

## Aluminium Alloy QQ-A-200/3 T3 Bar

### SPECIFICATIONS

Commercial	2024
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A high strength alloy with, dependent upon temper, minimum Proof Stress up to 56 ksi / 385 Mpa and minimum Tensile Strength up to 70 ksi / 482 MPa

### CHEMICAL COMPOSITION

SAE AMS QQ-A-200/3 Alloy QQ-A-200/3	
Element	% Present
Copper (Cu)	3.8 - 4.9
Magnesium (Mg)	1.2 - 1.8
Manganese (Mn)	0.3 - 0.9
Silicon (Si)	0.5 max
Iron (Fe)	0.5 max
Zinc (Zn)	0.25 max
Titanium (Ti)	0.15 max
Others (Total)	0.15 max
Chromium (Cr)	0.1 max
Other (Each)	0.05 max
Aluminium (Al)	Balance

### ALLOY DESIGNATIONS

Aluminium alloy QQ-A-200/3 has similarities to the following standard designations and specifications:  
AMS 4164, AMS 4165

### TEMPER TYPES

Alloy QQ-A-200/3 is supplied in a range of tempers:

- T3 - Solution heat treated, cold worked and naturally aged
- T8511 - Solution heat treated, stress-relieved by stretching then artificially aged
- T3511 - Solution heat treated and stress-relieved by stretching. Equivalent to T4 condition.

### SUPPLIED FORMS

Alloy QQ-A-200/3 is supplied as Extruded Bar

- Bar
- Extrusions

### GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.74 g/cm <sup>3</sup>
Melting Point	640 °C
Thermal Expansion	23.1 x10 <sup>-6</sup> /K
Modulus of Elasticity	73 GPa
Thermal Conductivity	121 W/m.K
Electrical Resistivity	30 % IACS

### MECHANICAL PROPERTIES

These apply to QQ-A-200/3 bar in the T3 temper

Diameter (mm)	Proof Strength (Min)	Tensile Strength (Min)	Elongation % (Min)
Up to & incl. 6.25mm	290	393	12
Over 6.3mm up to & incl. 19mm	303	414	12
Over 19mm up to & incl. 38mm	317	448	10
Over 38mm	358	483	10

## CONTACT

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## REVISION HISTORY

Datasheet Updated	14 January 2019
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