

Technical sheet :

ME 425 LIFT



 **MANITOU**
HANDLING YOUR WORLD

| Technical characteristics | | Metric | |
|---------------------------|---|--------|----------------------|
| 1.1 | Manufacturer | | Manitou |
| 1.2 | Model Name | | ME 425 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 |
| Weight | | | |
| 2.1 | Service weight | | 3875 kg |
| 2.2 | Weight on front axle (laden) / rear axle (laden) | | 5595 kg / 780 kg |
| 2.3 | Weight on front axle (Unladen) / rear axle (Unladen) | | 1580 kg / 2295 kg |
| Wheels | | | |
| 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 / rear wheels | | 2 / 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 |
| Dimensions | | | |
| 4.8 | Seat height/stand height | h7 | 1155 mm |
| 4.7 | Height of overhead guard (cabin) | h6 | 2186 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 |
| Performances | | | |
| 5.1 | Travel speed (laden / unladen) | | 19 km/h-20 km/h |
| 5.2 | Lifting speed (laden / unladen) | | 0.50 m/s-0.60 m/s |
| 5.3 | Lowering speed (laden / unladen) | | 0.51 m/s-0.54 m/s |
| 5.5 | Drawbar pull (Laden / Unladen) | | 800 daN / 900 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 | | Lithium |
| 6.4 | Battery voltage / capacity | | 76.80 V / 304 Ah |
| 6.5 | Battery weight (+/- 5%) | | 225 kg |
| 6.6 | Energy consumption according to VDI cycle (kWh/h) | | 6.50 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 425 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 | 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 | 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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