

## Features

- Excellent Machinability, the addition of bismuth and lead produces fine chips during machining, allowing for high-speed use in automatic lathes and achieving excellent surface finishes.
- High Mechanical Strength
- Lower lead content
- Suitability for Complex Parts: Its excellent machining characteristics allow to produce intricate and detailed components, such as fasteners, fittings, and automotive parts.
- Alternative to Brass, in some circumstances, due to its excellent machining characteristics, it can replace free-machining brass without requiring changes to existing tooling.

## RS PRO 2011 Aluminium Bar

**L:24IN X D:1/2 IN**

RS Stock No: 0747531



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 Alloy 2011 aluminium round bar is a high-strength, free-machining alloy used for precision components, with lead content typically below 0.2% to comply with environmental regulations like RoHS. This is a variation of the standard 2011 alloy, which has a higher lead content of 0.2-0.6%*

### Key Features

- *Versatility: It is well suited for applications requiring parts manufactured by repetition machining, such as automotive parts, fasteners, and fittings*
- *Corrosion Resistance: Corrosion resistance is considered low or poor, and items made from this alloy often require anodizing or other protective coatings for additional surface protection, particularly in harsh environments.*
- *Weldability: Welding is generally not recommended as the presence of lead and bismuth can lower solidification temperatures and lead to cracking.*
- *Compliance: The "low lead" variant meets the Restriction of Hazardous Substances (RoHS) directives, making it suitable for global markets with strict environmental regulations.*

### Applications

- *Automatic screw machine products*
- *Fasteners and fittings, such as industrial connectors and tube fittings*
- *Precision machine parts (e.g., clock, camera, and speedometer parts)*
- *Automotive components*
- *Ordnance*
- *Shafts, screws, and valves*

## General Specifications

<b>Material</b>	Aluminium
<b>Form</b>	Round Bar
<b>Grade</b>	2011
<b>Diameter</b>	1/2IN
<b>Length</b>	24IN

### Material Specifications

Density	2.82 g/cm <sup>3</sup>
Tensile Strength	365 MPa
Proof Stress	290 Min MPa (in T3 temper)
Thermal Expansion	22.9 x 10 <sup>-6</sup> /K
Melting Point	535-582 °C
Hardness	95 Brinell HB

### Similar Products

RS Code	Form	Diameter	Length
0747526	Round Bar	2IN	24IN
0747527	Round Bar	1IN	24IN
0747528	Round Bar	3IN	24IN
0747530	Round Bar	1 1/4IN	24IN
0747531	Round Bar	1/2IN	24IN
0747532	Round Bar	1 1/2IN	24IN
0747533	Round Bar	2 1/2IN	24IN