

## Features

- High Lead Content (3%): Finely dispersed lead particles act as a natural lubricant and chip breaker, enabling the production of small, manageable chips during machining.
- Suited for high-speed lathe work, thread rolling, and knurling with excellent surface finishes.
- Corrosion Resistance: Offers high resistance to moisture and many chemicals, making it suitable for marine and industrial environments.
- Features good thermal conductivity (approx. 123 W/m.K) and electrical conductivity (28% IACS), ideal for electrical contacts and switch blocks.
- Aesthetic Finish: It polishes to a high, "gold-like" luster very easily, making it ideal for visible architectural trim or high-end furniture inlays

## RS PRO Brass CZ121 Square Bar, L:1000MM x D:0.3/8IN

RS Stock No: 0800485



RS Professionally Approved Products bring to you professional quality parts across all product categories. Our product range has been tested by engineers and provides a comparable quality to the leading brands without paying a premium price.

## Product Description

### **RS PRO Brass Square Bar (CZ121)**

*The RS PRO Brass Square Bar (CZ121) is a high-machinability, free-turning brass alloy bar commonly used for manufacturing intricate parts, decorative fittings, and structural supports. It is made of CZ121 (CW614N), which is the standard European grade for free-machining brass due to its 3% lead content, acting as a lubricant and chip breaker during high-speed machining*

#### **Key Features:**

- *Fabrication Versatility: While it has poor cold-working properties, it offers excellent hot formability and is easily joined via soldering or brazing.*
- *Exceptional Chip Control: The lead content ensures that during drilling or milling, the material breaks into small, manageable chips rather than long, dangerous swarf. This prevents tool clogging.*
- *High Tool Life: Because it is "free cutting," it creates very little friction. This allows you to run your lathe or CNC at higher speeds while significantly extending the life of your cutting tools.*
- *Natural Lubricity: The alloy acts as its own lubricant during the machining process, often reducing the need for heavy cutting fluids.*
- *Knurling Quality: It takes a knurled pattern (for grips or thumbscrews) exceptionally well without tearing or producing ragged edges.*

#### **Applications:**

- *Precision Engineering: High-speed machined components, nuts, bolts, and pins.*
- *Decorative & Architectural: Furniture trims, window frames, and architectural extrusions due to its "golden" polished finish.*
- *Electrical & Plumbing: Switch blocks, plug pins, and corrosion-resistant plumbing fittings.*

## General Specifications

<b>Material</b>	Brass
<b>Form</b>	Square Bar
<b>Grade</b>	CZ121
<b>Length</b>	1000MM

# Metal Bars & Metal Rods



Diameter	0.3/8IN
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## Mechanical Specifications

Melting Point	875°C to 890°C
Density	8.47 g/cm <sup>3</sup>
Hardness	130 to 150 HV
Tensile Strength	360–580 MPa

## Approvals

Compliance/Certifications	RoHS Compliant; meets BS2874/CZ121M and BS EN 12164/CW614N
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## Similar Products

RS Code	Form	Diameter	Length
0800481	Square Bar	0.1/8IN	1000MM
0800482	Square Bar	1 IN	1000MM
0800483	Square Bar	6 MM	1000MM
0800486	Square Bar	0.3/4 IN	1000MM