

# Ultramet™ B316LCF

## TOP FEATURES

- Basic MMA pipe-welding electrode for cryogenic 316L applications
- High moisture resistance
- Particularly suited to the most demanding vertical and overhead welding applications
- Recovery is about 110%

## TYPICAL APPLICATIONS

- LNG

## CLASSIFICATION

AWS A5.4 E316L-15  
EN ISO 3581-A E 19 12 3 L B 4 2\*

\* Nearest classification

## CURRENT TYPE

DC+

## WELDING POSITIONS

All position, except vertical down

## CHEMICAL COMPOSITION (WEIGHT %), WELD METAL

	C	Mn	Si	S	P	Cr	Ni	Mo *	Cu	FN
Min.	not specified	0.5	not specified	not specified	not specified	17.0	11.0	2.0	not specified	2
Max.	0.04	2.0	0.90	0.025	0.030	20.0	13.0	3.0	0.5	5
Typical	<0.03	1.2	0.3	0.01	0.02	19	12	2.2	<0.1	3

\*Does not conform to DIN & which requires Mo 2.5 – 3.0%.

## MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

As welded	Min.	Typical
Tensile strength (MPa)	520	600
0.2% Proof strength (MPa)	320	470
Elongation (%) 4d	30	37
	5d	33
Reduction of area (%)	not specified	50
Impact ISO-V (J) + 20 °C	not specified	100
	-196 °C	35
Lateral expansion* (mm) -196 °C	0.38	0.45

\*Batch tested for Charpy lateral expansion >0.38mm at –196 °C.

## OUTPUT RANGE

Diameter x Length (mm)	Current range (A)
2.5 x 300	50-70
3.2 x 350	65-100
4.0 x 450	80-140

## PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Electrodes/pack	Net weight/pack (kg)	Item number
2.5 x 350	CAN	210	4.1	UMB316LCF-25-1
3.2 x 350	CAN	120	4.0	UMB316LCF-32-1
4.0 x 350	CAN	81	4.0	UMB316LCF-40-1

## 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

Safety Data Sheets (SDS) are available here:



Subject to Change – The information is accurate to the best of our knowledge at the time of printing.  
Please refer to [www.lincolnelectric.eu](http://www.lincolnelectric.eu) for any updated information.