

# Technical book

MI range  
1,5 to 3,5 tons  
IC trucks



# 1500 - 1800 kg

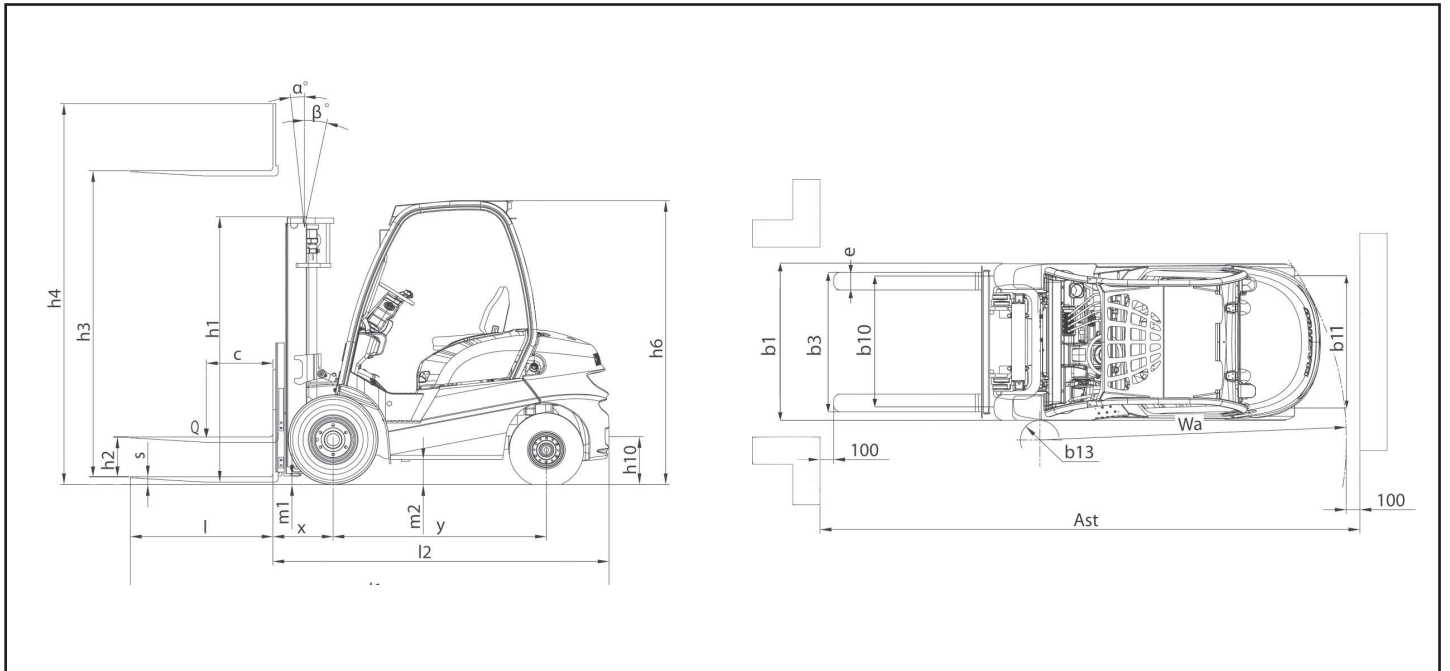
## TECHNICAL SPECS

|                |            |   |                                     |                  | MANITOU         | MANITOU           | MANITOU         | MANITOU           |
|----------------|------------|---|-------------------------------------|------------------|-----------------|-------------------|-----------------|-------------------|
| Specifications | 1.1        | Manufacturer  |                                     |                  | MANITOU         | MANITOU           | MANITOU         | MANITOU           |
|                | 1.2        | Model   |                                     |                  | MI15G           | MI15D             | MI18G           | MI18D             |
|                | 1.3        | Power source  |                                     |                  | LPG             | Diesel            | LPG             | Diesel            |
|                | 1.4        | Driving position  |                                     |                  | Seated          | Seated            | Seated          | Seated            |
|                | 1.5        | Nominal capacity  | Q                                   | t                | 1,5             | 1,5               | 1,8             | 1,8               |
|                | 1.6        | Load - Centre of gravity  | c                                   | mm               | 500             | 500               | 500             | 500               |
|                | 1.8        | Distance from the load-bearing surface to centre of front axle          | x                                   | mm               | 405             | 405               | 405             | 405               |
|                | 1.9        | Wheelbase   | y                                   | mm               | 1420            | 1420              | 1420            | 1420              |
|                | Weights    | 2.1   | Operating weight                    |                  | kg              | 2710              | 2905            | 2905              |
| 2.2            |            | Axle load, with load, front / rear                                      |                                     | kg               | 3640 / 570      | 3820 / 585        | 4160 / 545      | 4260 / 640        |
| 2.3            |            | Axle load, without load, front / rear                                   |                                     | kg               | 1230 / 1480     | 1325 / 1580       | 1215 / 1690     | 1315 / 1785       |
| Tyres, frame   | 3.1        | Tyre equipment : cushion (V), superelastic (SE), pneumatic (L)          |                                     |                  | SE              | SE                | SE              | SE                |
|                | 3.2        | Size of front wheels  |                                     |                  | 6.50-10 10      | 6.50-10 10        | 6.50-10 10      | 6.50-10 10        |
|                | 3.3        | Size of rear wheels   |                                     |                  | 5.00-8 8        | 5.00-8 8          | 5.00-8 8        | 5.00-8 8          |
|                | 3.5        | Number of front wheels (x=drive wheel) / rear wheels                    |                                     |                  | 2x / 2          | 2x / 2            | 2x / 2          | 2x / 2            |
|                | 3.6        | Front wheel gauge (middle of wheels)                                    | b10                                 | mm               | 900             | 900               | 900             | 900               |
|                | 3.7        | Rear wheel gauge (middle of wheels)                                     | b11                                 | mm               | 920             | 920               | 920             | 920               |
|                | Dimensions | 4.1   | Tilt of mast forwards/backwards (1) | $\alpha / \beta$ | deg             | 6 / 12            | 6 / 12          | 6 / 12            |
| 4.2            |            | Height mast lowered   | h1                                  | mm               | 2145            | 2145              | 2145            | 2145              |
| 4.3            |            | Free lift   | h2                                  | mm               | 155             | 155               | 155             | 155               |
| 4.4            |            | Lift height   | h3                                  | mm               | 3300            | 3300              | 3300            | 3300              |
| 4.5            |            | Height mast extended  | h4                                  | mm               | 4255            | 4255              | 4255            | 4255              |
| 4.7            |            | Height of overhead guard  | h6                                  | mm               | 2090            | 2090              | 2090            | 2090              |
| 4.8            |            | Height of seat  | h7                                  | mm               | 1160            | 1160              | 1160            | 1160              |
| 4.12           |            | Height of towing bar  | h10                                 | mm               | 315             | 315               | 315             | 315               |
| 4.19           |            | Overall length  | l1                                  | mm               | 3310            | 3310              | 3350            | 3350              |
| 4.20           |            | Length at fork heels  | l2                                  | mm               | 2240            | 2240              | 2280            | 2280              |
| 4.21           |            | Total width (overall)   | b1                                  | mm               | 1080 / 1500     | 1080 / 1500       | 1080 / 1500     | 1080 / 1500       |
| 4.22           |            | Fork dimensions   |                                     | mm               | 35 / 100 / 1070 | 35 / 100 / 1070   | 35 / 100 / 1070 | 35 / 100 / 1070   |
| 4.23           |            | Fork carriage to DIN 15173 A/B  |                                     |                  | FEM2A           | FEM2A             | FEM2A           | FEM2A             |
| 4.24           |            | Width of fork carriage b3   | b3                                  | mm               | 1000            | 1000              | 1000            | 1000              |
| 4.31           |            | Ground clearance below mast   | m1                                  | mm               | 115             | 115               | 115             | 115               |
| 4.32           |            | Ground clearance at centre of wheel-base                                | m2                                  | mm               | 150             | 150               | 150             | 150               |
| 4.33           |            | Width of aisle for pallet 1000x1200 crossways                           | Ast                                 | mm               | 3590            | 3590              | 3615            | 3615              |
| 4.34           |            | Width of aisle for pallet 800x1200 lengthways                           | Ast                                 | mm               | 3790            | 3790              | 3815            | 3815              |
| 4.35           |            | Turning radius  | Wa                                  | mm               | 1985            | 1985              | 2010            | 2010              |
| 4.36           |            | Inner turning radius  | b13                                 | mm               | 55              | 55                | 55              | 55                |
| Performances   | 5.1        | Speed of travel laden / unladen   |                                     | km/h             | 17.5 / 18       | 18.5 / 19         | 17.5 / 18       | 18.6 / 19.3       |
|                | 5.2        | Speed of raise laden / unladen  |                                     | m/s              | 0.45 / 0.55     | 0.50 / 0.55       | 0.45 / 0.55     | 0.50 / 0.55       |
|                | 5.3        | Speed of lowering laden / unladen m/s                                   |                                     | m/s              | 0.50 / 0.55     | 0.50 / 0.55       | 0.50 / 0.55     | 0.50 / 0.55       |
|                | 5.5        | Nominal towing power laden / unladen                                    |                                     | daN              | 14600 / 7700    | 14500 / 7600      | 14500 / 8000    | 14400 / 7950      |
|                | 5.7        | Gradeability with / without load  |                                     | %                | >20             | >20               | >20             | >20               |
|                | 5.10       | Service brake   |                                     |                  | Hydraulic       | Hydraulic         | Hydraulic       | Hydraulic         |
| Engines        | 7.1        | Engine Manufacturer / Type  |                                     |                  | NISSAN K21      | YANMAR 4TNE92-HRJ | NISSAN K21      | YANMAR 4TNE92-HRJ |
|                | 7.2        | Power delivery  |                                     | kW               | 29              | 32,8              | 29              | 32,8              |
|                | 7.3        | Rated speed   |                                     | tr/min           | 2250            | 2450              | 2250            | 2450              |
|                | 7.4        | Number of pistons / Cubic capacity                                      |                                     | cm <sup>3</sup>  | 4/2065          | 4/2065            | 4/2065          | 4/2659            |
|                | 7.5        | Fuel consumption according to VDI cycle                                 |                                     | L/h              | 5,7             | 3,26              | 5,7             | 3,26              |
| Miscellaneous  | 8.2        | Operating pressure for attachments                                      |                                     | bar              | 160             | 160               | 160             | 160               |
|                | 8.3        | Oil flow for attachments  |                                     | l/min            | 52              | 56                | 52              | 56                |
|                | 8.4        | Average noise level for the driver (in motion) measured/guaranteed      |                                     | db (A)           | 86              | 86                | 86              | 86                |
|                | -          | Average weighted acceleration on driver's body (acc to std NF EN 13059) |                                     | m/s <sup>2</sup> | 0,83            | 0,83              | 0,83            | 0,83              |

1 Values with duplex mast

Data is based on standard configurations (forks, battery).  
Performance data and dimensions are nominal and subject to tolerances.  
Specifications are subject to change without notice.

## DIMENSIONAL DRAWINGS



## MAST AND RATED CAPACITIES

| MI 1,5 T |   |     | Duplex Total Visibility |        |        | Duplex Free Lift |        |        | Triplex Free Lift |       |       |       |       |       |       |       |
|----------|---|-----|-------------------------|--------|--------|------------------|--------|--------|-------------------|-------|-------|-------|-------|-------|-------|-------|
|          |   |     | DVT33                   | DVT37  | DVT40  | DLL33            | DLL37  | DLL40  | TLL43             | TLL45 | TLL47 | TLL48 | TLL50 | TLL55 | TLL60 | TLL65 |
| h3*      | Lift height                                     | mm  | 3300                    | 3700   | 4000   | 3300             | 3700   | 4000   | 4300              | 4500  | 4700  | 4800  | 5000  | 5500  | 6000  | 6500  |
| h1       | Height mast lowered                             | mm  | 2145                    | 2395   | 2595   | 2160             | 2360   | 2560   | 2070              | 2120  | 2170  | 2220  | 2270  | 2470  | 2720  | 2870  |
| h2       | Free lift                                       | mm  | 155                     | 155    | 155    | 1575             | 1775   | 1975   | 1400              | 1500  | 1585  | 1600  | 1685  | 1885  | 2100  | 2200  |
| h4       | Height mast extended*                           | mm  | 3865                    | 4265   | 4600   | 3885             | 4285   | 4585   | 4980              | 5130  | 5380  | 5430  | 5595  | 6095  | 6730  | 7180  |
|          | Residual capacity without attachment            | kg  | 1500                    | 1500   | 1500   | 1500             | 1500   | 1500   | 1350              | 1300  | 1250  | 1250  | 1200  | 950   | 700   | -     |
|          | Residual capacity with Integrated sideshift     | kg  | 1500                    | 1500   | 1500   | 1500             | 1500   | 1500   | 1350              | 1300  | 1150  | 1150  | 1100  | 850   | 600   | -     |
|          | Residual capacity with forks posit. & sideshift | kg  | 1400                    | 1400   | 1400   | 1400             | 1400   | 1400   | 1250              | 1200  | 1050  | 1050  | 1000  | 750   | 500   | -     |
| α / β    | Tilt of mast forwards / backwards               | deg | 6 / 12                  | 6 / 12 | 6 / 12 | 6 / 12           | 6 / 12 | 6 / 12 | 6 / 6             | 6 / 6 | 6 / 6 | 6 / 6 | 6 / 6 | 3 / 6 | 3 / 6 | 3 / 6 |

\* Without backrest

| MI 1,8 T |   |     | Duplex Total Visibility |        |        | Duplex Free Lift |        |        | Triplex Free Lift |       |       |       |       |       |       |       |
|----------|---|-----|-------------------------|--------|--------|------------------|--------|--------|-------------------|-------|-------|-------|-------|-------|-------|-------|
|          |   |     | DVT33                   | DVT37  | DVT40  | DLL33            | DLL37  | DLL40  | TLL43             | TLL45 | TLL47 | TLL48 | TLL50 | TLL55 | TLL60 | TLL65 |
| h3*      | Lift height                                     | mm  | 3300                    | 3700   | 4000   | 3300             | 3700   | 4000   | 4300              | 4500  | 4700  | 4800  | 5000  | 5500  | 6000  | 6500  |
| h1       | Height mast lowered                             | mm  | 2145                    | 2395   | 2595   | 2160             | 2360   | 2560   | 2070              | 2120  | 2170  | 2220  | 2270  | 2470  | 2720  | 2870  |
| h2       | Free lift                                       | mm  | 155                     | 155    | 155    | 1575             | 1775   | 1975   | 1400              | 1500  | 1585  | 1600  | 1685  | 1885  | 2100  | 2200  |
| h4       | Height mast extended*                           | mm  | 3865                    | 4265   | 4600   | 3885             | 4285   | 4585   | 4980              | 5130  | 5380  | 5430  | 5595  | 6095  | 6730  | 7180  |
|          | Residual capacity without attachment            | kg  | 1800                    | 1800   | 1700   | 1800             | 1800   | 1700   | 1700              | 1700  | 1650  | 1650  | 1350  | 1050  | 750   | -     |
|          | Residual capacity with Integrated sideshift     | kg  | 1750                    | 1750   | 1650   | 1750             | 1750   | 1650   | 1600              | 1600  | 1550  | 1550  | 1250  | 950   | 650   | -     |
|          | Residual capacity with forks posit. & sideshift | kg  | 1650                    | 1650   | 1550   | 1650             | 1650   | 1550   | 1500              | 1500  | 1450  | 1450  | 1150  | 900   | 600   | -     |
| α / β    | Tilt of mast forwards / backwards               | deg | 6 / 12                  | 6 / 12 | 6 / 12 | 6 / 12           | 6 / 12 | 6 / 12 | 6 / 6             | 6 / 6 | 6 / 6 | 6 / 6 | 6 / 6 | 3 / 6 | 3 / 6 | 3 / 6 |

\* Without backrest

# 2000 - 2500 kg

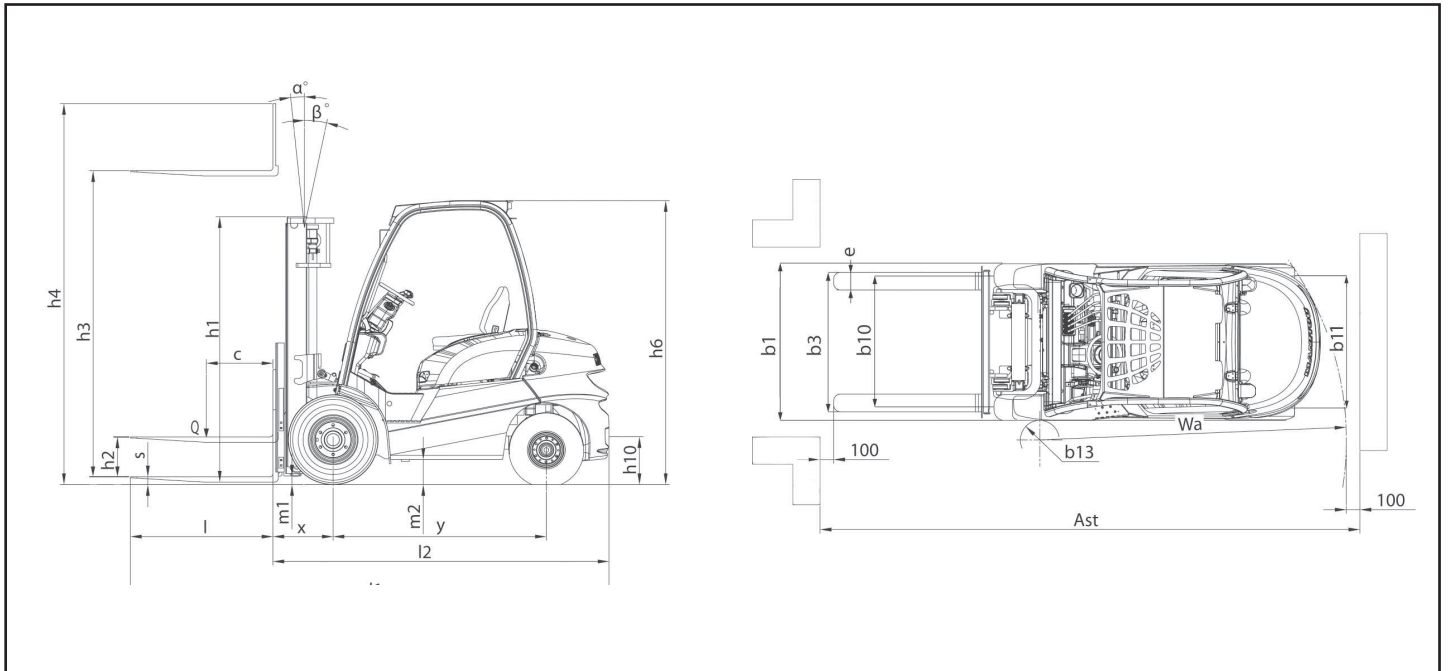
## TECHNICAL SPECS

|                |            |   |                                     |                  | MANITOU         | MANITOU              | MANITOU         | MANITOU              |
|----------------|------------|---|-------------------------------------|------------------|-----------------|----------------------|-----------------|----------------------|
|                |            |   |                                     |                  | MI20G           | MI20D                | MI25G           | MI25D                |
| Specifications | 1.1        | Manufacturer  |                                     |                  | MANITOU         | MANITOU              | MANITOU         | MANITOU              |
|                | 1.2        | Model   |                                     |                  | MI20G           | MI20D                | MI25G           | MI25D                |
|                | 1.3        | Power source  |                                     |                  | LPG             | Diesel               | LPG             | Diesel               |
|                | 1.4        | Driving position  |                                     |                  | Seated          | Seated               | Seated          | Seated               |
|                | 1.5        | Nominal capacity  | Q                                   | t                | 2               | 2                    | 2,5             | 2,5                  |
|                | 1.6        | Load - Centre of gravity  | c                                   | mm               | 500             | 500                  | 500             | 500                  |
|                | 1.8        | Distance from the load-bearing surface to centre of front axle          | x                                   | mm               | 465             | 465                  | 465             | 465                  |
|                | 1.9        | Wheelbase   | y                                   | mm               | 1600            | 1600                 | 1600            | 1600                 |
|                | Weights    | 2.1   | Operating weight                    |                  | kg              | 3620                 | 3725            | 3895                 |
| 2.2            |            | Axle load, with load, front / rear                                      |                                     | kg               | 4930 / 690      | 5005 / 720           | 5665 / 730      | 5735 / 765           |
| 2.3            |            | Axle load, without load, front / rear                                   |                                     | kg               | 1720 / 1900     | 1765 / 1960          | 1665 / 2230     | 1710 / 2290          |
| Tyres, frame   | 3.1        | Tyre equipment : cushion (V), superelastic (SE), pneumatic (L)          |                                     |                  | SE              | SE                   | SE              | SE                   |
|                | 3.2        | Size of front wheels  |                                     |                  | 7.00-12 12      | 7.00-12 12           | 7.00-12 12      | 7.00-12 12           |
|                | 3.3        | Size of rear wheels   |                                     |                  | 6.00-9 10       | 6.00-9 10            | 6.00-9 10       | 6.00-9 10            |
|                | 3.5        | Number of front wheels (x=drive wheel) / rear wheels                    |                                     |                  | 2x / 2          | 2x / 2               | 2x / 2          | 2x / 2               |
|                | 3.6        | Front wheel gauge (middle of wheels)                                    | b10                                 | mm               | 965             | 965                  | 965             | 965                  |
|                | 3.7        | Rear wheel gauge (middle of wheels)                                     | b11                                 | mm               | 973             | 973                  | 973             | 973                  |
|                | Dimensions | 4.1   | Tilt of mast forwards/backwards (1) | $\alpha / \beta$ |                 | 6 / 12               | 6 / 12          | 6 / 12               |
| 4.2            |            | Height mast lowered   | h1                                  | mm               | 2185            | 2185                 | 2185            | 2185                 |
| 4.3            |            | Free lift   | h2                                  | mm               | 140             | 140                  | 140             | 140                  |
| 4.4            |            | Lift height   | h3                                  | mm               | 3300            | 3300                 | 3300            | 3300                 |
| 4.5            |            | Height mast extended  | h4                                  | mm               | 4345            | 4345                 | 4345            | 4345                 |
| 4.7            |            | Height of overhead guard  | h6                                  | mm               | 2115            | 2115                 | 2115            | 2115                 |
| 4.8            |            | Height of seat  | h7                                  | mm               | 1190            | 1190                 | 1190            | 1190                 |
| 4.12           |            | Height of towing bar  | h10                                 | mm               | 355             | 355                  | 360             | 360                  |
| 4.19           |            | Overall length  | l1                                  | mm               | 3615            | 3615                 | 3685            | 3685                 |
| 4.20           |            | Length at fork heels  | l2                                  | mm               | 2465            | 2465                 | 2535            | 2535                 |
| 4.21           |            | Total width (overall)   | b1                                  | mm               | 1155 / 1595     | 1155 / 1595          | 1155 / 1595     | 1155 / 1595          |
| 4.22           |            | Fork dimensions   |                                     | mm               | 40 / 122 / 1150 | 40 / 122 / 1150      | 40 / 122 / 1150 | 40 / 122 / 1150      |
| 4.23           |            | Fork carriage to DIN 15173 A/B  |                                     |                  | FEM2A           | FEM2A                | FEM2A           | FEM2A                |
| 4.24           |            | Width of fork carriage b3   | b3                                  | mm               | 1038            | 1038                 | 1038            | 1038                 |
| 4.31           |            | Ground clearance below mast   | m1                                  | mm               | 115             | 115                  | 115             | 115                  |
| 4.32           |            | Ground clearance at centre of wheel-base                                | m2                                  | mm               | 175             | 175                  | 175             | 175                  |
| 4.33           |            | Width of aisle for pallet 1000x1200 crossways                           | Ast                                 | mm               | 3865            | 3865                 | 3930            | 3930                 |
| 4.34           |            | Width of aisle for pallet 800x1200 lengthways                           | Ast                                 | mm               | 4065            | 4065                 | 4130            | 4130                 |
| 4.35           |            | Turning radius  | Wa                                  | mm               | 2200            | 2200                 | 2265            | 2265                 |
| 4.36           |            | Inner turning radius  | b13                                 | mm               | 145             | 145                  | 145             | 145                  |
| Performances   | 5.1        | Speed of travel laden / unladen   |                                     | km/h             | 18.8 / 19.4     | 18 / 18.5            | 19.4 / 19.7     | 18 / 18.6            |
|                | 5.2        | Speed of raise laden / unladen  |                                     | m/s              | 0.47 / 0.55     | 0.47 / 0.55          | 0.47 / 0.55     | 0.47 / 0.55          |
|                | 5.3        | Speed of lowering laden / unladen m/s                                   |                                     | m/s              | 0.48 / 0.50     | 0.48 / 0.55          | 0.50 / 0.50     | 0.50 / 0.55          |
|                | 5.5        | Nominal towing power laden / unladen                                    |                                     | daN              | 16800 / 10400   | 16900 / 12300        | 17000 / 10400   | 17300 / 12400        |
|                | 5.7        | Gradeability with / without load  |                                     | %                | >20             | >20                  | >20             | >20                  |
|                | 5.10       | Service brake   |                                     |                  | Hydraulic       | Hydraulic            | Hydraulic       | Hydraulic            |
| Engines        | 7.1        | Engine Manufacturer / Type  |                                     |                  | NISSAN K25      | YANMAR 4TNV94L-BXPHZ | NISSAN K25      | YANMAR 4TNV94L-BXPHZ |
|                | 7.2        | Power delivery  |                                     | kW               | 35              | 35                   | 35              | 35                   |
|                | 7.3        | Rated speed   |                                     | tr/min           | 2400            | 2400                 | 2400            | 2400                 |
|                | 7.4        | Number of pistons / Cubic capacity                                      |                                     | cm <sup>3</sup>  | 4/2488          | 4/3054               | 4/2488          | 4/3054               |
|                | 7.5        | Fuel consumption according to VDI cycle                                 |                                     | L/h              | 6,3             | 3,56                 | 6,3             | 3,56                 |
| Miscellaneous  | 8.2        | Operating pressure for attachments                                      |                                     | bar              | 160             | 160                  | 160             | 160                  |
|                | 8.3        | Oil flow for attachments  |                                     | l/min            | 72              | 69                   | 72              | 69                   |
|                | 8.4        | Average noise level for the driver (in motion) measured/guaranteed      |                                     | db (A)           | 86              | 86                   | 86              | 86                   |
|                | -          | Average weighted acceleration on driver's body (acc to std NF EN 13059) |                                     | m/s <sup>2</sup> | 0,78            | 0,78                 | 0,78            | 0,78                 |

1 Values with duplex mast

Data is based on standard configurations (forks, battery).  
Performance data and dimensions are nominal and subject to tolerances.  
Specifications are subject to change without notice.

## DIMENSIONAL DRAWINGS



## MAST AND RATED CAPACITIES

| MI 2,0 T |   |     | Duplex Total Visibility |        |        | Duplex Free Lift |        |        | Triplex Free Lift |       |       |       |       |       |       |       |
|----------|---|-----|-------------------------|--------|--------|------------------|--------|--------|-------------------|-------|-------|-------|-------|-------|-------|-------|
|          |   |     | DVT33                   | DVT37  | DVT40  | DLL33            | DLL37  | DLL40  | TLL43             | TLL45 | TLL47 | TLL48 | TLL50 | TLL55 | TLL60 | TLL65 |
| h3*      | Lift height                                     | mm  | 3300                    | 3700   | 4000   | 3300             | 3700   | 4000   | 4300              | 4500  | 4700  | 4800  | 5000  | 5500  | 6000  | 6500  |
| h1       | Height mast lowered                             | mm  | 2185                    | 2435   | 2635   | 2160             | 2360   | 2560   | 2100              | 2150  | 2200  | 2250  | 2300  | 2500  | 2750  | 2900  |
| h2       | Free lift                                       | mm  | 140                     | 140    | 140    | 1480             | 1680   | 1880   | 1400              | 1470  | 1520  | 1570  | 1620  | 1820  | 2070  | 2200  |
| h4       | Height mast extended*                           | mm  | 3960                    | 4360   | 4660   | 3980             | 4330   | 4680   | 5000              | 5230  | 5380  | 5480  | 5680  | 6180  | 6730  | 7200  |
|          | Residual capacity without attachment            | kg  | 2000                    | 2000   | 2000   | 2000             | 2000   | 2000   | 1850              | 1800  | 1750  | 1750  | 1700  | 1300  | 900   | 800   |
|          | Residual capacity with Integrated sideshift     | kg  | 2000                    | 2000   | 2000   | 2000             | 2000   | 2000   | 1750              | 1700  | 1650  | 1650  | 1600  | 1200  | 800   | 700   |
|          | Residual capacity with forks posit. & sideshift | kg  | 1900                    | 1900   | 1900   | 1900             | 1900   | 1900   | -                 | 1700  | 1650  | 1650  | 1600  | 1200  | 800   | -     |
| α/β      | Tilt of mast forwards / backwards               | deg | 6 / 12                  | 6 / 12 | 6 / 12 | 6 / 12           | 6 / 12 | 6 / 12 | 6 / 6             | 6 / 6 | 6 / 6 | 6 / 6 | 6 / 6 | 3 / 6 | 3 / 6 | 3 / 6 |

\* Without backrest

| MI 2,5 T |   |     | Duplex Total Visibility |        |        | Duplex Free Lift |        |        | Triplex Free Lift |       |       |       |       |       |       |       |
|----------|---|-----|-------------------------|--------|--------|------------------|--------|--------|-------------------|-------|-------|-------|-------|-------|-------|-------|
|          |   |     | DVT33                   | DVT37  | DVT40  | DLL33            | DLL37  | DLL40  | TLL43             | TLL45 | TLL47 | TLL48 | TLL50 | TLL55 | TLL60 | TLL65 |
| h3*      | Lift height                                     | mm  | 3300                    | 3700   | 4000   | 3300             | 3700   | 4000   | 4300              | 4500  | 4700  | 4800  | 5000  | 5500  | 6000  | 6500  |
| h1       | Height mast lowered                             | mm  | 2185                    | 2435   | 2635   | 2160             | 2360   | 2560   | 2100              | 2150  | 2200  | 2250  | 2300  | 2500  | 2750  | 2900  |
| h2       | Free lift                                       | mm  | 140                     | 140    | 140    | 1480             | 1680   | 1880   | 1400              | 1470  | 1520  | 1570  | 1620  | 1820  | 2070  | 2200  |
| h4       | Height mast extended*                           | mm  | 3960                    | 4360   | 4660   | 3980             | 4330   | 4680   | 5000              | 5230  | 5380  | 5480  | 5680  | 6180  | 6730  | 7200  |
|          | Residual capacity without attachment            | kg  | 2500                    | 2500   | 2500   | 2500             | 2500   | 2500   | 2400              | 2350  | 2200  | 2200  | 1950  | 1650  | 1050  | -     |
|          | Residual capacity with Integrated sideshift     | kg  | 2500                    | 2500   | 2500   | 2500             | 2500   | 2500   | 2350              | 2300  | 2150  | 2150  | 1900  | 1600  | 1000  | -     |
|          | Residual capacity with forks posit. & sideshift | kg  | 2500                    | 2500   | 2450   | 2500             | 2500   | 2450   | -                 | 2250  | 2100  | 2100  | 1850  | 1550  | 950   | -     |
| α/β      | Tilt of mast forwards / backwards               | deg | 6 / 12                  | 6 / 12 | 6 / 12 | 6 / 12           | 6 / 12 | 6 / 12 | 6 / 6             | 6 / 6 | 6 / 6 | 6 / 6 | 6 / 6 | 3 / 6 | 3 / 6 | 3 / 6 |

\* Without backrest

# 3000 - 3500 kg

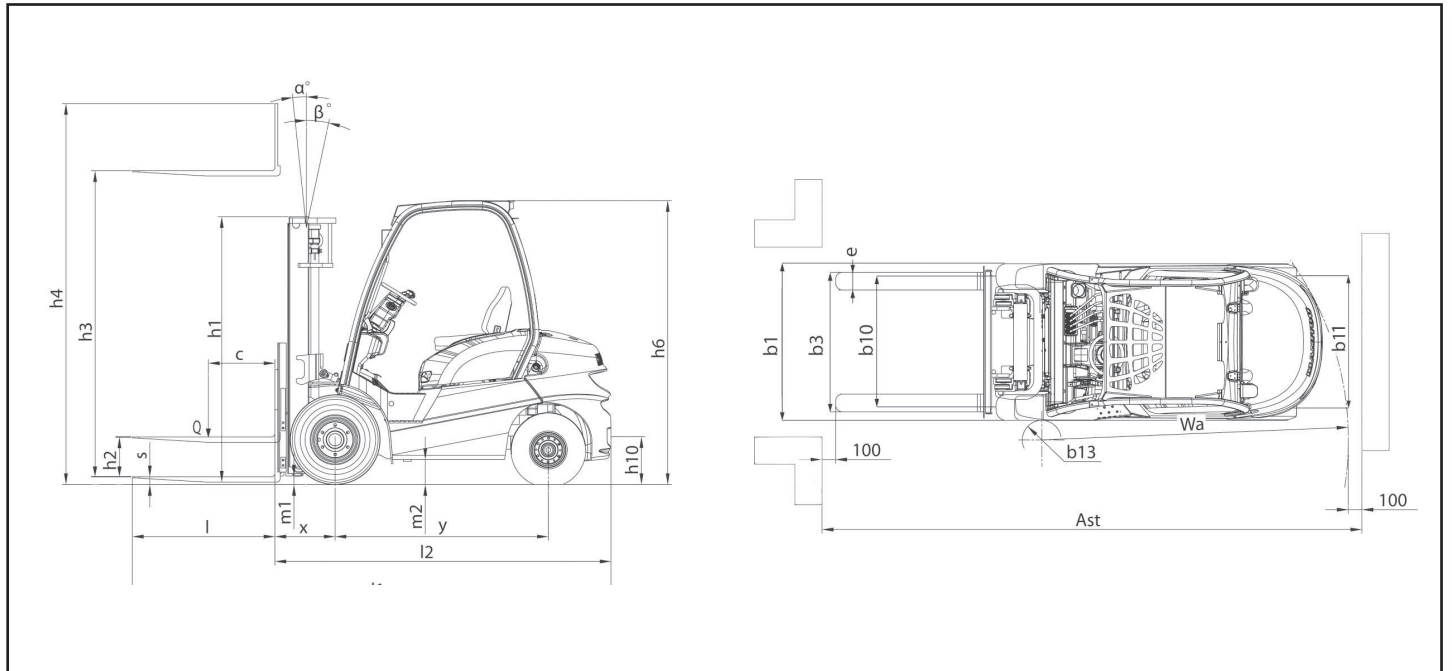
## TECHNICAL SPECS

|                |         |   |                  |                  | MANITOU         | MANITOU              | MANITOU         | MANITOU              |
|----------------|---------|---|------------------|------------------|-----------------|----------------------|-----------------|----------------------|
| Specifications | 1.1     | Manufacturer  |                  |                  | MANITOU         | MANITOU              | MANITOU         | MANITOU              |
|                | 1.2     | Model   |                  |                  | MI30G           | MI30D                | MI35G           | MI35D                |
|                | 1.3     | Power source  |                  |                  | LPG             | Diesel               | LPG             | Diesel               |
|                | 1.4     | Driving position  |                  |                  | Seated          | Seated               | Seated          | Seated               |
|                | 1.5     | Nominal capacity  | Q                | t                | 3               | 3                    | 3,5             | 3,5                  |
|                | 1.6     | Load - Centre of gravity  | c                | mm               | 500             | 500                  | 500             | 500                  |
|                | 1.8     | Distance from the load-bearing surface to centre of front axle          | x                | mm               | 480             | 480                  | 485             | 485                  |
|                | 1.9     | Wheelbase   | y                | mm               | 1700            | 1700                 | 1700            | 1700                 |
|                | Weights | 2.1   | Operating weight |                  | kg              | 4490                 | 4610            | 4740                 |
| 2.2            |         | Axle load, with load, front / rear                                      |                  | kg               | 6560 / 930      | 6650 / 960           | 7260 / 980      | 7360 / 1000          |
| 2.3            |         | Axle load, without load, front / rear                                   |                  | kg               | 1805 / 2685     | 1860 / 2750          | 1775 / 2965     | 1825 / 3035          |
| Tyres, frame   | 3.1     | Tyre equipment : cushion (V), superelastic (SE), pneumatic (L)          |                  |                  | SE              | SE                   | SE              | SE                   |
|                | 3.2     | Size of front wheels  |                  |                  | 28-9-15 12      | 28-9-15 12           | 28-9-15 12      | 28-9-15 12           |
|                | 3.3     | Size of rear wheels   |                  |                  | 6.50-10 10      | 6.50-10 10           | 6.50-10 10      | 6.50-10 10           |
|                | 3.5     | Number of front wheels (x=drive wheel) / rear wheels                    |                  |                  | 2x / 2          | 2x / 2               | 2x / 2          | 2x / 2               |
|                | 3.6     | Front wheel gauge (middle of wheels)                                    | b10              | mm               | 1005            | 1005                 | 1005            | 1005                 |
|                | 3.7     | Rear wheel gauge (middle of wheels)                                     | b11              | mm               | 975             | 975                  | 975             | 975                  |
| Dimensions     | 4.1     | Tilt of mast forwards/backwards (1)                                     | $\alpha / \beta$ |                  | 6 / 12          | 6 / 12               | 6 / 12          | 6 / 12               |
|                | 4.2     | Height mast lowered   | h1               | mm               | 2200            | 2200                 | 2315            | 2315                 |
|                | 4.3     | Free lift   | h2               | mm               | 145             | 145                  | 145             | 145                  |
|                | 4.4     | Lift height   | h3               | mm               | 3300            | 3300                 | 3300            | 3300                 |
|                | 4.5     | Height mast extended  | h4               | mm               | 4445            | 4445                 | 4445            | 4445                 |
|                | 4.7     | Height of overhead guard  | h6               | mm               | 2130            | 2130                 | 2130            | 2130                 |
|                | 4.8     | Height of seat  | h7               | mm               | 1215            | 1215                 | 1215            | 1215                 |
|                | 4.12    | Height of towing bar  | h10              | mm               | 355             | 355                  | 360             | 360                  |
|                | 4.19    | Overall length  | l1               | mm               | 3865            | 3865                 | 3935            | 3935                 |
|                | 4.20    | Length at fork heels  | l2               | mm               | 2715            | 2715                 | 2785            | 2785                 |
|                | 4.21    | Total width (overall)   | b1               | mm               | 1225 / 1725     | 1225 / 1725          | 1225 / 1725     | 1225 / 1725          |
|                | 4.22    | Fork dimensions   |                  | mm               | 45 / 122 / 1150 | 45 / 122 / 1150      | 50 / 122 / 1150 | 50 / 122 / 1150      |
|                | 4.23    | Fork carriage to DIN 15173 A/B  |                  |                  | FEM3A           | FEM3A                | FEM3A           | FEM3A                |
|                | 4.24    | Width of fork carriage b3   | b3               | mm               | 1100            | 1100                 | 1100            | 1100                 |
|                | 4.31    | Ground clearance below mast   | m1               | mm               | 130             | 130                  | 130             | 130                  |
|                | 4.32    | Ground clearance at centre of wheel-base                                | m2               | mm               | 200             | 200                  | 200             | 200                  |
|                | 4.33    | Width of aisle for pallet 1000x1200 crossways                           | Ast              | mm               | 4140            | 4140                 | 4195            | 4195                 |
|                | 4.34    | Width of aisle for pallet 800x1200 lengthways                           | Ast              | mm               | 4340            | 4340                 | 4395            | 4395                 |
|                | 4.35    | Turning radius  | Wa               | mm               | 2460            | 2460                 | 2510            | 2510                 |
|                | 4.36    | Inner turning radius  | b13              | mm               | 160             | 160                  | 160             | 160                  |
| Performances   | 5.1     | Speed of travel laden / unladen   |                  | km/h             | 18 / 18.5       | 18 / 18.5            | 17 / 17.5       | 18 / 18.5            |
|                | 5.2     | Speed of raise laden / unladen  |                  | m/s              | 0.45 / 0.55     | 0.45 / 0.52          | 0.40 / 0.52     | 0.39 / 0.40          |
|                | 5.3     | Speed of lowering laden / unladen m/s                                   |                  | m/s              | 0.48 / 0.50     | 0.43 / 0.48          | 0.47 / 0.38     | 0.40 / 0.35          |
|                | 5.5     | Nominal towing power laden / unladen                                    |                  | daN              | 17400 / 10800   | 16000 / 13800        | 17500 / 11000   | 18300 / 15200        |
|                | 5.7     | Gradeability with / without load  |                  | %                | >20             | >20                  | >18 / >20       | >18 / >20            |
|                | 5.10    | Service brake   |                  |                  | Hydraulic       | Hydraulic            | Hydraulic       | Hydraulic            |
| Engines        | 7.1     | Engine Manufacturer / Type  |                  |                  | NISSAN K25      | YANMAR 4TNV94L-BXPHZ | NISSAN K25      | YANMAR 4TNV94L-BXPHZ |
|                | 7.2     | Power delivery  |                  | kW               | 35              | 35                   | 35              | 35                   |
|                | 7.3     | Rated speed   |                  | tr/min           | 2400            | 2400                 | 2400            | 2400                 |
|                | 7.4     | Number of pistons / Cubic capacity                                      |                  | cm <sup>3</sup>  | 4/2488          | 4/3054               | 4/248           | 4/3054               |
|                | 7.5     | Fuel consumption according to VDI cycle                                 |                  | L/h              | 6,3             | 3,56                 | 6,3             | 3,56                 |
| Miscellaneous  | 8.2     | Operating pressure for attachments                                      |                  | bar              | 160             | 160                  | 160             | 160                  |
|                | 8.3     | Oil flow for attachments  |                  | l/min            | 72              | 69                   | 72              | 69                   |
|                | 8.4     | Average noise level for the driver (in motion) measured/guaranteed      |                  | db (A)           | 86              | 89                   | 86              | 89                   |
|                | -       | Average weighted acceleration on driver's body (acc to std NF EN 13059) |                  | m/s <sup>2</sup> | 0,5             | 0,5                  | 0,5             | 0,5                  |

1 Values with duplex mast

Data is based on standard configurations (forks, battery).  
Performance data and dimensions are nominal and subject to tolerances.  
Specifications are subject to change without notice.

## DIMENSIONAL DRAWINGS



## MAST AND RATED CAPACITIES

| MI 3,0 T |   |     | Duplex Total Visibility |        |        | Duplex Free Lift |        |        | Triplex Free Lift |       |       |       |       |       |       |       |
|----------|---|-----|-------------------------|--------|--------|------------------|--------|--------|-------------------|-------|-------|-------|-------|-------|-------|-------|
|          |   |     | DVT33                   | DVT37  | DVT40  | DLL33            | DLL37  | DLL40  | TLL43             | TLL45 | TLL47 | TLL48 | TLL50 | TLL55 | TLL60 | TLL65 |
| h3*      | Lift height                                     | mm  | 3300                    | 3700   | 4000   | 3300             | 3700   | 4000   | 4300              | 4500  | 4700  | 4800  | 5000  | 5500  | 6000  | 6500  |
| h1       | Height mast lowered                             | mm  | 2200                    | 2450   | 2650   | 2230             | 2430   | 2580   | 2115              | 2165  | 2215  | 2265  | 2315  | 2515  | 2765  | 2915  |
| h2       | Free lift                                       | mm  | 145                     | 145    | 145    | 1475             | 1675   | 1825   | 1360              | 1410  | 1460  | 1510  | 1560  | 1760  | 2010  | 2160  |
| h4       | Height mast extended*                           | mm  | 4035                    | 4435   | 4735   | 4055             | 4455   | 4755   | 5055              | 5305  | 5455  | 5555  | 5755  | 6255  | 6805  | 7255  |
|          | Residual capacity without attachment            | kg  | 3000                    | 3000   | 3000   | 3000             | 3000   | 3000   | 2950              | 2900  | 2800  | 2800  | 2500  | 1850  | 1400  | -     |
|          | Residual capacity with Integrated sideshift     | kg  | 3000                    | 3000   | 3000   | 3000             | 3000   | 3000   | 2850              | 2800  | 2700  | 2700  | 2400  | 1750  | 1300  | -     |
|          | Residual capacity with forks posit. & sideshift | kg  | 2900                    | 2900   | 2900   | 2900             | 2900   | 2900   | -                 | 2700  | 2600  | 2600  | 2300  | 1650  | 1200  | -     |
| α/β      | Tilt of mast forwards / backwards               | deg | 6 / 12                  | 6 / 12 | 6 / 12 | 6 / 12           | 6 / 12 | 6 / 12 | 6 / 6             | 6 / 6 | 6 / 6 | 6 / 6 | 6 / 6 | 3 / 6 | 3 / 6 | 3 / 6 |

\* Without backrest

| MI 3,5 T |   |     | Duplex Total Visibility |        |        | Duplex Free Lift |        |        | Triplex Free Lift |       |       |       |       |       |       |       |
|----------|---|-----|-------------------------|--------|--------|------------------|--------|--------|-------------------|-------|-------|-------|-------|-------|-------|-------|
|          |   |     | DVT33                   | DVT37  | DVT40  | DLL33            | DLL37  | DLL40  | TLL45             | TLL45 | TLL47 | TLL48 | TLL50 | TLL55 | TLL60 | TLL65 |
| h3*      | Lift height                                     | mm  | 3300                    | 3700   | 4000   | 3300             | 3700   | 4000   | 4300              | 4500  | 4700  | 4800  | 5000  | 5500  | 6000  | 6500  |
| h1       | Height mast lowered                             | mm  | 2315                    | 2565   | 2715   | 2330             | 2530   | 2680   | 2215              | 2265  | 2315  | 2365  | 2415  | 2565  | 2815  | 2965  |
| h2       | Free lift                                       | mm  | 145                     | 145    | 145    | 1500             | 1700   | 1850   | 1385              | 1435  | 1485  | 1535  | 1585  | 1735  | 1985  | 2135  |
| h4       | Height mast extended*                           | mm  | 4115                    | 4515   | 4815   | 4130             | 4530   | 4830   | 5130              | 5380  | 5530  | 5630  | 5830  | 6330  | 6880  | 7330  |
|          | Residual capacity without attachment            | kg  | 3500                    | 3500   | 3500   | 3500             | 3500   | 3500   | 3450              | 3400  | 3300  | 3300  | 3000  | 2200  | 1600  | 1500  |
|          | Residual capacity with Integrated sideshift     | kg  | 3500                    | 3500   | 3500   | 3500             | 3500   | 3500   | 3350              | 3300  | 3200  | 3200  | 2900  | 2100  | 1500  | 1400  |
|          | Residual capacity with forks posit. & sideshift | kg  | 3400                    | 3400   | 3400   | 3400             | 3400   | 3400   | -                 | 3200  | 3100  | 3100  | 2800  | 2000  | 1400  | -     |
| α/β      | Tilt of mast forwards / backwards               | deg | 6 / 12                  | 6 / 12 | 6 / 12 | 6 / 12           | 6 / 12 | 6 / 12 | 6 / 6             | 6 / 6 | 6 / 6 | 6 / 6 | 6 / 6 | 3 / 6 | 3 / 6 | 3 / 6 |

\* Without backrest

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