Technical sheet:

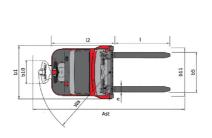
## ES-C 510

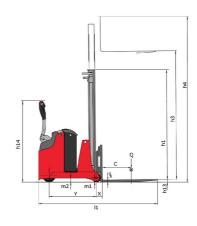




|       |   | <b>ES-C 510</b> Crea | ted on May 10, 2024 at 2:44:46 AM UTC |
|-------|---|----------------------|---------------------------------------|
|       | Technical characteristics                               |                      | Metric                                |
| 1.1   | Manufacturer  |                      | Manitou                               |
| 1.2   | Model Name  |                      | ES 510 GPF                            |
| 1.3   | Power source  |                      | Electrical                            |
| 1.4   | Operator type   |                      | Pedestrian                            |
| 1.5   | Max. capacity   | Q                    | 1000 kg                               |
| 1.6   | Load center of gravity                                  | C                    | 500 mm                                |
| 1.8   | Distance from Load backrest to center of rear axle      | X                    | 101 mm                                |
| 1.9   | Wheelbase   | у                    | 1047 mm                               |
|       | Weight  |                      |                                       |
| 2.1   | Service weight  |                      | 1388 kg                               |
|       | Wheels  |                      | 3                                     |
| 3.1   | Tires type  |                      | Polyurethane                          |
| 3.3   | Number of load wheels / Size of load wheels             |                      | 2 / 150x70                            |
| 3.5   | Number of front wheels / rear wheels                    |                      | 1/2                                   |
| 3.5.2 | Number of drive wheels / Size of drive wheels           |                      | 1/230x70                              |
| 3.7   | Rear wheel gauge  | b11                  | 826 mm                                |
|       | Dimensions  |                      |                                       |
| 4.19  | Overall length  | l1                   | 2278 mm                               |
| 4.20  | Length to face of forks                                 | 12                   | 1328 mm                               |
| 4.21  | Overall width   | b1                   | 923 mm                                |
| 4.22  | Forks section / width / length                          | s / e / l            | 35 mm / 100 mm / 800 mm               |
| 4.23  | Fork carriage ISO 2328 (class/form) A/B                 |                      | 2B                                    |
| 4.24  | Fork carriage width                                     | b3                   | 750 mm                                |
| 4.31  | Ground clearance below mast                             | m1                   | 60 mm                                 |
| 4.32  | Ground clearance at centre of wheelbase                 | m2                   | 69 mm                                 |
| 4.35  | Turning radius  | Wa                   | 1450 mm                               |
| 4.9   | Height tiller min. / max.                               | h14 / h14            | 830 mm / 1385 mm                      |
|       | Performances  |                      |                                       |
| 5.1   | Travel speed (laden / unladen)                          |                      | 4.50 km/h / 4.50 km/h                 |
| 5.2   | Lifting speed (laden / unladen)                         |                      | 0.30 m/s / 0.18 m/s                   |
| 5.3   | Lowering speed (laden / unladen)                        |                      | 0.22 m/s / 0.27 m/s                   |
| 5.8   | Max Gradeability (laden / unladen)                      |                      | 7 % / 10 %                            |
| 5.10  | Service brake   |                      | Electro magnetic                      |
|       | Engine  |                      |                                       |
| 6.1   | Drive motor rating S2 60 min                            |                      | 1.50 kW                               |
| 6.2   | Lift motor rating at S3 15%                             |                      | 3 kW                                  |
| 6.3   | Battery according to DIN 43531/35/36 A, B, C            |                      | DIN 43535-B                           |
| 6.4   | Battery voltage / capacity                              |                      | 24 V / 375 Ah                         |
| 6.5   | Battery weight (+/- 5%)                                 |                      | 293 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-C 510 - Dimensional drawing





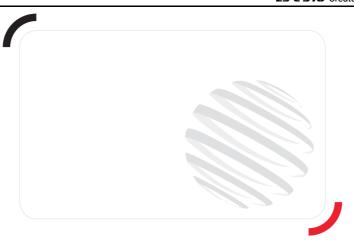
## Characteristics of masts and residual capacities

| Central Cylinder Simplex (CCS)  |    | CCS 15 | CCS 17 |
|---------------------------------|----|--------|--------|
| h1 - Mast lowered height        | mm | 1931   | 2181   |
| h2 - Mast free lift             | mm | 1420   | 1670   |
| h3 - Mast lifting height        | mm | 1420   | 1670   |
| h4 - Mast extended height       | mm | 2070   | 2320   |
| Residual capacity at max height | kg | 1000   | 1000   |

| Full Visibility Duplex (FVD)    |    | FVD 29 | FVD 34 | FVD 38 |
|---------------------------------|----|--------|--------|--------|
| h1 - Mast lowered height        | mm | 1931   | 2181   | 2381   |
| h3 - Mast lifting height        | mm | 2850   | 3350   | 3750   |
| h4 - Mast extended height       | mm | 3500   | 4000   | 4400   |
| Residual capacity at max height | kg | 1000   | 1000   | 900    |

| Free Lift Duplex (FLD)          |    | FLD 29 | FLD 34 |
|---------------------------------|----|--------|--------|
| h1 - Mast lowered height        | mm | 1931   | 2181   |
| h2 - Mast free lift             | mm | 1420   | 1670   |
| h3 - Mast lifting height        | mm | 2850   | 3355   |
| h4 - Mast extended height       | mm | 3500   | 4000   |
| Residual capacity at max height | kg | 1000   | 1000   |

| Free Lift Triplex (FLT)         |    | FLT 42 |
|---------------------------------|----|--------|
| h1 - Mast lowered height        | mm | 1956   |
| h2 - Mast free lift             | mm | 1380   |
| h3 - Mast lifting height        | mm | 4160   |
| h4 - Mast extended height       | mm | 4810   |
| Residual capacity at max height | kg | 800    |





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