

Copper - C101 HC / CW004A

Round Bar
Properties

Stock		Chemical Properties	
Dia (in)	Weight/m (Kg)	Element	Chemical composition %
3/16	0.16	Others (Total)	0.0 - 0.10
5mm	0.18	Copper (Cu)	Balance
1/4	0.28		
5/16	0.44	Mechanical Properties	
3/8	0.63	Property	Value
10mm	0.70	Proof stress	50 - 340 MPa
7/16	0.87	Tensile strength	200 - 400 MPa
12mm	1.05	Elongation	5 - 50%
1/2	1.13	Hardness Vickers	40 to 120 HV
9/16	1.42	Mechanical properties vary widely according to condition (Soft/HH etc)	
5/8	1.76		
16mm	1.78	Physical Properties	
11/16	2.02	Property	Value
3/4	2.53	Density	8.92 g/cm ³
20mm	2.79	Melting point	1083°C
13/16	2.96	Thermal expansion	16.9 x 10 ⁻⁶ /K
7/8	3.44	Modulus of elasticity	117 GPa
24mm	4.07	Thermal conductivity	391.1 W/m.K
25mm	4.49	Electrical resistivity	100% IACS / 0.0171 x 10 ⁻⁶ Ω.m
1	4.49		
1 1/8	5.70		
30mm	6.31		
1 3/16	6.34		
1 1/4	7.04		
1 3/8	8.51		
36mm	9.63		
38mm	10.00		
1 1/2	10.10		
40mm	11.22		
1 5/8	11.90		
1 3/4	13.80		
45mm	14.20		
50mm	17.47		
2	18.00		
2 1/4	23.00		
60mm	25.27		
2 1/2	27.00		
2 3/4	34.40		
70mm	34.40		
3	41.00		
80mm	44.93		
90mm	57.00		

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