

Technical sheet :

# **ES-C 510**



 **MANITOU**  
HANDLING YOUR WORLD

Technical characteristics			Metric
1.1	Manufacturer		Manitou
1.2	Model Name		ES-C 510
1.3	Power source		Electrical - Lead
1.4	Operator type		Pedestrian
1.5	Max. capacity	Q	1000 kg
1.6	Load center of gravity	c	500 mm
1.8	Distance from Load backrest to center of rear axle	x	101 mm
1.9	Wheelbase	y	1047 mm
<b>Weight</b>			
2.1	Service weight		1400 kg
<b>Wheels</b>			
3.1	Tires type		Polyurethane cushion
3.3	Number of load wheels / Size of load wheels		2 / 150x70
3.5	Number of front wheels / rear wheels		1 / 2
3.5.2	Number of drive wheels / Size of drive wheels		1/230x70
3.7	Rear wheel gauge	b11	826 mm
<b>Dimensions</b>			
4.19	Overall length	l1	2285 mm
4.20	Length to face of forks	l2	1335 mm
4.21	Overall width	b1	923 mm
4.22	Forks section / width / length	s / e / l	30 mm / 90 mm / 950 mm
4.23	Fork carriage ISO 2328 (class/form) A/B		2B
4.24	Fork carriage width	b3	750 mm
4.31	Ground clearance below mast	m1	60 mm
4.32	Ground clearance at centre of wheelbase	m2	69 mm
4.33	Aisle Width for pallets 1000 x 1200 crossways	Ast	2825 mm
4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	2935 mm
4.35	Turning radius	Wa	1360 mm
4.9	Height tiller min. / max.	h14	830 mm / 1385 mm
<b>Performances</b>			
5.1	Travel speed (laden / unladen)		6 km/h / 6 km/h
5.2	Lifting speed (laden / unladen)		0.18 m/s / 0.30 m/s
5.3	Lowering speed (laden / unladen)		0.27 m/s / 0.22 m/s
5.8	Max Gradeability (laden / unladen)		7 % / 10 %
5.10	Service brake		Electro magnetic
<b>Engine</b>			
6.1	Drive motor rating S2 60 min		1.50 kW
6.2	Lift motor rating at S3 15%		3 kW
6.3	Battery according to DIN 43531/35/36 A, B, C		DIN 43535-B
6.4	Battery voltage / capacity		24 V / 180 Ah
6.5	Battery weight (+/- 5%)		175 kg
<b>Miscellaneous</b>			
8.1	Type of drive control		AC
8.4	Sound level at the driver's ear according to DIN 12 053		65 dB

ES-C 510 - Dimensional drawing



## Characteristics of masts and residual capacities

Central Cylinder Simplex (CCS)		CCS 15	CCS 17
$\alpha$ - Mast/fork carriage tilt, forward	°	4	4
$\beta$ - Mast/fork carriage tilt, backward	°	6	6
h1 - Mast lowered height	mm	1932	2182
h2 - Mast free lift	mm	1420	1670
h3 - Mast lifting height	mm	1500	1700
h4 - Mast extended height	mm	2030	2280
Residual capacity at max height	kg	1000	1000

Full Visibility Duplex (FVD)		FVD 29	FVD 34	FVD 38
$\alpha$ - Mast/fork carriage tilt, forward	°	4	4	4
$\beta$ - Mast/fork carriage tilt, backward	°	6	6	6
h1 - Mast lowered height	mm	1932	2182	2382
h3 - Mast lifting height	mm	2900	3400	3800
h4 - Mast extended height	mm	3460	3960	4360
Residual capacity at max height	kg	1000	1000	900

Free Lift Duplex (FLD)		FLD 29	FLD 34
$\alpha$ - Mast/fork carriage tilt, forward	°	4	4
$\beta$ - Mast/fork carriage tilt, backward	°	6	6
h1 - Mast lowered height	mm	1932	2182
h2 - Mast free lift	mm	1420	1670
h3 - Mast lifting height	mm	2900	3400
h4 - Mast extended height	mm	3460	3960
Residual capacity at max height	kg	1000	1000

Free Lift Triplex (FLT)		FLT 42
$\alpha$ - Mast/fork carriage tilt, forward	°	4
$\beta$ - Mast/fork carriage tilt, backward	°	6
h1 - Mast lowered height	mm	1890
h2 - Mast free lift	mm	1380
h3 - Mast lifting height	mm	4200
h4 - Mast extended height	mm	4770
Residual capacity at max height	kg	800

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