



Product Data Sheet

OK Femax 33.80

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

Prepared by A-C Thorsson	Qualified by Tero Borg	Approved by J-P Ernoult	Reg no EN007073	Cancelling EN006818	Reg date 2016-02-16	Page 1 (2)
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REASON FOR ISSUE

Typical mechanical values added.

GENERAL

High-recovery rutile electrode for high productivity welding of fillets in the horizontal-vertical position. Particularly suitable for welding thick plates and for long run-out lengths. Good bead appearance. Easy slag removal.

Min AC OCV: 50
Polarity: AC, DC+-

Alloy Type: Carbon steel
Coating Type: Rutile

WELDING POSITIONS



CLASSIFICATIONS Electrode

SFA/AWS A5.1 E7024
EN ISO 2560-A E 42 0 RR 73

APPROVALS

ABS	2Y
ABS	E7024
BV	2Y
CE	EN 13479
CWB	CSA W48: E4924
DB	10.039.28
DNV	2Y
GL	2Y
LR	2Ym
PRS	2Y
RINA	2
RS	2Y
VdTÜV	00634

CHEMICAL COMPOSITION

All Weld Metal (%)

	Min	Max
C		0.12
Si	0.25	0.65
Mn	0.45	0.95
P		0.030
S		0.020
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)	420		460	
Rm (MPa)	510	640	550	490
A4 (%)				17
A5 (%)	22		27	
Charpy V at 0°C (J)	47		60	
	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								
3.2 x 450	130	170	6.8	180	0.68	21.0	2.50	69	28	1,2
4.0 x 450	180	230	11.1	180	0.68	13.5	3.80	69	30	1,2
5.0 x 450	250	340	16.3	180	0.67	9.1	5.80	68	30	1,2
6.0 x 450	300	430	22.7	176	0.68	6.4	7.1	79	35	1,2

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)