

Lincox 309L

CLASSIFICATION

AWS A5.4	E309L-17	A-Nr	8	Mat-Nr	1.4332
ISO 3581-A	E 23 12 L R 3 2	F-Nr	5		
		9606 FM	5		

TEMPERATURE RANGE

Pressurized parts : -20...+300°C
 Oxidation resistance : n.a

GENERAL DESCRIPTION

A rutile all position CrNi over-alloyed buffer electrode
 Suitable for welding stainless steel to mild and low alloy steels, stainless steel cladding
 Smooth weld appearance
 Minimum spatter and high resistance to porosity
 Good side wall wetting, no undercut
 Easy slag removal
 Weldable on AC and DC
 Also available in PROTECH™ Vacuum Pack

WELDING POSITIONS (ISO/ASME)


PA/1G



PB/2F



PC/2G



PF/3Gu



PE/4G

CURRENT TYPE

AC/DC +

APPROVALS

ABS	DNV	TÜV
+	Pending	+

CHEMICAL COMPOSITION (W%), TYPICAL, ALL WELD METAL

C	Mn	Si	Cr	Ni	P	S	FN (acc.WRC 1992)
≤0.040	0.9	0.9	23.5	12.2	≤0.025	≤0.025	5-20

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Condition	Yield strength	Tensile strength	Elongation	Impact ISO-V(J)
		(N/mm ²)	(N/mm ²)	(%)	+20°C
Typical values	AW	≥400	≥520	≥30	≥47

PACKAGING AND AVAILABLE SIZES

	Diameter (mm)	2.5	3.2	4.0
	Length (mm)	350	350	450
Carton + PE foil	Pieces / unit	90	55	40
	Net weight/unit (kg)	2.0	2.0	2.9
Protech™	Pieces / unit	90	55	40
	Net weight/unit (kg)	2.0	2.0	2.9

Identification Imprint: 309L-17 / LINCOX 309 L Tip Color: none

Lincox309L:rev.C-EN03-12/02/18

Lincoln 309L

EXAMPLES OF MATERIALS TO BE WELDED

Steel grades	EN 10088-1/-2	Mat. Nr	ASTM/ACI A240/A312/A351	UNS
Corrosion resistant cladsteels				
	X2CrNi18-10	1.4311	(TP)304LN	S30453
	X2CrNi19-11	1.4306	(TP)304L	S30403
			CF-3	J92500
	X4CrNi18-10	1.4301	(TP)304	S30400

Dissimilar metals (mild and low alloy steel to CrNi or CrNiMo stainless steel)

Build-up welding on mild and low alloy steel

Bufferlayer CrNi-cladsteel

WELDING PARAMETERS, OPTIMUM FILL PASSES

Diameter (mm)	Welding positions				
	PA/1G	PB/2F	PC/2G	PF/3Gup	PE/4G
2.5	75 A	75 A	70 A	65 A	70 A
3.2	100 A	100 A	90 A	80 A	90 A
4.0	130 A	130 A	120 A	110 A	