

Technical sheet :

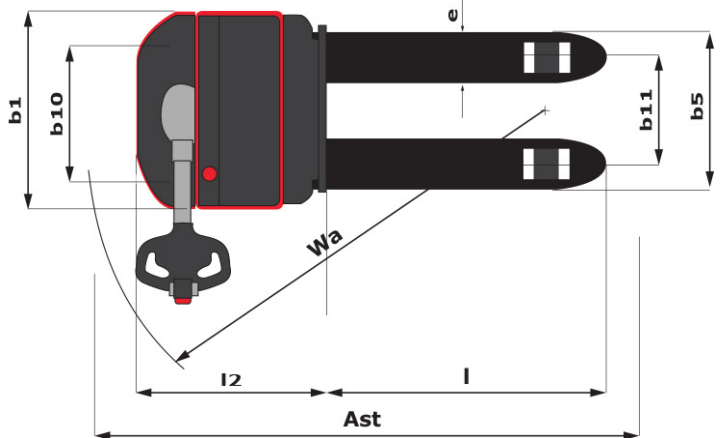
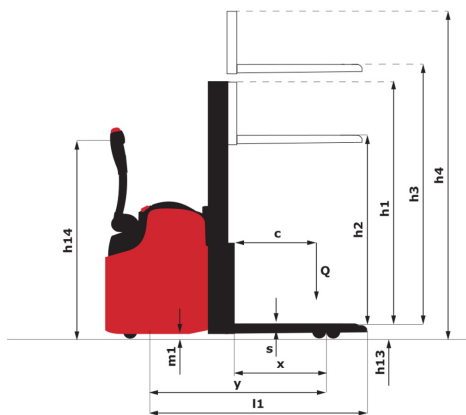
# **ES 410 ET**

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	Technical characteristics		Metric
1.1	Manufacturer		Manitou
1.2	Model Name		ES 410 ET
1.3	Power source		Battery
1.4	Operator type		Pedestrian
1.5	Max. capacity	Q	1000 kg
1.6	Load centre of gravity	c	600 mm
1.8	Distance from Load backrest to center of rear axle	x	720 mm
1.9	Wheelbase	y	1245 mm
	<b>Weight</b>		
2.1	Service weight		870 kg
2.2	Weight on front axle (laden) / rear axle (laden)		709 kg / 1161 kg
2.3	Weight on front axle (Unladen) / rear axle (Unladen)		609 kg / 261 kg
	<b>Wheels</b>		
3.1	Tyres type		Polyurethane
3.5.2	Number of drive wheels - Size of drive wheels		1 x 230x70
3.3	Number of load wheels - Size of load wheels		2 x 125x50
3.4	Number of stabilizer wheels / Size of the stabilizer wheels		1 x 125x50
3.5	Number of front wheels / rear wheels		2 / 2
3.6	Front wheel gauge	b10	517 mm
3.7	Rear wheel gauge	b11	380 mm
	<b>Dimensions</b>		
4.2	Mast height lowered	h1	1940 mm
4.3	Mast free lift *	h2	140 mm
4.4	Mast lifting height *	h3	2940 mm
4.5	Mast height extended	h4	3365 mm
4.15	Fork height in low position	h13	85 mm
4.19	Overall length	l1	1870 mm
4.20	Length to face of forks	l2	720 mm
4.21	Overall width	b1	800 mm
4.22	Forks section / width / length	s / e / l	180 mm x 60 mm / 1150 mm
4.24	Fork carriage width	b3	680 mm
4.31	Ground clearance below mast	m1	35 mm
4.32	Ground clearance at centre of wheelbase	m2	20 mm
4.33	Aisle width for 1000 x 1200 pallet widthways	Ast	2200 mm
4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	2287 mm
4.35	Turning radius	Wa	1400 mm
	<b>Performances</b>		
5.1	Travel speed (laden / unladen)		5.8 km/h / 6 km/h
5.2	Lifting speed (laden / unladen)		0.24 m/s / 0.14 m/s
5.3	Lowering speed (laden / unladen)		0.2 m/s / 0.3 m/s
5.7	Gradeability (laden / unladen)		8 % / 10 %
5.10	Service brake		Electro magnetic
	<b>Engine</b>		
6.1	Drive motor rating S2 60 min		1.2 kW
6.2	Lift motor rating at S3 15%		3 kW
6.4	Battery / Batteries capacity		24 V - 160 Ah
6.5	Battery weight (+/- 5%)		150 kg
7.2	Engine power according to ISO 1585		1.2 kW
	<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(A)

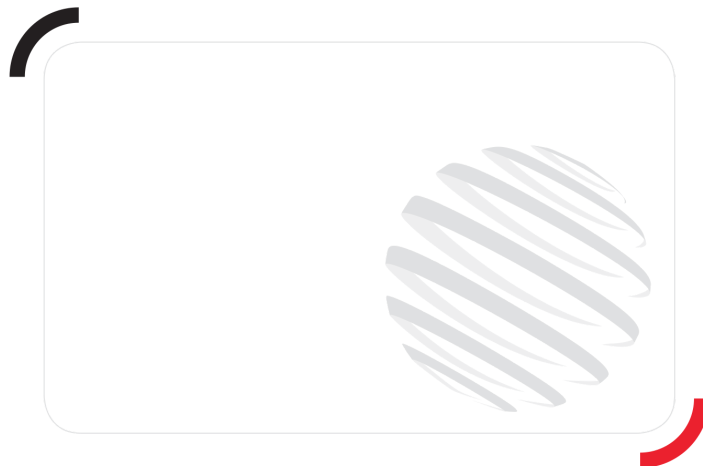
## Dimensional drawing



## Characteristics of masts and residual capacities

Central Cylinder Duplex		CCD 26	CCD 29	CCD 34
h1 - Height mast lowered *	mm	1780	1930	2180
h2 - Free lift	mm	140	140	140
h3 - Lifting Height	mm	2630	2930000	3430
h4 - Height mast extended *	mm	3065	3365000	3865
Residual capacity without attachment (Industrial load chart)	kg	1000	1000	850

Central Cylinder Simplex		CCS 15	CCS 17
h1 - Height mast lowered *	mm	1940	2190
h2 - Free lift	mm	1510	1760
h3 - Lifting Height	mm	1510	1760
h4 - Height mast extended *	mm	1940	2190
Residual capacity without attachment (Industrial load chart)	kg	1000	1000



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