

Technical sheet :

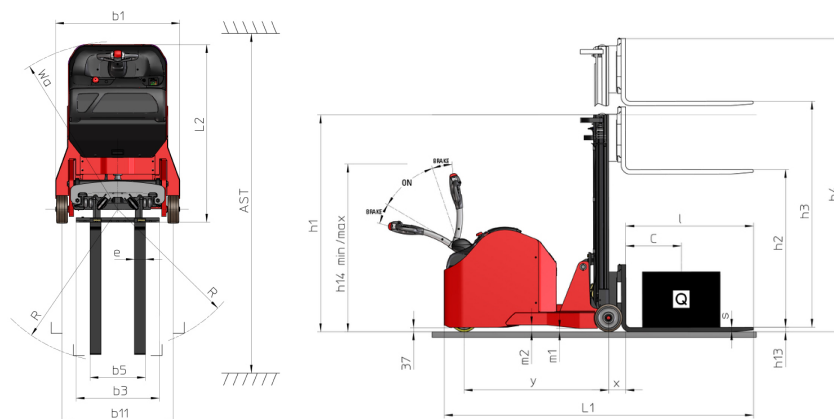
# ES-C 713



 **MANITOU**  
HANDLING YOUR WORLD

|       | Technical characteristics                               |           | Metric                   | Imperial              |
|-------|---|-----------|--------------------------|-----------------------|
| 1.1   | Manufacturer  |           | Manitou                  | Manitou               |
| 1.2   | Model Name  |           | ES-C 713                 | ES-C 713              |
| 1.3   | Power source  |           | Electrical               | Electrical            |
| 1.4   | Operator type   |           | Pedestrian               | Pedestrian            |
| 1.5   | Max. capacity   | Q         | 1300 kg                  | 2866 lb               |
| 1.6   | Load center of gravity                                  | c         | 500 mm                   | 20 in                 |
| 1.8   | Distance from Load backrest to center of rear axle      | x         | 157 mm                   | 6 in                  |
| 1.9   | Wheelbase   | y         | 1200 mm                  | 47 in                 |
|       | <b>Weight</b>   |           |                          |                       |
| 2.1   | Service weight  |           | 2200 kg                  | 4850 lb               |
| 2.2   | Weight on front axle (laden) / rear axle (laden)        |           | 450 kg / 3050 kg         | 992 lb / 6724 lb      |
| 2.3   | Weight on front axle (Unladen) / rear axle (Unladen)    |           | 1150 kg / 1050 kg        | 2535 lb / 2315 lb     |
|       | <b>Wheels</b>   |           |                          |                       |
| 3.1   | Tires type  |           | Polyurethane             | Polyurethane          |
| 3.3   | Number of load wheels / Size of load wheels             |           | 2 / 250x100              | 2 / 250x100           |
| 3.5   | Number of front wheels / rear wheels                    |           | 1 / 2                    | 1 / 2                 |
| 3.5.2 | Number of drive wheels / Size of drive wheels           |           | 1/254x100                | 1/254x100             |
| 3.7   | Rear wheel gauge  | b11       | 1003 mm                  | 39 in                 |
|       | <b>Dimensions</b>                                       |           |                          |                       |
| 4.15  | Fork height in low position                             | h13       | 35 mm                    | 1 in                  |
| 4.19  | Overall length  | l1        | 2690 mm                  | 106 in                |
| 4.20  | Length to face of forks                                 | l2        | 1540 mm                  | 61 in                 |
| 4.21  | Overall width   | b1        | 1120 mm                  | 44 in                 |
| 4.22  | Forks section / width / length                          | s / e / l | 40 mm / 100 mm / 1150 mm | 2 in / 4 in / 45 in   |
| 4.24  | Fork carriage width                                     | b3        | 750 mm                   | 30 in                 |
| 4.31  | Ground clearance below mast                             | m1        | 31 mm                    | 1 in                  |
| 4.32  | Ground clearance at centre of wheelbase                 | m2        | 62 mm                    | 2 in                  |
| 4.35  | Turning radius  | Wa        | 1560 mm                  | 61 in                 |
| 4.9   | Height tiller min. / max.                               | h14 / h14 | 1405 mm / 1005 mm        | 55 in / 40 in         |
|       | <b>Performances</b>                                     |           |                          |                       |
| 5.1   | Travel speed (laden / unladen)                          |           | 6 km/h / 6 km/h          | 4 mph / 4 mph         |
| 5.2   | Lifting speed (laden / unladen)                         |           | 0.11 m/s / 0.20 m/s      | 0.36 ft/s / 0.66 ft/s |
| 5.3   | Lowering speed (laden / unladen)                        |           | 0.22 m/s / 0.21 m/s      | 0.72 ft/s / 0.69 ft/s |
| 5.8   | Max Gradeability (laden / unladen)                      |           | 5 % / 8 %                | 5 % / 8 %             |
| 5.10  | Service brake   |           | Electro magnetic         | Electro magnetic      |
|       | <b>Engine</b>   |           |                          |                       |
| 6.1   | Drive motor rating S2 60 min                            |           | 2 kW                     | 2 kW                  |
| 6.2   | Lift motor rating at S3 15%                             |           | 4 kW                     | 4 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 / 315 Ah            | 24 V / 315 Ah         |
| 6.5   | Battery weight (+/- 5%)                                 |           | 275 kg                   | 606 lb                |
|       | <b>Miscellaneous</b>                                    |           |                          |                       |
| 8.1   | Type of drive control                                   |           | DC                       | DC                    |
| 8.4   | Sound level at the driver's ear according to DIN 12 053 |           | 65 dB                    | 65 dB                 |

## ES-C 713 - Dimensional drawing



# Characteristics of masts and residual capacities

| Central Cylinder Simplex (CCS)  |         | CCS 15      | CCS 17      |
|---------------------------------|---------|-------------|-------------|
| h1 - Mast lowered height        | in (mm) | 77 (1955)   | 86.8 (2205) |
| h2 - Mast free lift             | in (mm) | 57.7 (1465) | 67.5 (1715) |
| h3 - Mast lifting height        | in (mm) | 57.7 (1465) | 67.5 (1715) |
| h4 - Mast extended height       | in (mm) | 79.9 (2030) | 89.8 (2280) |
| Residual capacity at max height | lb (kg) | 2866 (1300) | 2866 (1300) |

| Full Visibility Duplex (FVD)     |         | FVD 29       | FVD 34       | FVD 38       |
|----------------------------------|---------|--------------|--------------|--------------|
| Mast/fork carriage tilt, forward | °       | 3            | 3            | 3            |
| h1 - Mast lowered height         | in (mm) | 77 (1955)    | 86.8 (2205)  | 94.7 (2405)  |
| h3 - Mast lifting height         | in (mm) | 113.8 (2890) | 133.5 (3390) | 149.2 (3790) |
| h4 - Mast extended height        | in (mm) | 136 (3455)   | 155.7 (3955) | 171.5 (4355) |
| Residual capacity at max height  | lb (kg) | 2866 (1300)  | 2866 (1300)  | 2425 (1100)  |

| Free Lift Duplex (FLD)          |         | FLD 29       | FLD 34       |
|---------------------------------|---------|--------------|--------------|
| h1 - Mast lowered height        | in (mm) | 77 (1955)    | 86.8 (2205)  |
| h2 - Mast free lift             | in (mm) | 57.7 (1465)  | 67.5 (1715)  |
| h3 - Mast lifting height        | in (mm) | 113.8 (2890) | 133.5 (3390) |
| h4 - Mast extended height       | in (mm) | 136 (3455)   | 155.7 (3955) |
| Residual capacity at max height | lb (kg) | 2866 (1300)  | 2866 (1300)  |

| Free Lift Triplex (FLT)         |         | FLT 42       | FLT 47       | FLT 54       |
|---------------------------------|---------|--------------|--------------|--------------|
| h1 - Mast lowered height        | in (mm) | 75.4 (1915)  | 81.7 (2075)  | 91.1 (2315)  |
| h2 - Mast free lift             | in (mm) | 56.1 (1425)  | 62.4 (1585)  | 72.2 (1835)  |
| h3 - Mast lifting height        | in (mm) | 165.6 (4205) | 184.4 (4685) | 213.2 (5415) |
| h4 - Mast extended height       | in (mm) | 187.8 (4770) | 206.7 (5250) | 235.4 (5980) |
| Residual capacity at max height | lb (kg) | 1984 (900)   | 1543 (700)   | 1102 (500)   |



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