

Technical sheet :

# ME 430 LIFT

---



| Technical characteristics |   |       | Metric              |
|---------------------------|---|-------|---------------------|
| 1.1                       | Manufacturer  |       | Manitou             |
| 1.2                       | Model Name  |       | ME 430 LIFT         |
| 1.3                       | Power source  |       | Electrical          |
| 1.4                       | Operator type   |       | Seated              |
| 1.5                       | Max. capacity   | Q     | 3000 kg             |
| 1.6                       | Load center of gravity                                  | c     | 500 mm              |
| 1.8                       | Load distance, centre of drive axle to fork             | x     | 463.50 mm           |
| 1.9                       | Wheelbase   | y     | 1650 mm             |
|                           | Standard mast reference of the machine                  |       | FVD 30              |
| Weight                    |   |       |                     |
| 2.1                       | Service weight  |       | 4610 kg             |
| 2.2                       | Weight on front axle (laden) / rear axle (laden)        |       | 6610 kg / 1000 kg   |
| 2.3                       | Weight on front axle (Unladen) / rear axle (Unladen)    |       | 1960 kg / 2650 kg   |
| Wheels                    |   |       |                     |
| 3.1                       | Tires type  |       | Solid tires         |
| 3.2                       | Dimensions of front wheels                              |       | 23x10-12-18PR       |
| 3.3                       | Dimensions of rear wheels                               |       | 18x7-8-16PR         |
| 3.5                       | Number of front wheels / rear wheels                    |       | 2 / 2               |
| 3.5.2                     | Number of drive wheels                                  |       | 2                   |
| 3.6                       | Front wheel gauge                                       | b10   | 1044 mm             |
| 3.7                       | Rear wheel gauge  | b11   | 960 mm              |
| Dimensions                |   |       |                     |
| 4.7                       | Height of overhead guard (cabin)                        | h6    | 2186 mm             |
| 4.8                       | Seat height/stand height                                | h7    | 1155 mm             |
| 4.12                      | Height of towing bar (coupling height)                  | h10   | 440 mm              |
| 4.19                      | Overall length  | l1    | 3522.50 mm          |
| 4.20                      | Length to face of forks                                 | l2    | 2452.50 mm          |
| 4.21                      | Overall width   | b1    | 1298 mm             |
| 4.22.1                    | Forks width / length                                    | e / l | 45 mm x 122 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    | 127 mm              |
| 4.32                      | Ground clearance at centre of wheelbase                 | m2    | 115 mm              |
| 4.33                      | Aisle Width for pallets 1000 x 1200 crossways           | Ast   | 3854 mm             |
| 4.34                      | Aisle width for 800 x 1200 pallet lengthways            | Ast   | 4053.50 mm          |
| 4.35                      | Turning radius  | Wa    | 2190 mm             |
| Performances              |   |       |                     |
| 5.1                       | Travel speed (laden / unladen)                          |       | 19 km/h-20 km/h     |
| 5.2                       | Lifting speed (laden / unladen)                         |       | 0.45 m/s-0.55 m/s   |
| 5.3                       | Lowering speed (laden / unladen)                        |       | 0.50 m/s-0.53 m/s   |
| 5.5                       | Drawbar pull (Laden / Unladen)                          |       | 8500 daN / 9500 daN |
| 5.7                       | Gradeability (laden / unladen)                          |       | 13 % / 24 %         |
| 5.10                      | Service brake   |       | Hydraulic           |
| Engine                    |   |       |                     |
| 6.1                       | Drive motor rating S2 60 min                            |       | 20 kW               |
| 6.2                       | Lift motor rating at S3 15%                             |       | 26 kW               |
| 6.3                       | Battery according to DIN 43531/35/36 A, B, C            |       | No                  |
| 6.4                       | Battery voltage / capacity                              |       | 76.80 V / 460 Ah    |
| 6.5                       | Battery weight (+/- 5%)                                 |       | 310 kg              |
| 6.6                       | Energy consumption according to VDI cycle (kWh/h)       |       | 8.22 kWh/h          |
| Miscellaneous             |   |       |                     |
| 8.2                       | Working hydraulic pressure for attachments              |       | 160 bar             |
| 8.3                       | Oil flow rate for attachments                           |       | 25 l/min            |
| 8.4                       | Sound level at the driver's ear according to DIN 12 053 |       | 70 dB               |

### ME 430 LIFT - Dimensional drawing



## Characteristics of masts and residual capacities

| Full Visibility Duplex (FVD)                               |    | FVD 30 | FVD 33 | FVD 37 | FVD 40 | FVD 45 |
|--|----|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward                       | °  | 6      | 6      | 6      | 6      | 6      |
| β - Mast/fork carriage tilt, backward                      | °  | 12     | 12     | 12     | 12     | 6      |
| h1 - Mast lowered height                                   | mm | 2000   | 2150   | 2400   | 2600   | 2850   |
| h2 - Mast free lift  | mm | 140    | 140    | 140    | 140    | 140    |
| h3 - Mast lifting height                                   | mm | 3000   | 3300   | 3700   | 4000   | 4500   |
| h4 - Mast extended height                                  | mm | 4046   | 4346   | 4746   | 5046   | 5546   |
| Residual capacity at max height                            | kg | 3000   | 3000   | 3000   | 3000   | 3000   |
| Residual capacity with integrated side shift at max height | kg | 2900   | 2900   | 2900   | 2900   | 2900   |

| Free Lift Triplex (FLT)                                    |    | FLT 40 | FLT 45 | FLT 48 | FLT 50 | FLT 55 | FLT 60 | FLT 65 |
|--|----|--------|--------|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward                       | °  | 6      | 6      | 6      | 6      | 3      | 3      | 3      |
| β - Mast/fork carriage tilt, backward                      | °  | 6      | 6      | 6      | 6      | 6      | 6      | 6      |
| h1 - Mast lowered height                                   | mm | 1950   | 2100   | 2200   | 2300   | 2450   | 2650   | 2850   |
| h2 - Mast free lift  | mm | 904    | 1054   | 1154   | 1254   | 1404   | 1604   | 1804   |
| h3 - Mast lifting height                                   | mm | 4000   | 4500   | 4800   | 5000   | 5500   | 6000   | 6500   |
| h4 - Mast extended height                                  | mm | 5046   | 5546   | 5846   | 6046   | 6546   | 7046   | 7546   |
| Residual capacity at max height                            | kg | 3000   | 3000   | 2900   | 2850   | 2670   | 2350   | 2000   |
| Residual capacity with integrated side shift at max height | kg | 2900   | 2900   | 2800   | 2750   | 2570   | 2250   | 1900   |



**Head Office**

B.P. 249 - 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 publication provides a description of the configuration versions and options for Manitou products, which may differ for equipment. The equipment presented in this brochure may be part of a series, as an option, or it may not be available, depending on the versions. Manitou reserves the right, at any time and without notice, to amend the specifications described and represented. The specifications provided do not bind the manufacturer. For more details, please contact your Manitou agent. This is not a contractually binding document. The presentation of the products is not contractually binding. List of specifications non-exhaustive. The logos as well as the visual identity of the company are owned by Manitou and cannot be used without authorisation. All rights reserved. The photos and diagrams contained in this brochure are only provided for consultation and information purposes.

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