



Product Data Sheet

OK 53.68

E 'Manual metal-arc welding'
ESAB Perstorp AB Sweden

Prepared by P-O Oskarsson	Qualified by Tero Borg	Approved by J-P Ernoult	Reg no EN007223	Cancelling EN007033	Reg date 2016-05-10	Page 1 (2)
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REASON FOR ISSUE

DNV-GL approval.

GENERAL

A high quality LMA electrode, particularly suitable for on site welding. The electrode yields a homogeneous , high quality weld metal with extra low content of impurities. It operates well on AC as well as DC positive and negative. DC negative is preferred , as it produces a small easily controlled weld pool, minimising the risk of burn through or undercutting.

The electrode is CTOD tested.

Min AC OCV: 65 V

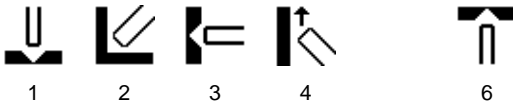
Polarity: AC, DC+(-)

Alloy Type: Carbon Manganese

Coating Type: Lime Basic

Diff Hydrogen: < 4.0 ml/100g

WELDING POSITIONS



CLASSIFICATIONS Electrode

SFA/AWS A5.1 E7016-1 H4 R
EN ISO 2560-A E 42 5 B 12 H5

APPROVALS

ABS 3Y H5
BV 3Y H5
CE EN 13479
DNV-GL 4 YH5
PRS 4Y H5
VdTÜV 06807

CHEMICAL COMPOSITION

All Weld Metal (%)

	Min	Max
C	0.04	0.09
Si	0.20	0.60
Mn	1.10	1.50
P		0.025
S		0.015
Cr		0.07
Ni		0.07
Mo		0.02
V		0.01
Nb		0.01
Cu		0.07
Al		0.01
Sn		0.01
Ti		0.04
Pb		0.01
As		0.05



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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)	420		470	
Rm (MPa)	530	640	550	490
A4 (%)				22
A5 (%)	22		30	
Charpy V at -45°C (J)			150	27
Charpy V at -50°C (J)	47		140	
	Comments: EN standard requires Rm min 500 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								
2.5 x 350	55	85	1.9	100	0.58	90.0	0.80	50	22	1,2,3,4,6
3.2 x 450	80	130	4.0	100	0.61	41.0	1.20	73	22	1,2,3,4,6
4.0 x 450	110	170	5.9	100	0.65	26.0	1.70	83	22	1,2,3,4,6

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)