

Technical sheet :

# **MC 18-4 ST5**

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| Technical characteristics |  |           | Metric                               |
|---------------------------|--|-----------|--------------------------------------|
| 1.1                       | Manufacturer   |           | Manitou                              |
| 1.2                       | Model Name   |           | MC 18-4 ST5                          |
| 1.3                       | Power source   |           | Diesel                               |
| 1.4                       | Operator type  |           | Seated                               |
| 1.5                       | Max. capacity  | Q         | 1800 kg                              |
| 1.6                       | Load center of gravity   | c         | 500 mm                               |
| 1.8                       | Load distance, centre of drive axle to fork  | x         | 616 mm                               |
| 1.9                       | Wheelbase  | y         | 1900 mm                              |
| Weight                    |  |           |                                      |
|                           | Standard mast reference of the machine   |           | FVD 33                               |
| 2.1                       | Service weight   |           | 3590 kg                              |
| 2.2                       | Weight on front axle (laden) / rear axle (laden)   |           | 4670 kg / 720 kg                     |
| 2.3                       | Weight on front axle (Unladen) / rear axle (Unladen)                                     |           | 1660 kg / 1930 kg                    |
| Wheels                    |  |           |                                      |
| 3.1                       | Tires type   |           | Pneumatic                            |
| 3.2                       | Dimensions of front wheels   |           | 12,5/80-18/12 SL R4                  |
| 3.3                       | Dimensions of rear wheels  |           | 27x10-12 SKS                         |
| 3.5                       | Number of front wheels / rear wheels   |           | 2 / 2                                |
| 3.5.2                     | Number of drive wheels   |           | 4                                    |
| 3.6                       | Front wheel gauge  | b10       | 1159 mm                              |
| 3.7                       | Rear wheel gauge   | b11       | 1176 mm                              |
| Dimensions                |  |           |                                      |
| 4.7                       | Height of overhead guard (cabin) / Overall height of low overhead guard (Buggie version) | h6 / h6*  | 2155 mm / 1990 mm                    |
| 4.8                       | Seat height/stand height   | h7        | 1094 mm                              |
| 4.19                      | Overall length   | l1        | 4100 mm                              |
| 4.20                      | Length to face of forks  | l2        | 2950 mm                              |
| 4.21                      | Overall width  | b1        | 1450 mm                              |
| 4.22                      | Forks section x width x length   | s / e / l | 35 mm x 100 mm / 1150 mm             |
| 4.23                      | Fork carriage ISO 2328 (class/form) A/B  |           | 2A                                   |
| 4.24                      | Fork carriage width  | b3        | 1260 mm                              |
| 4.31                      | Ground clearance below mast  | m1        | 300 mm                               |
| 4.32                      | Ground clearance at centre of wheelbase  | m2        | 310 mm                               |
| 4.35                      | Turning radius   | Wa        | 3370 mm                              |
| Performances              |  |           |                                      |
| 5.1                       | Travel speed (laden / unladen)   |           | 12 km/h / 23.50 km/h                 |
| 5.2                       | Lifting speed (laden / unladen)  |           | 0.44 m/s / 0.44 m/s                  |
| 5.3                       | Lowering speed (laden / unladen)   |           | 0.40 m/s / 0.40 m/s                  |
| 5.5                       | Drawbar pull (Laden)   |           | 1800 daN                             |
| 5.7                       | Gradeability (laden)   |           | 35 %                                 |
| 5.10                      | Service brake  |           | Hydraulic brakes by loss of pressure |
| Engine                    |  |           |                                      |
| 7.2                       | I.C. Engine power rating   |           | 27 kW                                |
| 7.1                       | Engine brand / model / norm  |           | Kubota / D1803 CR E5B / Stage V      |
| 7.3                       | Rated speed  |           | 2700 rpm                             |
| 7.4                       | Number of cylinders / Capacity of cylinders  |           | 3 - 1826 cm <sup>3</sup>             |
| Miscellaneous             |  |           |                                      |
| 8.1                       | Type of drive control  |           | Electronic                           |
| 8.2                       | Working hydraulic pressure for attachments   |           | 160 bar                              |
| 8.3                       | Oil flow rate for attachments  |           | 31 l/min                             |

MC 18-4 ST5 - Dimensional drawing



## Characteristics of masts and residual capacities

| Full Visibility Duplex (FVD)                              | FVD 33 | FVD 37 | FVD 40 | FVD 45 |
|---|--------|--------|--------|--------|
| $\alpha$ - Mast/fork carriage tilt, forward               | °      | 12     | 12     | 12     |
| $\beta$ - Mast/fork carriage tilt, backward               | °      | 10     | 10     | 10     |
| h1 - Mast lowered height                                  | mm     | 2348   | 2608   | 2798   |
| h2 - Mast free lift                                       | mm     | 85     | 85     | 85     |
| h3 - Mast lifting height                                  | mm     | 3300   | 3700   | 4000   |
| h4 - Mast extended height                                 | mm     | 4018   | 4428   | 4768   |
| Residual capacity at max height                           | kg     | 1800   | 1800   | 1100   |
| Residual capacity with hooked-on side shift at max height | kg     | 1800   | 1800   | 1100   |
| Height at max capacity                                    | mm     | 3300   | 3700   | 2500   |
| Height at max capacity with hooked-on sideshift           | mm     | 3300   | 3700   | 3600   |

| Free Lift Triplex (FLT)                                   | FLT 37 | FLT 43 | FLT 47 | FLT 55 |
|---|--------|--------|--------|--------|
| $\alpha$ - Mast/fork carriage tilt, forward               | °      | 12     | 12     | 6      |
| $\beta$ - Mast/fork carriage tilt, backward               | °      | 10     | 10     | 6      |
| h1 - Mast lowered height                                  | mm     | 1998   | 2198   | 2348   |
| h2 - Mast free lift                                       | mm     | 1305   | 1505   | 1655   |
| h3 - Mast lifting height                                  | mm     | 3700   | 4300   | 4700   |
| h4 - Mast extended height                                 | mm     | 4453   | 5053   | 5453   |
| Residual capacity at max height                           | kg     | 1600   | 1000   | 600    |
| Residual capacity with hooked-on side shift at max height | kg     | 1550   | 1000   | 600    |
| Height at max capacity                                    | mm     | 3400   | 3400   | 3400   |
| Height at max capacity with hooked-on sideshift           | mm     | 3300   | 3400   | 3400   |

| Full Visibility Triplex (FVT)                             | FVT 33 |
|---|--------|
| $\alpha$ - Mast/fork carriage tilt, forward               | °      |
| $\beta$ - Mast/fork carriage tilt, backward               | °      |
| h1 - Mast lowered height                                  | mm     |
| h2 - Mast free lift                                       | mm     |
| h3 - Mast lifting height                                  | mm     |
| h4 - Mast extended height                                 | mm     |
| Residual capacity at max height                           | kg     |
| Residual capacity with hooked-on side shift at max height | kg     |
| Height at max capacity                                    | mm     |
| Height at max capacity with hooked-on sideshift           | mm     |



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