

**Classifications**

EN ISO 3581-A:2012	: E 23 12 L R 12	KS D 7014	: E309L-16
EN ISO 3581-B:2012	: ES309L-16	JIS Z 3221	: ES309L-16
AWS A5.4-06	: E309L-16		

**Description**

- Covering is lime titania type for welding of 22%Cr-12%Ni stainless steel and heat-resisting castings, clad side of type 304 clad steels. Welding of dissimilar steels such as Cr-Mo steel or carbon steel to stainless steel.
- As its deposited weld metal has austenitic structure, with suitable ferrite, crack resistance is good and intergranular corrosion resistance is superior to that of E309 type.
- Redry the electrode at 250~350°C for 30~60 minutes prior to use.

**Welding positions****Typical chemical composition of all-weld metal (%)**

C	Si	Mn	P	S	Ni	Cr	Mo	Cu	FN
0.03	0.84	0.76	0.027	0.013	12.97	23.04	0.08	0.09	11.1

\* FN : WRC 1992

**Typical mechanical properties of all-weld metal**

	Y.S (0.2%OS) (MPa)	T.S (MPa)	EI. (%)	Remarks
AWS A5.4		min. 520	min. 30	
EN ISO 3581-A	min. 320	min. 510	min. 25	
Example	480	600	40	AW

\* AW : As-Welded

**Sizes available and recommended currents (AC or DC +)**

Dia.	(mm)	2.0	2.6	3.2	4.0	5.0
Length	(mm)	250	300	350	350	350
Amp. (A)	F V · OH	30~50 25~45	50~80 45~60	80~110 70~90	110~150 90~130	140~180

**Approvals**

ABS

E309L-16

\* Others : CWB, CE