

Technical sheet :

MI 40 D ST5



 **MANITOU**
HANDLING YOUR WORLD

| Technical characteristics | | | Metric |
|---------------------------|---|-----------|----------------------------|
| 1.1 | Manufacturer | | MANITOU |
| 1.2 | Model Name | | MI 40 D ST5 |
| 1.3 | Power source | | Diesel |
| 1.4 | Operator type | | Seated |
| 1.5 | Max. capacity | Q | 4000 kg |
| 1.6 | Load center of gravity | c | 500 mm |
| 1.8 | Load distance, centre of drive axle to fork | x | 550 mm |
| 1.9 | Wheelbase | y | 2000 mm |
| Weight | | | |
| 2.1 | Service weight | | 6430 kg |
| 2.2 | Weight on front axle (laden) / rear axle (laden) | | 9330 kg / 1100 kg |
| 2.3 | Weight on front axle (Unladen) / rear axle (Unladen) | | 3000 kg / 3430 kg |
| Wheels | | | |
| 3.1 | Tires type | | Super Elastic |
| 3.2 | Dimensions of front wheels | | 8.25-15 14PR |
| 3.3 | Dimensions of rear wheels | | 7.00-12 12PR |
| 3.5 | Number of front wheels / rear wheels | | 2 / 2 |
| 3.5.2 | Number of drive wheels | | 2 |
| 3.6 | Front wheel gauge | b10 | 1160 mm |
| 3.7 | Rear wheel gauge | b11 | 1130 mm |
| Dimensions | | | |
| 4.7 | Height of overhead guard (cabin) | h6 | 2390 mm |
| 4.8 | Seat height/stand height | h7 | 1370 mm |
| 4.12 | Height of towing bar (coupling height) | h10 | 445 mm |
| 4.19 | Overall length | l1 | 4285 mm |
| 4.20 | Length to face of forks | l2 | 3065 mm |
| 4.21 | Overall width | b1 | 1395 mm |
| 4.21 | Overall width - Single wheels | b1 | 1395 mm |
| 4.21 | Overall width - Twinned wheels | b1 | 1940 mm |
| 4.22 | Forks section / width / length | s / e / l | 50 mm x 122 mm x 1220 mm |
| 4.23 | Fork carriage ISO 2328 (class/form) A/B | | 3A |
| 4.24 | Fork carriage width | b3 | 1250 mm |
| 4.31 | Ground clearance below mast | m1 | 170 mm |
| 4.32 | Ground clearance at centre of wheelbase | m2 | 230 mm |
| 4.33 | Aisle Width for pallets 1000 x 1200 crossways | Ast | 4530 mm |
| 4.34 | Aisle width for 800 x 1200 pallet lengthways | Ast | 4330 mm |
| 4.35 | Turning radius | Wa | 2780 mm |
| 4.36 | Internal turning radius (over tyres) | b13 | 135 mm |
| Performances | | | |
| 5.1 | Travel speed (laden / unladen) | | 13 km/h-23 km/h |
| 5.2 | Lifting speed (laden / unladen) | | 0.49 m/s-0.52 m/s |
| 5.3 | Lowering speed (laden / unladen) | | 0.50 m/s-0.50 m/s |
| 5.5 | Drawbar pull (Laden / Unladen) | | 3800 daN / 2000 daN |
| 5.7 | Gradeability (laden / unladen) | | 20 % / 20 % |
| 5.10 | Service brake | | Hydraulic |
| Engine | | | |
| 7.1 | Engine brand / model / norm | | Deutz / TCD2.9L4 / Stage V |
| 7.2 | I.C. Engine power rating | | 55.40 kW |
| 7.3 | Rated speed | | 2200 rpm |
| 7.4 | Number of cylinders / Capacity of cylinders | | 4 - 2920 cm³ |
| Miscellaneous | | | |
| 8.2 | Working hydraulic pressure for attachments | | 190 bar |
| 8.3 | Oil flow rate for attachments | | 90 l/min |
| 8.4 | Measured/guaranteed mean noise level at the ear of the operator | | < 89 dB |

MI 40 D ST5 - Dimensional drawing



Characteristics of masts and residual capacities

| Full Visibility Duplex (FVD) | | FVD 30 | FVD 33 | FVD 35 | FVD 37 | FVD 40 | FVD 45 | FVD 50 |
|--|----|--------|--------|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward | ° | 6 | 6 | 6 | 6 | 6 | 6 | 6 |
| β - Mast/fork carriage tilt, backward | ° | 12 | 12 | 12 | 12 | 12 | 12 | 12 |
| h1 - Mast lowered height | mm | 2245 | 2395 | 2495 | 2595 | 2795 | 3070 | 3345 |
| h2 - Mast free lift | mm | 160 | 160 | 160 | 160 | 160 | 160 | 160 |
| h3 - Mast lifting height | mm | 3000 | 3300 | 3500 | 3700 | 4000 | 4500 | 5000 |
| h4 - Mast extended height | mm | 4170 | 4470 | 4670 | 4870 | 5170 | 5670 | 6170 |
| Residual capacity at max height | kg | 4000 | 4000 | 4000 | 4000 | 4000 | 3700 | 3200 |
| Residual capacity with integrated side shift at max height | kg | 4000 | 4000 | 4000 | 4000 | 4000 | 3600 | 3100 |
| Height at max capacity | mm | 3000 | 3300 | 3500 | 3700 | 4000 | 4000 | 4000 |
| Height at max capacity with integrated sideshift | mm | 3000 | 3300 | 3500 | 3700 | 4000 | 4000 | 4000 |

| Free Lift Duplex (FLD) | | FLD 30 | FLD 33 | FLD 35 | FLD 37 |
|--|----|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward | ° | 6 | 6 | 6 | 6 |
| β - Mast/fork carriage tilt, backward | ° | 12 | 12 | 12 | 12 |
| h1 - Mast lowered height | mm | 2226 | 2376 | 2476 | 2576 |
| h2 - Mast free lift | mm | 1364 | 1514 | 1614 | 1714 |
| h3 - Mast lifting height | mm | 3000 | 3300 | 3500 | 3700 |
| h4 - Mast extended height | mm | 4170 | 4470 | 4670 | 4870 |
| Residual capacity at max height | kg | 4000 | 4000 | 4000 | 4000 |
| Residual capacity with integrated side shift at max height | kg | 4000 | 4000 | 4000 | 4000 |
| Height at max capacity | mm | 3000 | 3300 | 3500 | 3700 |
| Height at max capacity with integrated sideshift | mm | 3000 | 3300 | 3500 | 3700 |

| Free Lift Triplex (FLT) | | FLT 40 | FLT 43 | FLT 45 | FLT 47 | FLT 50 | FLT 55 | FLT 60 |
|--|----|--------|--------|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward | ° | 6 | 6 | 6 | 6 | 6 | 3 | 3 |
| β - Mast/fork carriage tilt, backward | ° | 12 | 6 | 6 | 6 | 6 | 6 | 6 |
| h1 - Mast lowered height | mm | 2080 | 2180 | 2248 | 2310 | 2410 | 2575 | 2790 |
| h2 - Mast free lift | mm | 1229 | 1329 | 1395 | 1459 | 1559 | 1724 | 1939 |
| h3 - Mast lifting height | mm | 4000 | 4300 | 4500 | 4700 | 5000 | 5500 | 6000 |
| h4 - Mast extended height | mm | 5170 | 5470 | 5685 | 5870 | 6170 | 6670 | 7180 |
| Residual capacity at max height | kg | 4000 | 3900 | 3500 | 3300 | 3100 | 2800 | 2300 |
| Residual capacity with integrated side shift at max height | kg | 3900 | 3800 | 3400 | 3200 | 3000 | 2700 | 2200 |
| Height at max capacity | mm | 4000 | 2500 | 4000 | 4000 | 4000 | 2500 | 2500 |



Head Office

B.P. 249 - 430 rue de l'Aubinière

44150 Ancenis Cedex - France

Tel: +33 (0)2 40 09 10 11 - Fax: +33 (0)2 40 09 10 97

www.manitou.com



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