

# Aluminium Bronze - NES 833 DEFSTAN 02-833

## Hexagon Bar

## Properties

Stock		Chemical Properties	
Dia (in)	Weight/m (Kg)	Element	Chemical composition %
13mm	1.11	Iron (Fe)	4.20 typical
17mm	1.90	Aluminium (Al)	9.30 typical
19mm	2.37	Manganese (Mn)	0.30 typical
22mm	3.18	Nickel (Ni)	4.20 typical
0.920	3.61	Copper (Cu)	Balance
1.937	3.72		
1.100	4.40		
27mm	4.90		
1.125	5.38		
30mm	5.91		
1.200	6.23		
1.300	7.28		
1.3125	7.30		
36mm	8.52		
1.480	9.19		
1.625	11.22		
1.600	11.81		
46mm	12.63		
1.860	14.76		
2.050	17.84		
2.220	21.46		

  

Mechanical Properties	
Property	Value
Proof stress	400 - 530 MPa
Tensile strength	600 - 760 Mpa
Elongation A50 mm	15 - 5%
Hardness Vickers	170 to 220 HV

  

Physical Properties	
Property	Value
Density	7.5 Kg/m <sup>3</sup>
Thermal Conductivity	42 W/m.K
Electrical Resistivity	0.172 x 10 <sup>-6</sup> Ω.m

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