

Technical sheet :

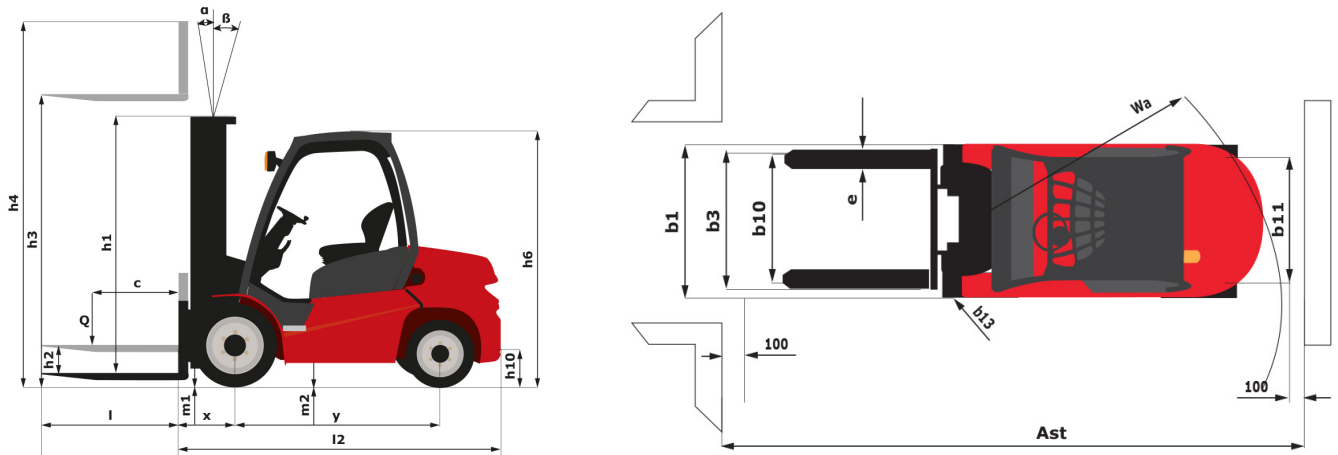
# **MI-X 60 D**

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| 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 centre 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                       | Tyres 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                |   |                  |                          |
| 4.1                       | Tilt of Mast Forward (deg) / Backward (deg)                     | $\alpha / \beta$ | 6 / 12                   |
| 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 / 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                   |
| 4.34                      | Aisle width for 800 x 1200 pallet lengthways                    | Ast              | 5302 mm                  |
| 4.36                      | Internal turning radius (over tyres)                            | b13              | 1222 mm                  |
| 4.35                      | Turning radius  | Wa               | 3260 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                |
| Engine                    |   |                  |                          |
| 7.1                       | Engine brand / model  |                  | Cummins / QSB3,3         |
| 7.2                       | Engine power according to ISO 1585                              |                  | 74 kW                    |
| 7.3                       | Rated speed   |                  | 2200 rpm                 |
| 7.4                       | Number of cylinders / Capacity of cylinders                     |                  | 4 - 3300 cm <sup>3</sup> |
| 7.5                       | Fuel consumption according to VDI cycle                         |                  | 7.2 l/h                  |
| 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(A)               |

## Dimensional drawing



## Characteristics of masts and residual capacities

| Full Visibility Duplex  |    | FVD 30 | FVD 33 | FVD 36 | FVD 40 | FVD 45 | FVD 50 |
|---|----|--------|--------|--------|--------|--------|--------|
| h2 - Free lift  | mm | 1600   | 160    | 160    | 160    | 160    | 160    |
| h1 - Height mast lowered *  | mm | 2500   | 2650   | 2800   | 3000   | 3300   | 3550   |
| h3 - Lifting Height   | mm | 3000   | 3300   | 3600   | 4000   | 4500   | 5000   |
| h4 - Height mast extended *   | mm | 3995   | 4295   | 4595   | 4995   | 5500   | 6000   |
| α / β - Mast inclination (front / rear)                             | °  | 6 / 12 | 6 / 12 | 6 / 12 | 6 / 12 | 6 / 6  | 6 / 6  |
| Residual capacity at max height                                     | kg | 6000   | 6000   | 6000   | 6000   | 6000   | 6000   |
| Residual capacity without attachment (Industrial load chart)        | kg | 6000   | 6000   | 6000   | 6000   | 6000   | 6000   |
| Residual capacity with hooked-on side shift (Industrial load chart) | kg | 5500   | 5500   | 5500   | 5500   | 5500   | 5500   |
| Height at max capacity  | mm | 3000   | 3300   | 3600   | 4000   | 4500   | 5000   |
| Height at max capacity with hooked-on sideshift                     | mm | 3000   | 3300   | 3600   | 4000   | 4500   | 5000   |

| Free Lift Duplex  |    | FLD 30 | FLD 33 | FLD 36 | FLD 40 |
|---|----|--------|--------|--------|--------|
| h2 - Free lift  | mm | 1495   | 1645   | 1795   | 1995   |
| h1 - Height mast lowered *  | mm | 2450   | 2600   | 2750   | 2950   |
| h3 - Lifting Height   | mm | 3000   | 3300   | 3600   | 4000   |
| h4 - Height mast extended *   | mm | 3955   | 4255   | 4555   | 4955   |
| α / β - Mast inclination (front / rear)                             | °  | 6 / 12 | 6 / 12 | 6 / 12 | 6 / 12 |
| Residual capacity at max height                                     | kg | 6000   | 6000   | 6000   | 6000   |
| Residual capacity without attachment (Industrial load chart)        | kg | 6000   | 6000   | 6000   | 6000   |
| Residual capacity with hooked-on side shift (Industrial load chart) | kg | 5500   | 5500   | 5500   | 5500   |
| Height at max capacity  | mm | 3000   | 3300   | 3600   | 4000   |
| Height at max capacity with hooked-on sideshift                     | mm | 3000   | 3300   | 3600   | 4000   |

| Free Lift Triplex   |    | FLT 45 | FLT 48 | FLT 50 | FLT 55 | FLT 60 |
|---|----|--------|--------|--------|--------|--------|
| h2 - Free lift  | mm | 1500   | 1600   | 1672   | 1800   | 2000   |
| h1 - Height mast lowered *  | mm | 2725   | 2825   | 2875   | 3075   | 3225   |
| h3 - Lifting Height   | mm | 4500   | 4800   | 5000   | 5500   | 6000   |
| h4 - Height mast extended *   | mm | 5735   | 6035   | 6213   | 6785   | 7235   |
| α / β - Mast inclination (front / rear)                             | °  | 6 / 6  | 6 / 6  | 6 / 6  | 3 / 6  | 3 / 6  |
| Residual capacity at max height                                     | kg | 5500   | 5500   | 5500   | 5200   | 5000   |
| Residual capacity without attachment (Industrial load chart)        | kg | 5500   | 5500   | 5500   | 5200   | 5000   |
| Residual capacity with hooked-on side shift (Industrial load chart) | kg | 5000   | 5000   | 5000   | 4700   | 4500   |
| Height at max capacity  | mm | 4500   | 4800   | 5000   | 5500   | 6000   |
| Height at max capacity with hooked-on sideshift                     | mm | 4500   | 4800   | 5000   | 5500   | 6000   |



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