



Product Data Sheet

OK 48.60

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

Prepared by P-O Oskarsson	Qualified by Tero Tolonen	Approved by Tony Dray	Reg no EN005966	Cancelling EN004393	Reg date 2012-12-28	Page 1 (2)
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REASON FOR ISSUE

RINA approval deleted

GENERAL

General - purpose basic DC + electrode for mild and low alloy steels .
Very good running characteristics .

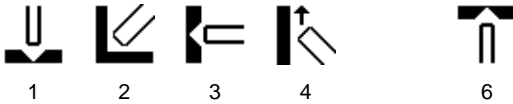
Polarity: DC+

Alloy Type: Carbon - Manganese

Coating Type: Lime Basic

Diff Hydrogen: <5.0 ml/100g

WELDING POSITIONS



CLASSIFICATIONS Electrode

SFA/AWS A5.1 E7018
EN ISO 2560-A E 42 4 B 42 H5

APPROVALS

ABS 3H5, 3Y
BV 3, 3YH5
CE EN 13479
DB 10.039.23
DNV 3 YH5
GL 3YH5
LR 3Y H5
VdTÜV 10094

CHEMICAL COMPOSITION

All Weld Metal (%)

	Min	Max
C	0.02	0.10
Si	0.30	0.70
Mn	0.90	1.40
P		0.020
S		0.015
Cr		0.20
Ni		0.30
Mo		0.20
V		0.050
Nb		0.050
Cu		0.30
Mn+Ni+Cr+Mo+V		1.75



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MECHANICAL PROPERTIES OF WELD METAL

Properties	ISO	
	As welded Min	Max
ReL (MPa)	420	
Rm (MPa)	510	640
A4-A5 (%)	22	
Charpy V at -20°C (J)	54	
Charpy V at -40°C (J)	47	
Comments: Elongation=A5		

ECONOMICS & CURRENT DATA

Dimension (mm) Ø x Length	Current (A)		W	η	N	B	H	T	U	Welding Positions
	Min	Max								
2.5 x 350	80	110	2.2	116	0.62	73	0.83	59	24	1,2,3,4,6
3.2 x 350	110	150	3.6	123	0.62	44	1.14	80	22	1,2,3,4,6
3.2 x 450	110	150	4.7	123	0.64	33	1.2	102	22	1,2,3,4,6
4.0 x 350	125	210	5.4	116	0.62	30	1.76	76	23	1,2,3,4,6
4.0 x 450	125	210	7.0	118	0.67	22	1.9	99	24	1,2,3,4,6
5.0 x 450	200	260	10.3	118	0.69	14	2.6	109	23	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)