



Product Data Sheet

OK 46.16

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

Prepared by A-C Thorsson	Qualified by Tero Borg	Approved by J-P Ernoult	Reg no EN007309	Cancelling EN007038	Reg date 2016-07-21	Page 1 (2)
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REASON FOR ISSUE

Coating type amended.

GENERAL

All-round, all-positional rutile electrode for thin and medium thick plates. Good striking and restriking properties. A relatively thick coating makes the electrode weld quietly with little spatter.

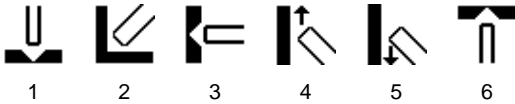
Min AC OCV: 50

Polarity: AC, DC+-

Alloy Type: Carbon Manganese

Coating Type: Rutile-cellulosic covering

WELDING POSITIONS



CLASSIFICATIONS Electrode

SFA/AWS A5.1 E7014
EN ISO 2560-A E 38 0 RC 11

APPROVALS

ABS	2
BV	2
CE	EN 13479
DB	10.039.37
DNV	2
GL	2
LR	2
RS	2
VdTÜV	02528

CHEMICAL COMPOSITION

All Weld Metal (%)

	Min	Max
C	0.05	0.12
Si	0.20	0.60
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



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MECHANICAL PROPERTIES OF WELD METAL

Properties	ISO			AWS
	As welded Min	Max	Typ	As welded Min
Rp0.2 (MPa)				400
ReL (MPa)	380		440	
Rm (MPa)	510	600	510	490
A4 (%)				17
A5 (%)	22		26	
Charpy V at 0°C (J)	47		60	
	Comments: EN standard requires Rm min 470 MPa and A5 min 20%.			Comments:

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	70	1.1	94	0.57	167	0.54	40	24	1,2,3,4,5,6
2.5 x 350	60	100	1.9	99	0.6	86	0.9	49	25	1,2,3,4,5,6
3.2 x 350	80	150	3.2	100	0.58	52	1.3	59	23	1,2,3,4,5,6
4.0 x 350	100	200	4.9	105	0.59	34	1.8	65	24	1,2,3,4,5,6

- 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)

OTHER DATA

Applications:

Manual metal arc welding of carbon steels and carbon-manganese steels.