

Technical sheet :

MSI-X 35



 **MANITOU**
HANDLING YOUR WORLD

| Technical characteristics | | Metric | |
|---------------------------|---|-----------|--------------------------------------|
| 1.1 | Manufacturer | | Manitou |
| 1.2 | Model Name | | MSI-X35 |
| 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 |
| Weight | | | |
| 2.1 | Service weight | | 4645 kg |
| 2.2 | Weight on front axle (laden) / rear axle (laden) | | 7260 kg / 885 kg |
| 2.3 | Weight on front axle (Unladen) / rear axle (Unladen) | | 1680 kg / 2965 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 | | | |
| 4.7 | Height of overhead guard (cabin) | h6 | 2095 mm |
| 4.8 | Seat height/stand height | h7 | 972 mm |
| 4.19 | Overall length | l1 | 4239 mm |
| 4.20 | Length to face of forks | l2 | 3189 mm |
| 4.21 | Overall width | b1 | 1330 mm |
| 4.22 | Forks section / width / length | s / e / l | 50 mm x 122 mm x 1150 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 | 4661 mm |
| 4.35 | Turning radius | Wa | 2680 m |
| Performances | | | |
| 5.1 | Travel speed (laden / unladen) | | 18 km/h-22 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 / Unladen) | | 2070 daN / 1380 daN |
| 5.7 | Gradeability (laden / unladen) | | 26 % / 31 % |
| 5.10 | Service brake | | Hydraulic brakes by loss of pressure |
| Engine | | | |
| 7.1 | Engine brand / model | | Kubota / V2403 |
| 7.2 | I.C. Engine power rating | | 36 kW |
| 7.3 | Rated speed | | 2700 rpm |
| 7.4 | Number of cylinders / Capacity of cylinders | | 4 - 2434 cm³ |
| Miscellaneous | | | |
| 8.1 | Type of drive control | | Cable |
| 8.2 | Working hydraulic pressure for attachments | | 180 bar |
| 8.3 | Oil flow rate for attachments | | 45 l/min |
| 8.4 | Measured/guaranteed mean noise level at the ear of the operator | | < 80 dB |
| 8.4 | Sound level at the driver's ear according to DIN 12 053 | | 80 dB |

MSI-X 35 - 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 | ° | 10 | 10 | 3500 | 10 | 10 |
| β - Mast/fork carriage tilt, backward | ° | 12 | 12 | 3500 | 12 | 12 |
| 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 | | | |
| Height at max capacity | mm | 3000 | 3700 | 3700 | 2500 | 2500 |

| Free Lift Triplex (FLT) | | FLT 34 | FLT 37 | FLT 40 | FLT 43 | FLT 47 | FLT 55 | FLT 60 |
|---|----|--------|--------|--------|--------|--------|--------|--------|
| α - Mast/fork carriage tilt, forward | ° | 10 | 10 | 10 | 10 | 10 | 6 | 6 |
| β - Mast/fork carriage tilt, backward | ° | 12 | 12 | 12 | 12 | 12 | 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 | | | | | | |
| Height at max capacity | mm | 3400 | 2500 | 2500 | 2500 | 2500 | 2500 | 2500 |

| Full Visibility Triplex (FVT) | | FVT 33 |
|---|----|--------|
| α - Mast/fork carriage tilt, forward | ° | 10 |
| β - Mast/fork carriage tilt, backward | ° | 12 |
| h1 - Mast lowered height | mm | 1826 |
| h2 - Mast free lift | mm | 82 |
| h3 - Mast lifting height | mm | 3300 |
| h4 - Mast extended height | mm | 4027 |
| Height at max capacity | mm | 2500 |



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