

Technical sheet :

# MI 40 D ST5

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 **MANITOU**  
HANDLING YOUR WORLD

| Technical characteristics |   |           | Metric                     |
|---------------------------|---|-----------|----------------------------|
| 1.1                       | Manufacturer  |           | MANITOU                    |
| 1.2                       | Model Name  |           | MI 40 D ST5                |
| 1.3                       | Power source  |           | Diesel                     |
| 1.4                       | Operator type   |           | Seated                     |
| 1.5                       | Max. capacity   | Q         | 4000 kg                    |
| 1.6                       | Load center of gravity  | c         | 500 mm                     |
| 1.8                       | Load distance, centre of drive axle to fork                     | x         | 550 mm                     |
| 1.9                       | Wheelbase   | y         | 2000 mm                    |
| Weight                    |   |           |                            |
| 2.1                       | Service weight  |           | 6430 kg                    |
| 2.2                       | Weight on front axle (laden) / rear axle (laden)                |           | 9330 kg / 1100 kg          |
| 2.3                       | Weight on front axle (Unladen) / rear axle (Unladen)            |           | 3000 kg / 3430 kg          |
| Wheels                    |   |           |                            |
| 3.1                       | Tires type  |           | Super Elastic              |
| 3.2                       | Dimensions of front wheels                                      |           | 8.25-15 14PR               |
| 3.3                       | Dimensions of rear wheels                                       |           | 7.00-12 12PR               |
| 3.5                       | Number of front wheels / rear wheels                            |           | 2 / 2                      |
| 3.5.2                     | Number of drive wheels  |           | 2                          |
| 3.6                       | Front wheel gauge   | b10       | 1160 mm                    |
| 3.7                       | Rear wheel gauge  | b11       | 1130 mm                    |
| Dimensions                |   |           |                            |
| 4.7                       | Height of overhead guard (cabin)                                | h6        | 2390 mm                    |
| 4.8                       | Seat height/stand height  | h7        | 1370 mm                    |
| 4.12                      | Height of towing bar (coupling height)                          | h10       | 445 mm                     |
| 4.19                      | Overall length  | l1        | 4285 mm                    |
| 4.20                      | Length to face of forks   | l2        | 3065 mm                    |
| 4.21                      | Overall width   | b1        | 1395 mm                    |
| 4.21                      | Overall width - Single wheels                                   | b1        | 1395 mm                    |
| 4.21                      | Overall width - Twinned wheels                                  | b1        | 1940 mm                    |
| 4.22                      | Forks section / width / length                                  | s / e / l | 50 mm x 122 mm x 1220 mm   |
| 4.23                      | Fork carriage ISO 2328 (class/form) A/B                         |           | 3A                         |
| 4.24                      | Fork carriage width   | b3        | 1250 mm                    |
| 4.31                      | Ground clearance below mast                                     | m1        | 170 mm                     |
| 4.32                      | Ground clearance at centre of wheelbase                         | m2        | 230 mm                     |
| 4.33                      | Aisle Width for pallets 1000 x 1200 crossways                   | Ast       | 4530 mm                    |
| 4.34                      | Aisle width for 800 x 1200 pallet lengthways                    | Ast       | 4330 mm                    |
| 4.35                      | Turning radius  | Wa        | 2780 mm                    |
| 4.36                      | Internal turning radius (over tyres)                            | b13       | 135 mm                     |
| Performances              |   |           |                            |
| 5.1                       | Travel speed (laden / unladen)                                  |           | 13 km/h-23 km/h            |
| 5.2                       | Lifting speed (laden / unladen)                                 |           | 0.49 m/s-0.52 m/s          |
| 5.3                       | Lowering speed (laden / unladen)                                |           | 0.50 m/s-0.50 m/s          |
| 5.5                       | Drawbar pull (Laden / Unladen)                                  |           | 3800 daN / 2000 daN        |
| 5.7                       | Gradeability (laden / unladen)                                  |           | 20 % / 20 %                |
| 5.10                      | Service brake   |           | Hydraulic                  |
| Engine                    |   |           |                            |
| 7.1                       | Engine brand / model / nom                                      |           | Deutz / TCD2.9L4 / Stage V |
| 7.2                       | I.C. Engine power rating  |           | 55.40 kW                   |
| 7.3                       | Rated speed   |           | 2200 rpm                   |
| 7.4                       | Number of cylinders / Capacity of cylinders                     |           | 4 - 2920 cm³               |
| Miscellaneous             |   |           |                            |
| 8.2                       | Working hydraulic pressure for attachments                      |           | 190 bar                    |
| 8.3                       | Oil flow rate for attachments                                   |           | 90 l/min                   |
| 8.4                       | Measured/guaranteed mean noise level at the ear of the operator |           | < 89 dB                    |

### MI 40 D ST5 - Dimensional drawing



## Characteristics of masts and residual capacities

| Full Visibility Duplex (FVD)                               |    | FVD 30 | FVD 33 | FVD 35 | FVD 37 | FVD 40 | FVD 45 | FVD 50 |
|--|----|--------|--------|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward                       | °  | 6      | 6      | 6      | 6      | 6      | 6      | 6      |
| β - Mast/fork carriage tilt, backward                      | °  | 12     | 12     | 12     | 12     | 12     | 12     | 12     |
| h1 - Mast lowered height                                   | mm | 2245   | 2395   | 2495   | 2595   | 2795   | 3070   | 3345   |
| h2 - Mast free lift  | mm | 160    | 160    | 160    | 160    | 160    | 160    | 160    |
| h3 - Mast lifting height                                   | mm | 3000   | 3300   | 3500   | 3700   | 4000   | 4500   | 5000   |
| h4 - Mast extended height                                  | mm | 4170   | 4470   | 4670   | 4870   | 5170   | 5670   | 6170   |
| Residual capacity at max height                            | kg | 4000   | 4000   | 4000   | 4000   | 4000   | 3700   | 3200   |
| Residual capacity with integrated side shift at max height | kg | 4000   | 4000   | 4000   | 4000   | 4000   | 3600   | 3100   |
| Height at max capacity                                     | mm | 3000   | 3300   | 3500   | 3700   | 4000   | 4000   | 4000   |
| Height at max capacity with integrated sideshift           | mm | 3000   | 3300   | 3500   | 3700   | 4000   | 4000   | 4000   |

| Free Lift Duplex (FLD)                                     |    | FLD 30 | FLD 33 | FLD 35 | FLD 37 |
|--|----|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward                       | °  | 6      | 6      | 6      | 6      |
| β - Mast/fork carriage tilt, backward                      | °  | 12     | 12     | 12     | 12     |
| h1 - Mast lowered height                                   | mm | 2226   | 2376   | 2476   | 2576   |
| h2 - Mast free lift  | mm | 1364   | 1514   | 1614   | 1714   |
| h3 - Mast lifting height                                   | mm | 3000   | 3300   | 3500   | 3700   |
| h4 - Mast extended height                                  | mm | 4170   | 4470   | 4670   | 4870   |
| Residual capacity at max height                            | kg | 4000   | 4000   | 4000   | 4000   |
| Residual capacity with integrated side shift at max height | kg | 4000   | 4000   | 4000   | 4000   |
| Height at max capacity                                     | mm | 3000   | 3300   | 3500   | 3700   |
| Height at max capacity with integrated sideshift           | mm | 3000   | 3300   | 3500   | 3700   |

| Free Lift Triplex (FLT)                                    |    | FLT 40 | FLT 43 | FLT 45 | FLT 47 | FLT 50 | FLT 55 | FLT 60 |
|--|----|--------|--------|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward                       | °  | 6      | 6      | 6      | 6      | 6      | 3      | 3      |
| β - Mast/fork carriage tilt, backward                      | °  | 12     | 6      | 6      | 6      | 6      | 6      | 6      |
| h1 - Mast lowered height                                   | mm | 2080   | 2180   | 2248   | 2310   | 2410   | 2575   | 2790   |
| h2 - Mast free lift  | mm | 1229   | 1329   | 1395   | 1459   | 1559   | 1724   | 1939   |
| h3 - Mast lifting height                                   | mm | 4000   | 4300   | 4500   | 4700   | 5000   | 5500   | 6000   |
| h4 - Mast extended height                                  | mm | 5170   | 5470   | 5685   | 5870   | 6170   | 6670   | 7180   |
| Residual capacity at max height                            | kg | 4000   | 3900   | 3500   | 3300   | 3100   | 2800   | 2300   |
| Residual capacity with integrated side shift at max height | kg | 3900   | 3800   | 3400   | 3200   | 3000   | 2700   | 2200   |
| Height at max capacity                                     | mm | 4000   | 2500   | 4000   | 4000   | 4000   | 2500   | 2500   |



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