LINCOLN® ER316/316LCF

Stainless ▪ AWS ER316/316L

KEY FEATURES

- Controlled Low Ferrite (Range 3-6)
- Charpy V-Notch test results capable of exceeding 27 J (20 ft▪lbf) @ -196°C (-320°F)
- Exceeds 15 mils (0.38 mm) of lateral expansion @ -196°C (-320°F)
- Q2 Lot® - Certificates showing actual wire composition, ferrite number, and impact properties tested at -196°C (-320°F) available online
- Batch Managed Inventory
- Ink jet printing identification on entire length of electrode

WELDING POSITIONS

All

CONFORMANCES

AWS A5.9:	ER316/316L
ASME SFA-A5.9:	ER316/316L

TYPICAL APPLICATIONS

- LNG Storage
- Cryogenic Vessels and Piping

SHIELDING GAS

100% Argon

TYPICAL BASE METALS

316L stainless steels

DIAMETERS / PACKAGING

Diameter in (mm)	10 lb (4.5 kg) Tube 30 lb (13.6 kg) Master Carton
1/16 (1.6) 3/32 (2.4) 1/8 (3.2)	ED034927 ED034928 ED034929

MECHANICAL PROPERTIES[1]

	Yield Strength[2] MPa (ksi)	Tensile Strength MPa (ksi)	Elongation %	Charpy V-Notch J (ft▪lbf) -196°C (-320°F)	Lateral Expansion mils (mm) -196°C (-320°F)
Typical Performance[3] As-Welded with 100% Ar	430 (63)	570 (83)	42	70 (95)	42 (1.1)

[1] Typical all weld metal [2] Measured with 0.2% offset [3] See test results disclaimer

IMPORTANT: SPECIAL VENTILATION AND/OR EXHAUST REQUIRED
Fumes from the normal use of some welding products can contain significant quantities of components - such as chromium and manganese - which can lower the 5.0 mg/m³ maximum exposure guideline for general welding fume. BEFORE USE, READ AND UNDERSTAND THE SAFETY DATA SHEET (SDS) FOR THIS PRODUCT AND SPECIFIC INFORMATION PRINTED ON THE PRODUCT CONTAINER.

Material Safety Data Sheets (MSDS) and Certificates of Conformance are available on our website at www.lincolnelectric.com

TEST RESULTS

Test results for mechanical properties, deposit or electrode composition and diffusible hydrogen levels were obtained from a weld produced and tested according to prescribed standards, and should not be assumed to be the expected results in a particular application or weldment. Actual results will vary depending on many factors, including, but not limited to, weld procedure, plate chemistry and temperature, weldment design and fabrication methods. Users are cautioned to confirm by qualification testing, or other appropriate means, the suitability of any welding consumable and procedure before use in the intended application.

CUSTOMER ASSISTANCE POLICY

The Lincoln Electric Company is manufacturing and selling high quality welding equipment, consumables, and cutting equipment. Our challenge is to meet the needs of our customers and to exceed their expectations. On occasion, purchasers may ask Lincoln Electric for information or advice about their use of our products. Our employees respond to inquiries to the best of their ability based on information provided to them by the customers and the knowledge they may have concerning the application. Our employees, however, are not in a position to verify the information provided or to evaluate the engineering requirements for the particular weldment. Accordingly, Lincoln Electric does not warrant or guarantee or assume any liability with respect to such information or advice. Moreover, the provision of such information or advice does not create, expand, or alter any warranty on our products. Any express or implied warranty that might arise from the information or advice, including any implied warranty of merchantability or any warranty of fitness for any customers' particular purpose is specifically disclaimed.

Lincoln Electric is a responsive manufacturer, but the selection and use of specific products sold by Lincoln Electric is solely within the control of, and remains the sole responsibility of the customer. Many variables beyond the control of Lincoln Electric affect the results obtained in applying these types of fabrication methods and service requirements.

Subject to Change – This information is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.com for any updated information.

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