

LincoX 316L

SMAW

CLASSIFICATION

AWS A5.4	E316L-17	A-Nr	8	Mat-Nr	1.4430
ISO 3581-A	E 19 12 3 L R 3 2	F-Nr	5		
		9606 FM	5		

TEMPERATURE RANGE

Pressurized parts :-120...+350°C
 Oxidation resistance : n.a

GENERAL DESCRIPTION

A rutile-basic stainless steel electrode for 316L or equivalent steels
 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	Mo	FN (acc.WRC 1992)
0.025	0.8	0.8	18.0	12.0	2.5	3-10

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Condition	0.2% Proof strength [N/mm ²]	Tensile strength [N/mm ²]	Elongation [%]	Impact ISO-V(J)	
				+20°C	-105°C
Required: AWS A5.4 ISO 3581-A Typical values	not required min. 320 480	min. 490 min. 510 600	min. 30 min. 25 42	not required not required 70	40

PACKAGING AND AVAILABLE SIZES

	Diameter (mm)	Length (mm)	Available diameters				
			2.0	2.5	3.2	4.0	5.0
Carton + PE foil	Pieces / unit		196	120	80	55	31
	Net weight/unit (kg)		2.3	2.53	2.78	3.75	3.41
Protech™	Pieces / unit		160	110	69	46	28
	Net weight/unit (kg)		1.84	2.32	2.4	3.12	3.08

Identification Imprint: 316L-17 / LINOX 316 L Tip Color: none

LincoX316L: rev. C-EN03-01/02/16

All information in this data sheet is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.eu for any updated information.
 Fumes: Safety Data Sheets (SDS) are available on our website.

Lincoln 316L

EXAMPLES OF MATERIALS TO BE WELDED

Steel grades	EN 10088-1/-2	EN 10213-4	Mat. Nr	ASTM/ACI A240/A312/A351	UNS
Extra low carbon [C <0.03%]					
	X2CrNiMo17-12-2		1.4404	[TP]316L CF-3M	S31603 J92800
	X2CrNiMo18-14-3		1.4435	[TP]316L	S31603
Medium carbon [C >0.03%]					
	X4CrNiMo17-12-2		1.4401	[TP]316	S31600
	X4CrNiMo17-13-3		1.4436		
		GX5CrNiMo19-11	1.4408	CF 8M	J92900
Ti-, Nb stabilized					
	X6CrNiMoTi17-12-2		1.4571	316Ti	S31635
	X6CrNiMoNb17-12-2		1.4580	316Cb	S31640
	X6CrNiNb18-10		1.4550	[TP]347	S34700
		GX5CrNiNb19-10	1.4552	CF-8C	J92710

SMAW

WELDING PARAMETERS, OPTIMUM FILL PASSES

Diameter (mm)	Welding positions				
	PA/1G	PB/2F	PC/2G	PF/3Gup	PE/4G
2.0	40A	45A	45A	40A	40A
2.5	70A	70A	70A	60A	60A
3.2	100A	100A	100A	70A	70A
4.0	140A	140A	140A		
5.0	180A	180A			