

Technical sheet :

ES 612 LI



| | Technical characteristics | | Metric | Imperial |
|-------|---|-----------|--------------------------|-----------------------|
| 1.1 | Manufacturer | | Manitou | Manitou |
| 1.2 | Model Name | | ES 612 LI | ES 612 LI |
| 1.3 | Power source | | Electrical | Electrical |
| 1.4 | Operator type | | Pedestrian | Pedestrian |
| 1.5 | Max. capacity | Q | 1200 kg | 2646 lb |
| 1.6 | Load center of gravity | c | 600 mm | 24 in |
| 1.8 | Distance from Load backrest to center of rear axle | x | 834 mm | 33 in |
| 1.9 | Wheelbase | y | 1492 mm | 59 in |
| | Weight | | | |
| 2.1 | Service weight | | 1251 kg | 2758 lb |
| 2.2 | Weight on front axle (laden) / rear axle (laden) | | 1295 kg / 1163 kg | 2855 lb / 2564 lb |
| 2.3 | Weight on front axle (Unladen) / rear axle (Unladen) | | 1328 kg / 1003 kg | 2928 lb / 2211 lb |
| | Wheels | | | |
| 3.1 | Tires type | | Bandage | Bandage |
| 3.3 | Number of load wheels / Size of load wheels | | 2 / 140x60 | 2 / 140x60 |
| 3.4 | Number of stabilizer wheels / Size of the stabilizer wheels | | 1 / 140x60 | 1 / 140x60 |
| 3.5 | Number of front wheels / rear wheels | | 2 / 4 | 2 / 4 |
| 3.5.2 | Number of drive wheels / Size of drive wheels | | 1/230x70 | 1/230x70 |
| 3.6 | Front wheel gauge | b10 | 529 mm | 21 in |
| 3.7 | Rear wheel gauge | b11 | 380 mm | 15 in |
| | Dimensions | | | |
| 4.6 | Initial lift | h5 | 110 mm | 4 in |
| 4.19 | Overall length | l1 | 2162 mm | 85 in |
| 4.20 | Length to face of forks | l2 | 973 mm | 38 in |
| 4.21 | Overall width | b1 | 800 mm | 31 in |
| 4.22 | Forks section / width / length | s / e / l | 60 mm / 185 mm / 1190 mm | 2 in / 7 in / 47 in |
| 4.24 | Fork carriage width | b3 | 700 mm | 28 in |
| 4.32 | Ground clearance at centre of wheelbase | m2 | 30 mm | 1 in |
| 4.33 | Aisle Width for pallets 1000 x 1200 crossways | Ast | 2521 mm | 99 in |
| 4.34 | Aisle width for 800 x 1200 pallet lengthways | Ast | 2428 mm | 96 in |
| 4.35 | Turning radius | Wa | 1716 mm | 68 in |
| 4.9 | Height tiller min. / max. | h14 / h14 | 750 mm / 1250 mm | 30 in / 49 in |
| | Performances | | | |
| 5.1 | Travel speed (laden / unladen) | | 4.50 km/h / 4.50 km/h | 3 mph / 3 mph |
| 5.2 | Lifting speed (laden / unladen) | | 0.18 m/s / 0.30 m/s | 0.59 ft/s / 0.98 ft/s |
| 5.3 | Lowering speed (laden / unladen) | | 0.27 m/s / 0.22 m/s | 0.89 ft/s / 0.72 ft/s |
| 5.8 | Max Gradeability (laden / unladen) | | 7 % / 10 % | 7 % / 10 % |
| 5.10 | Service brake | | Electro magnetic | Electro magnetic |
| | Engine | | | |
| 6.1 | Drive motor rating S2 60 min | | 1.50 kW | 1.50 kW |
| 6.2 | Lift motor rating at S3 15% | | 3 kW | 3 kW |
| 6.3 | Battery according to DIN 43531/35/36 A, B, C | | DIN 43535-B | DIN 43535-B |
| 6.4 | Battery voltage / capacity | | 24 V / 180 Ah | 24 V / 180 Ah |
| 6.5 | Battery weight (+/- 5%) | | 189 kg | 417 lb |
| | Miscellaneous | | | |
| 8.1 | Type of drive control | | AC | AC |
| 8.4 | Sound level at the driver's ear according to DIN 12 053 | | 65 dB | 65 dB |

ES 612 LI - Dimensional drawing



Characteristics of masts and residual capacities

| Central Cylinder Simplex (CCS) | | CCS 15 | CCS 17 |
|---------------------------------|---------|-------------|-------------|
| h1 - Mast lowered height | in (mm) | 76.9 (1953) | 86.7 (2203) |
| h2 - Mast free lift | in (mm) | 59.3 (1506) | 69.1 (1756) |
| h3 - Mast lifting height | in (mm) | 59.3 (1506) | 69.1 (1756) |
| h4 - Mast extended height | in (mm) | 77.2 (1960) | 87 (2210) |
| Residual capacity at max height | lb (kg) | 2646 (1200) | 2646 (1200) |

| Full Visibility Duplex (FVD) | | FVD 29 | FVD 34 | FVD 38 |
|---------------------------------|---------|--------------|--------------|--------------|
| h1 - Mast lowered height | in (mm) | 76.9 (1953) | 86.7 (2203) | 94.6 (2403) |
| h3 - Mast lifting height | in (mm) | 115.6 (2936) | 135.3 (3436) | 151 (3836) |
| h4 - Mast extended height | in (mm) | 133.5 (3390) | 153.1 (3890) | 168.9 (4290) |
| Residual capacity at max height | lb (kg) | 2646 (1200) | 2315 (1050) | 1764 (800) |

| Free Lift Duplex (FLD) | | FLD 29 | FLD 34 |
|---------------------------------|---------|-----------------------|--------------|
| h1 - Mast lowered height | in (mm) | 76.9 (1953) | 86.7 (2203) |
| h2 - Mast free lift | in (mm) | 59.3 (1506) | 69.1 (1756) |
| h3 - Mast lifting height | in (mm) | 115.4 (2931) | 135.1 (3431) |
| h4 - Mast extended height | in (mm) | 133267.7 (3385000) | 153 (3885) |
| Residual capacity at max height | lb (kg) | 2646 (1200) | 2315 (1050) |

| Free Lift Triplex (FLT) | | FLT 42 | FLT 45 |
|---------------------------------|---------|--------------|--------------|
| h1 - Mast lowered height | in (mm) | 75.2 (1911) | 81.5 (2071) |
| h2 - Mast free lift | in (mm) | 57.7 (1466) | 64 (1626) |
| h3 - Mast lifting height | in (mm) | 167.2 (4246) | 186.1 (4726) |
| h4 - Mast extended height | in (mm) | 185.9 (4723) | 204.8 (5203) |
| Residual capacity at max height | lb (kg) | 1433 (650) | 1279 (580) |



Head Office

B.P. 249 - 430 rue de l'Aubinière

44150 Ancenis Cedex - France

Tel: +33 (0)2 40 09 10 11 - Fax: +33 (0)2 40 09 10 97

www.manitou.com



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