

E 'Manual metal-arc welding'
ESAB-MÓR Kft Hungary

Signed by A-C Thorsson	Approved by Tony Dray/Christos Skodras	Reg no EN005193	Cancelling EN004748	Reg date 2010-02-17	Page 1 (2)
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REASON FOR ISSUE

Mechanical data up dated

GENERAL

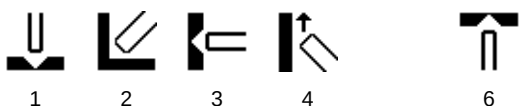
All positional rutile electrode for thin and medium thick plates. Good striking and restriking properties,. Suitable for tack welding and useful for bridging gaps.

Min AC OCV: 50

Alloy Type: Carbon Manganese

Polarity: AC, DC+-

Coating Type: Rutile

WELDING POSITIONS

CLASSIFICATIONS Electrode

SFA/AWS A5.1 E6013

CHEMICAL COMPOSITION

	All Weld Metal (%)	
	Min	Max
C	0.05	0.12
Si	0.30	0.70
Mn	0.25	0.75
P		0.030
S		0.030
Cr		0.19
Ni		0.29
Mo		0.19
V		0.049
Nb		0.049
Cu		0.29

MECHANICAL PROPERTIES OF WELD METAL

Properties	ISO		AWS
	As welded Min	Max	As welded Min
Rp0.2 (MPa)			330
ReL (MPa)	380		
Rm (MPa)	470	600	430
A4 (%)			17
A5 (%)	22		
Charpy V at 0°C (J)	47		

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ECONOMICS & CURRENT DATA

Dimension (mm) Ø x Length	Current (A)		W	η	N	B	H	T	U	Welding Positions
	Min	Max								
2.0 x 300	50	60	1.1	94	0.54	167	0.6	36	23	1,2,3
2.5 x 350	70	100	1.8	92	0.60	93	0.7	58	24	1,2,3,4,6
3.2 x 350	100	140	2.9	95	0.61	57	1.1	60	23	1,2,3,4,6
4.0 x 350	120	170	4.3	94	0.62	37	1.3	73	20	1,2,3,4,6
5.0 x 450	160	250	8.8	96	0.66	17	2.0	105	21	1,2,3,4

W = Weight (kg / 100 electrodes)

η = Efficiency (g weld metal x 100 / g core wire)

N = Effective value (kg weld metal / kg electrodes)

B = Changes (number of electrodes / kg weld metal)

H = Deposit rate at 90% of max current (kg weld metal / hour arc time)

T = Fusion time at 90% of max current (s / electrode)

U = Arc voltage (V)
