

# Omnia® 46

## TOP FEATURES

- Suitable for general construction work.
- Smaller diameters excellent for hobby market.
- Very suitable for low open circuit voltage transformers (min. OCV 42 V).

## CLASSIFICATION

AWS A5.1 E6013  
EN ISO 2560-A E 42 0 R 11

## CURRENT TYPE

AC/DC-

## WELDING POSITIONS

All positions

## APPROVALS

ABS	LR	BV	DNV	TÜV
+	+	+	+	+

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

C	Mn	Si
0.06	0.5	0.45

## MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J) 0°C
Required: AWS A5.1		min. 330	min. 430	min. 17	not specified
EN ISO		min. 420	500-640	min. 20	min. 47
Typical values	AW	460	540	27	65

AW = As welded

## OUTPUT RANGE

Diameter x Length (mm)	Current range (A)
2.0 x 300	50-60
2.5 x 350	70-90
3.2 x 350	90-125
3.2 x 450	100-135
4.0 x 350	140-190
4.0 x 450	150-200
5.0 x 450	180-240

## PACKAGING AND AVAILABLE SIZES

Diameter x Length (mm)	Packaging	Electrodes/pack	Net weight/pack (kg)	Item number
2.0 x 300	CBOX	390	4.0	609059-1
2.5 x 300	CBOX	250	4.2	609060-I
2.5 x 350	CBOH	110	2.1	800358-1
	CBOX	250	4.8	609060
3.2 x 350	CBOH	75	2.3	800372-1
	CBOX	175	5.3	609061
3.2 x 450	CBOX	150	6.2	609062
4.0 x 350	CBOX	102	5.0	609063
4.0 x 450	CBOX	93	5.9	609064
5.0 x 450	CBOX	56	5.8	609065

### 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.