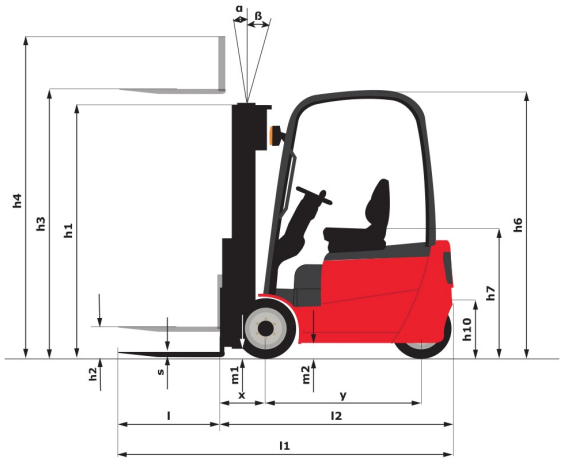
Technical sheet :

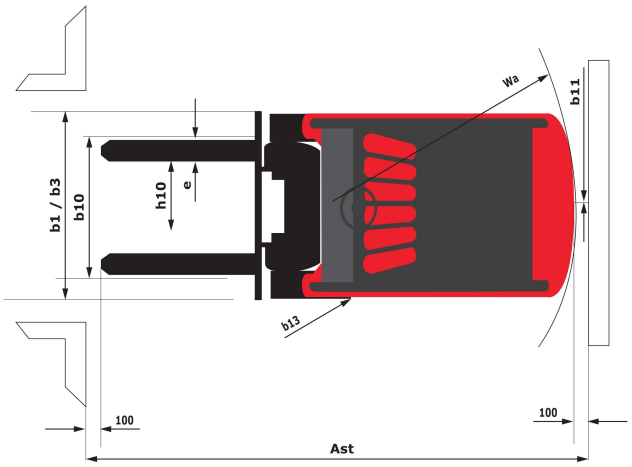
# ME 435

MANITOU
HANDLING YOUR WORLD

| | Technical characteristics | | Metric |
|---|---|---|---|
| 1.1 | Manufacturer | | Manitou |
| 1.2 | Model Name | | ME 435 |
| 1.3 | Power source | | Electric |
| 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 | 445 mm |
| 1.9 | Wheelbase | y | 1750 mm |
| | **Weight** | | |
| 2.1 | Service weight | | 5550 kg |
| 2.2 | Weight on front axle (laden) / rear axle (laden) | | 8050 kg / 1000 kg |
| 2.3 | Weight on front axle (Unladen) / rear axle (Unladen) | | 2720 kg / 2830 kg |
| | **Wheels** | | |
| 3.1 | Tyres type | | PPS |
| 3.2 | Dimensions of front wheels | | 23 x 9-10 |
| 3.3 | Dimensions of rear wheels | | 18 x 7-8 |
| 3.5 | Number of front wheels / rear wheels | | 2 / 2 |
| 3.5.2 | Number of drive wheels | | 2 |
| 3.6 | Front wheel gauge | b10 | 1085 mm |
| 3.7 | Rear wheel gauge | b11 | 960 mm |
| | **Dimensions** | | |
| 4.1 | Tilt of Mast Forward (deg) / Backward (deg) | α / β | 15 / 15 |
| 4.7 | Height of overhead guard (cabin) | h6 | 2240 mm |
| 4.8 | Seat height/stand height | h7 | 1190 mm |
| 4.12 | Height of towing bar (coupling height) | h10 | 625 mm |
| 4.19 | Overall length | l1 | 3650 mm |
| 4.20 | Length to face of forks | l2 | 2500 mm |
| 4.21 | Overall width | b1 | 1315 mm |
| 4.22 | Forks section / width / length | s / e / l | 50 mm x 122 mm / 1150 mm |
| 4.23 | Fork carriage ISO 2328 (class/form) A/B | | 3A |
| 4.24 | Fork carriage width | b3 | 1100 mm |
| 4.31 | Ground clearance below mast | m1 | 112 mm |
| 4.32 | Ground clearance at centre of wheelbase | m2 | 115 mm |
| 4.33 | Aisle Width for pallets 1000 x 1200 crossways | Ast | 4045 mm |
| 4.34 | Aisle width for 800 x 1200 pallet lengthways | Ast | 4245 mm |
| 4.36 | Internal turning radius (over tyres) | b13 | 730 mm |
| 4.35 | Turning radius | Wa | 2400 mm |
| | **Performances** | | |
| 5.1 | Travel speed (laden / unladen) | | 19 km/h / 20 km/h |
| 5.2 | Lifting speed (laden / unladen) | | 0.39 m/s / 0.54 m/s |
| 5.3 | Lowering speed (laden / unladen) | | 0.47 m/s / 0.42 m/s |
| 5.5 | Drawbar pull (Laden / Unladen) | | 1690 daN / 1700 daN |
| 5.7 | Gradeability (laden / unladen) | | 12 % / 18 % |
| 5.10 | Service brake | | Oil bath |
| | **Engine** | | |
| 6.1 | Drive motor rating S2 60 min | | 18.50 kW |
| 6.2 | Lift motor rating at S3 15% | | 25.40 kW |
| 6.3 | Battery according to DIN 43531/35/36 A, B, C | | DIN43536 A |
| 6.4 | Battery / Batteries capacity | | 80 V / 700 Ah |
| 6.6 | Energy consumption | | 12.50 kW/h |
| | **Miscellaneous** | | |
| 8.1 | Type of drive control | | Electronic |
| 8.2 | Working hydraulic pressure for attachments | | 210 Bar |
| 8.3 | Oil flow rate for attachments | | 65 l/min |
| 8.4 | Measured/guaranteed mean noise level at the ear of the operator | | < 74 dB(A) |

# Dimensional drawing




# Characteristics of masts and residual capacities

| Full Visibility Duplex | | FVD 30 | FVD 33 | FVD 35 | FVD 37 | FVD 40 | FVD 43 | FVD 45 | FVD 48 | FVD 50 |
|---|---|---|---|---|---|---|---|---|---|---|
| h2 - Free lift | mm | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 | 150 |
| h1 - Height mast lowered * | mm | 2235 | 2385 | 2485 | 2858 | 2835 | 2985 | 3085 | 3235 | 3335 |
| h3 - Lifting Height | mm | 3000 | 3300 | 3500 | 3700 | 4000 | 4300 | 4500 | 4800 | 5000 |
| h4 - Height mast extended * | mm | 3838 | 4138 | 4338 | 4538 | 4838 | 5138 | 5338 | 5638 | 5838 |
| α / β - Mast inclination (front / rear) | ° | 5 / 8 | 5 / 8 | 5 / 8 | 5 / 8 | 5 / 8 | 5 / 5 | 5 / 5 | 5 / 5 | 5 / 5 |
| Residual capacity without attachment (Industrial load chart) | kg | 3500 | 3500 | 3500 | 3500 | 3500 | 3500 | 3500 | 3500 | 3400 |
| Residual capacity with integrated side shift (Industrial load chart) | kg | 3500 | 3500 | 3500 | 3500 | 3500 | 3500 | 3400 | 3350 | 3400 |
| Residual capacity with hooked-on side shift (Industrial load chart) | kg | 3500 | 3500 | 3500 | 3500 | 3500 | 3500 | 3400 | 3300 | 3200 |
| Height at max capacity | mm | 3000 | 3300 | 3500 | 3700 | 4000 | 4300 | 4500 | 4800 | 4000 |
| Height at max capacity with integrated sideshift | mm | 3000 | 3300 | 3500 | 3700 | 4000 | 4300 | 4000 | 4000 | 4000 |

| Free Lift Duplex | | FLD 30 | FLD 33 | FLD 37 | FLD 40 |
|---|---|---|---|---|---|
| h2 - Free lift | mm | 1275 | 1425 | 1625 | 1825 |
| h1 - Height mast lowered * | mm | 2135 | 2285 | 2485 | 2685 |
| h3 - Lifting Height | mm | 3000 | 3300 | 3700 | 4000 |
| h4 - Height mast extended * | mm | 3860 | 4160 | 4560 | 4860 |
| α / β - Mast inclination (front / rear) | ° | 5 / 8 | 5 / 8 | 5 / 8 | 5 / 8 |
| Residual capacity without attachment (Industrial load chart) | kg | 3500 | 3500 | 3500 | 3500 |
| Residual capacity with integrated side shift (Industrial load chart) | kg | 3500 | 3500 | 3500 | 3500 |
| Residual capacity with hooked-on side shift (Industrial load chart) | kg | 3500 | 3500 | 3500 | 3500 |
| Height at max capacity | mm | 3000 | 3300 | 3700 | 4000 |
| Height at max capacity with integrated sideshift | mm | 3000 | 3300 | 3700 | 4000 |

| Free Lift Triplex | | FLT 40 | FLT 43 | FLT 48 | FLT 50 | FLT 55 | FLT 60 |
|---|---|---|---|---|---|---|---|
| h2 - Free lift | mm | 1275 | 1375 | 1575 | 1675 | 1875 | 2125 |
| h1 - Height mast lowered * | mm | 2135 | 2235 | 2435 | 2535 | 2735 | 2985 |
| h3 - Lifting Height | mm | 4000 | 4300 | 4800 | 5000 | 5500 | 6000 |
| h4 - Height mast extended * | mm | 4680 | 5160 | 5660 | 5860 | 6360 | 6860 |
| α / β - Mast inclination (front / rear) | ° | 5 / 5 | 5 / 5 | 5 / 5 | 5 / 5 | 5 / 5 | 5 / 5 |
| Residual capacity without attachment (Industrial load chart) | kg | 3500 | 3400 | 3300 | 3200 | 3150 | 3000 |
| Residual capacity with integrated side shift (Industrial load chart) | kg | 3500 | 3350 | 3250 | 3200 | 3150 | 3000 |
| Residual capacity with hooked-on side shift (Industrial load chart) | kg | 3400 | 3250 | 3100 | 3050 | 3000 | 2850 |
| Height at max capacity | mm | 4000 | 4000 | 4000 | | | |
| Height at max capacity with integrated sideshift | mm | 4000 | | | | | |

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

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 thisbrochure 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