

860

TOP FEATURES

- Industry standard for submerged arc welding applications
- Excellent operating characteristics in a variety of general welding applications.
- Capable of producing weld deposits with impact toughness exceeding 27 J at -40°C with L-61 wire

CLASSIFICATION

Flux	EN ISO 14174: S A AB 1 56 AC H5		
Flux/wire	EN ISO 14171-A: MR	EN ISO 14171-A: TR	AWS A5.17 / A5.23
860 / L-60	S 35 2 AB S1		F6A2-EL12
860 / LNS 135	S 35 2 AB S2	S 3T 0 AB S2	F6A2-EM12
860 / L-61	S 38 2 AB S2Si	S 3T 0 AB S2Si	F7A2-EM12K
860 / L-50M	S 42 2 AB S3Si		F7A2/F7P2-EH12K
860 / L-70	S 46 2 AB S2Mo	S 4T 2 AB S2Mo	F7A2-EA1-A2
860 / LNS 140A	S 46 2 AB S2Mo	S 4T 2 AB S2Mo	F7A2-EA2-A2
860 / LNS 163	S 42 2 AB S2Ni1Cu		F7A4-EG-G
860 / LNS T55	S 50 2 AB TZ		F7A2/F7P4-EC1

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

Wire grade	C	Mn	Si	P	S	Mo
L-60	0.05	1.0	0.25	<0.025	<0.020	
LNS 135	0.06	1.3	0.3	<0.025	<0.020	
L-61	0.10	1.2	0.3	<0.025	<0.020	
L-50M (LNS 133U)	0.07	1.7	0.5	<0.025	<0.020	
LNS 140A (L-70)	0.05	1.3	0.3	<0.025	<0.020	0.4
LNS T55	0.06	1.8	0.7	<0.020	<0.015	

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Wire grade	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)	
					0°C	-20°C
L-60	AW	360	480	30	80	50
LNS 135	AW	390	490	33	100	50
L-61	AW	430	510	32	100	60
L-61	SR	400	505	32		115
L-50M (LNS 133U)	AW	460	530	28	120	80
L-50M (LNS 133U)	SR	420	520			115
LNS 140A (L-70)	AW	520	570	26		70
LNS 140A (L-70)	SR	510	580	30		50
LNS T55	AW	520	610			70
LNS T55	SR	470	560			70
LNS 163	AW	460	540	27		55

* AW = As welded; SR = Stress relieved

FLUX CHARACTERISTICS

Current type	DC/AC
Basicity (Boniszewski)	1.1
Solidification speed	High
Density (kg/dm³)	1.4
Grain size (ISO 14174)	1 - 16

PACKAGING AND AVAILABLE SIZES

Packaging	Weight (kg)	Item number
DRUM	250.0	111828
PE BAG	25.0	FX860-25
SRB BAG	25.0	FX860-25SRB

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.