



# EI 309L



Stainless Steel Flux Cored Welding Electrode - **AWS A5.4/ASME SFA-A5.4 2012: E309L-16**

### Key Benefits

- Excellent welding properties and weld bead appearance.
- Easy arc start.
- Low carbon content reducing risk for intergranular corrosion.
- Suitable for both AC and DC currents.

### Conformity and Approvals

AWS A5.4 2012:	E309L-16
ASME SFA-A5.4 2012:	E309L-16
CWB/CSA W-48-14:	E309L-16
EN ISO 3581-A:	E 19 23 12 L R 12

### Typical applications

- Austenitic Ni-Cr-Mo stainless steels
- Excellent resistance to pitting and intergranular corrosion.
- 1.4436/ASTM steels.
- Joining of dissimilar metals.

### Welding Positions



### Wire Composition as per AWS A5.4/A5.4M 2012: E309L-16

<b>Requirements – AWS E309L-16</b> Typical Wire Composition	<b>%C</b>	<b>%Mn</b>	<b>%Si</b>	<b>%S</b>	<b>%P</b>
	0.04 max. 0.026	0.5-2.5 1.23	1.00 max. 0.92	0.03 max. 0.009	0.04 max. 0.017
<b>Requirements - AWS E309L-16</b> Typical Wire Composition	<b>%Cr</b>	<b>%Ni</b>	<b>%Mo</b>	<b>%Cu</b>	<b>%V</b>
	22.0-25.0 22.82	12.0-14.0 12.75	0.75 max. 0.01	0.75 max. 0.005	- 0.037

### Mechanical Properties

	<b>Yield Strength</b> MPa (ksi)	<b>Tensile Strength</b> MPa (ksi)	<b>Elongation</b> %	<b>Ferrite Number</b> (FN)
<b>Requirements</b> As welded	Not specified	490 (70) min.	30 min.	Not specified
<b>Typical Results (all weld metal)</b> As Welded	450 (65)	600 (87)	35	8 - 13

## Ordering Information

Product Number	Product/AWS Specification	Dimension mm/inches	Single Pack Weight kg/lb	Box Weight kg/lb
1302508M32	EI-309L (E309L-16)	2.50 x 300 mm (3/32" x 12")	2.5 kg (5.5 lb)	7.5 kg (16.5 lb)
1302516M35	EI-309L (E309L-16)	3.25 x 350 mm (1/8" x 14")	5.0 kg (11.0 lb)	15.0 kg (33.0 lb)
1302520M35	EI-309L (E309L-16)	4.00 x 350 mm (5/32" x 14")	5.0 kg (11.0 lb)	15.0 kg (33.0 lb)
1302528M35	EI-309L (E309L-16)	5.00 x 350 mm (3/16" x 14")	5.0 kg (11.0 lb)	15.0 kg (33.0 lb)



Single Tube



Box