

Technical sheet :

# ER 12



 **MANITOU**  
HANDLING YOUR WORLD

| Technical characteristics |   |           | Metric                   |
|---------------------------|---|-----------|--------------------------|
| 1.1                       | Manufacturer  |           | Manitou                  |
| 1.2                       | Model Name  |           | ER 12                    |
| 1.3                       | Power source  |           | Electrical               |
| 1.4                       | Operator type   |           | Seated                   |
| 1.5                       | Max. capacity   | Q         | 1200 kg                  |
| 1.6                       | Load center of gravity                                  | c         | 600 mm                   |
| 1.8                       | Load distance, centre of drive axle to fork             | x         | 307 mm                   |
| 1.9                       | Wheelbase   | y         | 1378 mm                  |
| Weight                    |   |           |                          |
| 2.1                       | Service weight  |           | 2580 kg                  |
| Wheels                    |   |           |                          |
| 3.1                       | Tires type  |           | Vulkollan                |
| 3.5.2                     | Number of drive wheels - Size of drive wheels           |           | 1 x 355 x 155            |
| 3.3                       | Number of load wheels - Size of load wheels             |           | 2 x 220*85               |
| 3.5                       | Number of front wheels / rear wheels                    |           | 1 / 2                    |
| 3.6                       | Front wheel gauge                                       | b10       | 0 mm                     |
| 3.7                       | Rear wheel gauge  | b11       | 995 mm                   |
| Dimensions                |   |           |                          |
| 4.7                       | Height of overhead guard (cabin)                        | h6        | 2205 mm                  |
| 4.8                       | Seat height/stand height                                | h7        | 1077 mm                  |
| 4.19                      | Overall length  | l1        | 2413 mm                  |
| 4.20                      | Length to face of forks                                 | l2        | 1263 mm                  |
| 4.21                      | Overall width   | b1        | 1120 mm                  |
| 4.22                      | Forks section / width / length                          | s / e / l | 40 mm x 100 mm / 1150 mm |
| 4.23                      | Fork carriage ISO 2328 (class/form) A/B                 |           | 2A                       |
| 4.26                      | Distance between wheel arms/loading surfaces            | b4        | 900 mm                   |
| 4.25.1                    | Width over forks min. / max.                            | b5        | 316 mm / 697 mm          |
| 4.32                      | Ground clearance at centre of wheelbase                 | m2        | 70 mm                    |
| 4.33                      | Aisle width for 1000 x 1200 pallet lengthways           |           | 2701 mm                  |
| 4.34                      | Aisle width for 800 x 1200 pallet lengthways            | Ast       | 2768 mm                  |
| 4.35                      | Turning radius  | Wa        | 1598 mm                  |
| Performances              |   |           |                          |
| 5.1                       | Travel speed (laden / unladen)                          |           | 12.30 km/h / 12.50 km/h  |
| 5.2                       | Lifting speed (laden / unladen)                         |           | 0.46 m/s / 0.54 m/s      |
| 5.3                       | Lowering speed (laden / unladen)                        |           | 0.58 m/s / 0.60 m/s      |
| 5.4.1                     | Reach speed (with load / without load)                  |           | 0.20 m/s / 0.20 m/s      |
| 5.7                       | Gradeability (laden / unladen)                          |           | 7.50 % / 11.10 %         |
| 5.10                      | Service brake   |           | Electric                 |
| Engine                    |   |           |                          |
| 6.1                       | Drive motor rating S2 60 min                            |           | 5.90 kW                  |
| 6.2                       | Lift motor rating at S3 15%                             |           | 11 kW                    |
| 6.3                       | Battery according to DIN 43531/35/36 A, B, C            |           | DIN43531 B               |
| 6.4                       | Battery voltage / capacity                              |           | 48 V / 420 Ah            |
| 6.5                       | Battery weight (+/- 5%)                                 |           | 730 kg                   |
| Miscellaneous             |   |           |                          |
| 8.1                       | Type of drive control                                   |           | Electronic               |
| 8.3                       | Oil flow rate for attachments                           |           | 25 l/min                 |
| 8.4                       | Sound level at the driver's ear according to DIN 12 053 |           | 57.40 dB                 |

### ER 12 - Dimensional drawing



## Characteristics of masts and residual capacities

| Full Visibility Duplex (FVD)                               |    | FVD 32 | FVD 36 | FVD 38 | FVD 42 | FVD 45 | FVD 48 |
|--|----|--------|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward                       | °  | 4      | 4      | 4      | 4      | 4      | 4      |
| β - Mast/fork carriage tilt, backward                      | °  | 1      | 1      | 1      | 1      | 1      | 1      |
| h1 - Mast lowered height                                   | mm | 2170   | 2370   | 2470   | 2670   | 2820   | 2970   |
| h2 - Mast free lift  | mm | 125    | 125    | 125    | 125    | 125    | 125    |
| h3 - Mast lifting height                                   | mm | 3200   | 3600   | 3800   | 4200   | 4500   | 4800   |
| h4 - Mast extended height                                  | mm | 3780   | 4180   | 4380   | 4780   | 5080   | 5380   |
| Residual capacity with integrated side shift at max height | kg | 1200   | 1200   | 1200   | 1200   | 1200   | 1200   |

| Free Lift Triplex (FLT)                                    |    | FLT 48 | FLT 54 | FLT 57 | FLT 63 | FLT 68 |
|--|----|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward                       | °  | 3      | 3      | 3      | 3      | 3      |
| β - Mast/fork carriage tilt, backward                      | °  | 1      | 1      | 1      | 1      | 1      |
| h1 - Mast lowered height                                   | mm | 2140   | 2340   | 2440   | 2640   | 2790   |
| h2 - Mast free lift  | mm | 1600   | 1800   | 1900   | 2100   | 2250   |
| h3 - Mast lifting height                                   | mm | 4800   | 5400   | 5700   | 6300   | 6800   |
| h4 - Mast extended height                                  | mm | 5380   | 5980   | 6280   | 6880   | 7330   |
| Residual capacity with integrated side shift at max height | kg | 1200   | 1200   | 1200   | 1000   | 700    |

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