ELECTRODE AISi 12

International standards

Material No.	3.2585
EN ISO 18273	E AI 4047 (AISi 12)
DIN 1732	EL-AlSi12

Approvals ---

Characteristics Special coated electrode for AlSi cast alloy welding.

Welding instructions The welding area has to be thoroughly cleaned, the seam flanks should

shine metallic bright. Electrode AlSi 12 is easy-to-weld and to de-slag. In order to obtain a dense, non-porous weld, the electrode should be preferably welded in horizontal position, with a short arc and at high

speed.

Preheat the welding area of massive work-pieces to 150 – 250° C.

A single layer, without layering, is recommended.

Storage WARNING: Aluminium electrodes are very sensitive to humidity pick-up,

since their coating contains hygroscopic salts. Therefore, storage in a dry place is very important.

Electrodes which have picked-up humidity must be dried (see

"Rebaking").

Operating temperature ---

Base materials 3.2161 G-AlSi8Cu3 3.2383 G-AlSi10Mg(Cu)

3.2211 G-AlSi11 3.2581 G-AlSi12 3.2381 G-AlSi10Mg 3.2583 G-AlSi12(Cu)

Mechanical properties of all-weld metal

(typical values)

Tensile strength	Yield strength	Elongation
R _m N/mm²	R _{p0,2} N/mm²	A ₅ %
200	80	8

Weld metal analysis

(typical, wt. %)

Al	Si	Mn	Fe
Bal.	12	< 0,5	0,5

Current = +

Welding positions PA, PB, PC, PF

Rebaking 1 h, 120 °C + / - 10 °C (if required)

Dia./Length	Amperage (A)	Pcs./packet	Pcs./carton	kg/1000	kg/packet	kg/carton
2,5 x 350	50 - 80	222	889	9,0	2,0	8,0
3,2 x 350	70 - 100	143	571	14,0	2,0	8,0
4,0 x 350	100 - 130	87	348	23,0	2,0	8,0
5,0 x 350	120 - 150	56	223	35,9	2,0	8,0

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