

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 | 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 | 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 |
| 6.5 | Battery technology | | Lithium-ion |
| 6.5 | Battery weight (+/- 5%) | | 65 kg |
| 6.6.1 | Energy consumption according to DIN EN 16796 | | 0.55 kWh/h |

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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