



## Material - ISO 3522 Al Si12Cu1(Fe)

### Standard Specification for Aluminium and Aluminium Alloys

Group - Non-Ferrous Aluminium Alloy

Sub Group - ISO 3522 for Aluminium and Aluminium Alloys

Application - Intended for Valve, Pump, General Engineering, Automotive and Other Industries

Grade Belongs to the Industry - Casting

Chemical Composition			Heat Treatment															
Silicon	Si %	10.500 - 13.500	As-Cast															
Iron	Fe %	1.300 max.																
Copper	Cu %	0.700 - 1.200																
Manganese	Mn %	0.550 max.																
Magnesium	Mg %	0.350 max.																
Chromium	Cr %	0.100 max.																
Nickel	Ni %	0.300 max.																
Zinc	Zn %	0.550 max.																
Lead	Pb %	0.200 max.																
Tin	Sn %	0.100 max.																
Titanium	Ti %	0.200 max.																
Other	Ot%	0.250 max.																
Aluminium	Al %	Balance																
-	-	-	<table border="1"> <thead> <tr> <th colspan="2">Mechanical Properties</th> </tr> </thead> <tbody> <tr> <td>Tensile Strength in Mpa</td> <td>240 min.</td> </tr> <tr> <td>Yield Strength in Mpa</td> <td>140 min.</td> </tr> <tr> <td>Elongation in %</td> <td>1 min.</td> </tr> <tr> <td>Reduction of Area in %</td> <td>-</td> </tr> <tr> <td>Hardness in HBW</td> <td>70 min.</td> </tr> <tr> <td>Impact in Joule</td> <td>-</td> </tr> </tbody> </table>		Mechanical Properties		Tensile Strength in Mpa	240 min.	Yield Strength in Mpa	140 min.	Elongation in %	1 min.	Reduction of Area in %	-	Hardness in HBW	70 min.	Impact in Joule	-
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Cross Reference Table			
Material	Standard	Country	Grade Belong to the Industry
EN AC-47100	DIN	Germany	Casting
EN AC-47100	BS	British	Casting
EN AC-47100	ASME	USA	Casting
EN AC-47100	UNI	Italy	Casting
EN AC-47100	AFNOR NF	France	Casting
EN AC-47100	UNE	Spain	Casting
EN AC-47100	SFS	Finland	Casting

**Further any inquiry to discuss with Gravity Cast Pvt. Ltd. – Gravity Group of Companies team member Call on +918469160029, or email [marketing@gravitycastindia.com](mailto:marketing@gravitycastindia.com)**

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