

Technical sheet :

M 50-2 D ST5



 **MANITOU**
HANDLING YOUR WORLD

| | Technical characteristics | | Metric |
|-------|--|-----------|---------------------------|
| 1.1 | Manufacturer | | MANITOU |
| 1.2 | Model Name | | M 50-2 D ST5 |
| 1.3 | Power source | | Diesel |
| 1.4 | Operator type | | Seated |
| 1.5 | Max. capacity | Q | 5000 kg |
| 1.6 | Load center of gravity | c | 600 mm |
| 1.8 | Load distance, centre of drive axle to fork | x | 773 mm |
| 1.9 | Wheelbase | y | 2060 mm |
| | Weight | | |
| | Standard mast reference of the machine | | FVD 37 |
| 2.1 | Service weight | | 8275 kg |
| 2.2 | Weight on front axle (laden) / rear axle (laden) | | 11615 kg / 1660 kg |
| 2.3 | Weight on front axle (Unladen) / rear axle (Unladen) | | 3285 kg / 4990 kg |
| | Wheels | | |
| 3.1 | Tires type | | Pneumatic |
| 3.2 | Dimensions of front wheels | | 18-19,5 18PR A224 |
| 3.3 | Dimensions of rear wheels | | 10R17,5 G291 GY |
| 3.5 | Number of front wheels / rear wheels | | 2 / 2 |
| 3.5.2 | Number of drive wheels | | 2 |
| 3.6 | Front wheel gauge | b10 | 1600 mm |
| 3.7 | Rear wheel gauge | b11 | 1640 mm |
| | Dimensions | | |
| 4.7 | Height of overhead guard (cabin) / Overall height of low overhead guard (Buggie version) | h6 / h6* | 2440 mm / 2440 mm |
| 4.8 | Seat height/stand height | h7 | 1407 mm |
| 4.19 | Overall length | l1 | 4948 mm |
| 4.20 | Length to face of forks | l2 | 3748 mm |
| 4.21 | Overall width | b1 | 2057 mm |
| 4.22 | Forks section x width x length | s / e / l | 60 mm x 150 mm / 1200 mm |
| 4.23 | Fork carriage ISO 2328 (class/form) A/B | | 4A |
| 4.24 | Fork carriage width | b3 | 1670 mm |
| 4.31 | Ground clearance below mast | m1 | 250 mm |
| 4.32 | Ground clearance at centre of wheelbase | m2 | 377 mm |
| 4.33 | Aisle width for 1000 x 1200 pallet widthways | Ast | 5640 mm |
| 4.34 | Aisle width for 800 x 1200 pallet lengthways | Ast | 5640 mm |
| 4.35 | Turning radius | Wa | 3465 mm |
| | Performances | | |
| 5.1 | Travel speed (laden / unladen) | | 22 km/h / 22 km/h |
| 5.2 | Lifting speed (laden / unladen) | | 0.40 m/s / 0.40 m/s |
| 5.3 | Lowering speed (laden / unladen) | | 0.50 m/s / 0.40 m/s |
| 5.5 | Drawbar pull (Laden) | | 6900 daN |
| 5.7 | Gradeability (laden) | | 51 % |
| 5.10 | Service brake | | Hydraulic |
| | Transmission type | | Torque converter |
| | Engine | | |
| 7.1 | Engine brand / model / norm | | Deutz / TCD 2,9 / Stage V |
| 7.2 | I.C. Engine power rating | | 55 kW |
| 7.3 | Rated speed | | 2300 rpm |
| 7.4 | Number of cylinders / Capacity of cylinders | | 4 - 2925 cm³ |
| | Miscellaneous | | |
| 8.2 | Working hydraulic pressure for attachments | | 230 bar |
| 8.3 | Oil flow rate for attachments | | 97 l/min |
| 8.4 | Sound level at the driver's ear according to DIN 12 053 | | 78 dB |

M 50-2 D ST5 - Dimensional drawing



Characteristics of masts and residual capacities

| Full Visibility Duplex (FVD) | | FVD 33 | FVD 35 | FVD 37 | FVD 40 | FVD 45 | FVD 50 |
|---|----|--------|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward | ° | 15 | 15 | 15 | 15 | 15 | 10 |
| β - Mast/fork carriage tilt, backward | ° | 15 | 15 | 15 | 15 | 15 | 15 |
| h1 - Mast lowered height | mm | 2625 | 2725 | 2825 | 2975 | 3225 | 3475 |
| h3 - Mast lifting height | mm | 3300 | 3700 | 3700 | 4000 | 4500 | 5000 |
| Residual capacity at max height | kg | 5000 | 5000 | 5000 | 5000 | 4750 | 3500 |
| Residual capacity with hooked-on side shift at max height | kg | 4700 | 4700 | 4700 | 4700 | 4400 | |
| Height at max capacity | mm | 3300 | 3500 | 3700 | 4000 | 4000 | 4000 |
| Height at max capacity with hooked-on sideshift | mm | 3300 | 3500 | 3700 | 4000 | 4000 | |

| Free Lift Triplex (FLT) | | FLT 43 | FLT 45 | FLT 47 | FLT 50 | FLT 55 | FLT 60 |
|---|----|--------|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward | ° | 15 | 15 | 15 | 10 | 10 | 10 |
| β - Mast/fork carriage tilt, backward | ° | 15 | 15 | 15 | 15 | 15 | 15 |
| h1 - Mast lowered height | mm | 2425 | 2500 | 2560 | 2675 | 2825 | 3000 |
| h2 - Mast free lift | mm | 1455 | 1530 | 1590 | 1705 | 1855 | 2030 |
| h3 - Mast lifting height | mm | 4300 | 4500 | 4700 | 5000 | 5500 | 6000 |
| Residual capacity at max height | kg | | 4500 | 3500 | 2000 | 2000 | |
| Residual capacity with hooked-on side shift at max height | kg | 4400 | | | 3000 | 1600 | 250 |
| Height at max capacity | mm | 2500 | 4000 | 4000 | 3700 | 5500 | 2500 |
| Height at max capacity with hooked-on sideshift | mm | 3500 | | | 3700 | 3700 | 3200 |



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