

## Brass - CW614N / CZ121

### Round Bar

### Properties

Stock		Chemical Properties	
Dia (in)	Weight/m (Kg)	Element	Chemical Composition %
3mm	0.06	Copper (Cu)	58.00 typical
1/8	0.07	Lead (Pb)	3.0 typical
9/64	0.08	Zinc (Zn)	Balance
5/32	0.12		
4mm	0.11		
3/16	0.15		
5mm	0.17		
13/64	0.18		
7/32	0.21		
6mm	0.24		
1/4	0.27		
7mm	0.33		
9/32	0.34		
5/16	0.42		
8mm	0.43		
11/32	0.51		
9mm	0.53		
3/8	0.61		
10mm	0.67		
13/32	0.71		
11mm	0.81		
7/16	0.83		
15/32	0.95		
12mm	0.96		
1/2	1.08		
13mm	1.13		
17/32	1.21		
14mm	1.30		
9/16	1.36		
15mm	1.50		
5/8	1.67		
16mm	1.70		
21/32	1.84		
17mm	1.92		
11/16	2.02		
18mm	2.16		
3/4	2.41		
25/32	2.52		
20mm	2.66		
13/16	2.83		
21mm	2.93		
27/32	3.05		

  

Mechanical Properties	
Property	Value
Proof Stress	150 - 420 MPa
Tensile Strength	360 - 580 MPa
Elongation A50 mm	25 - 5%
Hardness Vickers	100 to 160 HV

  

Physical Properties	
Property	Value
Density	8.47 g/cm <sup>3</sup>
Melting Point	875°C
Thermal Expansion	20.9 x 10 <sup>-6</sup> /K
Modulus of Elasticity	97 GPa
Thermal Conductivity	123 W/ m.K
Electrical Resistivity	0.062 x 10 <sup>-6</sup> Ω.m

22mm	3.22
7/8	3.27
23mm	3.52
15/16	3.76
24mm	3.83
25mm	4.16
1	4.29
26mm	4.50
1 1/16	4.84
28mm	5.22
1 1/8	5.43
30mm	5.99
1 3/16	6.04
1 1/4	6.70
32mm	6.48
1 5/16	7.38
1 3/8	8.11
35mm	8.15
36mm	8.62
1 7/16	8.85
1 1/2	9.64
1 9/16	10.50
40mm	10.64
1 5/8	11.30
42mm	11.73
1 11/16	12.20
1 3/4	13.10
45mm	13.47
1 7/8	15.10
50mm	16.63
2	17.30
2 1/16	18.30
2 1/8	19.40
55mm	20.06
2 1/4	21.70
60mm	23.95
2 3/8	24.20
2 1/2	26.80
65mm	27.11
2 5/8	29.60
2 3/4	32.50
70mm	32.60
2 7/8	35.50
3	38.60
80mm	42.57
3 1/4	45.30
3 1/2	52.50
90mm	53.88
3 3/4	60.40
100mm	66.13
4	68.70

4 1/4	77.50
4 1/2	86.90
115mm	88.60
4 3/4	96.80
5	107.00
130mm	113.22
5 1/4	118.00
5 1/2	130.00
140mm	130.00
6	155.00
155mm	160.00
165mm	181.24
6 1/2	185.00
7	211.00
180mm	211.00
7 1/2	241.60
200mm	266.00
8	274.00
205mm	281.00
9	348.00
10	429.00

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