

# MANILEC

# ES 5 FR.LI.LE

## 511.513.516.520

Pedestrian operated  
electric stackers



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				



