

FILARC Product Data Sheet

FILARC 98S

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 EN007363	Cancelling EN007045	Reg date 2016-08-22	Page 1 (2)
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REASON FOR ISSUE

Alloy and coating type amended.

GENERAL

All positional low hydrogen electrode for welding of higher strength steels, depositing weld metal with a minimum yield strength of 550 N/mm² after stress relieving.

Min AC OCV: 65V

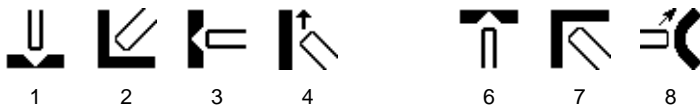
Polarity: AC, DC+-

Alloy Type: Low alloyed (0.9 % Ni, 0.3 % Mo)

Coating Type: Basic covering

Diff Hydrogen: < 5.0 ml/100g

WELDING POSITIONS



CLASSIFICATIONS Electrode

SFA/AWS A5.5

E9018-G

EN ISO 18275-A

E 55 6 Mn1NiMo B T 32 H5

APPROVALS

ABS

E9018-G

NAKS/HAKC

3.2 - 4.0 mm

APPROVALS (SPECIFIC)

Sepro

UNA 272581

APPROVAL COMMENT

NAKS/HAKC: Valid for lot numbers starting with SB

CHEMICAL COMPOSITION

All Weld Metal (%)

	Min	Max
C	0.035	0.075
Si	0.20	0.50
Mn	1.6	2.0
P		0.018
S		0.015
Cr		0.10
Ni	0.6	0.99
Mo	0.3	0.6
V		0.03
Nb		0.02
Cu		0.1

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MECHANICAL PROPERTIES OF WELD METAL

Properties	ISO			AWS
	Min	Max	Typ	Min
	PWHT 580°C 1h			Stress relieved 620°C 1h
Rp0.2 (MPa)				530
ReL (MPa)	550		650	
Rm (MPa)	610	780	710	620
A4 (%)				17
A5 (%)	18		21	
Charpy V at -50°C (J)			80	
Charpy V at -60°C (J)	47		60	

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	2.0	101	0.60	83.3	0.72	60	24.4	1,2,3,4,6,7,8
3.2 x 350	80	140	3.2	92	0.55	56.6	0.94	68	23.3	1,2,3,4,6,7,8
4.0 x 450	120	180	6.9	105	0.60	24.4	1.43	103	24.0	1,2,3,4,6,7,8

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)