

860

CLASSIFICATION

Flux	Flux/wire			
ISO 14174 S A AB 1 56 AC H5		AWS A5.17 / A5.23	ISO 14171-A : MR	ISO 14171-A : TR
860 / L-60	F6A2-EL12	S 35 2 AB S1		
860 / LNS 135	F6A2-EM12	S 35 2 AB S2		S 3T 0 AB S2
860 / L-61	F7A2-EM12K	S 38 2 AB S2Si		S 3T 0 AB S2Si
860 / L-50M (LNS 133U)	F7A2/F7P2-EH12K	S 42 2 AB S3Si		
860 / L-70	F7A2-EA1-A2	S 42 2 AB S2Mo		S 4T 2 AB S2Mo
860 / LNS 140A	F7A2-EA2-A2	S 42 2 AB S2Mo		S 4T 2 AB S2Mo
860 / LNS 163	F7A4-EG-G	S 42 4 AB S2Ni1Cu		
860 / LNS T55	F7A2/F7P4-EC1	S 50 3 AB SZ		

GENERAL DESCRIPTION

Multi purpose neutral agglomerated flux

Good impact values in both multi-run (with L-60/L-61/L-50M) and two-run (with LNS 140A) techniques

High restraint cracking resistant

APPROVALS

Wire grade	BV	ABS	LRS	DNV	GL	RMRS	RINA	CRS	TÜV
L-60									✓
LNS 135					3M/3T				✓
L-61	A3YM/A2YT	YM/2YT	3YM/2YT	3YM/2YT	3YM/2YT	3YM/2YT	3M/3YM/2YT	3YM/2YT	✓
LNS 140A (L-70)	A3YTM		3Y40M/3YT	3Y40TM	3YM/2YT				✓
LNS 150									✓
LNS 163									✓

CHEMICAL COMPOSITION (W%), 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 [N/mm ²]	Tensile strength [N/mm ²]	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
	SR	400	505	32		115
L-50M (LNS 133U)	AW	460	530	28	120	80
	SR	420	520			115
LNS 140A (L-70)	AW	520	570	26		70
	SR	510	580	30		50
LNS T55	AW	520	610			70
	SR	470	560			70
LNS 163	AW	460	540	27		55

* AW : As welded - SR : Stress relieved

860: rev. C-EN24-01/02/16

All information in this data sheet is accurate to the best of our knowledge at the time of printing. Please refer to www.lincolnelectric.eu for any updated information.
Fumes: Safety Data Sheets (SDS) are available on our website.

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EXAMPLES OF MATERIALS TO BE WELDED											
Code	Type / Steel grades	Multirun									
		L-60	LNS 135	L-61	L-50M (LNS 133U)	LNS 140A (L-70)	LNS T55				
		AW	AW	AW	AW	SR	AW	SR	AW	SR	
Ship plates											
	A to D	✓	✓	✓	✓		✓				
	AH(32),DH(36), DH(40)	✓			✓	✓	✓	✓	✓	✓	✓
General structural steels											
EN 10025 part 2	S185, S235, S275	✓	✓	✓	✓	✓					
	S355	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Cast steels											
EN 10213-2	GP240R	✓	✓	✓	✓	✓					
Pipe materials											
EN 10208-2	L210, L240, L290	✓	✓	✓	✓	✓					
	L360	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	L415				✓		✓	✓	✓	✓	✓
	L445, L480						✓	✓			
API 5LX	X42, X46	✓	✓	✓	✓	✓					
	X52	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	X56, X60				✓		✓	✓	✓	✓	✓
	X65, X70						✓	✓			
EN 10216-1/10217-1	P235, P275	✓	✓	✓	✓	✓					
	P355	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
Boiler & pressure vessel steels											
EN 10028-1	P235GH, P265GH, P295GH	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	P355GH	✓	✓	✓	✓						
Fine grained steels											
EN 10025 part 3/4	S275	✓	✓	✓	✓	✓					
	S355	✓	✓	✓	✓	✓	✓	✓	✓	✓	✓
	S420				✓		✓	✓	✓	✓	✓
	S460						✓				
High yield strength steels											
EN 10025 part 6	S460, S500						✓				

FLUX CHARACTERISTICS

Current type	DC/AC
Basicity (Boniszewski)	1.1
Solidification speed	High
Density (kg/dm ³)	1.4
Grain size (ISO 14174)	1 - 16

PACKAGING AND AVAILABLE SIZES

Unit	Net weight (kg)
Bag	25
Sahara ReadyBag™ (SRB)	25
Big Bag	1000