

Technical sheet :

MI 80 D ST5



 **MANITOU**
HANDLING YOUR WORLD

| Technical characteristics | | Metric | |
|---------------------------|---|-----------|---------------------------|
| 1.1 | Manufacturer | | MANITOU |
| 1.2 | Model Name | | MI 80 D ST5 |
| 1.3 | Power source | | Diesel |
| 1.4 | Operator type | | Seated |
| 1.5 | Max. capacity | Q | 8000 kg |
| 1.6 | Load center of gravity | c | 600 mm |
| 1.8 | Load distance, centre of drive axle to fork | x | 714 mm |
| 1.9 | Wheelbase | y | 2600 mm |
| | Standard mast reference of the machine | | FVD 30 |
| Weight | | | |
| 2.1 | Service weight | | 12540 kg |
| 2.2 | Weight on front axle (laden) / rear axle (laden) | | 18340 kg / 2200 kg |
| 2.3 | Weight on front axle (Unladen) / rear axle (Unladen) | | 5180 kg / 7360 kg |
| Wheels | | | |
| 3.1 | Tires type | | Pneumatic |
| 3.2 | Dimensions of front wheels | | 9.00-20-14PR |
| 3.3 | Dimensions of rear wheels | | 9.00-20-14PR |
| 3.5 | Number of front wheels / rear wheels | | 4 / 2 |
| 3.5.2 | Number of drive wheels | | 4 |
| 3.6 | Front wheel gauge | b10 | 1628 mm |
| 3.7 | Rear wheel gauge | b11 | 1700 mm |
| Dimensions | | | |
| 4.8 | Seat height/stand height | h7 | 1350 mm |
| 4.7 | Height of overhead guard (cabin) | h6 | 2580 mm |
| 4.12 | Height of towing bar (coupling height) | h10 | 505 mm |
| 4.19 | Overall length | l1 | 5524 mm |
| 4.20 | Length to face of forks | l2 | 4004 mm |
| 4.21 | Overall width | b1 | 2165 mm |
| 4.21 | Overall width - Twinned wheels | b1 | 2165 mm |
| 4.22 | Forks section / width / length | s / e / l | 75 mm x 160 mm x 1520 mm |
| 4.23 | Fork carriage ISO 2328 (class/form) A/B | | 4A |
| 4.24 | Fork carriage width | b3 | 2100 mm |
| 4.31 | Ground clearance below mast | m1 | 250 mm |
| 4.32 | Ground clearance at centre of wheelbase | m2 | 339 mm |
| 4.33 | Aisle Width for pallets 1000 x 1200 crossways | Ast | 5644 mm |
| 4.34 | Aisle width for 800 x 1200 pallet lengthways | Ast | 5844 mm |
| 4.35 | Turning radius | Wa | 3730 mm |
| 4.36 | Internal turning radius (over tyres) | b13 | 1327 mm |
| Performances | | | |
| 5.1 | Travel speed (laden / unladen) | | 26 km/h-27 km/h |
| 5.2 | Lifting speed (laden / unladen) | | 0.38 m/s-0.40 m/s |
| 5.3 | Lowering speed (laden / unladen) | | 0.43 m/s-0.39 m/s |
| 5.5 | Drawbar pull (Laden / Unladen) | | 6500 daN / 4500 daN |
| 5.7 | Gradeability (laden / unladen) | | 35 % / 35 % |
| 5.10 | Service brake | | Hydraulic |
| Engine | | | |
| 7.1 | Engine brand / model / nom | | Deutz / TCD 3.6 / Stage V |
| 7.2 | Engine power (Hp / kW) | | 116 Hp/85 kW |
| 7.3 | Rated speed | | 2200 rpm |
| 7.4 | Number of cylinders / Capacity of cylinders | | 4 - 3600 cm³ |
| Miscellaneous | | | |
| 8.2 | Working hydraulic pressure for attachments | | 195 bar |
| 8.3 | Oil flow rate for attachments | | 55 l/min |
| 8.4 | Measured/guaranteed mean noise level at the ear of the operator | | < 84 dB |

MI 80 D ST5 - Dimensional drawing



Characteristics of masts and residual capacities

| Full Visibility Duplex (FVD) | FVD 30 | FVD 33 | FVD 36 | FVD 40 | FVD 45 | FVD 50 |
|--|--------|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward | 6.20 | 6.20 | 6.20 | 6.20 | 6.20 | 6.20 |
| β - Mast/fork carriage tilt, backward | 12.20 | 12.20 | 12.20 | 12.20 | 6.20 | 6.20 |
| h1 - Mast lowered height | 2700 | 2850 | 3000 | 3200 | 3500 | 3750 |
| h2 - Mast free lift | 200 | 200 | 200 | 200 | 200 | 200 |
| h3 - Mast lifting height | 3000 | 3300 | 3600 | 4000 | 4500 | 5000 |
| h4 - Mast extended height | 4210 | 4510 | 4810 | 5210 | 5710 | 6210 |
| Residual capacity at max height | 8000 | 8000 | 8000 | 8000 | 8000 | 8000 |
| Height at max capacity | 3000 | 3300 | 3600 | 4000 | 4500 | 5000 |
| Height at max capacity with integrated sideshift | 3000 | 3300 | 3600 | 4000 | 4500 | 5000 |

| Free Lift Triplex (FLT) | FLT 45 | FLT 48 | FLT 50 | FLT 55 | FLT 60 |
|--|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward | 6.20 | 6.20 | 6.20 | 3.20 | 3.20 |
| β - Mast/fork carriage tilt, backward | 6.20 | 6.20 | 6.20 | 6.20 | 6.20 |
| h1 - Mast lowered height | 2750 | 2850 | 2950 | 3100 | 3250 |
| h2 - Mast free lift | 1485 | 1585 | 1600 | 1800 | 1985 |
| h3 - Mast lifting height | 4500 | 4800 | 5000 | 5500 | 6000 |
| h4 - Mast extended height | 5775 | 6075 | 6360 | 6810 | 7275 |
| Residual capacity at max height | 7000 | 7000 | 6500 | 6100 | 5600 |
| Height at max capacity | 4500 | 4800 | 5000 | 5500 | 6000 |
| Height at max capacity with integrated sideshift | 4500 | 4800 | 5000 | 5500 | 6000 |



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