 1/2	10.02
100 x 5mm	5.36
100 x 6mm	5.36
100 x 6.3mm	5.63
100 x 8mm	7.12
100 x 10mm	8.93
100 x 12mm	10.71
4 x 1/8	2.86
4 x 1/4	5.73
4 x 3/8	8.60
4 x 1/2	11.46
4 x 1	22.50
4 x 1 1/2	34.00
4 x 2	45.00
120 x 10mm	10.72
5 x 1/4	7.17
5 x 1/2	14.30
5 x 3/4	21.72
140 x 10mm	12.46
150 x 6mm	8.02
150 x 10mm	13.39
150 x 12mm	16.07
6 x 1/8	4.48
6 x 1/4	8.96
160 x 10mm	14.28
200 x 6mm	10.72
200 x 10mm	17.80

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