

# MANILEC

# ES 5 FR.LI.LE

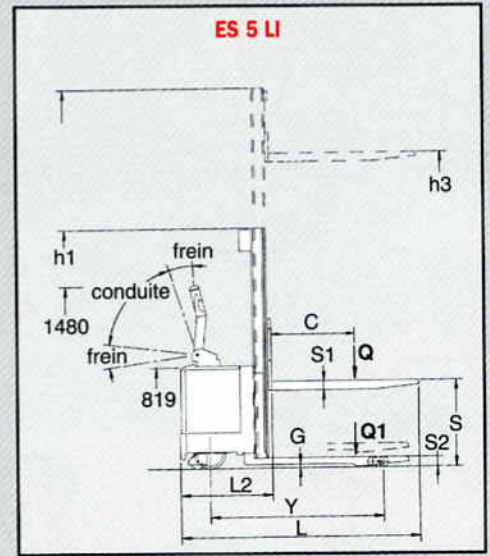
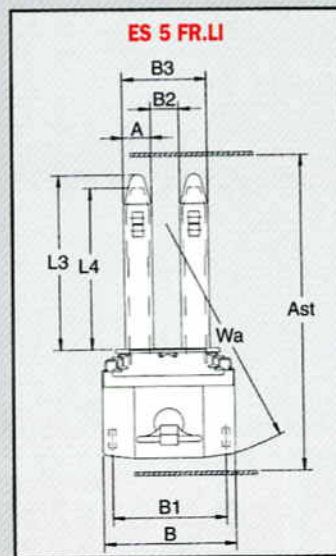
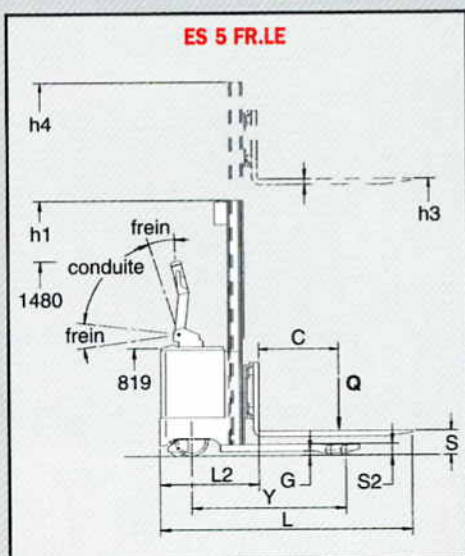
## 511.513.516.520

Pedestrian operated  
electric stackers



# MANITOU®

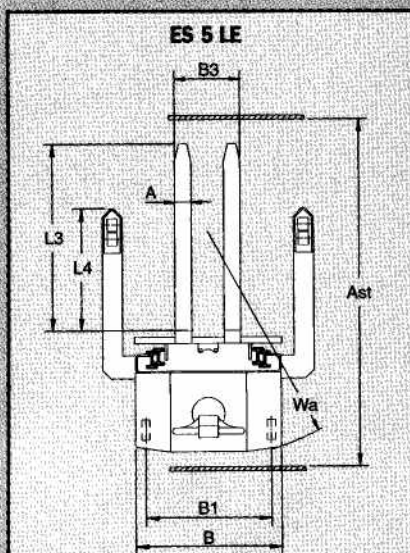
Code	1 Manufacturer		MANITOU					
	2 Type		ES 511FR	ES 513FR	ES 516FR	ES 520FR		
Specifications	3	Single nominal load capacity on forks	Q	kg	1100	1300	1600	2000
	4	Single nominal load capacity on supporting legs	Q1	kg				
	5	Combined load capacity on forks and legs	Q2	kg				
	6	Nominal load centre	C	mm	600			
	7	Forks lifting height	h3	mm	See lifting masts table			
Forks	8	Standard length	L3	mm	1150			
	9	Maximum external width	B3	mm	560	560	560	570
	10	Minimum external width	B3	mm				
	11	Standard internal width	B2	mm	200	200	200	180
	12	Arm cross section (width x thickness)	A x S1	mm	180x75	180x75	180x75	195x70
	13	Distance from ground to fork top, low position	S	mm	90			
Supporting legs	14	External width with standard forks		mm	520	520	520	495
	15	Internal width with standard forks		mm	280	280	280	255
	16	Distance from ground to leg top, low position	S2	mm	80	80	80	85
	17	Ground clearance in low position	G	mm	30	30	30	25
	18	Length from fork heel (duplex mast)	L4	mm	830	830	800	800
Dimensions	19	Overall length with standard forks (duplex mast)	L	mm	1818	1818	1890	1890
	20	Length without forks (duplex mast)	L2	mm	668	668	740	740
	21	Overall chassis width	B	mm	891			
	22	Overall height (forks lowered/lifted)	h1/h4	mm	See lifting masts table			
	23	Distance between stabilising wheels	B1	mm	767			
	24	Wheelbase with standard forks	Y	mm	1105			
	25	Turning radius with standard forks	Wa	mm	1375			
Weight	26	Net weight with standard duplex 3.3 m mast, without battery		kg	675	680	810	830
	27	Batteries net weight 180, 225, 270 or 312 A/h		kg	175, 220, 245, 290			
Wheels P = polyurethane C = rubber	28	1 drive & directing wheel (material / Ø x L)		mm	C/250x80	C/250x80	C or P/250x80P/270 x90	
	29	2 stabilising wheels (material / Ø x L)		mm	P/120 x 50			
	30	Load bearing castors (G) or bogies (B) (material / Ø x L)		mm	G(P/80x80)	B(P/80x80)	B(P/80x80)	B(P/80x80)
Performances	31	Driving speed : unload / load		km/h	6 / 4,9	6 / 4,6	6 / 4 ou 5	6 / 4,9
	32	Lifting speed : unload / load		cm/s	12,9 / 9,3	12,9 / 8,6	13,5 / 10	12 / 9
	33	Lowering speed : unload / load		cm/s	18 / 21	18 / 21,3	17,5 / 22	17,5 / 22,5
	34	Gradient (dry ground) : unload / load		%	10 / 8	10 / 7	8 / 6	8 / 6
	35	Stacking aisle with pallet 800 x 1200	Ast	mm	2170	2170	2240	2240
Power	36	Drive motor 24 V (S2-60 mm)		W	800	800	800 or 1000	1000
	37	Speed control		type	Multiple settings electronic controller			
	38	Brakes		type	Electromagnetic & autoreverse			
	39	Lifting motor 24 V (S3-10 %)		W	2000 or 3000 W according to capacity & lifting mast			
	40	Traction battery 24 V		A/h	180 to 312			
41	Charger with electronic regulation, single phase 220V		Amp	In built 25 A or external 40 A				



1	MANITOU			MANITOU			
2	ES 513LI	ES 516LI	ES 520LI	ES 511LE	ES 513LE	ES 516LE	ES 520LE
3	1300	1600	2000	1100	1300	1600	2000
4	1600	2000	2500				
5	1600	2000	2000				
6	600			600			
7	See lifting masts table			See lifting masts table			
8	1180			1150			
9	570	570	575	680 / 940 / 1040			
10				200	200	240	260
11	190	190	175	adjustable			
12	190x70	190x70	200x70	100x40	100x40	120x40	130x40
13	90 / 200			60			
14	535			1131 / 1290 / 1490			
15	225			891 / 1050 / 1250			
16	80 / 190	80 / 190	90 / 200	85	65	85	95
17	30 / 140	30 / 140	20 / 130	35			
18	1109	1069	1065	760	760	754	754
19	1921	1942	1946	1695	1695	1701	1701
20	741	762	766	745	745	751	751
21	891			891			
22	See lifting masts table*			See lifting masts table			
23	767			767			
24	lowered	1360 / 1320	lifted	1133			
25	lowered	1620 / 1580	lifted	1408			
26	750	880	910				
27	175, 220, 245, 290			175, 220, 245, 290			
28	C/250x80	C or P/250x80	P/270x90	C/250x80	C/250x80	C or P/250x80	P/270x90
29	P/120x50			P/120x50			
30	B(P/80x80)	B(P/80x80)	B(P/80x80)	G(P/80x80)	B(P/80x80)	B(P/80x80)	B(P/80x80)
31	6 / 4,6	6 / 4 ou 5	6 / 4,9	6 / 4,9	6 / 4,6	6 / 4 ou 5	6 / 4,9
32	12,9 / 8,6	13,5 / 10	12 / 9	12,9 / 9,3	12,9 / 8,6	13,5 / 10	12 / 9
33	18 / 21,3	17,5 / 22	17,5 / 22,5	18 / 21	18 / 21,3	17,5 / 22	17,5 / 22,5
34	10 / 7	8 / 6	8 / 6	10 / 8	10 / 7	8 / 6	8 / 6
35	2325						
36	800	800 or 1000	1000	800	800	800 or 1000	1000
37	Multiple settings electronic controller			Multiple settings electronic controller			
38	Electromagnetic & autoreverse			Electromagnetic & autoreverse			
39	2000 or 3000 W according to capacity & lifting mast			2000 or 3000 W according to capacity & lifting mast			
40	180 to 312			180 to 312			
41	In built 25 A or external 40 A			In built 25 A or external 40 A			

## OPTIONAL EQUIPMENTS

- Forks with special dimensions
- H.I.L. : combined hourmeter, discharge indicator and cut off
- Maintenance free batterie and adapted charger
- Fast battery charger (less than 8 hours)
- Driving platform for ride-on use
- Special protections :  
Cold store - 10°, IP 54, Corrosion protection.



ES 5 FR.LE										
LIFTING MASTS										
Mast type and reference	Simplex		Duplex			Duplex with full free lift			Triplex with full free lift	
	S14	S17	D28	D33	D37	DLL28	DLL33	DLL37	TLL42	TLL47
<b>FORK HEIGHT (in mm)</b>										
In maximum lift H3	1470	1720	2840	3340	3740	2845	3345	3745	4240	4740
In free lift H2	1470	1720	0	0	0	1470	1720	1920	1470	1640
<b>OVERALL MAST HEIGHT (in mm)</b>										
Mast folded H1	1935	2185	1935	2185	2385	1935	2185	2385	1965	2130
Mast extended H4	1935	2185	3310	3810	4210	3310	3820	4210	4735	5230

(\*) Pour les modèles LI, rajouter 20 mm aux cotes H1 et H4

