Product Data Sheet

OK 74.70

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

Prepared by	Qualified by	Approved by	Reg no	Cancelling	Reg date	Page
A-C Thorsson	Tero Borg	J-P Ernoult	EN007052	EN006775	2016-02-15	1 (2)

REASON FOR ISSUE

Typical mechanical values amended.

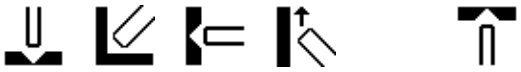
GENERAL

OK 74.70 is used for welding high tensile low alloyed steels. The electrode is designed for welding different constructions including pipelines made from pipe steel in grades API 5LX60, 5LX65, 5LX70.

Polarity: DC+(-)

Alloy Type: 0.5% Mo
Coating Type: Lime Basic
Diff Hydrogen: <5.0 ml/100g

WELDING POSITIONS



1 2 3 4 6

CLASSIFICATIONS Electrode

SFA/AWS A5.5	E8018-G
EN ISO 2560-A	E 50 4 Z B 42 H5

APPROVALS

NAKS/HAKC 3.2-4.0 mm

APPROVAL COMMENT

NAKS/HAKC: Valid for lot numbers starting with SB

CHEMICAL COMPOSITION

All Weld Metal (%)

	Min	Max
C	0.06	0.10
Si	0.25	0.50
Mn	1.25	1.60
P		0.015
S		0.015
Cr		0.19
Ni		0.29
Mo	0.35	0.50
V		0.049
Nb		0.049
Cu		0.29

MECHANICAL PROPERTIES OF WELD METAL

	ISO			AWS
	As welded			Stress relieved 620°C 1h
Properties	**Min**	**Max**	**Typ**	**Min**
Rp0.2 (MPa)	500		550	460
Rm (MPa)	560	720	650	550
A4 (%)				19
A5 (%)	18		25	
Charpy V at -20°C (J)			120	
Charpy V at -40°C (J)	47		90	
	Comments:			Comments: Temperature is not defined in AWS.

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ECONOMICS & CURRENT DATA

Dimension (mm)	Current (A)		W	η	N	B	H	T	U	Welding
Ø x Length	Min	Max								Positions
3.2 x 350	80	140	3.4	104	0.58	50	1.14	63	23	1,2,3,4,6
3.2 x 450	80	140	6.6	104	0.61	25	1.6	91	23	1,2,3,4,6
4.0 x 450	90	190	6.7	109	0.63	24	1.66	93	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)