

## Flux

### Classification

Flux P240	EN 760 :	S A FB 1 55 AC H5
Flux/Wire	AWS A5.17 / A5.23	EN 756 : MR
P240 / L61 (LNS129)	F7A4-EM12K	S 42 4 FB S2Si
P240 / L50M (LNS133U)	F7A/P8-EH12K	S 42 6 FB S3Si
P240 / LNS 160	F7A/P10-ENi1-Ni1	S 46 6 FB S2Ni1*
P240 / LNS 162	F7A/P10-ENi2-Ni2	S 46 6 FB S2Ni2*
P240 / LNS 165 (LA85)	F8A/P8-ENi5-Ni5	S 50 6 FB Sz
P240 / LNS 150 (LA92)	F8P2-EB2-B2R	
P240 / LNS 151 (LA93)	F9P0-EB3-B3R	
P240 / LNS 168	F6A5-EM2-M2	S 69 4 FB S0

\* Nearest classification

### General description

**Highly basic fluoride agglomerated flux**  
**Good impact values suitable for offshore constructions**  
**Consistently good CTOD values with CMn and Ni-alloyed wires**  
**Low hydrogen content**  
**Suitable for single/multi wire welding**

### Approvals

Wire grade	LRS	BV	ABS	DNV	GL	Controlas	CRS	TÜV
L50M (LNS 133U)	3YM	A3M,A3YM	YM>47J<	4Y40M	6YM	x	3YM	X
LNS 162								X
LNS 160								X
LNS 164								X

### Chemical composition (w%), typical, all weld metal

Wire grade	C	Mn	Si	S	P	Ni	Mo	Cr
L61 (LNS129)	0.08	1.0	0.35	< 0.010	< 0.010			
L50M (LNS 133U)	0.08	1.6	0.35	< 0.015	< 0.020			
LNS 160	0.08	1	0.25	< 0.015	< 0.020	1		
LNS 162	0.08	1	0.25	< 0.015	< 0.020	2.2		
LNS 165	0.08	1.3	0.35	< 0.015	< 0.020	0.9	0.15	
LNS 150 (LA92)	0.08	1.2	0.3	< 0.010	< 0.015		0.15	1.1
LNS 151 (LA93)	0.10	0.7	0.3	< 0.010	< 0.015		1.0	2.5
LNS 168	0.08	1.5	0.4	< 0.015	< 0.015	2.4	0.4	0.3

### Mechanical properties, typical, all weld metal

Wire grade	Condition	Yield strength (N/mm <sup>2</sup> )	Tensile strength (N/mm <sup>2</sup> )	Elongation (%)	Impact ISO-V(J)			
					-20°C	-40°C	-50°C	-60°C
L61 (LNS129)	AW	440	530	30	115	75		
L50M (LNS 133U)	AW	460	560	28				40
	SR	420	540	28				40
LNS 160	AW	470	550	28				80
	SR	430	490	32				100
LNS 162	AW	480	560	26				100
	SR	460	530	30				140
LNS 165	AW	520	600	25				60
	SR	510	580	24				60
LNS 150 (LA92)	SR	520	610	24				100
LNS 151 (LA93)	SR	550	640	24				50
LNS 168	AW	790	840	20			55	

AW : As welded  
 SR: Stress relieved

P240: rev. EN 24

**Liability:** All information in this data sheet is based on the best available knowledge, is subject to change without notice and can only be considered as suitable for general guidance **Fumes:** Consult information on Welding Safety Sheet, available upon request

## Suggestions for use

Characteristics :	Applications
Boiler and pressure vessels	Low temperature applications
Off-shore applications	Highly restraint constructions
Nuclear components	Single and multi-wire systems

## Materials to be welded

STEEL / STANDARD	TYPE	Multirun					
		L50M (LNS133U)	LNS160	LNS162	LNS165	LNS150 (LA92)	LNS151 (LA93)
<b>Ship plates</b>							
	A to E,	x	x	x	x		
	AH32 to EH40	x	x	x	x		
<b>General structural steel</b>							
EN 10025 part 6 (A 36-204)	500 A & AL				x		
EN 10025 part 3/part 4	S275 to S460 all qualities	x	x	x	x		
EN 10149 (A36-231)	S315 to S460 MC & NC	x	x	x	x		
	S315 to S500 MC & NC				x		
EN 10025 part 2	S185 to E360 all qualities	x	x	x	x		
<b>Boiler &amp; pressure vessel steel</b>							
EN 10028 (A 36-205)	P235 to P460 all qualities	x	x	x	x		
EN 10207 (A36-220)	P235 to P275 all qualities	x	x	x	x		
A36-601 & NF A36-605	A37 to A52 all qualities	x	x	x	x		
EN 10028-2	13CrMo 4-5					x	x
(Elevated temperature steel)	10CrMo 9-10					x	x
<b>Steel for dangerous material transportation</b>							
A 36-215	P265 to P460 all qualities	x	x	x	x		
<b>Low temperature steels</b>							
	P285 to P420 all qualities	x	x	x	x		

## Flux characteristics

Current type	DC (+,-) / AC
Basicity (Boniszewski)	3
Density (kg/dm <sup>3</sup> )	1,1
Grain size	2-20

## Packaging and available sizes

Unit	Net weight (kg)
Sahara ReadyBag™ (SRB)	25