

OP 139

TOP FEATURES

- Versatile range of applications for this semi-basic flux
- Suitable for narrow groove
- High current carrying capacity

CLASSIFICATION

Flux	EN ISO 14174: SA AB 1 68 AC H5	
Flux/wire	AWS A5.17	AWS A5.23
OE-S1	F6A2-EL12	
OE-S2	F7A5/F7P5-EM12K	
OE-S2Mo		F8A5/F8P5-EA2-A3
OE-S2NiCu		F8A6-EG-G

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

Wire grade	C	Mn	Si	Ni	Mo	Cu
OE-S1	0.05	0.85	0.15			
OE-S2	0.06	1.8	0.3			
OE-S2Mo	0.06	1.8	0.3		0.4	
OE-S2NiCu	0.06	1.8	0.3	0.7		0.4

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Wire grade	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)		
					-20°C	-40°C	-50°C
OE-S1	AW	≥370	460-520	≥27	≥80		
OE-S2	AW	≥430	500-570	≥27	≥140	≥60	
OE-S2	PWHT 620°C/1h	≥400	490-560	≥25	≥100	≥50	
OE-S2Mo	AW	≥480	570-630	≥21	≥110	≥60	
OE-S2Mo	PWHT 620°C/1h	≥470	550-620	≥22		≥50	
OE-S2NiCu	AW	≥470	550-620	≥22			≥40

*AW = As welded; PWHT = Post weld heat treatment

FLUX CHARACTERISTICS

Current type	AC; DC+
Basicity (Boniszewski)	1.7
Grain size (EN ISO 14174)	2-20
Redrying	300-350°C x 2-4h

PACKAGING AND AVAILABLE SIZES

Packaging	Weight (kg)	Item number
DRY BAG	25.0	W000280023

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 for any updated information.