

Technical sheet :

ES 312 EASY

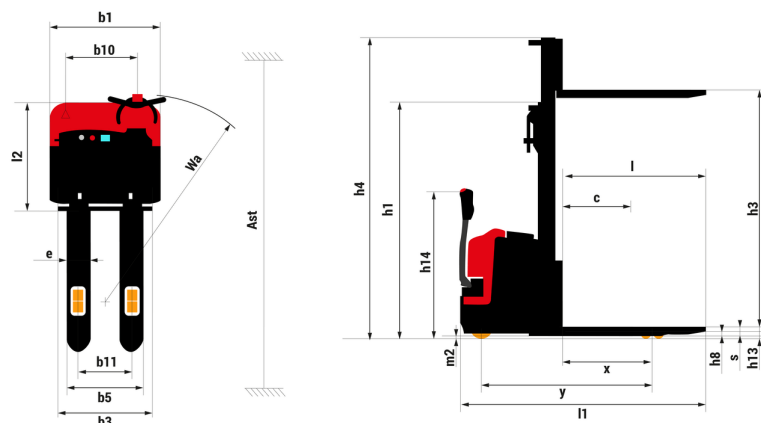
OXYGEN



 **MANITOU**
HANDLING YOUR WORLD

	Technical characteristics		Imperial
1.1	Manufacturer		MANITOU
1.2	Model Name		ES 312 Easy
1.3	Power source		Electrical - Lithium
1.4	Operator type		Walking alongside
1.5	Max. capacity	Q	2646 lb
1.6	Load center of gravity	c	24 in
1.8	Load distance, centre of drive axle to fork (low/raised) - Low position / Raised position	x / x	28 in / 28 in
1.9	Wheelbase	y	52 in
	Weight		
2.1	Service weight		2249 lb
2.2	Weight on front axle (laden) / rear axle (laden)		1378 lb / 3516 lb
2.3	Weight on front axle (Unladen) / rear axle (Unladen)		1510 lb / 739 lb
	Wheels		
3.1	Tires type		Polyurethane cushion
3.3	Number of load wheels / Size of load wheels		4 / 83x80
3.4	Number of stabilizer wheels / Size of the stabilizer wheels		1 / 140x55
3.5	Number of front wheels / rear wheels		2 / 4
3.5.2	Number of drive wheels / Size of drive wheels		1/250x80
3.6	Front wheel gauge	b10	20 in
3.7	Rear wheel gauge	b11	15 in
	Dimensions		
4.10	Height of wheel arms	h8	3 in
4.15	Fork height in low position	h13	4 in
4.19	Overall length	l1	76 in
4.20	Length to face of forks	l2	31 in
4.21	Overall width	b1	31 in
4.22	Forks section / width / length	s / e / l	2 in / 7 in / 45 in
4.24	Fork carriage width	b3	27 in
4.25	Forks spread	b5	22 in
4.32	Ground clearance at centre of wheelbase	m2	0.98 in
4.33	Aisle Width for pallets 1000 x 1200 crossways	Ast	95 in
4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	94 in
4.35	Turning radius	Wa	61 in
4.9	Height tiller min. / max.	h14 / h14	31 in / 47 in
	Performances		
5.1	Travel speed (laden / unladen)		4 mph / 4 mph
5.2	Lifting speed (laden / unladen)		0.72 ft/s / 2 ft/s
5.3	Lowering speed (laden / unladen)		1 ft/s / 1 ft/s
5.8	Max Gradeability (laden / unladen)		8 % / 16 %
5.10	Service brake		Electro magnetic
	Engine		
6.1	Drive motor rating S2 60 min		2.20 kW
6.2	Lift motor rating at S3 15%		4.20 kW
6.4	Battery voltage / capacity		48 V / 80 Ah
	Battery technology		Lithium-ion
6.5	Battery weight (+/- 5%)		132 lb

ES 312 Easy - Dimensional drawing



Characteristics of masts and residual capacities

Full Visibility Duplex (FVD)		FVD 30
h1 - Mast lowered height	in	78.3
h2 - Mast free lift	in	3.5
h3 - Mast lifting height	in	118.1
h4 - Mast extended height	in	137.4
Residual capacity at max height	lb	2646
Height at max capacity	in	121.7

Free Lift Triplex (FLT)		FLT 43
h1 - Mast lowered height	in	74.4
h2 - Mast free lift	in	56.1
h3 - Mast lifting height	in	169.3
h4 - Mast extended height	in	188.2
Residual capacity at max height	lb	1775
Height at max capacity	in	129.5

Equipment

Standard
Battery - 5.04kWh - Lithium-ion
Internal charger - 48 V - 20 A - Lithium-ion - Single-phase
Pincode - On tiller
Polyurethane tandem-load wheels

Optional
Cold environment (-30°C (-22°F) in/out)
Key switch entry
Soft polyurethane drive wheel - 75 shore



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