

QQ-A-200/3 - AMS4164 - AMS4165 - 2024

Additional Information

Aluminium QQ-A-200/3 has similarities to the following standard designations and specifications

but may not be a direct equivalent:

AMS 4164

AMS 4165

Chemical Properties

Element	Chemical Composition %
Copper (Cu)	3.80 - 4.90
Magnesium (Mg)	1.20 - 1.80
Manganese (Mn)	0.30 - 0.90
Iron (Fe)	0.0 - 0.50
Silicon (Si)	0.0 - 0.50
Zinc (Zn)	0.0 - 0.25
Others (Total)	0.0 - 0.15
Titanium (Ti)	0.0 - 0.15
Chromium (Cr)	0.0 - 0.10
Other (Each)	0.0 - 0.05
Aluminium (Al)	Balance

Mechanical Properties

Dia (mm)	Proof Strength (Min)	Tensile Strength (Min)	Elongation (% Min)
Up to & incl. 6.3	290	392	12
Over 6.3 up to & incl. 19	303	413	12
Over 19 up to & incl. 38.1	317	448	10
Over 38.1	358	482	10

Physical Properties

Proper	Value
Density	2.79 g/cm ³
Melting Point	640 °C
Thermal Expansion	23.1 x 10 ⁻⁶ /K
Modulus of Elasticity	73 GPa
Thermal Conductivity	121 - 150 W/m.K
Electrical Resistivity	30 - 40% IACS

Temper Types

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

O - Soft

T3 - Solution heat treated, cold worked and naturally aged

T3510 - Solution heat treated and stress-relieved by stretching. Equivalent to T4 condition

T3511 - Solution heat treated and stress-relieved by stretching. Equivalent to T4 condition

T42 - Solution heat treated and naturally aged to a substantially stable condition

T81 - Solution heat treated, cold worked then artificially aged

T8510 - Solution heat treated, stress-relieved by stretching then artificially aged

Disclaimer

This data is indicative only and as such is not to be relied upon in place of the full specification. In particular, mechanical property requirements vary widely with temper, product and product dimensions. All information is based on our present knowledge and is given in good faith. No liability will be accepted by the Company in respect of any action taken by any third party in reliance thereon.

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