

# Linux P 316L

## CLASSIFICATION

AWS A5.4	E316L-16	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 stainless steel electrode for 316L or equivalent steels  
 All positional welding including fixed pipework  
 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



PH/5Gu

## CURRENT TYPE

AC / DC +

## APPROVALS

ABS	TÜV
+	+

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

C	Mn	Si	Cr	Ni	Mo	FN [acc.WRC 1992]
0.025	0.8	0.6	19.0	12.0	2.5	3-10

## MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Condition	Yield strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)	Impact ISO-V(J)	
				+20°C	-105°C
Required: AWS A5.4 ISO 3581-A Typical values	not required min. 320 480	min. 520 min. 510 580	min. 30 min. 25 41	not required not required 70	not required not required 40

## PACKAGING AND AVAILABLE SIZES

	Diameter (mm) Length (mm)	2.0	2.5	3.2	4.0
		300	350	350	450
Carton + PE foil	Pieces / unit	195	95	60	60
	Net weight/unit (kg)	2.15	1.9	2.0	3.62
Protech™	Pieces / unit	159	95	60	46
	Net weight/unit (kg)	1.75	1.9	2.0	3.05

Identification Imprint: 316L-16 / LINOX P 316L Tip Color: none

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## EXAMPLES OF MATERIALS TO BE WELDED

Steel grades	EN 10088-1/-2	EN 10213-4	Mat. Nr	ASTM/ACI A240/A312/A351	UNS
<b>Extra low carbon [C &lt;0.03%]</b>					
	X2CrNiMo17-12-2		1.4404	(TP)316L CF-3M	S31603 J92800
	X2CrNiMo18-14-3		1.4435	(TP)316L	S31603
<b>Medium carbon [C &gt;0.03%]</b>					
	X4CrNiMo17-12-2		1.4401	(TP)316	S31600
	X4CrNiMo17-13-3		1.4436		
		GX5CrNiMo19-11	1.4408	CF 8M	J92900
<b>Ti-, Nb stabilized</b>					
	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

## WELDING PARAMETERS, OPTIMUM FILL PASSES

Diameter (mm)	Welding positions				
	PA/1G	PB/2F	PC/2G	PF/3Gup	PE/4G
2.0	50 A	50 A	45 A	40 A	50 A
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	
5.0	180 A	180 A			