

P240X

TOP FEATURES

- Excellent impact toughness properties.
- Low carbon burn-off.
- Recommended with Long stick-out process.
- Suitable in multi-wire (tandem, triple arc), conventional and Long Stick Out applications.
- Recommended for PWHT assembly..

CLASSIFICATION

Flux	EN ISO 14174: S A FB 1 55 AC H5	
Flux/wire	EN ISO 14171-A: MR	AWS A5.17 / A5.23
P240X / L-61	S 42 5 FB S2Si	F7A6-EM12K
P240X / L-50M	S 46 6 FB S3Si	F7A8/P8-EH12K
P240X / LNS 150	S 50 4 FB S2CrMo1	F8P4-EB2R-B2
P240X / LNS 160	S 46 6 FB S2Ni1	
P240X / LNS 162	S 46 6 FB S2Ni2*	F7A10/P10-ENi2-Ni2
P240X / LNS164	S 50 6 FB S3Ni1Mo	F9A8/P8-EF3-F3
P240X / LNS 165	S 50 6 FB S3Ni1Mo0.2	F8A8/P8-ENi5-Ni5
P240X / LNS 168	S 69 4 FB S3NiCr2.5Mo	F10A5-EM2-M2
P240X / LAC690	S 62 6 FB T3Ni2.5CrMo H5	

* Nearest classification

FLUX CHARACTERISTICS

Current type	DC/AC
Basicity (Boniszewski)	3.0
Grain size (EN ISO 14174)	2-20
Density (kg/dm ³)	1.1
Diffusible hydrogen level	H5
General storage handling instructions	OP-9403-Rev.10

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

Wire grade	C	Mn	Si	P	S	Ni	Mo	Cr
L-61	0.08	1.0	0.35	< 0.010	< 0.010			
L-50M (LNS 133U)	0.08	1.6	0.35	< 0.010	< 0.010			
LNS 150	0.13	0.8	0.15	< 0.010	< 0.010		0.5	1.2
LNS 160	0.055	1.0	0.25	< 0.010	< 0.010	1.0		
LNS 162	0.08	1.0	0.25	< 0.010	< 0.010	2.0		
LNS 164	0.08	1.7	0.1	< 0.010	< 0.010	0.9	0.5	
LNS 165	0.08	1.4	0.25	< 0.010	< 0.010	1.0	0.2	
LNS 168	0.06	1.4	0.3	< 0.010	< 0.010	2.3	0.5	0.5
LAC690	0.08	1.4	0.2	< 0.010	< 0.010	2.4	0.4	0.4

Note: Consider C% up by 0.015, Mn% and Si down by 0.05/0.10 when using LSO.

MECHANICAL PROPERTIES, TYPICAL, ALL WELD METAL

Wire grade	Condition*	Yield strength (MPa)	Tensile strength (MPa)	Elongation (%)	Impact ISO-V (J)			
					-29 °C	-40 °C	-50 °C	-60 °C
L-61	AW / DC+	460	520	35		200	47	
L-61	SR / DC+	410	500	34		185		180
L-61	AW / AC / Long Stick Out	500	560	32		145		100
L-61	SR / AC / Long Stick Out	430	530	34		165		150
L-50M	AW / DC+	500	575	33		215		190
L-50M	SR / DC+	420	520	37			210	175
L-50M	AW / AC / Long Stick Out	570	630	31		195		150
L-50M	SR / AC / Long Stick Out	480	560	35		192		160
LNS 150	SR / DC+	540	610	29			47	
LNS 150	SR / AC / Long Stick Out	550	640	23	140		30	
LNS 160	AW / DC+	490	542	32		200		140
LNS 160	AW / AC / Long Stick Out	497	553	31		215		135
LNS 160	SR / DC+					190		155
LNS 160	SR / AC / Long Stick Out					240		185
LNS 162	AW / DC+	500	570	32		190		150
LNS 162	SR / DC+	440	530	36		240		190
LNS 162	AW / AC / Long Stick Out	530	600	31		210		180
LNS 162	SR / AC / Long Stick Out	470	560	33		230		190
LNS 164	AW / DC+	630	680	29		110		80
LNS 164	SR / DC+	600	660	28		170		80
LNS 164	AW / AC / Long Stick Out	660	730	27		190		150
LNS 164	SR / AC / Long Stick Out	640	700	28		220		180
LNS 165	AW / DC+	570	620	31		165		145
LNS 165	AW / AC / Long Stick Out	580	650	32		230		200
LNS 165	SR / DC+	510	600	29		170		145
LNS 165	SR / AC / Long Stick Out	540	620	30		200		190
LNS 168	AW	720	800	20		90	55	
LAC690	AW / DC+	685	780	26		140		110
LAC690	AW / AC / Long Stick Out	690	790	25		150		110
LAC690	SR / DC+	650	745	27		155		115
LAC690	SR / AC / Long Stick Out	660	750	25		155		130

* AW = As welded; SR = Stress relieved

590 °C/1h for the L61 wire

620 °C/1h for the L50M/LNS160/LNS162/LNS164/LNS165/LAC690

690 °C/1h for the LNS150

For the solid electrodes diam 4mm:

– DC+ = 5.7kg/h @ 2.1kJ/mm (500A;29V;42cm/min)

– AC/LSO = 10kg/h @ 1.6kJ/mm (500A;34V;64cm/min)

For the flux cored electrodes diam 3.2mm:

– DC+ = 6,5kg/h @ 1.9kJ/mm (480A;32V;50cm/min)

–AC/LSO = 12kg/h @ 2.1kJ/mm (480A;38V;50cm/min)

PACKAGING AND AVAILABLE SIZES

Packaging	Weight (kg)	Item number
SRB BAG	25.0	111040
DRUM	200.0	112276

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.