Technical sheet :

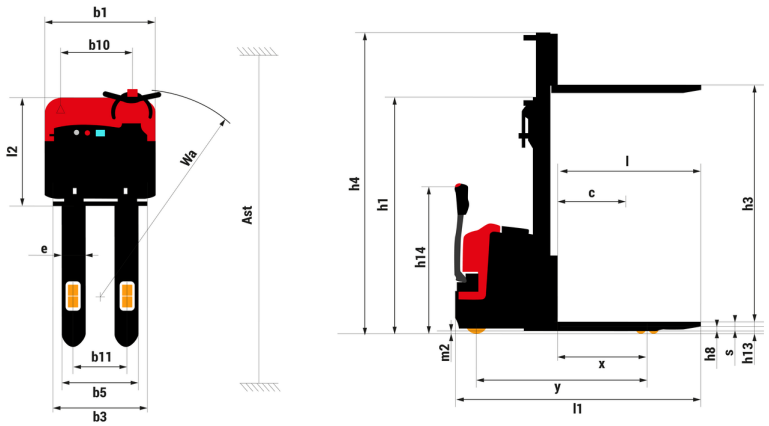
ES 312 EASY

OXYGEN

MANITOU
HANDLING YOUR WORLD

	Technical characteristics		Metric
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	1200 kg
1.6	Load center of gravity	c	600 mm
1.8	Load distance, centre of drive axle to fork (low/raised) - Low position / Raised position	x / x	700 mm / 700 mm
1.9	Wheelbase	y	1318 mm
	Weight		
2.1	Service weight		1020 kg
2.2	Weight on front axle (laden) / rear axle (laden)		625 kg / 1595 kg
2.3	Weight on front axle (Unladen) / rear axle (Unladen)		685 kg / 335 kg
	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	510 mm
3.7	Rear wheel gauge	b11	385 mm
	Dimensions		
4.10	Height of wheel arms	h8	80 mm
4.15	Fork height in low position	h13	90 mm
4.19	Overall length	l1	1934 mm
4.20	Length to face of forks	l2	784 mm
4.21	Overall width	b1	800 mm
4.22	Forks section / width / length	s / e / l	60 mm / 185 mm / 1150 mm
4.24	Fork carriage width	b3	680 mm
4.25	Forks spread	b5	570 mm
4.32	Ground clearance at centre of wheelbase	m2	25 mm
4.33	Aisle Width for pallets 1000 x 1200 crossways	Ast	2420 mm
4.34	Aisle width for 800 x 1200 pallet lengthways	Ast	2390 mm
4.35	Turning radius	Wa	1550 mm
4.9	Height tiller min. / max.	h14 / h14	790 mm / 1205 mm
	Performances		
5.1	Travel speed (laden / unladen)		6 km/h / 6 km/h
5.2	Lifting speed (laden / unladen)		0.22 m/s / 0.47 m/s
5.3	Lowering speed (laden / unladen)		0.45 m/s / 0.40 m/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 / 105 Ah
	Battery technology		Lithium-ion
6.5	Battery weight (+/- 5%)		65 kg

ES 312 Easy - Dimensional drawing



Characteristics of masts and residual capacities

Full Visibility Duplex (FVD)		FVD 30
h1 - Mast lowered height	mm	1990
h2 - Mast free lift	mm	90
h3 - Mast lifting height	mm	3000
h4 - Mast extended height	mm	3490
Residual capacity at max height	kg	1200
Height at max capacity	mm	3090

Free Lift Triplex (FLT)		FLT 43
h1 - Mast lowered height	mm	1890
h2 - Mast free lift	mm	1425
h3 - Mast lifting height	mm	4300
h4 - Mast extended height	mm	4780
Residual capacity at max height	kg	805
Height at max capacity	mm	3290

Equipment

Standard
Battery - 5.04kWh - Lithium-ion
Onboard charger - 0.96kW AC - Lithium-ion - Single-phase
Pincode - On tiller
Polyurethane tandem-load wheels

Optional
Cold environment (from -28°C (-18°F))
External charger - 2.4kW AC - Lithium-ion - Single-phase
Key switch entry
Soft polyurethane drive wheel - 75 shore

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