Technical sheet :

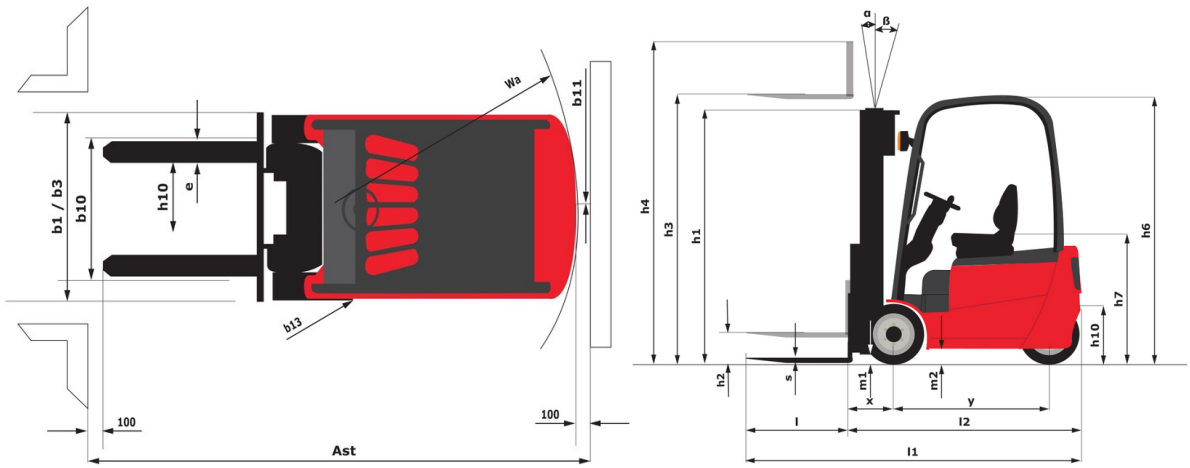
# ME 425C




MANITOU
HANDLING YOUR WORLD

| | Technical characteristics | | Metric | Imperial |
|---|---|---|---|---|
| 1.1 | Manufacturer | | Manitou | Manitou |
| 1.2 | Model Name | | ME 425 C | ME 425 C |
| 1.3 | Power source | | Electrical | Electrical |
| 1.4 | Operator type | | Sitting | Sitting |
| 1.5 | Max. capacity | Q | 2500 kg | 5512 lb |
| 1.6 | Load center of gravity | c | 500 mm | 20 in |
| 1.8 | Load distance, centre of drive axle to fork | x | 448 mm | 18 in |
| 1.9 | Wheelbase | y | 1485 mm | 58 in |
| | **Weight** | | | |
| 2.1 | Service weight | | 4300 kg | 9480 lb |
| 2.2 | Weight on front axle (laden) / rear axle (laden) | | 6060 kg / 740 kg | 13360 lb / 1631 lb |
| 2.3 | Weight on front axle (Unladen) / rear axle (Unladen) | | 1960 kg / 2340 kg | 4321 lb / 5159 lb |
| | **Wheels** | | | |
| 3.1 | Tires type | | PPS | PPS |
| 3.2 | Dimensions of front wheels | | 23 x 9-10 | 23 x 9-10 |
| 3.3 | Dimensions of rear wheels | | 18 x 7-8 | 18 x 7-8 |
| 3.5 | Number of front wheels / rear wheels | | 2 / 2 | 2 / 2 |
| 3.5.2 | Number of drive wheels | | 2 | 2 |
| 3.6 | Front wheel gauge | b10 | 1058 mm | 42 in |
| 3.7 | Rear wheel gauge | b11 | 960 mm | 38 in |
| | **Dimensions** | | | |
| 4.7 | Height of overhead guard (cabin) | h6 | 2155 mm | 85 in |
| 4.8 | Seat height/stand height | h7 | 1070 mm | 42 in |
| 4.12 | Height of towing bar (coupling height) | h10 | 303 mm | 12 in |
| 4.19 | Overall length | l1 | 3492 mm | 137 in |
| 4.20 | Length to face of forks | l2 | 2342 mm | 92 in |
| 4.21 | Overall width | b1 | 1265 mm | 50 in |
| 4.22 | Forks section / width / length | s / e / l | 122 mm x 1150 mm x 40 mm | 5 in x 45 in x 2 in |
| 4.23 | Fork carriage ISO 2328 (class/form) A/B | | 2A | 2A |
| 4.24 | Fork carriage width | b3 | 1038 mm | 41 in |
| 4.31 | Ground clearance below mast | m1 | 112 mm | 4 in |
| 4.32 | Ground clearance at centre of wheelbase | m2 | 120 mm | 5 in |
| 4.33 | Aisle Width for pallets 1000 x 1200 crossways | Ast | 3738 mm | 147 in |
| 4.34 | Aisle width for 800 x 1200 pallet lengthways | Ast | 3938 mm | 155 in |
| 4.35 | Turning radius | Wa | 2090 mm | 82 in |
| 4.36 | Internal turning radius (over tyres) | b13 | 730 mm | 29 in |
| | **Performances** | | | |
| 5.1 | Travel speed (laden / unladen) | | 14 km/h-14 km/h | 9 mph-9 mph |
| 5.2 | Lifting speed (laden / unladen) | | 0.23 m/s-0.43 m/s | 0.75 ft/s-1 ft/s |
| 5.3 | Lowering speed (laden / unladen) | | 0.41 m/s-0.22 m/s | 1 ft/s-0.72 ft/s |
| 5.5 | Drawbar pull (Laden / Unladen) | | 1800 daN / 1700 daN | 1800 daN / 1700 daN |
| 5.7 | Gradeability (laden / unladen) | | 11 % / 12 % | 11 % / 12 % |
| 5.10 | Service brake | | Hydraulic | Hydraulic |
| | **Engine** | | | |
| 6.1 | Drive motor rating S2 60 min | | 11 kW | 11 kW |
| 6.2 | Lift motor rating at S3 15% | | 8.60 kW | 8.60 kW |
| 6.3 | Battery according to DIN 43531/35/36 A, B, C | | DIN43531 B | DIN43531 B |
| 6.4 | Battery voltage / capacity | | 48 V / 700 Ah | 48 V / 700 Ah |
| 6.6 | Energy consumption | | 5.80 kWh | 5.80 kWh |
| | **Miscellaneous** | | | |
| 8.1 | Type of drive control | | Electronic | Electronic |
| 8.2 | Working hydraulic pressure for attachments | | 175 bar | 2538 PSI |
| 8.3 | Oil flow rate for attachments | | 35 l/min | 9 US gpm |
| 8.4 | Measured/guaranteed mean noise level at the ear of the operator | | < 72 dB | < 72 dB |
| 8.4 | Sound level at the driver's ear according to DIN 12 053 | | 72 dB | 72 dB |

## ME 425C - Dimensional drawing



# Characteristics of masts and residual capacities

| Full Visibility Duplex (FVD) | | FVD 27 | FVD 30 | FVD 33 | FVD 36 | FVD 40 | FVD 43 | FVD 45 |
|---|---|---|---|---|---|---|---|---|
| Mast/fork carriage tilt, forward | ° | 5 | 5 | 5 | 5 | 5 | 5 | 5 |
| Mast/fork carriage tilt, backward | ° | 6 | 10 | 10 | 10 | 10 | 6 | 6 |
| h1 - Mast lowered height | in (mm) | 73 (1855) | 78.9 (2005) | 85.4 (2170) | 90.7 (2305) | 100.6 (2555) | 107.5 (2730) | 111.4 (2830) |
| h2 - Mast free lift | in (mm) | 5.5 (140) | 5.5 (140) | 5.5 (140) | 5.5 (140) | 5.5 (140) | 5.5 (140) | 5.5 (140) |
| h3 - Mast lifting height | in (mm) | 106.3 (2700) | 118.1 (3000) | 129.9 (3300) | 141.7 (3600) | 157.5 (4000) | 169.3 (4300) | 177.2 (4500) |
| h4 - Mast extended height | in (mm) | 131.9 (3350) | 143.7 (3650) | 156.7 (3980) | 167.3 (4250) | 183.1 (4650) | 195.7 (4970) | 202.8 (5150) |
| Residual capacity at max height | lb (kg) | 5512 (2500) | 5512 (2500) | 5512 (2500) | 5512 (2500) | 5512 (2500) | 5512 (2500) | 5401 (2450) |
| Residual capacity with integrated side shift at max heigth | lb (kg) | 5512 (2500) | 5512 (2500) | 5512 (2500) | 5512 (2500) | 5512 (2500) | 5401 (2450) | 5291 (2400) |
| Residual capacity with hooked-on side shift at max heigth | lb (kg) | 5512 (2500) | 5512 (2500) | 5512 (2500) | 5401 (2450) | 5291 (2400) | 5181 (2350) | 5071 (2300) |
| Height at max capacity | in (mm) | 106.3 (2700) | 118.1 (3000) | 129.9 (3300) | 141.7 (3600) | 157.5 (4000) | 169.3 (4300) | 177.2 (4500) |
| Height at max capacity with integrated sideshift | in (mm) | 106.3 (2700) | 118.1 (3000) | 129.9 (3300) | 141.7 (3600) | 157.5 (4000) | 157.5 (4000) | 157.5 (4000) |

| Free Lift Duplex (FLD) | | FLD 27 | FLD 30 | FLD 33 | FLD 36 | FLD 40 |
|---|---|---|---|---|---|---|
| Mast/fork carriage tilt, forward | ° | 5 | 5 | 5 | 5 | 5 |
| Mast/fork carriage tilt, backward | ° | 6 | 10 | 10 | 10 | 10 |
| h1 - Mast lowered height | in (mm) | 73.5 (1866) | 78 (1980) | 83.9 (2130) | 89.8 (2280) | 99.6 (2530) |
| h2 - Mast free lift | in (mm) | 49.2 (1250) | 53.1 (1350) | 59.1 (1500) | 65 (1650) | 74.8 (1900) |
| h3 - Mast lifting height | in (mm) | 106.3 (2700) | 118.1 (3000) | 129.9 (3300) | 141.7 (3600) | 157.5 (4000) |
| h4 - Mast extended height | in (mm) | 132.7 (3370) | 143.1 (3635) | 156.3 (3970) | 168.1 (4270) | 182.5 (4635) |
| Residual capacity at max height | lb (kg) | 5512 (2500) | 5512 (2500) | 5512 (2500) | 5512 (2500) | 5512 (2500) |
| Residual capacity with integrated side shift at max heigth | lb (kg) | 5512 (2500) | 5512 (2500) | 5512 (2500) | 5512 (2500) | 5512 (2500) |
| Residual capacity with hooked-on side shift at max heigth | lb (kg) | 5512 (2500) | 5512 (2500) | 5512 (2500) | 5401 (2450) | 5291 (2400) |
| Height at max capacity | in (mm) | 106.3 (2700) | 118.1 (3000) | 129.9 (3300) | 141.7 (3600) | 157.5 (4000) |
| Height at max capacity with integrated sideshift | in (mm) | 106.3 (2700) | 118.1 (3000) | 129.9 (3300) | 141.7 (3600) | 157.5 (4000) |

| Free Lift Triplex (FLT) | | FLT 40 | FLT 43 | FLT 45 | FLT 48 | FLT 50 | FLT 55 | FLT 60 | FLT 65 |
|---|---|---|---|---|---|---|---|---|---|
| Mast/fork carriage tilt, forward | ° | 5 | 5 | 5 | 5 | 5 | 3 | 3 | 3 |
| Mast/fork carriage tilt, backward | ° | 6 | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| h1 - Mast lowered height | in (mm) | 75.8 (1925) | 79.7 (2025) | 82.5 (2095) | 86.4 (2195) | 89 (2260) | 95.5 (2425) | 104.1 (2645) | 111 (2820) |
| h2 - Mast free lift | in (mm) | 49.4 (1255) | 53.3 (1355) | 56.1 (1425) | 60 (1525) | 62.6 (1590) | 69.1 (1755) | 77.8 (1975) | 84.6 (2150) |
| h3 - Mast lifting height | in (mm) | 157.5 (4000) | 169.3 (4300) | 177.2 (4500) | 189 (4800) | 196.9 (5000) | 216.5 (5500) | 236.2 (6000) | 255.9 (6500) |
| h4 - Mast extended height | in (mm) | 184.3 (4680) | 196.1 (4980) | 205.9 (5230) | 215.7 (5480) | 223.6 (5680) | 203.9 (5180) | 263.4 (6690) | 282.7 (7180) |
| Residual capacity at max height | lb (kg) | 5512 (2500) | 5401 (2450) | 5181 (2350) | 4960 (2250) | 4740 (2150) | 4519 (2050) | 3638 (1650) | 2976 (1350) |
| Residual capacity with integrated side shift at max heigth | lb (kg) | 5401 (2450) | 5401 (2450) | 5071 (2300) | 4850 (2200) | 4630 (2100) | 4409 (2000) | 3527 (1600) | 2866 (1300) |
| Residual capacity with hooked-on side shift at max heigth | lb (kg) | 5181 (2350) | 5071 (2300) | 4960 (2250) | 4630 (2100) | 4519 (2050) | 4189 (1900) | 3307 (1500) | 2646 (1200) |
| Height at max capacity | in (mm) | 157.5 (4000) | 169.3 (4300) | 157.5 (4000) | 157.5 (4000) | 157.5 (4000) | 157.5 (4000) | 157.5 (4000) | 157.5 (4000) |
| Height at max capacity with integrated sideshift | in (mm) | 157.5 (4000) | 169.3 (4300) | 157.5 (4000) | 157.5 (4000) | 157.5 (4000) | 157.5 (4000) | 157.5 (4000) | 157.5 (4000) |

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