

Technical sheet :

# ME 425 LD LIFT

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|        | Technical characteristics                               |       | Metric               |
|--------|---|-------|----------------------|
| 1.1    | Manufacturer  |       | Manitou              |
| 1.2    | Model Name  |       | ME 425 LD LIFT       |
| 1.3    | Power source  |       | Electrical - Lithium |
| 1.4    | Operator type   |       | Seated               |
| 1.5    | Max. capacity   | Q     | 2500 kg              |
| 1.6    | Load center of gravity                                  | c     | 500 mm               |
| 1.8    | Load distance, centre of drive axle to fork             | x     | 431 mm               |
| 1.9    | Wheelbase   | y     | 1520 mm              |
|        | Standard mast reference of the machine                  |       | FVD 30               |
|        | <b>Weight</b>   |       |                      |
| 2.1    | Service weight  |       | 3830 kg              |
| 2.2    | Weight on front axle (laden) / rear axle (laden)        |       | 5575 kg / 755 kg     |
| 2.3    | Weight on front axle (Unladen) / rear axle (Unladen)    |       | 1560 kg / 2270 kg    |
|        | <b>Wheels</b>   |       |                      |
| 3.1    | Tires type  |       | Solid tires          |
| 3.2    | Dimensions of front wheels                              |       | 23x9-10-18PR         |
| 3.3    | Dimensions of rear wheels                               |       | 18X7-8-14PR          |
| 3.5    | Number of front wheels                                  |       | 2                    |
| 3.5.2  | Number of drive wheels                                  |       | 2                    |
| 3.6    | Front wheel gauge                                       | b10   | 1046 mm              |
| 3.7    | Rear wheel gauge  | b11   | 960 mm               |
|        | <b>Dimensions</b>                                       |       |                      |
| 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    | 3357 mm              |
| 4.20   | Length to face of forks                                 | l2    | 2287 mm              |
| 4.21   | Overall width   | b1    | 1271 mm              |
| 4.22.1 | Forks width / length                                    | e / l | 40 mm x 122 mm       |
| 4.23   | Fork carriage ISO 2328 (class/form) A/B                 |       | 2A                   |
| 4.24   | Fork carriage width                                     | b3    | 1038 mm              |
| 4.31   | Ground clearance below mast                             | m1    | 120 mm               |
| 4.32   | Ground clearance at centre of wheelbase                 | m2    | 115 mm               |
| 4.33   | Aisle Width for pallets 1000 x 1200 crossways           | Ast   | 3670 mm              |
| 4.34   | Aisle width for 800 x 1200 pallet lengthways            | Ast   | 3866 mm              |
| 4.35   | Turning radius  | Wa    | 2035 mm              |
|        | <b>Performances</b>                                     |       |                      |
| 5.1    | Travel speed (laden / unladen)                          |       | 16 km/h-17 km/h      |
| 5.2    | Lifting speed (laden / unladen)                         |       | 0.35 m/s-0.46 m/s    |
| 5.3    | Lowering speed (laden / unladen)                        |       | 0.51 m/s-0.54 m/s    |
| 5.5    | Drawbar pull (Laden / Unladen)                          |       | 6000 daN / 6500 daN  |
| 5.7    | Gradeability (laden / unladen)                          |       | 10 % / 18 %          |
| 5.10   | Service brake   |       | Hydraulic            |
|        | <b>Engine</b>   |       |                      |
| 6.1    | Drive motor rating S2 60 min                            |       | 17 kW                |
| 6.2    | Lift motor rating at S3 15%                             |       | 23 kW                |
| 6.3    | Battery according to DIN 43531/35/36 A, B, C            |       | Lithium              |
| 6.4    | Battery voltage / capacity                              |       | 76.80 V / 230 Ah     |
| 6.5    | Battery weight (+/- 5%)                                 |       | 180 kg               |
| 6.6    | Energy consumption according to VDI cycle (kWh/h)       |       | 5.70 kWh/h           |
|        | <b>Miscellaneous</b>                                    |       |                      |
| 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 425 LD 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 | 2500   | 2500   | 2500   | 2500   | 2450   |
| Residual capacity with integrated side shift at max height | kg | 2450   | 2450   | 2450   | 2450   | 2400   |

| 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      | 12     | 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 | 2500   | 2350   | 2250   | 2150   | 2050   | 1850   | 1600   |
| Residual capacity with integrated side shift at max height | kg | 2450   | 2300   | 2200   | 2100   | 2000   | 1800   | 1550   |



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