Eleal® 4047

Aluminum electrode

Classification

ISO 18273 :Al 4047A (AlSi12(A))

Temperature Range

Pressure parts

Oxidation resistance

General description

Aluminum electrode. Especially for welding forged and cast aluminium alloys containing more than 7% Si as main alloying element. Also applicable as surfacing electrode. Good weldability, no porosity. Applicable when Al-properties are unknown.

Welding positions

ISO/ASME PA/1G PB/2F PF/3G up

Current type

DC electr. +

Chemical composition (w%),typical,all weld metal

Al	Si	Fe	Cu	Mn	Mg	Zn	Ti	Others
rest	11.0-12.0	0.4 max	0.05 max	0.10 max	0.05 max	0.10 max	0.10 max	0.15 max

Mechanical properties,all weld metal

	Condition	0.2% Yield Strength (N/mm^2)	Tensile Strength (N/mm^2)	Elongation (%)	Hardness HB
Typical values after welding	AW	30	80	30	

Packaging, available sizes and identification

	Diameter (mm)	2.5	3.2	4.0
	Length (mm)	350	350	350
Unit:	Pieces / unit (nominal)	227	152	102
Box	Net weight/unit (kg)	2.0	2.0	2.0

Identification Imprint: Eleal® 4047 Tip colour: none

Eleal® 4047 : rev.EN 20

Materials to be welded

Type	W.Nr.
G-AlSi 10Mg	3.2381
G-AlSi 12	3.2581

Calculation data

Size Diam.x length (mm)	Current range type (A)	Current	Arc time - per electrode at max.current - (s)*	Energy E (kJ)	Dep.rate H (kg/h)	Weight/ 1000 pcs. (kg)	Electrodes/ kg weldmetal (pcs)	kg Electrodes/ kg weldmetal (1/N)
2.5x350	60-90	DC+				8.8		
3.2x350	80-110	DC+				13.2		
4.0x350	100-140	DC+				19.6		

* stub end = 35 mm

Welding parameters,optimum fill passes

Welding positions Diameter (mm)	PA/1G Current (A)	PB/2F	PC/2G	PF/3G up	PE/4G	PF/5G up
2.5	80	80		75		
3.2	100	100		95		
4.0	130	130		125		

Application advice

If the thickness is more than 10 mm,it is advisable to preheat at 150-250°C