

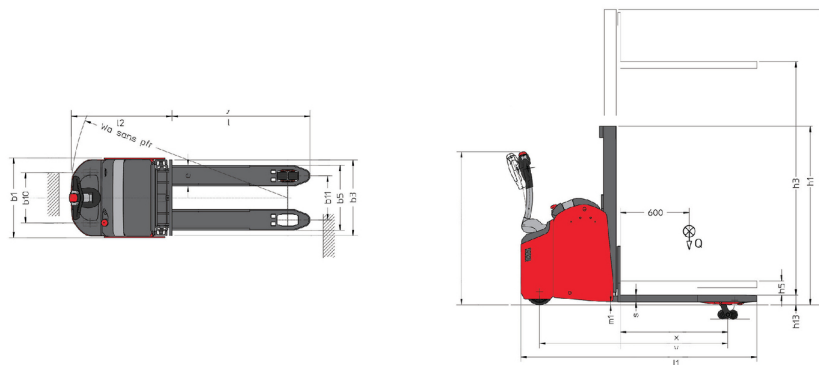
Technical sheet :

ES 420 DL



| Technical characteristics | | | Metric |
|---------------------------|---|-----------|---------------------------|
| 1.1 | Manufacturer | | Manitou |
| 1.2 | Model Name | | ES 420 DL |
| 1.3 | Power source | | Electrical |
| 1.4 | Operator type | | Pedestrian |
| 1.5 | Max. capacity | Q | 2000 kg |
| 1.51 | Nominal capacity on wrapover forks | Q | 1000 kg |
| 1.52 | Nominal capacity in double stacking 1 / 2 | Q / Q | 1000 kg + 1000 kg |
| 1.6 | Load center of gravity | c | 600 mm |
| 1.8 | Distance from Load backrest to center of rear axle | x | 937 mm |
| 1.9 | Wheelbase | y | 1644 mm |
| Weight | | | |
| 2.1 | Service weight | | 1020 kg |
| 2.2 | Weight on front axle (laden) / rear axle (laden) | | 1460 kg / 1560 kg |
| 2.3 | Weight on front axle (Unladen) / rear axle (Unladen) | | 730 kg / 290 kg |
| Wheels | | | |
| 3.1 | Tires type | | Polyurethane |
| 3.3 | Number of load wheels / Size of load wheels | | 4 / 82x68 |
| 3.4 | Number of stabilizer wheels / Size of the stabilizer wheels | | 2 / 120x50 |
| 3.5 | Number of front wheels / rear wheels | | 3 / 4 |
| 3.5.2 | Number of drive wheels / Size of drive wheels | | 1/230x75 |
| 3.6 | Front wheel gauge | b10 | 435 mm |
| 3.7 | Rear wheel gauge | b11 | 380 mm |
| Dimensions | | | |
| 4.15 | Fork height in low position | h13 | 85 mm |
| 4.19 | Overall length | l1 | 2060 mm |
| 4.20 | Length to face of forks | l2 | 870 mm |
| 4.21 | Overall width | b1 | 688 mm |
| 4.22 | Forks section / width / length | s / e / l | 160 mm / 180 mm / 1190 mm |
| 4.24 | Fork carriage width | b3 | 650 mm |
| 4.31 | Ground clearance below mast | m1 | 25 mm |
| 4.32 | Ground clearance at centre of wheelbase | m2 | 30 mm |
| 4.35 | Turning radius | Wa | 1870 mm |
| 4.9 | Height tiller min. / max. | h14 / h14 | 866 mm / 1320 mm |
| Performances | | | |
| 5.1 | Travel speed (laden / unladen) | | 5.50 km/h / 6 km/h |
| 5.2 | Lifting speed (laden / unladen) | | 0.11 m/s / 0.18 m/s |
| 5.3 | Lowering speed (laden / unladen) | | 0.20 m/s / 0.24 m/s |
| 5.8 | Max Gradeability (laden / unladen) | | 10 % / 20 % |
| 5.10 | Service brake | | Electro magnetic |
| Engine | | | |
| 6.1 | Drive motor rating S2 60 min | | 1.70 kW |
| 6.2 | Lift motor rating at S3 15% | | 2 kW |
| 6.3 | Battery according to DIN 43531/35/36 A, B, C | | No |
| 6.4 | Battery voltage / capacity | | 24 V / 270 Ah |
| 6.5 | Battery weight (+/- 5%) | | 245 kg |
| Miscellaneous | | | |
| 8.1 | Type of drive control | | AC |
| 8.4 | Sound level at the driver's ear according to DIN 12 053 | | 65 dB |

ES 420 DL - Dimensional drawing



Characteristics of masts and residual capacities

| Central Cylinder Duplex (CCD) | | CCD 17 | CCD 21 |
|---------------------------------|----|--------|--------|
| h1 - Mast lowered height | mm | 1365 | 1560 |
| h3 - Mast lifting height | mm | 1725 | 2125 |
| h4 - Mast extended height | mm | 2185 | 2580 |
| Residual capacity at max height | kg | 1000 | 1000 |

| Central Cylinder Simplex (CCS) | | CCS 17 |
|---------------------------------|----|--------|
| h1 - Mast lowered height | mm | 2180 |
| h2 - Mast free lift | mm | 1725 |
| h3 - Mast lifting height | mm | 1725 |
| h4 - Mast extended height | mm | 2180 |
| Residual capacity at max height | kg | 1000 |



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