

Technical sheet :

# **MI 70 D**

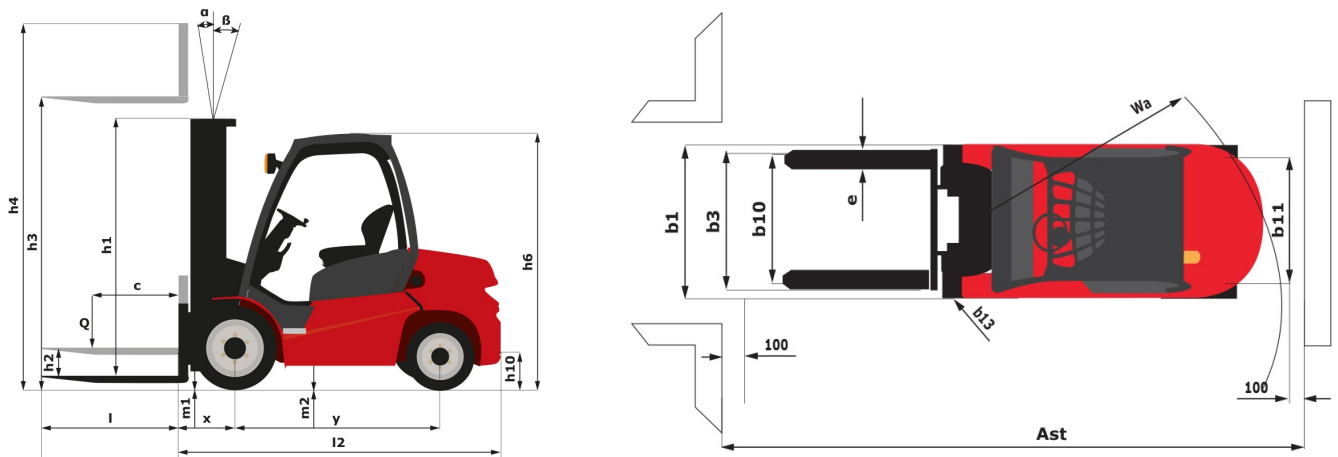
---



| Technical characteristics |  |                  | Metric                   | Imperial                        |
|---------------------------|--|------------------|--------------------------|---------------------------------|
| 1.1                       | Manufacturer   |                  | Manitou                  | Manitou                         |
| 1.2                       | Model Name   |                  | MI 70 D                  | MI 70 D                         |
| 1.3                       | Power source   |                  | Diesel                   | Diesel                          |
| 1.4                       | Operator type  |                  | Seated                   | Seated                          |
| 1.5                       | Max. capacity  | Q                | 7000 kg                  | 15432 lbs                       |
| 1.6                       | Load centre of gravity                               | c                | 600 mm                   | 23.622 in                       |
| 1.8                       | Load distance, centre of drive axle to fork          | x                | 603 mm                   | 23.74 in                        |
| 1.9                       | Wheelbase  | y                | 2300 mm                  | 90.551 in                       |
| Weight                    |  |                  |                          |                                 |
| 2.1                       | Service Weight                                       |                  | 10110 kg                 | 22289 lbs                       |
| 2.2                       | Weight on front axle (laden) / rear axle (laden)     |                  | 15290 kg / 1820 kg       | 33709 lbs / 4012 lbs            |
| 2.3                       | Weight on front axle (Unladen) / rear axle (Unladen) |                  | 4120 kg / 5990 kg        | 9083 lbs / 13206 lbs            |
| Wheels                    |  |                  |                          |                                 |
| 3.1                       | Tyres type   |                  | Pneumatic                | Pneumatic                       |
| 3.2                       | Dimensions of front wheels                           |                  | 8.25-15-14PR             | 8.25-15-14PR                    |
| 3.3                       | Dimensions of rear wheels                            |                  | 8.25-15-14PR             | 8.25-15-14PR                    |
| 3.5                       | Number of front wheels / rear wheels                 |                  | 4 / 2                    | 4 / 2                           |
| 3.2                       | Number of drive wheels                               |                  | 4                        | 4                               |
| 3.6                       | Front wheel gauge                                    | b10              | 1489 mm                  | 58.622 in                       |
| 3.7                       | Rear wheel gauge                                     | b11              | 1700 mm                  | 66.929 in                       |
| Dimensions                |  |                  |                          |                                 |
| 4.1                       | Tilt of Mast Forward (deg) / Backward (deg)          | $\alpha / \beta$ | 6 / 12                   | 6 / 12                          |
| 4.7                       | Height of overhead guard (cabin)                     | h6               | 2430 mm                  | 95.669 in                       |
| 4.8                       | Seat height/stand height                             | h7               | 1350 mm                  | 53.15 in                        |
| 4.12                      | Height of towing bar (coupling height)               | h10              | 710 mm                   | 27.953 in                       |
| 4.19                      | Overall length                                       | l1               | 4804 mm                  | 15761 ft 2 in                   |
| 4.20                      | Length to face of forks                              | l2               | 3584 mm                  | 141.102 in                      |
| 4.21                      | Overall width  | b1               | 1990 mm                  | 78.346 in                       |
| 4.22                      | Forks section / width / length                       | s / e / l        | 65 mm x 150 mm x 1220 mm | 2.559 in x 5.906 in x 48.031 in |
| 4.23                      | Fork carriage ISO 2328 (class/form) A/B              |                  | 4A                       | 4A                              |
| 4.24                      | Fork carriage width                                  | b3               | 1700 mm                  | 66.929 in                       |
| 4.31                      | Ground clearance below mast                          | m1               | 190 mm                   | 7.48 in                         |
| 4.32                      | Ground clearance at centre of wheelbase              | m2               | 270 mm                   | 10.63 in                        |
| 4.33                      | Aisle width for 1000 x 1200 pallet widthways         | Ast              | 5242 mm                  | 206.378 in                      |
| 4.34                      | Aisle width for 800 x 1200 pallet lengthways         | Ast              | 5377 mm                  | 211.693 in                      |
| 4.35                      | Turning radius                                       | Wa               | 3330 mm                  | 131.102 in                      |
| 4.36                      | Internal turning radius (over tyres)                 | b13              | 1222 mm                  | 48.11 in                        |
| Performances              |  |                  |                          |                                 |
| 5.1                       | Travel speed (laden / unladen)                       |                  | 18 km/h / 24 km/h        | 11.2 mph / 14.9 mph             |
| 5.2                       | Lifting speed (laden / unladen)                      |                  | 0.36 m/s / 0.41 m/s      | 1.18 ft/s / 1.35 ft/s           |
| 5.3                       | Lowering speed (laden / unladen)                     |                  | 0.48 m/s / 0.42 m/s      | 1.57 ft/s / 1.38 ft/s           |
| 5.5                       | Drawbar pull (Laden / Unladen)                       |                  | 6280 daN / 3600 daN      | 6280 daN / 3600 daN             |
| 5.7                       | Gradeability - laden                                 |                  | 34 %                     | 34 %                            |
| 5.9                       | Service brake  |                  | Hydraulic                | Hydraulic                       |

| Engine        |   |  |                          |                            |
|---------------|---|--|--------------------------|----------------------------|
| 7.1           | Engine brand / model  |  | Deutz / TCD 3.6L 4       | Deutz / TCD 3.6L 4         |
| 7.2           | Engine power according to ISO 1585                              |  | 55.4 kW                  | 55.4 kW                    |
| 7.3           | Rated speed   |  | 2200 tr/min              | 2200 tr/min                |
| 7.4           | Number of cylinders / Capacity of cylinders                     |  | 4 - 3600 cm <sup>3</sup> | 4 - 219.69 in <sup>3</sup> |
|               | Fuel consumption according to VDI cycle                         |  | 9.4 l/h                  | 9.4 l/h                    |
| Miscellaneous |   |  |                          |                            |
| 8.2           | Working hydraulic pressure for attachments (bar)                |  | 195 Bar                  | 13 PSI                     |
| 8.3           | Oil flow rate for attachments                                   |  | 55 l/min                 | 55 l/min                   |
| 8.4           | Measured/guaranteed mean noise level at the ear of the operator |  | < 84 dB(A)               | < 84 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 | 160    | 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 | 4167   | 4467   | 4767   | 5167   | 5667   | 6167   |
| α / β - Mast inclination (front / rear)                             | °  | 6 / 12 | 6 / 12 | 6 / 12 | 6 / 12 | 6 / 6  | 6 / 6  |
| Residual capacity without attachment (Industrial load chart)        | kg | 7000   | 7000   | 7000   | 7000   | 7000   | 7000   |
| Residual capacity with hooked-on side shift (Industrial load chart) | kg | 6500   | 6500   | 6500   | 6500   | 6500   | 6500   |
| 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 | 1335   | 1485   | 1635   | 1835   |
| h1 - Height mast Lowered  | mm | 2450   | 2600   | 2750   | 2950   |
| h3 - Lifting Height   | mm | 3000   | 3300   | 3600   | 4000   |
| h4 - Height mast extended   | mm | 4115   | 4415   | 4715   | 5115   |
| α / β - Mast inclination (front / rear)                             | °  | 6 / 12 | 6 / 12 | 6 / 12 | 6 / 12 |
| Residual capacity without attachment (Industrial load chart)        | kg | 7000   | 7000   | 7000   | 7000   |
| Residual capacity with hooked-on side shift (Industrial load chart) | kg | 6500   | 6500   | 6500   | 6500   |
| 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 without attachment (Industrial load chart)        | kg | 6400   | 6300   | 6300   | 6100   | 5500   |
| Residual capacity with hooked-on side shift (Industrial load chart) | kg | 5900   | 5800   | 5800   | 5600   | 5000   |

| Free Lift Triplex                                  |    | FLT 45 | FLT 48 | FLT 50 | FLT 55 | FLT 60 |
|--|----|--------|--------|--------|--------|--------|
| Height at max capacity                             | mm | 4500   | 4800   | 5000   | 5500   | 6000   |
| Height at max capacity with hooked-on<br>sideshift | mm | 4500   | 4800   | 5000   | 5500   | 6000   |



Siège Social

430 rue de l'Aubinière - 44150 Ancenis Cedex - France

Tel: +33(0)2 40 09 10 11 - Fax: +33 (0)2 40 09 10 97

[www.manitou.com](http://www.manitou.com)



This brochure describes versions and configuration options for Manitou products which may be fitted with different equipment. The equipment described in this brochure may be standard, optional or not available depending on version. Manitou reserves the right to change the specifications shown and described at any time and without prior warning. The manufacturer is not liable for the specifications given. For more information, contact your Manitou dealer. Non-contractual document. Product descriptions may differ from actual products. List of specifications is not comprehensive. The logos and visual identity of the company are the property of Manitou and may not be used without authorisation. All rights reserved. The photos and diagrams contained in this brochure are provided for information only.

MANITOU BF SA - Limited company with board of directors - Share capital: 39,668,399 euros - 857 802 508  
RCS Nantes