

# FILARC Product Data Sheet

# FILARC 118

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 EN007046	Cancelling EN006777	Reg date 2016-02-11	Page 1 (2)
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## REASON FOR ISSUE

Typical mechanical values added.

## GENERAL

All position basic AC/DC electrode with 120% recovery for welding steels with min 680 N/mm<sup>2</sup> yield strength; e.g NAXTRA 70, T1, 80 HLES, HY80 and HY100.

Use shortest possible arc. Weave slowly when permitted. A slight weave can be used for standing fillet welds. Use DC- for root runs

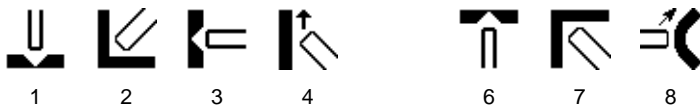
**Min AC OCV:** 65V

**Polarity:** AC, DC+-

**Alloy Type:** C, Mn, 2%Ni, 0.4%Mo

**Coating Type:** Basic

## WELDING POSITIONS



## CLASSIFICATIONS Electrode

SFA/AWS A5.5 E11018-M  
EN ISO 18275-A E 69 5 Mn2NiMo B 32 H5

## APPROVALS

ABS AWS, E11018-M  
BV 4Y62 H5  
CE EN 13479  
DNV 4Y62 H5  
LR 4Y62 H5  
MoD (N) Q1N, HY80

## APPROVALS (SPECIFIC)

Seproz UNA 272581

## CHEMICAL COMPOSITION

### All Weld Metal (%)

	Min	Max
C	0.040	0.080
Si	0.20	0.60
Mn	1.40	1.80
P		0.020
S		0.020
Cr		0.19
Ni	1.80	2.50
Mo	0.30	0.50
V		0.02
Nb		0.01
Cu		0.05
Al		0.008
Sn		0.01
Ti		0.03
Pb		0.01
As		0.02

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## MECHANICAL PROPERTIES OF WELD METAL

Properties	ISO			AWS	
	As welded Min	Max	Typ	As welded Min	Max
Rp0.2 (N/mm <sup>2</sup> )				680	760
ReL (MPa)	690		740		
Rm (MPa)	760	960	800		
Rm (N/mm <sup>2</sup> )				760	
A4 (%)				20	
A5 (%)	17		22		
Charpy V at -50°C (J)	47		80	27	

## 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	105	2.0	98.8	0.61	83.3	0.93	46.6	25.3	1,2,3,4,6,7,8
3.2 x 350	90	140	3.87	110.9	0.56	46.2	1.21	64.3	22.8	1,2,3,4,6,7,8
4.0 x 450	110	180	7.07	110.4	0.61	23.1	1.72	90.0	22.8	1,2,3,4,6,7,8
5.0 x 450	190	280	11	113.3	0.63	13.5	2.75	90.3	24.6	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)