

Technical sheet

# **MI 35 D**

Masted Forklift Trucks



|      | Technical characteristics                                                  | Metric                   |
|------|----------------------------------------------------------------------------|--------------------------|
| 1.1  | Manufacturer                                                               | Manitou                  |
| 1.2  | Model                                                                      | MI 35 D                  |
| 1.3  | Type of traction                                                           | Diesel                   |
| 1.4  | Type of operation                                                          | Seated                   |
| 1.5  | Q - Rated capacity                                                         | 3500 kg                  |
| 1.6  | c - Center of gravity of load                                              | 500 mm                   |
| 1.8  | x - Distance from the load bearing surface to the centre of the front axle | 485 mm                   |
| 1.9  | y - Wheelbase                                                              | 1700 mm                  |
|      | Weight                                                                     |                          |
| 2.1  | Weight of truck in working order                                           | 4860 kg                  |
| 2.2  | Laden weight on front/rear axle                                            | 7360 kg / 1000 kg        |
| 2.3  | Unladen weight on front/rear axle                                          | 1825 kg / 3035 kg        |
|      | Wheels                                                                     |                          |
| 3.1  | Tyre equipment: bandage (V), PPS (SE), inflatable tyre (L)                 | Solid cushion            |
| 3.5  | Number of front wheels (x)                                                 | 2x / 2                   |
| 3.6  | b10 - Front track                                                          | 1.01 mm                  |
| 3.7  | b11 - Rear track                                                           | 0.98 mm                  |
|      | Dimensions                                                                 |                          |
| 4.1  | $\alpha$ / $\beta$ - Front/Rear mast angle                                 | 6 ° / 12 °               |
| 4.2  | h1 - Height (mast lowered)                                                 | 2320 mm                  |
| 4.3  | h2 - Free lift                                                             | 150 mm                   |
| 4.4  | h3 - Lift height (Duplex mast)                                             | 3300 mm                  |
| 4.5  | h4 - Height of extended mast                                               | 4450 mm                  |
| 4.7  | h6 - Height of driver protection (cab)                                     | 2130 mm                  |
| 4.8  | h7 - Height of seat                                                        | 1215 mm                  |
| 4.12 | h10 - Height of towing coupling                                            | 360 mm                   |
| 4.19 | l1 - Total length                                                          | 3940 mm                  |
| 4.20 | l2 - Length to fork heel                                                   | 2790 mm                  |
| 4.21 | b1 - Overall width - Singe/twinned wheels                                  | 1230 mm / 1725 mm        |
| 4.22 | e / s / l - Fork dimensions                                                | 1150 x 122 x 50          |
| 4.23 | Fork carriage to DIN 15173 A/B                                             | FEM 3A                   |
| 4.24 | b3 - Width of fork clamp                                                   | 1100 mm                  |
| 4.31 | m1 - Ground clearance under mast                                           | 130 mm                   |
| 4.33 | Ast - Aisle width for 1000 x 1200 pallet widthwise                         | 4200 mm                  |
| 4.34 | Ast - Aisle width for 800 x 1200 pallet lengthwise                         | 4400 mm                  |
| 4.35 | Wa - Turning radius                                                        | 2510 mm                  |
| 4.36 | b13 - Inner turning radius                                                 | 160 mm                   |
|      | Performances                                                               |                          |
| 5.1  | Speed of travel laden / unladen                                            | 18 km/h / 18.50 km/h     |
| 5.2  | Lifting speed laden / unladen                                              | 0.39 m/s / 0.40 m/s      |
| 5.3  | Lowering speed laden / unladen                                             | 0.40 m/s / 0.35 m/s      |
| 5.5  | Nominal pulling force laden / unladen                                      | 1830 daN / 1520 daN      |
| 5.7  | Maximum ramp laden / unladen                                               | 18 % / 20 %              |
| 5.10 | Service brake                                                              | Hydraulic                |
|      | Engine                                                                     |                          |
| 7.1  | Engine manufacturer / Type                                                 | Yanmar / 3A              |
| 7.2  | Useful power                                                               | 35 kW                    |
| 7.4  | Number of pistons / Capacity                                               | 4 / 3054 cm <sup>3</sup> |
| 7.5  | Fuel consumption according to VDI cycle                                    | 3.56 l/h                 |
|      | Miscellaneous                                                              |                          |
| 8.2  | Working hydraulic pressure for attachments                                 | 160 bar                  |
| 8.3  | Oil flow rate for attachments                                              | 69 l/min                 |
| 8.4  | Measured/guaranteed mean noise level at the ear of the operator            | 84 dB(A)                 |

## Characteristics of masts and residual capacities

| Duplex Total Visibility                                              |    | FVD 33 | FVD 37 | FVD 40 |
|----------------------------------------------------------------------|----|--------|--------|--------|
| Lift height                                                          | mm | 3300   | 3700   | 4000   |
| Height (mast lowered)                                                | mm | 2315   | 2565   | 2715   |
| Free lift                                                            | mm | 145    | 145    | 145    |
| Height of extended mast                                              | mm | 4115   | 4515   | 4815   |
| Residual Capacity without attachment (Industrial load chart)         | kg | 3500   | 3500   | 3500   |
| Residual Capacity with integrated side shift (Industrial load chart) | kg | 3500   | 3500   | 3500   |
| Forward/backward mast tilt angle                                     | °  | 6 / 12 | 6 / 12 | 6 / 12 |

| Duplex Free Lift                                                     |    | FLD 33 | FLD 37 | FLD 40 |
|----------------------------------------------------------------------|----|--------|--------|--------|
| Lift height                                                          | mm | 3300   | 3700   | 4000   |
| Height (mast lowered)                                                | mm | 2330   | 2530   | 2680   |
| Free lift                                                            | mm | 1500   | 1700   | 1850   |
| Height of extended mast                                              | mm | 4130   | 4530   | 4830   |
| Residual Capacity without attachment (Industrial load chart)         | kg | 3500   | 3500   | 3500   |
| Residual Capacity with integrated side shift (Industrial load chart) | kg | 3500   | 3500   | 3500   |
| Forward/backward mast tilt angle                                     | °  | 6 / 12 | 6 / 12 | 6 / 12 |

| Triplex Free Lift                                                    |    | FLT 43 | FLT 45 | FLT 47 | FLT 48 | FLT 50 | FLT 55 | FLT 60 | FLT 65 |
|----------------------------------------------------------------------|----|--------|--------|--------|--------|--------|--------|--------|--------|
| Lift height                                                          | mm | 4300   | 4500   | 4700   | 4800   | 5000   | 5500   | 6000   | 6500   |
| Height (mast lowered)                                                | mm | 2215   | 2265   | 2315   | 2365   | 2415   | 2565   | 2815   | 2965   |
| Free lift                                                            | mm | 1385   | 1435   | 1485   | 1535   | 1585   | 1735   | 1985   | 2135   |
| Height of extended mast                                              | mm | 5130   | 5380   | 5530   | 5630   | 5830   | 6330   | 6880   | 7330   |
| Residual Capacity without attachment (Industrial load chart)         | kg | 3450   | 3400   | 3300   | 3300   | 3000   | 2200   | 1600   | 1500   |
| Residual Capacity with integrated side shift (Industrial load chart) | kg | 3450   | 3300   | 3200   | 3200   | 2900   | 2100   | 1500   | 1400   |
| Forward/backward mast tilt angle                                     | °  | 6 / 6  | 6 / 6  | 6 / 6  | 6 / 6  | 6 / 6  | 3 / 6  | 3 / 6  | 3 / 6  |



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: 39,547,824 euros - 857 802 508 RCS Nantes

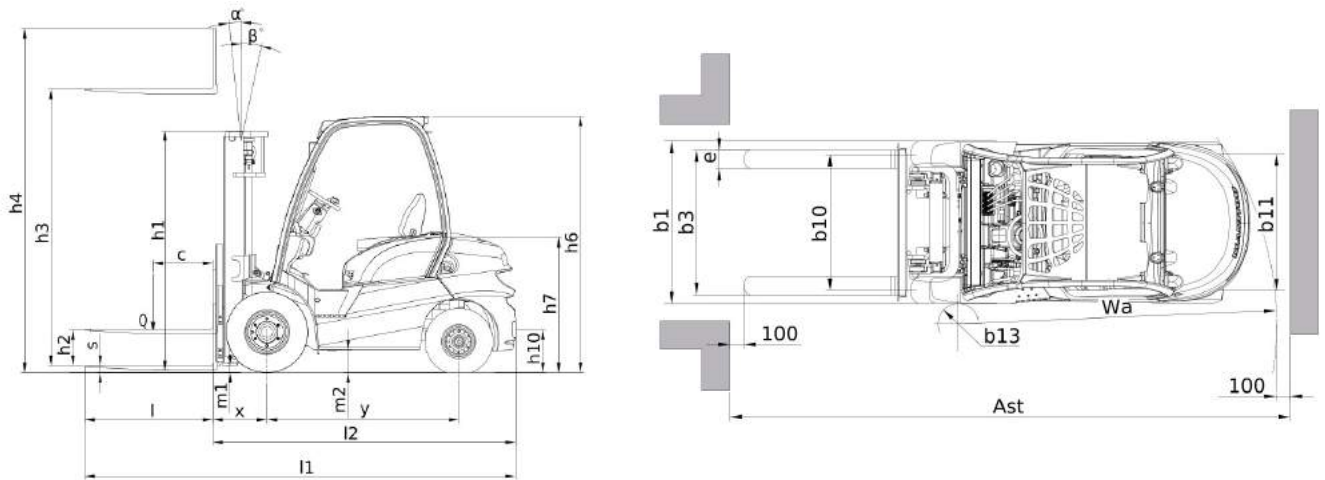
Technical sheet

# MI 35 G

Masted Forklift Trucks



|      | Technical characteristics                                                  | Metric                   |
|------|----------------------------------------------------------------------------|--------------------------|
| 1.1  | Manufacturer                                                               | Manitou                  |
| 1.2  | Model                                                                      | MI 35 G                  |
| 1.3  | Type of traction                                                           | LPG gas                  |
| 1.4  | Type of operation                                                          | Seated                   |
| 1.5  | Q - Rated capacity                                                         | 3500 kg                  |
| 1.6  | c - Center of gravity of load                                              | 500 mm                   |
| 1.8  | x - Distance from the load bearing surface to the centre of the front axle | 485 mm                   |
| 1.9  | y - Wheelbase                                                              | 1700 mm                  |
|      | Weight                                                                     |                          |
| 2.1  | Weight of truck in working order                                           | 4740 kg                  |
| 2.2  | Laden weight on front/rear axle                                            | 7260 kg / 980 kg         |
| 2.3  | Unladen weight on front/rear axle                                          | 1775 kg / 2965 kg        |
|      | Wheels                                                                     |                          |
| 3.1  | Tyre equipment: bandage (V), PPS (SE), inflatable tyre (L)                 | Solid cushion            |
| 3.5  | Number of front wheels (x)                                                 | 2x / 2                   |
| 3.6  | b10 - Front track                                                          | 1.01 mm                  |
| 3.7  | b11 - Rear track                                                           | 0.98 mm                  |
|      | Dimensions                                                                 |                          |
| 4.1  | $\alpha$ / $\beta$ - Front/Rear mast angle                                 | 6 ° / 12 °               |
| 4.2  | h1 - Height (mast lowered)                                                 | 2320 mm                  |
| 4.3  | h2 - Free lift                                                             | 150 mm                   |
| 4.4  | h3 - Lift height (Duplex mast)                                             | 3300 mm                  |
| 4.5  | h4 - Height of extended mast                                               | 4450 mm                  |
| 4.7  | h6 - Height of driver protection (cab)                                     | 2130 mm                  |
| 4.8  | h7 - Height of seat                                                        | 1215 mm                  |
| 4.12 | h10 - Height of towing coupling                                            | 360 mm                   |
| 4.19 | l1 - Total length                                                          | 3940 mm                  |
| 4.20 | l2 - Length to fork heel                                                   | 2790 mm                  |
| 4.21 | b1 - Overall width - Singe/twinned wheels                                  | 1230 mm / 1725 mm        |
| 4.22 | e / s / l - Fork dimensions                                                | 1150 x 122 x 50          |
| 4.23 | Fork carriage to DIN 15173 A/B                                             | FEM 3A                   |
| 4.24 | b3 - Width of fork clamp                                                   | 1100 mm                  |
| 4.31 | m1 - Ground clearance under mast                                           | 130 mm                   |
| 4.33 | Ast - Aisle width for 1000 x 1200 pallet widthwise                         | 4200 mm                  |
| 4.34 | Ast - Aisle width for 800 x 1200 pallet lengthwise                         | 4400 mm                  |
| 4.35 | Wa - Turning radius                                                        | 2510 mm                  |
| 4.36 | b13 - Inner turning radius                                                 | 160 mm                   |
|      | Performances                                                               |                          |
| 5.1  | Speed of travel laden / unladen                                            | 17 km/h / 17.50 km/h     |
| 5.2  | Lifting speed laden / unladen                                              | 0.40 m/s / 0.52 m/s      |
| 5.3  | Lowering speed laden / unladen                                             | 0.47 m/s / 0.38 m/s      |
| 5.5  | Nominal pulling force laden / unladen                                      | 1750 daN / 1100 daN      |
| 5.7  | Maximum ramp laden / unladen                                               | 18 % / 20 %              |
| 5.10 | Service brake                                                              | Hydraulic                |
|      | Engine                                                                     |                          |
| 7.1  | Engine manufacturer / Type                                                 | Nissan / 3B              |
| 7.2  | Useful power                                                               | 35 kW                    |
| 7.4  | Number of pistons / Capacity                                               | 4 / 2488 cm <sup>3</sup> |
| 7.5  | Fuel consumption according to VDI cycle                                    | 6.30 l/h                 |
|      | Miscellaneous                                                              |                          |
| 8.2  | Working hydraulic pressure for attachments                                 | 160 bar                  |
| 8.3  | Oil flow rate for attachments                                              | 72 l/min                 |
| 8.4  | Measured/guaranteed mean noise level at the ear of the operator            | 80 dB(A)                 |



## Characteristics of masts and residual capacities

| Duplex Total Visibility                                              |    | FVD 33 | FVD 37 | FVD 40 |
|----------------------------------------------------------------------|----|--------|--------|--------|
| Lift height                                                          | mm | 3300   | 3700   | 4000   |
| Height (mast lowered)                                                | mm | 2315   | 2565   | 2715   |
| Free lift                                                            | mm | 145    | 145    | 145    |
| Height of extended mast                                              | mm | 4115   | 4515   | 4815   |
| Residual Capacity without attachment (Industrial load chart)         | kg | 3500   | 3500   | 3500   |
| Residual Capacity with integrated side shift (Industrial load chart) | kg | 3500   | 3500   | 3500   |
| Forward/backward mast tilt angle                                     | °  | 6 / 12 | 6 / 12 | 6 / 12 |

| Duplex Free Lift                                                     |    | FLD 33 | FLD 37 | FLD 40 |
|----------------------------------------------------------------------|----|--------|--------|--------|
| Lift height                                                          | mm | 3300   | 3700   | 4000   |
| Height (mast lowered)                                                | mm | 2330   | 2530   | 2680   |
| Free lift                                                            | mm | 1500   | 1700   | 1850   |
| Height of extended mast                                              | mm | 4130   | 4530   | 4830   |
| Residual Capacity without attachment (Industrial load chart)         | kg | 3500   | 3500   | 3500   |
| Residual Capacity with integrated side shift (Industrial load chart) | kg | 3500   | 3500   | 3500   |
| Forward/backward mast tilt angle                                     | °  | 6 / 12 | 6 / 12 | 6 / 12 |

| Triplex Free Lift                                                    |    | FLT 43 | FLT 45 | FLT 50 | FLT 55 | FLT 60 | FLT 65 | FLT 47 | FLT 48 |
|----------------------------------------------------------------------|----|--------|--------|--------|--------|--------|--------|--------|--------|
| Lift height                                                          | mm | 4300   | 4500   | 5000   | 5500   | 6000   | 6500   | 4700   | 4800   |
| Height (mast lowered)                                                | mm | 2215   | 2265   | 2415   | 2565   | 2815   | 2965   | 2315   | 2365   |
| Free lift                                                            | mm | 1385   | 1435   | 1585   | 1735   | 1985   | 2135   | 1485   | 1535   |
| Height of extended mast                                              | mm | 5130   | 5380   | 5830   | 6330   | 6880   | 7330   | 5530   | 5530   |
| Residual Capacity without attachment (Industrial load chart)         | kg | 3450   | 3400   | 3000   | 2200   | 1600   | 1500   | 3300   | 3300   |
| Residual Capacity with integrated side shift (Industrial load chart) | kg | 3450   | 3300   | 2900   | 2100   | 1500   | 1400   | 3200   | 3200   |
| Forward/backward mast tilt angle                                     | °  | 6 / 6  | 6 / 6  | 6 / 6  | 3 / 6  | 3 / 6  | 3 / 6  | 6 / 6  | 6 / 6  |



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: 39,547,824 euros - 857 802 508 RCS Nantes