

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		Electrical
1.4	Operator type		Pedestrian
1.5	Max. capacity	Q	1000 kg
1.6	Load center 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	Tires type		Polyurethane
3.3	Number of load wheels / Size of load wheels		2 / 125x50
3.4	Number of stabilizer wheels / Size of the stabilizer wheels		1 / 125x50
3.5	Number of front wheels / rear wheels		2 / 2
3.5.2	Number of drive wheels / Size of drive wheels		1/230x70
3.6	Front wheel gauge	b10	517 mm
3.7	Rear wheel gauge	b11	380 mm
	<b>Dimensions</b>		
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	60 mm / 180 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
4.35	Turning radius	Wa	1400 mm
	<b>Performances</b>		
5.1	Travel speed (laden / unladen)		5.80 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)		0.20 m/s / 0.30 m/s
5.8	Max Gradeability (laden / unladen)		8 % / 10 %
5.10	Service brake		Electro magnetic
	<b>Engine</b>		
6.1	Drive motor rating S2 60 min		1.20 kW
6.2	Lift motor rating at S3 15%		3 kW
6.4	Battery voltage / capacity		24 V / 160 Ah
6.5	Battery weight (+/- 5%)		150 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 410 ET - Dimensional drawing



# Characteristics of masts and residual capacities

Central Cylinder Duplex (CCD)		CCD 26	CCD 29	CCD 34
h1 - Mast lowered height	mm	1780	1930	2180
h2 - Mast free lift	mm	140	140	140
h3 - Mast lifting height	mm	2630	2930	3430
h4 - Mast extended height	mm	3065	3365	3865
Residual capacity at max height	kg	1000	1000	900

Central Cylinder Simplex (CCS)		CCS 15	CCS 17
h1 - Mast lowered height	mm	1930	2180
h2 - Mast free lift	mm	1500	1750
h3 - Mast lifting height	mm	1500	1750
h4 - Mast extended height	mm	1930	2180
Residual capacity at max height	kg	1000	1000



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