

Features

- **Exceptional Corrosion and Erosion Resistance:** The alloy performs particularly well in marine and high-chloride environments and is highly resistant to biofouling.
- **Excellent Wear and Abrasion Resistance:** This property makes it ideal for moving parts in machinery and other industrial applications where friction is a factor
- **Resistance to Shock Loading:** The material can withstand significant shock loading without failure.
- **Property Retention at Cryogenic Temperatures:** It maintains its mechanical properties even at sub-zero temperatures.
- **High Mechanical Strength:** It offers high tensile strength (ranging from approximately 600 to 760 MPa, depending on diameter) and toughness, making it suitable for high-stress applications.

RS PRO ALUMINIUM BRONZE (COPPER ALLOY) CA104 ROUND BAR L:1M X DIA: 4.1/2IN

RS Stock No: 0764052



RS PRO is the own brand of RS. The RS PRO Seal of Approval is your assurance of professional quality, a guarantee that every part is rigorously tested, inspected, and audited against demanding standards. Making RS PRO the Smart Choice for our customers.

Product Description

RS PRO Aluminium Bronze (Copper Alloy) Round Bar

The RS Pro Aluminium Bronze (Copper Alloy) CA104 round bar is a high-performance, wrought alloy prized for its combination of high strength, excellent corrosion resistance, and durability in demanding environments

Key Features:

- *Non-Sparking: A key safety feature for use in specific industrial environments.*
- *Good Weldability: Gas-shielded arc welding is rated as "excellent", and other methods like spot and butt welding are rated as "good".*
- *While durable, it has a low machinability rating (around 30% compared to free-machining brass), requiring sharp tools and careful handling to prevent work hardening and chipping.*

Applications:

- *Marine & Offshore: Marine hardware, ship propellers, pumps, and valves.*
- *Engineering & Industrial: Heavy-duty bushings and bearings, gears, high-strength fasteners, and engine components.*
- *Aerospace & Defence: Utilized in aerospace structural parts and weapons handling systems.*
- *Pumps and Valves: Used for components like impellers and valve seats.*
- *Gears: Suitable for heavy-load gears and worm wheels due to its strength and shock resistance.*
- *Hydraulic Components: Used in hydraulic valve components.*

General Specifications

Material	CA104 (CW307G)
Form	Round Bar
Length	1M
Diameter	4.1/2IN

Copper Rods, Bars, Tubes & Hexagonals



Mechanical Properties

Density	7.58 g/cm³
Thermal Conductivity	37.7 W/m.K
Tensile Strength	680 to 740 MPa (600 – 760 MPa typical range)
Hardness	120 to 220 HV

Similar Products

RS Code	Diameter	Length
0764163	2.1/2IN	1000MM
0764165	2.3/4IN	1000MM
0764166	2IN	1000MM
0764167	1.1/2IN	1000MM
0764168	2.1/2IN	1000MM
0764178	1.1/4IN	1000MM
0764051	3.1/2IN	1000MM
0764053	7IN	1000MM