

Aluminium wire

Classification

AWS A5.10	: ER4047
ISO 18273	: S Al 4047A (AlSi12 (A))

General description

Solid wire for welding of cast aluminium alloys containing up to 12% Si

Shielding gases (acc. EN 439)

GTAW	I1	Inert gas Ar (100%)
GMAW	I1	Inert gas Ar (100%)
	I3	Inert gas Ar+ >0-95% He

Chemical composition (w%). typical wire / rod

Al	Si	Ti	Fe	Zn	Mn	Cu
bal.	11.4	0.01	0.4	0.01	0.01	0.04

Mechanical properties, typical

	Process	Shielding gas	Condition	0.2% Proof strength (N/mm ²)	Tensile strength (N/mm ²)	Elongation (%)
Typical values	GTAW	I1	AW	80	180	5
	GMAW	I1	AW	80	180	6

Physical properties

Melting range	573 - 585°C
Density	approximately 2650 kg/m ³

Materials to be welded

Material type	Code	Type	W.Nr.	Int.Cast.Nr.
Aluminium cast alloys	DIN 1725-2	G-Al Si 12	3.3581	A 413.0
		G-Al Si 12 (Cu)	3.3583	
		G-Al Si 11		
		G-Al Si 10 Mg	3.2381	361.0
		G-Al Si 10 Mg (Cu)	3.2383	
		G-Al Si 9 Mg	3.2373	359.0
		G-Al Si 9 Cu 3	3.2161	
		G-Al Si 7 Mg	3.2371	356.0
		G-Al Si 6 Cu 4	3.2151	319.0

Packaging and available sizes

Process	Unit	Diameter (mm)	1.0	1.2	1.6	2.0	2.4	3.2	4.0
GTAW	5 kg tube					X	X	X	X
GMAW	7 kg spool B300		X	X	X				

Other sizes and packaging on request

LNT/LNM AISi12: rev. EN 20

Liability: All information in this data sheet is based on the best available knowledge, is subject to change without notice and can only be considered as suitable for general guidance **Fumes:** Consult information on Welding Safety Sheet, available upon request