

Technical sheet :

MSI 35 ST5



 **MANITOU**
HANDLING YOUR WORLD

| Technical characteristics | | Metric | |
|---------------------------|--|-----------|--------------------------------------|
| 1.1 | Manufacturer | | Manitou |
| 1.2 | Model Name | | MSI 35 ST5 |
| 1.3 | Power source | | Diesel |
| 1.4 | Operator type | | Seated |
| 1.5 | Max. capacity | Q | 3500 kg |
| 1.6 | Load center of gravity | c | 500 mm |
| 1.8 | Load distance, centre of drive axle to fork | x | 631 mm |
| 1.9 | Wheelbase | y | 1900 mm |
| | Standard mast reference of the machine | | FVD 33 |
| Weight | | | |
| 2.1 | Service weight | | 4780 kg |
| 2.2 | Weight on front axle (laden) / rear axle (laden) | | 7350 kg / 850 kg |
| 2.3 | Weight on front axle (Unladen) / rear axle (Unladen) | | 1710 kg / 3070 kg |
| Wheels | | | |
| 3.1 | Tires type | | Pneumatic |
| 3.2 | Dimensions of front wheels | | 300-15/18 6T P43 |
| 3.3 | Dimensions of rear wheels | | 7.00-12/12 ED PLUS |
| 3.5 | Number of front wheels / rear wheels | | 2 / 2 |
| 3.5.2 | Number of drive wheels | | 2 |
| 3.6 | Front wheel gauge | b10 | 1044 mm |
| 3.7 | Rear wheel gauge | b11 | 1108 mm |
| Dimensions | | | |
| 4.8 | Seat height/stand height | h7 | 972 mm |
| 4.7 | Height of overhead guard (cabin) / Overall height of low overhead guard (Buggie version) | h6 | 2095 mm / 1930 mm |
| 4.19 | Overall length | l1 | 4289 mm |
| 4.20 | Length to face of forks | l2 | 3139 mm |
| 4.21 | Overall width | b1 | 1330 mm |
| 4.22 | Forks section / width / length | s / e / l | 45 mm x 125 mm x 1200 mm |
| 4.23 | Fork carriage ISO 2328 (class/form) A/B | | 3A |
| 4.24 | Fork carriage width | b3 | 1260 mm |
| 4.31 | Ground clearance below mast | m1 | 260 mm |
| 4.32 | Ground clearance at centre of wheelbase | m2 | 238 mm |
| 4.33 | Aisle Width for pallets 1000 x 1200 crossways | Ast | 4711 mm |
| 4.35 | Turning radius | Wa | 2680 m |
| Performances | | | |
| 5.1 | Travel speed (laden / unladen) | | 21 km/h-21 km/h |
| 5.2 | Lifting speed (laden / unladen) | | 0.50 m/s-0.50 m/s |
| 5.3 | Lowering speed (laden / unladen) | | 0.50 m/s-0.30 m/s |
| 5.5 | Drawbar pull (Laden) | | 1900 daN |
| 5.7 | Gradeability (laden) | | 24 % |
| 5.10 | Service brake | | Hydraulic brakes by loss of pressure |
| | Transmission type | | Hydrostatic |
| Engine | | | |
| 7.1 | Engine brand / model / norm | | Kubota / D1803 CRT E5B / Stage V |
| 7.2 | Engine power (Hp / kW) | | 50 Hp/37 kW |
| 7.3 | Rated speed | | 2700 rpm |
| 7.4 | Number of cylinders / Capacity of cylinders | | 3 - 1826 cm³ |
| Miscellaneous | | | |
| 8.1 | Type of drive control | | Electronic |
| 8.2 | Working hydraulic pressure for attachments | | 230 bar |
| 8.3 | Oil flow rate for attachments | | 45 l/min |
| 8.4 | Sound level at the driver's ear according to DIN 12 053 | | 81 dB |

MSI 35 ST5 - Dimensional drawing



Characteristics of masts and residual capacities

| Full Visibility Duplex (FVD) | FVD 30 | FVD 33 | FVD 37 | FVD 40 | FVD 45 |
|--|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward ° | 12 | 12 | 12 | 12 | 12 |
| β - Mast/fork carriage tilt, backward ° | 10 | 10 | 10 | 10 | 10 |
| h1 - Mast lowered height mm | 2136 | 2286 | 2546 | 2736 | 2986 |
| h2 - Mast free lift mm | 90 | 90 | 90 | 90 | 90 |
| h3 - Mast lifting height mm | 3000 | 3300 | 3700 | 4000 | 4500 |
| h4 - Mast extended height mm | 3738 | 4038 | 4438 | 4738 | 5238 |
| Residual capacity at max height kg | 3500 | 3500 | 3500 | 3500 | 3500 |
| Residual capacity with hooked-on side shift at max height kg | 3500 | 3500 | 3500 | 3500 | 3500 |
| Height at max capacity mm | 3000 | 3300 | 3700 | 4000 | 4500 |
| Height at max capacity with hooked-on sideshift mm | 3000 | 3300 | 3700 | 4000 | 4500 |

| Free Lift Triplex (FLT) | FLT 34 | FLT 37 | FLT 40 | FLT 43 | FLT 47 | FLT 55 | FLT 60 |
|--|--------|--------|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward ° | 12 | 12 | 12 | 12 | 12 | 6 | 6 |
| β - Mast/fork carriage tilt, backward ° | 10 | 10 | 10 | 10 | 10 | 6 | 6 |
| h1 - Mast lowered height mm | 1936 | 2036 | 2136 | 2286 | 2386 | 2736 | 2986 |
| h2 - Mast free lift mm | 1208 | 1308 | 1408 | 1558 | 1658 | 2008 | 2258 |
| h3 - Mast lifting height mm | 3400 | 3700 | 4000 | 4300 | 4700 | 5500 | 6000 |
| h4 - Mast extended height mm | 4184 | 4484 | 4784 | 5084 | 5484 | 6284 | 6784 |
| Residual capacity at max height kg | 3500 | 3500 | 3500 | 2600 | 1800 | | |
| Residual capacity with hooked-on side shift at max height kg | 3500 | 3500 | 3500 | 3200 | 1800 | | |
| Height at max capacity mm | 3400 | 3700 | 4000 | 4000 | 3500 | 2500 | 2500 |
| Height at max capacity with hooked-on sideshift mm | 3400 | 3700 | 4000 | 4000 | 3500 | | |



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