

Technical sheet :

ES-C 510



 **MANITOU**
HANDLING YOUR WORLD

Technical characteristics			Metric	Imperial
1.1	Manufacturer		Manitou	Manitou
1.2	Model Name		ES 510 GPF	ES 510 GPF
1.3	Power source		Electrical	Electrical
1.4	Operator type		Pedestrian	Pedestrian
1.5	Max. capacity	Q	1000 kg	2205 lb
1.6	Load center of gravity	c	500 mm	20 in
1.8	Distance from Load backrest to center of rear axle	x	101 mm	4 in
1.9	Wheelbase	y	1047 mm	41 in
Weight				
2.1	Service weight		1388 kg	3060 lb
Wheels				
3.1	Tires type		Polyurethane	Polyurethane
3.3	Number of load wheels / Size of load wheels		2 / 150x70	2 / 150x70
3.5	Number of front wheels / rear wheels		1 / 2	1 / 2
3.5.2	Number of drive wheels / Size of drive wheels		1/230x70	1/230x70
3.7	Rear wheel gauge	b11	826 mm	33 in
Dimensions				
4.19	Overall length	l1	2278 mm	90 in
4.20	Length to face of forks	l2	1328 mm	52 in
4.21	Overall width	b1	923 mm	36 in
4.22	Forks section / width / length	s / e / l	35 mm / 100 mm / 800 mm	1 in / 4 in / 31 in
4.23	Fork carriage ISO 2328 (class/form) A/B		2B	2B
4.24	Fork carriage width	b3	750 mm	30 in
4.31	Ground clearance below mast	m1	60 mm	2 in
4.32	Ground clearance at centre of wheelbase	m2	69 mm	3 in
4.35	Turning radius	Wa	1450 mm	57 in
4.9	Height tiller min. / max.	h14 / h14	830 mm / 1385 mm	33 in / 55 in
Performances				
5.1	Travel speed (laden / unladen)		4.50 km/h / 4.50 km/h	3 mph / 3 mph
5.2	Lifting speed (laden / unladen)		0.30 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
5.8	Max Gradeability (laden / unladen)		7 % / 10 %	7 % / 10 %
5.10	Service brake		Electro magnetic	Electro magnetic
Engine				
6.1	Drive motor rating S2 60 min		1.50 kW	1.50 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 voltage / capacity		24 V / 375 Ah	24 V / 375 Ah
6.5	Battery weight (+/- 5%)		293 kg	646 lb
Miscellaneous				
8.1	Type of drive control		AC	AC
8.4	Sound level at the driver's ear according to DIN 12 053		65 dB	65 dB

ES-C 510 - Dimensional drawing



Characteristics of masts and residual capacities

Central Cylinder Simplex (CCS)		CCS 15	CCS 17
h1 - Mast lowered height	in (mm)	76 (1931)	85.9 (2181)
h2 - Mast free lift	in (mm)	55.9 (1420)	65.7 (1670)
h3 - Mast lifting height	in (mm)	55.9 (1420)	65.7 (1670)
h4 - Mast extended height	in (mm)	81.5 (2070)	91.3 (2320)
Residual capacity at max height	lb (kg)	2205 (1000)	2205 (1000)

Full Visibility Duplex (FVD)		FVD 29	FVD 34	FVD 38
h1 - Mast lowered height	in (mm)	76 (1931)	85.9 (2181)	93.7 (2381)
h3 - Mast lifting height	in (mm)	112.2 (2850)	131.9 (3350)	147.6 (3750)
h4 - Mast extended height	in (mm)	137.8 (3500)	157.5 (4000)	173.2 (4400)
Residual capacity at max height	lb (kg)	2205 (1000)	2205 (1000)	1984 (900)

Free Lift Duplex (FLD)		FLD 29	FLD 34
h1 - Mast lowered height	in (mm)	76 (1931)	85.9 (2181)
h2 - Mast free lift	in (mm)	55.9 (1420)	65.7 (1670)
h3 - Mast lifting height	in (mm)	112.2 (2850)	132.1 (3355)
h4 - Mast extended height	in (mm)	137.8 (3500)	157.5 (4000)
Residual capacity at max height	lb (kg)	2205 (1000)	2205 (1000)

Free Lift Triplex (FLT)		FLT 42
h1 - Mast lowered height	in (mm)	77 (1956)
h2 - Mast free lift	in (mm)	54.3 (1380)
h3 - Mast lifting height	in (mm)	163.8 (4160)
h4 - Mast extended height	in (mm)	189.4 (4810)
Residual capacity at max height	lb (kg)	1764 (800)



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