

Technical sheet :

MI-X 60 D



 **MANITOU**
HANDLING YOUR WORLD

| Technical characteristics | | | Metric |
|---------------------------|---|-----------|--------------------------|
| 1.1 | Manufacturer | | Manitou |
| 1.2 | Model Name | | MI-X 60 D |
| 1.3 | Power source | | Diesel |
| 1.4 | Operator type | | Seated |
| 1.5 | Max. capacity | Q | 6000 kg |
| 1.6 | Load center of gravity | c | 600 mm |
| 1.8 | Load distance, centre of drive axle to fork | x | 598 mm |
| 1.9 | Wheelbase | y | 2300 mm |
| Weight | | | |
| 2.1 | Service weight | | 8825 kg |
| 2.2 | Weight on front axle (laden) / rear axle (laden) | | 13000 kg / 1825 kg |
| 2.3 | Weight on front axle (Unladen) / rear axle (Unladen) | | 3960 kg / 4865 kg |
| Wheels | | | |
| 3.1 | Tires type | | Pneumatic |
| 3.2 | Dimensions of front wheels | | 8.25-15-14PR |
| 3.3 | Dimensions of rear wheels | | 8.25-15-14PR |
| 3.5 | Number of front wheels / rear wheels | | 4 / 2 |
| 3.5.2 | Number of drive wheels | | 4 |
| 3.6 | Front wheel gauge | b10 | 1489 mm |
| 3.7 | Rear wheel gauge | b11 | 1700 mm |
| Dimensions | | | |
| 4.7 | Height of overhead guard (cabin) | h6 | 2430 mm |
| 4.8 | Seat height/stand height | h7 | 1350 mm |
| 4.12 | Height of towing bar (coupling height) | h10 | 710 mm |
| 4.19 | Overall length | l1 | 4729 mm |
| 4.20 | Length to face of forks | l2 | 3509 mm |
| 4.21 | Overall width | b1 | 1990 mm |
| 4.21 | Overall width - Single wheels | b1 | 1990 mm |
| 4.22 | Forks section / width / length | s / e / l | 60 mm x 150 mm x 1220 mm |
| 4.23 | Fork carriage ISO 2328 (class/form) A/B | | 4A |
| 4.24 | Fork carriage width | b3 | 1700 mm |
| 4.31 | Ground clearance below mast | m1 | 190 mm |
| 4.32 | Ground clearance at centre of wheelbase | m2 | 270 mm |
| 4.33 | Aisle Width for pallets 1000 x 1200 crossways | Ast | 5167 mm |
| 4.34 | Aisle width for 800 x 1200 pallet lengthways | Ast | 5302 mm |
| 4.35 | Turning radius | Wa | 3260 mm |
| 4.36 | Internal turning radius (over tyres) | b13 | 1222 mm |
| Performances | | | |
| 5.1 | Travel speed (laden / unladen) | | 27 km/h-29 km/h |
| 5.2 | Lifting speed (laden / unladen) | | 0.46 m/s-0.49 m/s |
| 5.3 | Lowering speed (laden / unladen) | | 0.48 m/s-0.42 m/s |
| 5.5 | Drawbar pull (Laden / Unladen) | | 6500 daN / 2672 daN |
| 5.7 | Gradeability (laden) | | 43 % |
| 5.10 | Service brake | | Hydraulic |
| | Transmission type | | Torque converter |
| Engine | | | |
| 7.1 | Engine brand / model | | Cummins / QSB3,3 |
| 7.2 | I.C. Engine power rating | | 74 kW |
| 7.3 | Rated speed | | 2200 rpm |
| 7.4 | Number of cylinders / Capacity of cylinders | | 4 - 3300 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 | | < 88 dB |
| 8.4 | Sound level at the driver's ear according to DIN 12 053 | | 88 dB |

MI-X 60 D - 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 | 6 | 6 | 6 | 6 | 6 |
| β - Mast/fork carriage tilt, backward | 12 | 12 | 12 | 12 | 6 | 6 |
| h1 - Mast lowered height | 2500 | 2650 | 2800 | 3000 | 3300 | 3550 |
| h2 - Mast free lift | 1600 | 160 | 160 | 160 | 160 | 160 |
| h3 - Mast lifting height | 3000 | 3300 | 3600 | 4000 | 4500 | 5000 |
| h4 - Mast extended height | 3995 | 4295 | 4595 | 4995 | 5500 | 6000 |
| Residual capacity at max height | 6000 | 6000 | 6000 | 6000 | 6000 | 6000 |
| Residual capacity with hooked-on side shift at max height | 5500 | 5500 | 5500 | 5500 | 5500 | 5500 |
| Height at max capacity | 3000 | 3300 | 3600 | 4000 | 4500 | 5000 |
| Height at max capacity with hooked-on sideshift | 3000 | 3300 | 3600 | 4000 | 4500 | 5000 |

| Free Lift Duplex (FLD) | FLD 30 | FLD 33 | FLD 36 | FLD 40 |
|---|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward | 6 | 6 | 6 | 6 |
| β - Mast/fork carriage tilt, backward | 12 | 12 | 12 | 12 |
| h1 - Mast lowered height | 2450 | 2600 | 2750 | 2950 |
| h2 - Mast free lift | 1495 | 1645 | 1795 | 1995 |
| h3 - Mast lifting height | 3000 | 3300 | 3600 | 4000 |
| h4 - Mast extended height | 3955 | 4255 | 4555 | 4955 |
| Residual capacity at max height | 6000 | 6000 | 6000 | 6000 |
| Residual capacity with hooked-on side shift at max height | 5500 | 5500 | 5500 | 5500 |
| Height at max capacity | 3000 | 3300 | 3600 | 4000 |
| Height at max capacity with hooked-on sideshift | 3000 | 3300 | 3600 | 4000 |

| Free Lift Triplex (FLT) | FLT 45 | FLT 48 | FLT 50 | FLT 55 | FLT 60 |
|---|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward | 6 | 6 | 6 | 3 | 3 |
| β - Mast/fork carriage tilt, backward | 6 | 6 | 6 | 6 | 6 |
| h1 - Mast lowered height | 2725 | 2825 | 2875 | 3075 | 3225 |
| h2 - Mast free lift | 1500 | 1600 | 1672 | 1800 | 2000 |
| h3 - Mast lifting height | 4500 | 4800 | 5000 | 5500 | 6000 |
| h4 - Mast extended height | 5735 | 6035 | 6213 | 6785 | 7235 |
| Residual capacity at max height | 5500 | 5500 | 5500 | 5200 | 5000 |
| Residual capacity with hooked-on side shift at max height | 5000 | 5000 | 5000 | 4700 | 4500 |
| Height at max capacity | 4500 | 4800 | 5000 | 5500 | 6000 |
| Height at max capacity with hooked-on sideshift | 4500 | 4800 | 5000 | 5500 | 6000 |



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