

Technical sheet :

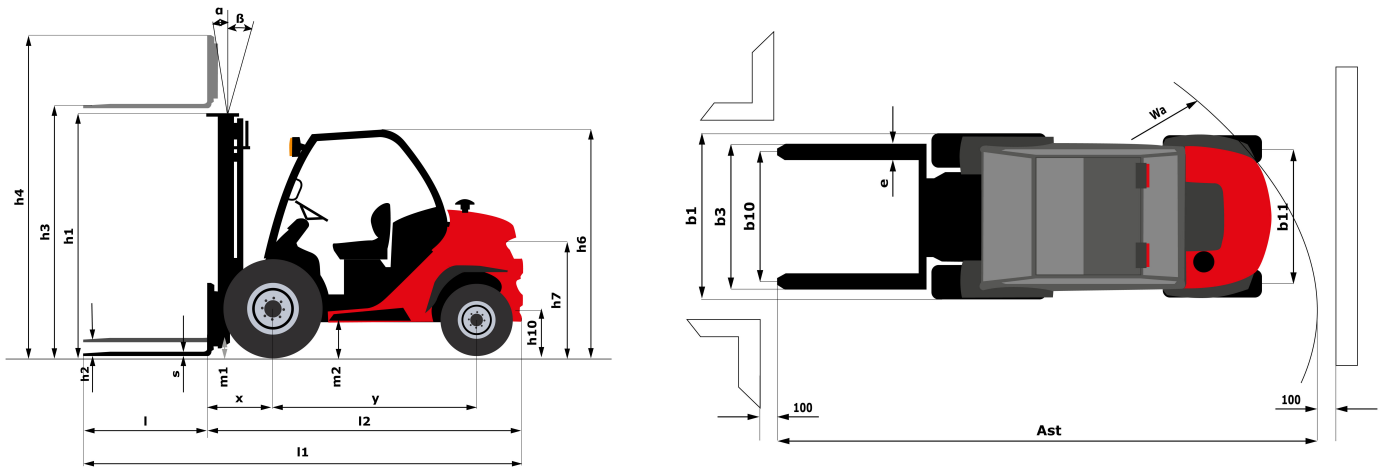
# **MSI 35 3B - FT4**

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| Technical characteristics |  |                  | Metric                   |
|---------------------------|--|------------------|--------------------------|
| 1.1                       | Manufacturer   |                  | Manitou                  |
| 1.2                       | Model Name   |                  | MSI 35 3B - FT4          |
| 1.3                       | Power source   |                  | Diesel                   |
| 1.4                       | Operator type  |                  | Seated                   |
| 1.5                       | Max. capacity  | Q                | 3500 kg                  |
| 1.6                       | Load centre of gravity                               | c                | 500 mm                   |
| 1.8                       | Load distance, centre of drive axle to fork          | x                | 630 mm                   |
| 1.9                       | Wheelbase  | y                | 1800 mm                  |
| Weight                    |  |                  |                          |
| 2.1                       | Service weight                                       |                  | 4845 kg                  |
| 2.2                       | Weight on front axle (laden) / rear axle (laden)     |                  | 7430 kg / 915 kg         |
| 2.3                       | Weight on front axle (Unladen) / rear axle (Unladen) |                  | 1730 kg / 3115 kg        |
| Wheels                    |  |                  |                          |
| 3.1                       | Tyres type   |                  | Pneumatic                |
| 3.2                       | Dimensions of front wheels                           |                  | 275/70 R22,5             |
| 3.3                       | Dimensions of rear wheels                            |                  | 7.00x12 14PR             |
| 3.5                       | Number of front wheels / rear wheels                 |                  | 2 / 2                    |
| 3.5.2                     | Number of drive wheels                               |                  | 2                        |
| 3.6                       | Front wheel gauge                                    | b10              | 1046 mm                  |
| 3.7                       | Rear wheel gauge                                     | b11              | 1102 mm                  |
| Dimensions                |  |                  |                          |
| 4.1                       | Tilt of Mast Forward (deg) / Backward (deg)          | $\alpha / \beta$ | 10 / 12                  |
| 4.8                       | Seat height/stand height                             | h7               | 1025 mm                  |
| 4.12                      | Height of towing bar (coupling height)               | h10              | 310 mm                   |
| 4.19                      | Overall length                                       | l1               | 4130 mm                  |
| 4.20                      | Length to face of forks                              | l2               | 3030 mm                  |
| 4.21                      | Overall width  | b1               | 1323 mm                  |
| 4.22                      | Forks section / width / length                       | s / e / l        | 45 mm x 125 mm / 1100 mm |
| 4.23                      | Fork carriage ISO 2328 (class/form) A/B              |                  | 3A                       |
| 4.24                      | Fork carriage width                                  | b3               | 1260 mm                  |
| 4.31                      | Ground clearance below mast                          | m1               | 270 mm                   |
| 4.32                      | Ground clearance at centre of wheelbase              | m2               | 260 mm                   |
| 4.33                      | Aisle Width for pallets 1000 x 1200 crossways        | Ast              | 4595 mm                  |
| 4.34                      | Aisle width for 800 x 1200 pallet lengthways         | Ast              | 4695 m                   |
| 4.36                      | Internal turning radius (over tyres)                 | b13              | 150 mm                   |
| 4.35                      | Turning radius                                       | Wa               | 2635 mm                  |
| Performances              |  |                  |                          |
| 5.1                       | Travel speed (laden / unladen)                       |                  | 20 km/h / 20 km/h        |
| 5.2                       | Lifting speed (laden / unladen)                      |                  | 0.40 m/s / 0.50 m/s      |
| 5.3                       | Lowering speed (laden / unladen)                     |                  | 0.40 m/s / 0.30 m/s      |
| 5.5                       | Drawbar pull (Laden / Unladen)                       |                  | 2640 daN / 1560 daN      |
| 5.7                       | Gradeability (laden / unladen)                       |                  | 29 % / 29 %              |
| 5.10                      | Service brake  |                  | Hydraulic                |
| Engine                    |  |                  |                          |
| 7.1                       | Engine brand / model                                 |                  | Kubota / V2403 CR TE4    |
| 7.2                       | Engine power according to ISO 1585                   |                  | 48.60 kW                 |
| 7.3                       | Rated speed  |                  | 2700 rpm                 |
| 7.4                       | Number of cylinders / Capacity of cylinders          |                  | 4 - 2434 cm <sup>3</sup> |
| Miscellaneous             |  |                  |                          |
| 8.1                       | Type of drive control                                |                  | Hydraulic                |
| 8.2                       | Working hydraulic pressure for attachments           |                  | 190 Bar                  |
| 8.3                       | Oil flow rate for attachments                        |                  | 77 l/min                 |

## Dimensional drawing



## Characteristics of masts and residual capacities

|  |    | FVD 30  | FVD 33  | FVD 35  | FVD 37  | FVD 40  | FVD 45  | FVD 50  |
|--|----|---------|---------|---------|---------|---------|---------|---------|
| h2 - Free lift                                       | mm | 0.13    | 0.13    | 0.13    | 0.13    | 0.13    | 0.13    | 0.13    |
| h1 - Height mast lowered *                           | mm | 2150000 | 2300000 | 2400000 | 2560000 | 2750000 | 3000000 | 3250000 |
| h3 - Lifting Height                                  | mm | 3000    | 3300    | 3500    | 3700    | 4000    | 4500    | 5000    |
| h4 - Height mast extended *                          | mm | 3893    | 4193    | 4393    | 4593    | 4893    | 5396    | 5863    |
| $\alpha$ / $\beta$ - Mast inclination (front / rear) | °  | 10 / 12 | 10 / 12 | 10 / 12 | 10 / 12 | 10 / 12 | 10 / 12 | 10 / 12 |
| Residual capacity at max height                      | kg | 3500    | 3500    | 3500    | 3500    | 3400    | 2900    | 2700    |

| Free Lift Triplex                                    |    | FLT 37  | FLT 40  | FLT 43  | FLT 47  | FLT 50  | FLT 55  | FLT 60  | FLT 65  | FLT 70  | FVD 55  | FVD 60  |
|--|----|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| h2 - Free lift                                       | mm | 1970    | 1397    | 1547    | 1647    | 1807    | 1997    | 2247    | 2497    | 2747    | 0.13    | 0.13    |
| h1 - Height mast lowered *                           | mm | 2050    | 2150    | 2300    | 2400    | 2560    | 2750    | 3000    | 3250    | 3500    | 3500    | 3790    |
| h3 - Lifting Height                                  | mm | 3700    | 4000    | 4300    | 4700    | 5000    | 5500    | 6000    | 6500    | 7000    | 5500    | 6000    |
| h4 - Height mast extended *                          | mm | 4500    | 4800    | 5100    | 5500    | 5800    | 6300    | 6800    | 7300    | 7800    | 6393    | 6893    |
| $\alpha$ / $\beta$ - Mast inclination (front / rear) | °  | 10 / 12 | 10 / 12 | 10 / 12 | 10 / 12 | 10 / 12 | 10 / 12 | 10 / 12 | 10 / 12 | 10 / 12 | 10 / 12 | 10 / 12 |
| Residual capacity at max height                      | kg | 3400    | 3400    | 3000    | 2600    | 2700    | 2200    | 1800    | 1200    |         |         |         |



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