

Technical sheet :

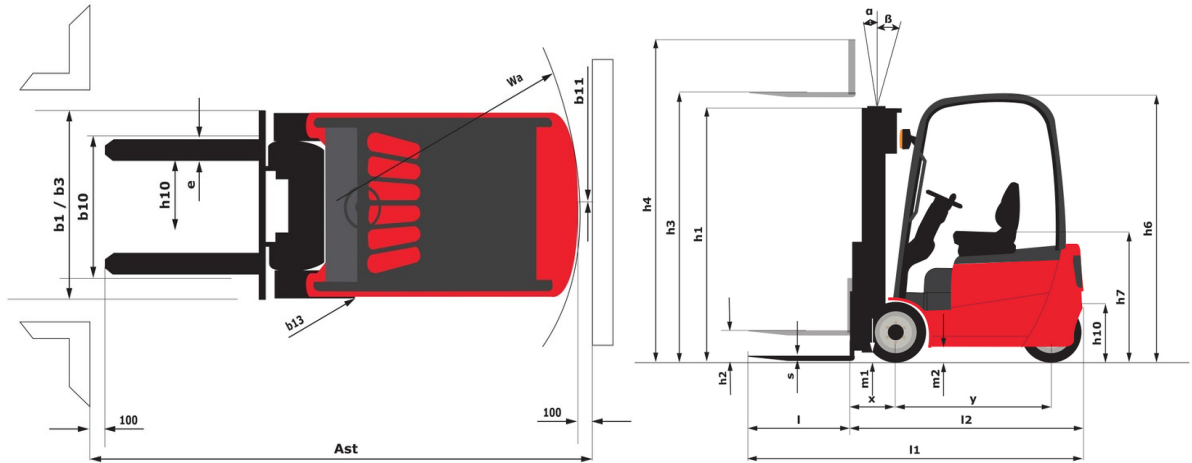
# ME 418



 **MANITOU**  
HANDLING YOUR WORLD

|       | Technical characteristics                                       |           | Metric                   | Imperial            |
|-------|-----------------------------------------------------------------|-----------|--------------------------|---------------------|
| 1.1   | Manufacturer                                                    |           | Manitou                  | Manitou             |
| 1.2   | Model Name                                                      |           | ME 418                   | ME 418              |
| 1.3   | Power source                                                    |           | Electrical               | Electrical          |
| 1.4   | Operator type                                                   |           | Seated                   | Seated              |
| 1.5   | Max. capacity                                                   | Q         | 1800 kg                  | 3968 lb             |
| 1.6   | Load center of gravity                                          | c         | 500 mm                   | 20 in               |
| 1.8   | Load distance, centre of drive axle to fork                     | x         | 411 mm                   | 16 in               |
| 1.9   | Wheelbase                                                       | y         | 1380 mm                  | 54 in               |
|       | Weight                                                          |           |                          |                     |
| 2.1   | Service weight                                                  |           | 3070 kg                  | 6768 lb             |
| 2.2   | Weight on front axle (laden) / rear axle (laden)                |           | 4350 kg / 520 kg         | 9590 lb / 1146 lb   |
| 2.3   | Weight on front axle (Unladen) / rear axle (Unladen)            |           | 1400 kg / 1670 kg        | 3086 lb / 3682 lb   |
|       | Wheels                                                          |           |                          |                     |
| 3.1   | Tires type                                                      |           | Solid tires              | Solid tires         |
| 3.2   | Dimensions of front wheels                                      |           | 21 x 8-9                 | 21 x 8-9            |
| 3.3   | Dimensions of rear wheels                                       |           | 5.00-8                   | 5.00-8              |
| 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       | 938 mm                   | 37 in               |
| 3.7   | Rear wheel gauge                                                | b11       | 898 mm                   | 35 in               |
|       | Dimensions                                                      |           |                          |                     |
| 4.7   | Height of overhead guard (cabin)                                | h6        | 2130 mm                  | 84 in               |
| 4.8   | Seat height/stand height                                        | h7        | 1045 mm                  | 41 in               |
| 4.12  | Height of towing bar (coupling height)                          | h10       | 275 mm                   | 11 in               |
| 4.19  | Overall length                                                  | l1        | 3248 mm                  | 128 in              |
| 4.20  | Length to face of forks                                         | l2        | 2098 mm                  | 83 in               |
| 4.21  | Overall width                                                   | b1        | 1138 mm                  | 45 in               |
| 4.22  | Forks section / width / length                                  | s / e / l | 100 mm x 1150 mm x 35 mm | 4 in x 45 in x 1 in |
| 4.23  | Fork carriage ISO 2328 (class/form) A/B                         |           | 2A                       | 2A                  |
| 4.24  | Fork carriage width                                             | b3        | 1000 mm                  | 39 in               |
| 4.31  | Ground clearance below mast                                     | m1        | 100 mm                   | 4 in                |
| 4.32  | Ground clearance at centre of wheelbase                         | m2        | 110 mm                   | 4 in                |
| 4.33  | Aisle Width for pallets 1000 x 1200 crossways                   | Ast       | 3511 mm                  | 138 in              |
| 4.34  | Aisle width for 800 x 1200 pallet lengthways                    | Ast       | 3711 mm                  | 146 in              |
| 4.35  | Turning radius                                                  | Wa        | 1900 mm                  | 75 in               |
| 4.36  | Internal turning radius (over tyres)                            | b13       | 680 mm                   | 27 in               |
|       | Performances                                                    |           |                          |                     |
| 5.1   | Travel speed (laden / unladen)                                  |           | 13.50 km/h-14 km/h       | 8 mph-9 mph         |
| 5.2   | Lifting speed (laden / unladen)                                 |           | 0.29 m/s-0.44 m/s        | 0.95 ft/s-1 ft/s    |
| 5.3   | Lowering speed (laden / unladen)                                |           | 0.49 m/s-0.48 m/s        | 2 ft/s-2 ft/s       |
| 5.5   | Drawbar pull (Laden / Unladen)                                  |           | 1200 daN / 1100 daN      | 1200 daN / 1100 daN |
| 5.7   | Gradeability (laden / unladen)                                  |           | 12 % / 13 %              | 12 % / 13 %         |
| 5.10  | Service brake                                                   |           | Hydraulic                | Hydraulic           |
|       | Engine                                                          |           |                          |                     |
| 6.1   | Drive motor rating S2 60 min                                    |           | 8 kW                     | 8 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 A               | DIN43531 A          |
| 6.4   | Battery voltage / capacity                                      |           | 48 V / 465 Ah            | 48 V / 465 Ah       |
| 6.6   | Energy consumption according to VDI cycle (kWh/h)               |           | 4.60 kWh/h               | 4.60 kWh/h          |
|       | 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 |           | < 71 dB                  | < 71 dB             |
| 8.4   | Sound level at the driver's ear according to DIN 12 053         |           | 71 dB                    | 71 dB               |

ME 418 - 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       |
|------------------------------------------------------------|---------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| α - Mast/fork carriage tilt, forward °                     |         | 5            | 5            | 5            | 5            | 5            | 5            | 5            |
| β - Mast/fork carriage tilt, backward °                    |         | 6            | 10           | 10           | 10           | 10           | 6            | 6            |
| h1 - Mast lowered height                                   | in (mm) | 71.9 (1825)  | 77.8 (1975)  | 83.7 (2125)  | 91.5 (2325)  | 101.4 (2575) | 107.3 (2725) | 111.2 (2825) |
| h2 - Mast free lift                                        | in (mm) | 5.7 (145)    | 5.7 (145)    | 5.7 (145)    | 5.7 (145)    | 5.7 (145)    | 5.7 (145)    | 5.7 (145)    |
| 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) | 128.5 (3265) | 140.4 (3565) | 152.2 (3865) | 164 (4165)   | 179.7 (4565) | 191.5 (4865) | 199.4 (5065) |
| Residual capacity at max height                            | lb (kg) | 3968 (1800)  | 3968 (1800)  | 3968 (1800)  | 3968 (1800)  | 3968 (1800)  | 3748 (1700)  | 3638 (1650)  |
| Residual capacity with integrated side shift at max height | lb (kg) | 3968 (1800)  | 3968 (1800)  | 3968 (1800)  | 3968 (1800)  | 3858 (1750)  | 3638 (1650)  | 3527 (1600)  |
| Residual capacity with hooked-on side shift at max height  | lb (kg) | 3968 (1800)  | 3968 (1800)  | 3968 (1800)  | 3748 (1700)  | 3638 (1650)  | 3417 (1550)  | 3307 (1500)  |
| 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) |              |              |

| Free Lift Duplex (FLD)                                     |         | FLD 27       | FLD 30       | FLD 33       | FLD 36       | FLD 40       |
|------------------------------------------------------------|---------|--------------|--------------|--------------|--------------|--------------|
| α - Mast/fork carriage tilt, forward °                     |         | 5            | 5            | 5            | 5            | 5            |
| β - Mast/fork carriage tilt, backward °                    |         | 6            | 10           | 10           | 10           | 10           |
| h1 - Mast lowered height                                   | in (mm) | 71.9 (1825)  | 77.8 (1975)  | 83.7 (2125)  | 89.6 (2275)  | 99.4 (2525)  |
| h2 - Mast free lift                                        | in (mm) | 48.8 (1240)  | 54.7 (1390)  | 60.6 (1540)  | 66.5 (1690)  | 76.4 (1940)  |
| 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) | 129.7 (3295) | 141.5 (3595) | 153.3 (3895) | 165.2 (4195) | 180.9 (4595) |
| Residual capacity at max height                            | lb (kg) | 3968 (1800)  | 3968 (1800)  | 3968 (1800)  | 3968 (1800)  | 3968 (1800)  |
| Residual capacity with integrated side shift at max height | lb (kg) | 3968 (1800)  | 3968 (1800)  | 3968 (1800)  | 3968 (1800)  | 3858 (1750)  |
| Residual capacity with hooked-on side shift at max height  | lb (kg) | 3968 (1800)  | 3968 (1800)  | 3968 (1800)  | 3748 (1700)  | 3638 (1650)  |
| 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) |

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