



Product Data Sheet

FILARC KV3L

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

Prepared by P-O Osakarsson	Qualified by Tero Borg	Approved by J-P Ernoult	Reg no EN007157	Cancelling EN006472	Reg date 2016-03-22	Page 1 (2)
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REASON FOR ISSUE

BV approval deleted.

GENERAL

Application: All position basic coated electrode with max 0.05% C, for welding creep resisting steels alloyed with 2.25Cr/1Mo, such as 10 CrMo 9 10. The FILARC KV3L is also recommended for welding 0.5Cr/0.5Mo/0.025V steels. The chemical composition of the weld metal guarantees a low sensitivity to solidification cracking, as a result of Mn/Si control. A minimum preheat and interpass temperature of 165-190 °C, is recommended for all material thicknesses.

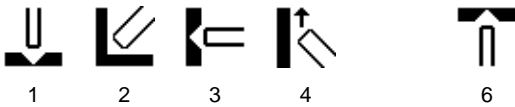
Polarity: DC+

Alloy Type: Low alloyed

Coating Type: Basic

Diff Hydrogen: < 5.0 ml/100g

WELDING POSITIONS



CLASSIFICATIONS Electrode

SFA/AWS A5.5

E8015-B3L

EN ISO 3580-A

E CrMo2L B 2 2 H5

APPROVALS

VdTÜV

APPROVALS (SPECIFIC)

Seproz

UNA 272581

CHEMICAL COMPOSITION

All Weld Metal (%)

	Min	Max
C	0.03	0.05
Si		0.40
Mn	0.50	0.90
P		0.015
S		0.015
Cr	2.00	2.50
Ni		0.29
Mo	0.90	1.20
Nb		0.009
Cu		0.10
Sn		0.02
Pb		0.01
As		0.01
Sb		0.01



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MECHANICAL PROPERTIES OF WELD METAL

Properties	ISO	AWS
	PWHT 690°C 1h Min	PWHT 690°C 1h Min
Rp0.2 (MPa)		460
ReL (MPa)	400	
Rm (MPa)	500	550
A4 (%)		17
A5 (%)	18	
Charpy V at 20°C (J)	47	

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	65	95	2.3	100	0.57	76.9	0.7	63	24	1,2,3,4,6
3.2 x 350	90	130	3.6	100	0.55	50.0	1.0	70	24	1,2,3,4,6
4.0 x 350	125	165	5.1	100	0.57	34.5	1.3	80	24	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)