

Technical sheet :

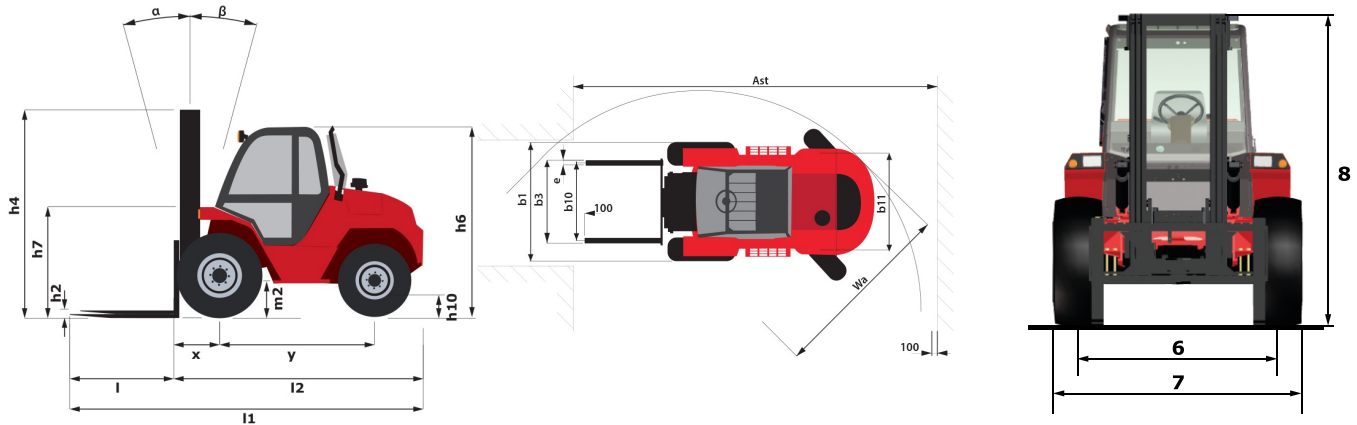
# **M 50-4**

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|       | Technical characteristics                                       |                  | Metric                   |
|-------|---|------------------|--------------------------|
| 1.1   | Manufacturer  |                  | Manitou                  |
| 1.2   | Model Name  |                  | M 50-4                   |
| 1.3   | Power source  |                  | Diesel                   |
| 1.4   | Operator type   |                  | Seated                   |
| 1.5   | Max. capacity   | Q                | 5000 kg                  |
| 1.6   | Load centre of gravity  | c                | 600 mm                   |
| 1.8   | Load distance, centre of drive axle to fork                     | x                | 773 mm                   |
| 1.9   | Wheelbase   | y                | 2120 mm                  |
|       | <b>Weight</b>   |                  |                          |
| 2.1   | Service weight  |                  | 8325 kg                  |
| 2.2   | Weight on front axle (laden) / rear axle (laden)                |                  | 11520 kg / 1805 kg       |
| 2.3   | Weight on front axle (Unladen) / rear axle (Unladen)            |                  | 3285 kg / 5040 kg        |
|       | <b>Wheels</b>   |                  |                          |
| 3.1   | Tyres type  |                  | Pneumatic                |
| 3.2   | Dimensions of front wheels                                      |                  | 18-22,5 MPT06            |
| 3.3   | Dimensions of rear wheels                                       |                  | 340/80 R18 XMCL          |
| 3.5   | Number of front wheels / rear wheels                            |                  | 2 / 2                    |
| 3.5.2 | Number of drive wheels  |                  | 4                        |
| 3.6   | Front wheel gauge   | b10              | 1620 mm                  |
| 3.7   | Rear wheel gauge  | b11              | 1740 mm                  |
|       | <b>Dimensions</b>   |                  |                          |
| 4.1   | Tilt of Mast Forward (deg) / Backward (deg)                     | $\alpha / \beta$ | 15 / 15                  |
| 4.7   | Height of overhead guard (cabin)                                | h6               | 1500 mm                  |
| 4.8   | Seat height/stand height  | h7               | 1400 mm                  |
| 4.12  | Height of towing bar (coupling height)                          | h10              | 760 mm                   |
| 4.19  | Overall length  | l1               | 4948 m                   |
| 4.20  | Length to face of forks   | l2               | 3748 mm                  |
| 4.21  | Overall width   | b1               | 2080 mm                  |
| 4.21  | Overall width - Single wheels                                   | b1               | 2057 mm                  |
| 4.22  | Forks section / width / length                                  | s / e / l        | 60 mm x 150 mm / 1200 mm |
| 4.24  | Fork carriage width   | b3               | 1670 mm                  |
| 4.31  | Ground clearance below mast                                     | m1               | 295 mm                   |
| 4.32  | Ground clearance at centre of wheelbase                         | m2               | 380 mm                   |
| 4.33  | Aisle Width for pallets 1000 x 1200 crossways                   | Ast              | 6812 mm                  |
| 4.34  | Aisle width for 800 x 1200 pallet lengthways                    | Ast              | 6812 mm                  |
| 4.36  | Internal turning radius (over tyres)                            | b13              | 1650 mm                  |
| 4.35  | Turning radius  | Wa               | 4640 mm                  |
|       | <b>Performances</b>   |                  |                          |
| 5.1   | Travel speed (laden / unladen)                                  |                  | 10 km/h / 24 km/h        |
| 5.2   | Lifting speed (laden / unladen)                                 |                  | 0.40 m/s / 0.40 m/s      |
| 5.3   | Lowering speed (laden / unladen)                                |                  | 0.40 m/s / 0.30 m/s      |
| 5.5   | Drawbar pull (Laden)  |                  | 1020 daN                 |
| 5.10  | Service brake   |                  | Hydraulic                |
|       | <b>Engine</b>   |                  |                          |
| 7.1   | Engine brand / model  |                  | Perkins / 854F-E34T WF   |
| 7.2   | Engine power according to ISO 1585                              |                  | 55 kW                    |
| 7.3   | Rated speed   |                  | 2200 rpm                 |
| 7.4   | Number of cylinders   |                  | 4                        |
| 7.5   | Fuel consumption according to VDI cycle                         |                  | 6.90 l/h                 |
|       | <b>Miscellaneous</b>  |                  |                          |
| 8.2   | Working hydraulic pressure for attachments                      |                  | 230 Bar                  |
| 8.3   | Oil flow rate for attachments                                   |                  | 97 l/min                 |
| 8.4   | Measured/guaranteed mean noise level at the ear of the operator |                  | < 76 dB(A)               |

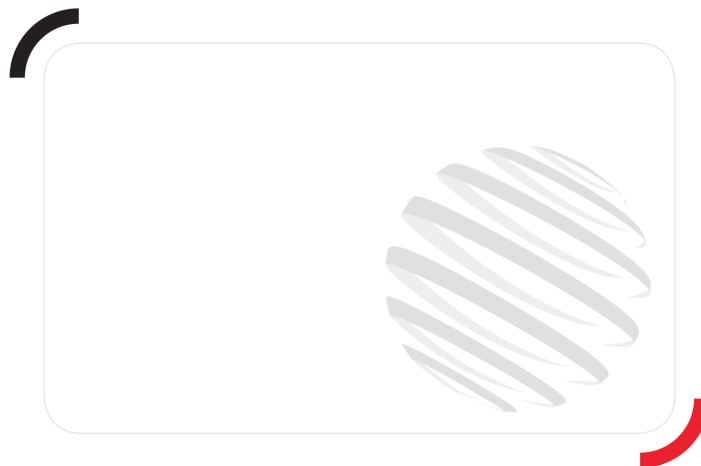
## Dimensional drawing



## Characteristics of masts and residual capacities

| Full Visibility Duplex   |    | FVD 30  | FVD 33  | FVD 35  | FVD 37  | FVD 40  | FVD 45  | FVD 50  |
|--|----|---------|---------|---------|---------|---------|---------|---------|
| h2 - Free lift   | mm | 0       | 0       | 0       | 0       | 0       | 0       | 0       |
| h1 - Height mast lowered *   | mm | 2560    | 2710    | 2810    | 2910    | 3060    | 3305    | 3560    |
| h3 - Lifting Height  | mm | 3000    | 3300    | 3500    | 3700    | 4000    | 4500    | 5000    |
| h4 - Height mast extended *  | mm | 4115    | 4415    | 4615    | 4815    | 5115    | 5615    | 6115    |
| α / β - Mast inclination (front / rear)                              | °  | 15 / 15 | 15 / 15 | 15 / 15 | 15 / 15 | 15 / 15 | 15 / 15 | 15 / 15 |
| Residual capacity at max height                                      | kg | 5000    | 5000    | 5000    | 5000    | 5000    | 5000    | 4000    |
| Residual capacity without attachment (Industrial load chart)         | kg | 5000    | 5000    | 5000    | 5000    | 5000    | 5000    | 4000    |
| Residual capacity with integrated side shift (Industrial load chart) | kg | 4700    | 4700    | 4700    | 4700    | 4700    | 4700    | 3600    |

| Free Lift Triplex  |    | FLT 37  | FLT 40  | FLT 43  | FLT 45  | FLT 47  | FLT 50  | FLT 55  | FLT 60  |
|--|----|---------|---------|---------|---------|---------|---------|---------|---------|
| h2 - Free lift   | mm | 1265    | 1365    | 1465    | 1540    | 1600    | 1715    | 1865    | 2040    |
| h1 - Height mast lowered *   | mm | 2310    | 2410    | 2510    | 2585    | 2645    | 2760    | 2910    | 3085    |
| h3 - Lifting Height  | mm | 3700    | 4000    | 4300    | 4500    | 4700    | 5000    | 5500    | 6000    |
| h4 - Height mast extended *  | mm | 4805    | 5105    | 5405    | 5605    | 5806    | 6105    | 6605    | 7105    |
| α / β - Mast inclination (front / rear)                              | °  | 15 / 15 | 15 / 15 | 15 / 15 | 15 / 15 | 15 / 15 | 15 / 15 | 15 / 15 | 15 / 15 |
| Residual capacity at max height                                      | kg | 5000    | 5000    | 4700    | 4600    | 4300    | 4450    | 4600    | 4450    |
| Residual capacity without attachment (Industrial load chart)         | kg | 5000    | 5000    | 4700    | 4600    | 4300    | 4450    | 4600    | 4450    |
| Residual capacity with integrated side shift (Industrial load chart) | kg | 4500    | 4500    | 4000    | 3600    | 3500    | 2000    | 1800    | 900     |



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