

# Aluminium Bronze - BSB 23 / DTD197

## Round Bar

## Properties

Stock		Additional Information				
Dia (mm)	Weight/m (Kg)	BS B 23 has similarities to the following standard designations and specification				
25	3.72	BS 2872 / 4 CA104M				
35	7.32	DTD197A				
1 1/2	8.93	EN12163/5/7 CW307G				
40	9.53	DIN 17665 / 17672 CuAl10Ni5Fe4, WN 2.0966				
2	15.52					
55	18.40	<b>Chemical Properties</b>				
60	21.45	<b>Element</b>		<b>Chemical Composition %</b>		
2 1/2	24.25	Copper (Cu)		Balance		
2 3/4	29.36	Aluminium (Al)		10.0		
3	34.95	Nickel (Ni)		4.9		
80	38.22	Iron (Fe)		4.7		
90	48.29	Manganese (Mn)		0.3		
4	62.15	<b>Mechanical Properties</b>				
130	100.70	<b>Condition</b>	<b>Typical Size Range (mm)</b>	<b>0.2% Proof Rp0,2 (MPa)</b>	<b>UTS Rm (MPa)</b>	<b>Elongation 5.65 Sqr So (%)</b>
140	116.67	Extruded & Drawn	10 - 75	370 - 600	740 - 850	12 - 20
		Rolled	50 - 175	320 - 500	700 - 800	15 - 25
		Forged	> 175	320 - 500	700 - 800	15 - 25
						195 - 255
						180 - 240
						180 - 240
		<b>Physical Properties</b>				
		<b>Property</b>	<b>Value</b>			
		Young's Modulus	125 GPa			
		Density	7.6 g/cm <sup>3</sup>			
		Melting Range	1060 - 1075 °C			
		Coefficient of Expansion (20 - 300 °C)	17 10 <sup>-6</sup> /m °C			
		Thermal Conductivity	46 W/m K			
		Electrical Conductivity	8% IACS			
		Electrical Resistivity	0.216 10 <sup>-6</sup> Ω m			
		Relative Magnetic Permeability	1.5			
		Specific Heat	375 J/kg K			

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