

Technical sheet :

# ES-C 713



 **MANITOU**  
HANDLING YOUR WORLD

|       | Technical characteristics                               |           | Metric                   |
|-------|---|-----------|--------------------------|
| 1.1   | Manufacturer  |           | Manitou                  |
| 1.2   | Model Name  |           | ES-C 713                 |
| 1.3   | Power source  |           | Electrical               |
| 1.4   | Operator type   |           | Pedestrian               |
| 1.5   | Max. capacity   | Q         | 1300 kg                  |
| 1.6   | Load center of gravity                                  | c         | 500 mm                   |
| 1.8   | Distance from Load backrest to center of rear axle      | x         | 157 mm                   |
| 1.9   | Wheelbase   | y         | 1200 mm                  |
|       | <b>Weight</b>   |           |                          |
| 2.1   | Service weight  |           | 2200 kg                  |
| 2.2   | Weight on front axle (laden) / rear axle (laden)        |           | 450 kg / 3050 kg         |
| 2.3   | Weight on front axle (Unladen) / rear axle (Unladen)    |           | 1150 kg / 1050 kg        |
|       | <b>Wheels</b>   |           |                          |
| 3.1   | Tires type  |           | Polyurethane             |
| 3.3   | Number of load wheels / Size of load wheels             |           | 2 / 250x100              |
| 3.5   | Number of front wheels / rear wheels                    |           | 1 / 2                    |
| 3.5.2 | Number of drive wheels / Size of drive wheels           |           | 1/254x100                |
| 3.7   | Rear wheel gauge  | b11       | 1003 mm                  |
|       | <b>Dimensions</b>                                       |           |                          |
| 4.15  | Fork height in low position                             | h13       | 45 mm                    |
| 4.19  | Overall length  | l1        | 2690 mm                  |
| 4.20  | Length to face of forks                                 | l2        | 1540 mm                  |
| 4.21  | Overall width   | b1        | 1120 mm                  |
| 4.22  | Forks section / width / length                          | s / e / l | 40 mm / 100 mm / 1150 mm |
| 4.24  | Fork carriage width                                     | b3        | 750 mm                   |
| 4.31  | Ground clearance below mast                             | m1        | 31 mm                    |
| 4.32  | Ground clearance at centre of wheelbase                 | m2        | 62 mm                    |
| 4.33  | Aisle Width for pallets 1000 x 1200 crossways           | Ast       | 3028 mm                  |
| 4.34  | Aisle width for 800 x 1200 pallet lengthways            | Ast       | 3136 mm                  |
| 4.35  | Turning radius  | Wa        | 1560 mm                  |
| 4.9   | Height tiller min. / max.                               | h14 / h14 | 1005 mm / 1405 mm        |
|       | <b>Performances</b>                                     |           |                          |
| 5.1   | Travel speed (laden / unladen)                          |           | 6 km/h / 6 km/h          |
| 5.2   | Lifting speed (laden / unladen)                         |           | 0.11 m/s / 0.20 m/s      |
| 5.3   | Lowering speed (laden / unladen)                        |           | 0.22 m/s / 0.21 m/s      |
| 5.8   | Max Gradeability (laden / unladen)                      |           | 5 % / 8 %                |
| 5.10  | Service brake   |           | Electro magnetic         |
|       | <b>Engine</b>   |           |                          |
| 6.1   | Drive motor rating S2 60 min                            |           | 2 kW                     |
| 6.2   | Lift motor rating at S3 15%                             |           | 4 kW                     |
| 6.3   | Battery according to DIN 43531/35/36 A, B, C            |           | DIN 43535-B              |
| 6.4   | Battery voltage / capacity                              |           | 24 V / 315 Ah            |
| 6.5   | Battery weight (+/- 5%)                                 |           | 275 kg                   |
|       | <b>Miscellaneous</b>                                    |           |                          |
| 8.1   | Type of drive control                                   |           | DC                       |
| 8.4   | Sound level at the driver's ear according to DIN 12 053 |           | 65 dB                    |

## ES-C 713 - Dimensional drawing



## Characteristics of masts and residual capacities

| Central Cylinder Simplex (CCS)              |    | CCS 15 | CCS 17 |
|---|----|--------|--------|
| $\alpha$ - Mast/fork carriage tilt, forward | °  | 4      | 4      |
| $\beta$ - Mast/fork carriage tilt, backward | °  | 6      | 6      |
| h1 - Mast lowered height                    | mm | 1955   | 2205   |
| h2 - Mast free lift                         | mm | 1465   | 1715   |
| h3 - Mast lifting height                    | mm | 1465   | 1715   |
| h4 - Mast extended height                   | mm | 2030   | 2280   |
| Residual capacity at max height             | kg | 1300   | 1300   |

| Full Visibility Duplex (FVD)                |    | FVD 29 | FVD 34 | FVD 38 |
|---|----|--------|--------|--------|
| $\alpha$ - Mast/fork carriage tilt, forward | °  | 3      | 3      | 3      |
| h1 - Mast lowered height                    | mm | 1955   | 2205   | 2405   |
| h3 - Mast lifting height                    | mm | 2890   | 3390   | 3790   |
| h4 - Mast extended height                   | mm | 3455   | 3955   | 4355   |
| Residual capacity at max height             | kg | 1300   | 1300   | 1100   |

| Free Lift Duplex (FLD)                      |    | FLD 29 | FLD 34 |
|---|----|--------|--------|
| $\alpha$ - Mast/fork carriage tilt, forward | °  | 4      | 4      |
| $\beta$ - Mast/fork carriage tilt, backward | °  | 6      | 6      |
| h1 - Mast lowered height                    | mm | 1955   | 2205   |
| h2 - Mast free lift                         | mm | 1465   | 1715   |
| h3 - Mast lifting height                    | mm | 2890   | 3390   |
| h4 - Mast extended height                   | mm | 3455   | 3955   |
| Residual capacity at max height             | kg | 1300   | 1300   |

| Free Lift Triplex (FLT)                     |    | FLT 42 | FLT 47 | FLT 54 |
|---|----|--------|--------|--------|
| $\alpha$ - Mast/fork carriage tilt, forward | °  | 4      | 4      | 4      |
| $\beta$ - Mast/fork carriage tilt, backward | °  | 6      | 6      | 6      |
| h1 - Mast lowered height                    | mm | 1915   | 2075   | 2315   |
| h2 - Mast free lift                         | mm | 1425   | 1585   | 1835   |
| h3 - Mast lifting height                    | mm | 4205   | 4685   | 5415   |
| h4 - Mast extended height                   | mm | 4770   | 5250   | 5980   |
| Residual capacity at max height             | kg | 900    | 700    | 500    |



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