

SPECIFICATIONS

Commercial 7075T6

A high strength aluminium alloy offering good corrosion resistance.

CHEMICAL COMPOSITION

Alloy 7075	
Element	% Present
Zinc (Zn)	5.1 - 6.1
Magnesium (Mg)	2.1 - 2.9
Copper (Cu)	1.2 - 2
Iron (Fe)	0.5 max
Silicon (Si)	0.4 max
Manganese (Mn)	0.3 max
Chromium (Cr)	0.18 - 0.28
Titanium (Ti)	0.2 max
Others (Total)	0.15 max
Other (Each)	0.05 max
Aluminium (Al)	Balance

TEMPER TYPES

- T6 - Solution heat treated and artificially aged

SUPPLIED FORMS

- Bar
- Extrusions
- Rod

GENERIC PHYSICAL PROPERTIES

Property	Value
Density	2.80 g/cm ³
Melting Point	635 °C
Thermal Expansion	23.5 x10 ⁻⁶ /K
Modulus of Elasticity	72 GPa
Thermal Conductivity	130 W/m.K
Electrical Resistivity	40 % IACS

'Typical' Physical Properties are given

MECHANICAL PROPERTIES

7075T6
Drawn Bar
Up to 25mm

Property	Value
Proof Stress	480 Min MPa
Tensile Strength	540 Min MPa
Elongation A50 mm	7 Min %

These properties apply where diameter of round bar, or width of flat bar, or thickness of rectangular bar, or wall thickness of tube/profile is up to 25mm. These figures are usually also available for dimension up to 80mm.

For Extruded (and not then drawn) product the minimum values reduce as dimension increases - For full details please consult the relevant standards and specifications.

CONTACT

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REVISION HISTORY

Datasheet Updated	25 January 2019
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