

Technical sheet :

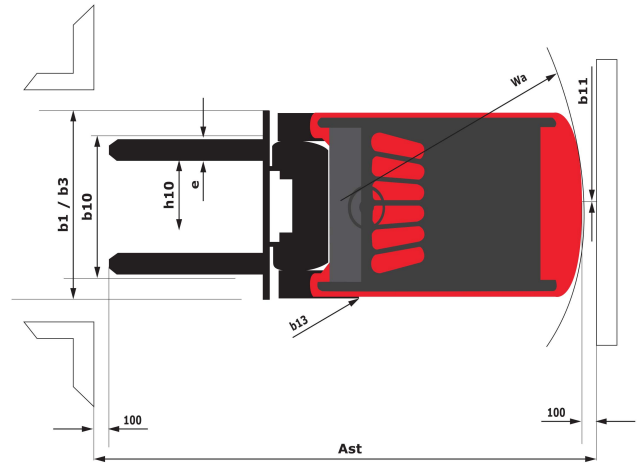
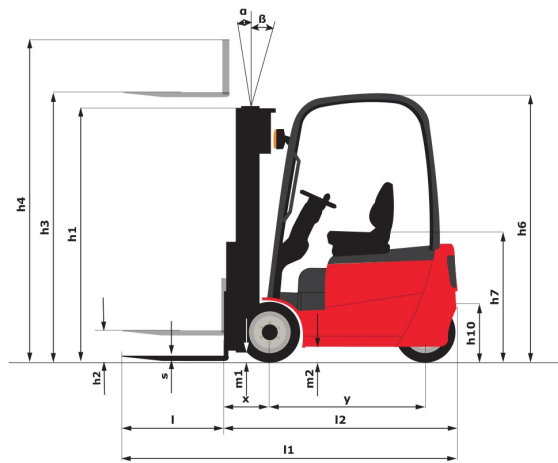
# **ME 316**

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|      | Technical characteristics                                       |                  | Metric                   |
|------|-----------------------------------------------------------------|------------------|--------------------------|
| 1.1  | Manufacturer                                                    |                  | Manitou                  |
| 1.2  | Model Name                                                      |                  | ME 316                   |
| 1.3  | Power source                                                    |                  | Electric                 |
| 1.4  | Operator type                                                   |                  | Seated                   |
| 1.5  | Max. capacity                                                   | Q                | 1600 kg                  |
| 1.6  | Load centre of gravity                                          | c                | 500 mm                   |
| 1.8  | Load distance, centre of drive axle to fork                     | x                | 355 mm                   |
| 1.9  | Wheelbase                                                       | y                | 1358 mm                  |
|      | Weight                                                          |                  |                          |
| 2.1  | Service Weight                                                  |                  | 3120 kg                  |
| 2.2  | Weight on front axle (laden) / rear axle (laden)                |                  | 4100 kg / 620 kg         |
| 2.3  | Weight on front axle (Unladen) / rear axle (Unladen)            |                  | 1440 kg / 1680 kg        |
|      | Wheels                                                          |                  |                          |
| 3.1  | Tyres type                                                      |                  | PPS                      |
| 3.2  | Dimensions of front wheels                                      |                  | 18x7-8                   |
| 3.3  | Dimensions of rear wheels                                       |                  | 15x4,5-8                 |
| 3.5  | Number of front wheels / rear wheels                            |                  | 2 / 1                    |
| 3.2  | Number of drive wheels                                          |                  | 2                        |
| 3.6  | Front wheel gauge                                               | b10              | 910 mm                   |
| 3.7  | Rear wheel gauge                                                | b11              | 175 mm                   |
|      | Dimensions                                                      |                  |                          |
| 4.1  | Tilt of Mast Forward (deg) / Backward (deg)                     | $\alpha / \beta$ | 5.5 / 6.5                |
| 4.7  | Height of overhead guard (cabin)                                | h6               | 2040 mm                  |
| 4.7  | Overall height of standard overhead guard                       | h6               | 3241 mm                  |
| 4.8  | Seat height/stand height                                        | h7               | 1000 mm                  |
| 4.12 | Height of towing bar (coupling height)                          | h10              | 500 mm                   |
| 4.19 | Overall length                                                  | l1               | 2968 mm                  |
| 4.20 | Length to face of forks                                         | l2               | 1898 mm                  |
| 4.21 | Overall width                                                   | b1               | 1086 mm                  |
| 4.22 | Forks section / width / length                                  | s / e / l        | 35 mm x 100 mm / 1070 mm |
| 4.23 | Fork carriage ISO 2328 (class/form) A/B                         |                  | FEM 2A                   |
| 4.24 | Fork carriage width                                             | b3               | 1000 mm                  |
| 4.31 | Ground clearance below mast                                     | m1               | 100 mm                   |
| 4.32 | Ground clearance at centre of wheelbase                         | m2               | 110 mm                   |
| 4.33 | Aisle width for 1000 x 1200 pallet widthways                    | Ast              | 3365 mm                  |
| 4.35 | Turning radius                                                  | Wa               | 1555 mm                  |
|      | Performances                                                    |                  |                          |
| 5.1  | Travel speed (laden / unladen)                                  |                  | 16 km/h / 18 km/h        |
| 5.2  | Lifting speed (laden / unladen)                                 |                  | 0.4 m/s / 0.47 m/s       |
| 5.3  | Lowering speed (laden / unladen)                                |                  | 0.46 m/s / 0.44 m/s      |
| 5.5  | Drawbar pull (Laden / Unladen)                                  |                  | 750 daN / 772 daN        |
| 5.7  | Gradeability - laden / unladen                                  |                  | 16 % / 18 %              |
| 5.9  | Service brake                                                   |                  | Oil bath                 |
|      | Engine                                                          |                  |                          |
| 6.1  | Number of drive motor / Drive motor rating S2 60 min            |                  | 2 / 9.5 kW               |
| 6.2  | Lift motor rating at S3 15%                                     |                  | 8.6 kW                   |
| 6.3  | Battery according to DIN 43531/35/36 A, B, C                    |                  | DIN43531 A               |
| 6.4  | Battery / Batteries capacity                                    |                  | 48 V / 575 Ah            |
| 6.6  | Energy consumption                                              |                  | 4.3 kW/h                 |
|      | Miscellaneous                                                   |                  |                          |
| 8.1  | Type of drive control                                           |                  | Electronic               |
| 8.2  | Working hydraulic pressure for attachments                      |                  | 180 Bar                  |
| 8.3  | Oil flow rate for attachments                                   |                  | 35 l/min                 |
| 8.4  | Measured/guaranteed mean noise level at the ear of the operator |                  | < 70 dB(A)               |

## Dimensional drawing



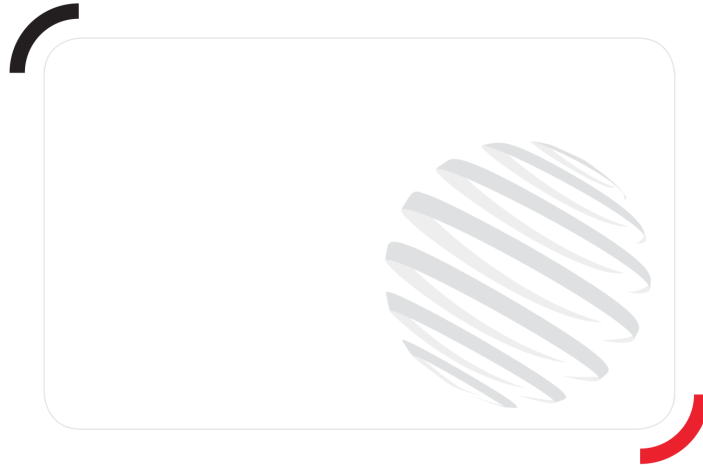
## Characteristics of masts and residual capacities

| Full Visibility Duplex                                               |    | FVD 27 | FVD 30 | FVD 33 | FVD 36 | FVD 40 | FVD 43 | FVD 45 |
|----------------------------------------------------------------------|----|--------|--------|--------|--------|--------|--------|--------|
| h2 - Free lift                                                       | mm | 145    | 145    | 145    | 145    | 145    | 145    | 145    |
| h1 - Height mast lowered *                                           | mm | 1845   | 1995   | 2145   | 2295   | 2545   | 2710   | 2820   |
| h3 - Lifting Height                                                  | mm | 2700   | 3000   | 3300   | 3600   | 4000   | 4300   | 4500   |
| h4 - Height mast extended *                                          | mm | 3265   | 3565   | 3865   | 4165   | 4565   | 4865   | 5065   |
| $\alpha / \beta$ - Mast inclination (front / rear)                   | °  | 6 / 6  | 6 / 6  | 6 / 6  | 6 / 6  | 4 / 5  | 4 / 5  | 4 / 5  |
| Residual capacity without attachment (Industrial load chart)         | kg | 1600   | 1600   | 1600   | 1600   | 1600   | 1600   | 1500   |
| Residual capacity with integrated side shift (Industrial load chart) | kg | 1600   | 1600   | 1600   | 1600   | 1600   | 1600   | 1500   |
| Residual capacity with hooked-on side shift (Industrial load chart)  | kg | 1600   | 1600   | 1600   | 1600   | 1550   | 1500   | 1400   |
| Height at max capacity                                               | mm | 2700   | 3000   | 3300   | 3600   | 4000   | 4300   | 4500   |
| Height at max capacity with integrated sideshift                     | mm | 2700   | 3000   | 3300   | 3600   | 4000   | 4300   | 4500   |

| Free Lift Duplex                                                     |    | FLD 27 | FLD 30 | FLD 33 | FLD 36 | FLD 40 |
|----------------------------------------------------------------------|----|--------|--------|--------|--------|--------|
| h2 - Free lift                                                       | mm | 1260   | 1410   | 1560   | 1710   | 1960   |
| h1 - Height mast lowered *                                           | mm | 1845   | 1995   | 2145   | 2295   | 2545   |
| h3 - Lifting Height                                                  | mm | 2700   | 3000   | 3300   | 3600   | 4000   |
| h4 - Height mast extended *                                          | mm | 3295   | 3595   | 3895   | 4195   | 4595   |
| $\alpha / \beta$ - Mast inclination (front / rear)                   | °  | 6 / 6  | 6 / 6  | 6 / 6  | 6 / 6  | 4 / 5  |
| Residual capacity without attachment (Industrial load chart)         | kg | 1600   | 1600   | 1600   | 1600   | 1600   |
| Residual capacity with integrated side shift (Industrial load chart) | kg | 1600   | 1600   | 1600   | 1600   | 1600   |
| Residual capacity with hooked-on side shift (Industrial load chart)  | kg | 1600   | 1600   | 1600   | 1600   | 1550   |
| Height at max capacity                                               | mm | 2700   | 3000   | 3300   | 3600   | 4000   |
| Height at max capacity with integrated sideshift                     | mm | 2700   | 3000   | 3300   | 3600   | 4000   |

| Free Lift Triplex                                            |    | FLT 40 | FLT 43 | FLT 45 | FLT 48 | FLT 50 | FLT 55 | FLT 60 | FLT 65 |
|--------------------------------------------------------------|----|--------|--------|--------|--------|--------|--------|--------|--------|
| h2 - Free lift                                               | mm | 1325   | 1425   | 1490   | 1590   | 1655   | 1825   | 2010   | 2010   |
| h1 - Height mast lowered *                                   | mm | 1910   | 2010   | 2075   | 2175   | 2240   | 2410   | 2625   | 2840   |
| h3 - Lifting Height                                          | mm | 4000   | 4300   | 4500   | 4800   | 5000   | 5500   | 6000   | 6500   |
| h4 - Height mast extended *                                  | mm | 4595   | 4895   | 5095   | 5395   | 5595   | 6095   | 6625   | 7170   |
| $\alpha / \beta$ - Mast inclination (front / rear)           | °  | 4 / 5  | 4 / 5  | 4 / 5  | 4 / 5  | 4 / 5  | 4 / 5  | 4 / 5  | 4 / 5  |
| Residual capacity without attachment (Industrial load chart) | kg | 1600   | 1550   | 1500   | 1450   | 1400   | 1250   | 1100   | 900    |

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