Linox 309L

PROTECH™ VACUUM PACK

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)

CURRENT TYPE

AC/DC +

APPROVALS

ABS	DNV	TÜV
+	Pending	+

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

C	Mn	Si	Cr	Ni	FN (acc.WRC 1992)
0.025	0.7	0.7	24.0	12.5	8-20

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Condition	0.2% Proof strength (N/mm²)	Tensile strength (N/mm²)	Elongation (%)	Impact ISO-V(J) +20°C	Impact ISO-V(J) -20°C
Required: AWS A5.4		not required	min. 520	min. 30	not required	
ISO 3581-A		min. 320	min. 510	min. 25	not required	
Typical values	AW	500	620	40	55	40

PACKAGING AND AVAILABLE SIZES

	Diameter (mm)	2.5	3.2	4.0
	Length (mm)	350	350	450
Carton + PE foil	**Pieces / unit**	120	80	58
	Net weight/unit (kg)	2.59	2.9	4.12
Protech™	**Pieces / unit**	110	69	45
	Net weight/unit (kg)	2.37	2.5	3.2

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

Linox 309L: rev. C-EN02-01/02/16

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EXAMPLES OF MATERIALS TO BE WELDED

Steel grades	EN 10088-1/-2	Mat. Nr	ASTM/ACI A240/A312/A351	UNS
Corrosion resistant cladsteels				
	X2CrNiN18-10	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	70A	70A	70A	60A	60A
3.2	100A	100A	100A	70A	70A
4.0	140A	140A	140A		