

Technical sheet :

# ***ES 510 GPF - ES-C 510***

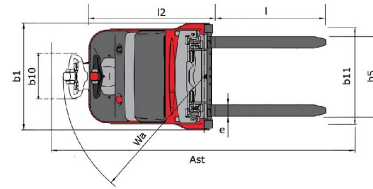
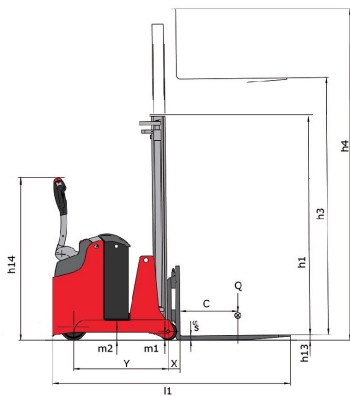
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Technical characteristics			Metric	Imperial
1.1	Manufacturer		Manitou	Manitou
1.2	Model Name		ES 510 GPF	ES 510 GPF
1.3	Power source		Battery	Battery
1.4	Operator type		Pedestrian	Pedestrian
1.5	Max. capacity	Q	1000 kg	2205 lbs
1.6	Load centre of gravity	c	500 mm	19.685 in
1.8	Distance from Load backrest to center of rear axle	x	101 mm	3.976 in
1.9	Wheelbase	y	1047 mm	41.22 in
Weight				
2.1	Service Weight		1388 kg	3060 lbs
Wheels				
3.1	Tyres type		Polyurethane	Polyurethane
3.2	Number of drive wheels - Size of drive wheels		1 x 230x70	1 x 230x70
3.3	Number of load wheels - Size of load wheels		2 x 150x70	2 x 150x70
3.5	Number of front wheels / rear wheels		1 / 2	1 / 2
3.7	Rear wheel gauge	b11	826 mm	32.52 in
Dimensions				
4.2	Mast height lowered	h1	1931 mm	76.024 in
4.4	Mast lifting height	h3	2850 mm	112.205 in
4.5	Mast height extended	h4	3500 mm	137.795 in
4.9	Height tiller up min./max. / max.	h14 / h14	830 mm / 1385 mm	32.677 in / 54.528 in
4.19	Overall length	l1	2278 mm	89.685 in
4.20	Length to face of forks	l2	1328 mm	52.283 in
4.21	Overall width	b1	923 mm	36.339 in
4.22	Forks section / width / length	s / e / l	35 mm x 100 mm x 800 mm	1.378 in x 3.937 in x 31.496 in
4.24	Fork carriage width	b3	750 mm	29.528 in
4.31	Ground clearance below mast	m1	60 mm	2.362 in
4.32	Ground clearance at centre of wheelbase	m2	69 mm	2.717 in
4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	2935 mm	115.551 in
4.35	Turning radius	Wa	1450 mm	57.087 in
Performances				
5.1	Travel speed (laden / unladen)		4.5 km/h / 4.5 km/h	2.8 mph / 2.8 mph
5.2	Lifting speed (laden / unladen)		0.3 m/s / 0.18 m/s	0.98 ft/s / 0.59 ft/s
5.3	Lowering speed (laden / unladen)		0.22 m/s / 0.27 m/s	0.72 ft/s / 0.89 ft/s
5.7	Gradeability - laden / unladen		7 % / 10 %	7 % / 10 %
5.9	Service brake		Electro magnetic	Electro magnetic
Engine				
6.1	Drive motor rating S2 60 min		1.5 kW	1.5 kW
6.2	Lift motor rating at S3 15%		3 kW	3 kW
6.3	Battery according to DIN 43531/35/36 A, B, C		DIN 43535-B	DIN 43535-B
6.4	Battery / Batteries capacity		24 V - 375 Ah	24 V - 375 Ah
6.5	Battery weight (+/- 5%)		293 kg	646 lbs
Miscellaneous				
8.1	Type of drive control		AC	AC



## Dimensional drawing



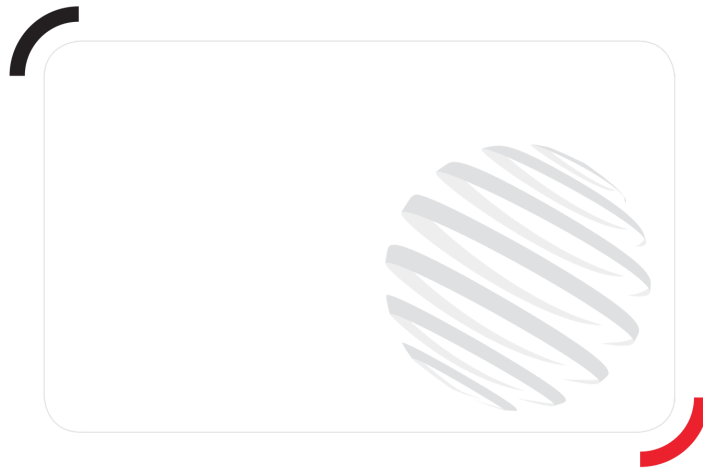
## Characteristics of masts and residual capacities

Central Cylinder Simplex		CCS 15	CCS 17
h2 - Free lift	mm	1420	1670
h1 - Height mast Lowered	mm	1931000	2181000
h3 - Lifting Height	mm	1420000	1670000
h4 - Height mast extended	mm	2070000	2320000
Residual capacity without attachment (Industrial load chart)	kg	1000	1000

Full Visibility Duplex		FVD 29	FVD 34	FVD 38
h1 - Height mast Lowered	mm	1931	2181	2381
h3 - Lifting Height	mm	2850	3350	3750
h4 - Height mast extended	mm	3500	4000	4400
Residual capacity without attachment (Industrial load chart)	kg	1000	1000	900

Free Lift Duplex		FLD 29	FLD 34
h2 - Free lift	mm	1420	1670
h1 - Height mast Lowered	mm	1931	2181
h3 - Lifting Height	mm	2850	3350
h4 - Height mast extended	mm	3500	4000
Residual capacity without attachment (Industrial load chart)	kg	1000	1000

Free Lift Triplex		FLT 42
h2 - Free lift	mm	1380
h1 - Height mast Lowered	mm	1956
h3 - Lifting Height	mm	4160
h4 - Height mast extended	mm	4810
Residual capacity without attachment (Industrial load chart)	kg	800



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