

Technical sheet :

MBL 745 HT + (BSV)

Manitou is committed to bringing value to its backhoe loaders by incorporating advanced and robust features for multi-application capabilities. Powered by a BS-V turbocharged engine, MBL 745 HT + variant is launched for improved operational economics for our customers. It comes with a variable displacement pump which improves hydraulics in handling flow rate and pressure based on load and improves the cycle time compared to other higher power engines.



 **MANITOU**
HANDLING YOUR WORLD

| Capacities | | Metric |
|---|-----------|--|
| Wheelbase 2 wheels drive | | 2185 mm |
| Wheelbase 4 wheels drive | | 2140 mm |
| Weight and dimensions | | |
| Unladen weight with 2 WD | | 7860 kg |
| Unladen weight with 2 WD 7 in 1 | | 8150 kg |
| Unladen weight with 4 WD | | 7955 kg |
| Unladen weight with 4 WD 7 in 1 | | 8245 kg |
| Overall length | l1 | 7290 mm |
| Overall width | b1 | 2330 mm |
| Cabin height | h6 | 2900 mm |
| Overall height | h17 | 3790 mm |
| External turning radius over tyres (braked) / External turning radius over tyres (braked) 4WD | Wa1 | 3.30 m / 3.85 m |
| External turning radius over tyres (unbraked) / External turning radius over tyres (unbraked) 4WD | Wa1 | 4.30 m / 4.20 m |
| External turning radius over bucket (braked) / External turning radius over bucket (braked) 4WD | Wa5 / Wa5 | 5 m / 5.55 m |
| External turning radius over bucket (unbraked) | Wa5 | 5.75 m |
| Standard tires front / rear | | 9.0 x 16 - 16 PR / 16.9 x 28-12PR |
| Optional tires (front / rear) | | 9.0 x 16 - 16 PR / 12.5 x 18 - 12 PR / 14.0 x 25 - 20 PR / 16.9 x 28 - 12 PR |
| Reach at travelling | c2 | 2030 mm |
| Rear axle center to slew center | c3 | 1308 mm |
| Ground clearance | m4 | 315 mm |
| Performances | | |
| Travel speed forward 1st / 2nd | | 5.40 km/h / 8.60 km/h |
| Travel speed forward 3rd / 4th | | 19.90 km/h / 40 km/h |
| Engine | | |
| Engine brand | | M&M |
| Engine model / nom | | MCVNC35TI074CE5A Turbocharged CEV BS-V - BS-V |
| Displacement | | 3.50 l |
| Engine power (kW) / Gross Power | | 55 kW @ 2200 rpm |
| Max. torque / Engine rotation | | 400 Nm @ 1200 rpm |
| Battery voltage / capacity | | 12 V / 165 Ah |
| Transmission | | |
| Transmission brand | | Carraro |
| Number of gears (forward / reverse) | | 4 / 4 |
| Torque converter stall ratio | | 2.64:1 |
| Service brake | | Wet disc brakes |
| Hydraulics | | |
| Hydraulic flow | | 143 l/min |
| Main relief pressure | | 225 bar |
| Hydraulic pump type | | Axial piston |
| Tank capacities | | |
| Hydraulic oil | | 75 l |
| Cooling liquid | | 16 l |
| Fuel | | 130 l |
| Transmission oil | | 17.50 l |
| Engine oil | | 13.50 l |
| Oil rear axle | | 17.10 l |
| Oil rear axle 4WD | | 17.50 l |
| Bucket | | |
| Backhoe standard capacity | | 0.27 m³ |
| Width backhoe bucket | | 889 mm |
| Loader standard capacity | | 1 m³ |
| Width loader bucket | | 2235 mm |
| Miscellaneous | | |
| Power steering | | Yes |
| Front steer axle of oscillation 2WD | | 20 ° |
| Front steer axle of oscillation 4WD | | 16 ° |
| Steering wheels (front / rear) | | 2 / 2 |

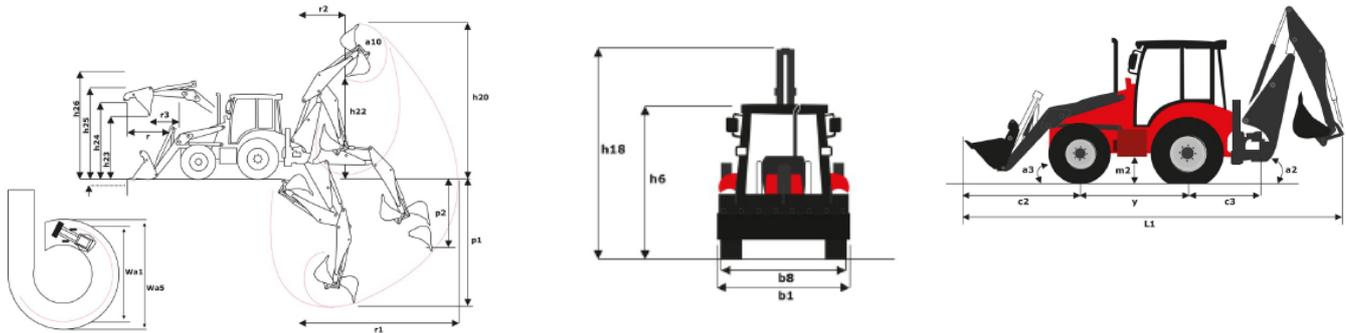
Performance backhoe

| | Standard dipper |
|---|-----------------|
| p1 - Max dig depth (mm) | 4741 |
| r1 - Max reach ground level to slew center (mm) | 5730 |
| r2 - Max loading reach (mm) | 1996 |
| Max operating height (mm) | 5626 |
| Max loading height (mm) | 3871 |
| p2 - Max straight wall dig depth (mm) | 2602 |
| a10 - Max bucket rotation (°) | 194 |
| Total side shift (mm) | 1198 |
| Dipper tearout (kgF) | 3942 |
| Bucket tearout (kgF) | 5810 |
| Hydraulic lift capacity (kg) | 1460 |

Performance loader

| | Standard shovel |
|--|-----------------|
| Max dump angle (°) | 51 |
| h26 - Max operating height (loader version) (mm) | 4230 |
| h23 - Max dump height at 45° (mm) | 2780 |
| h24 - Max loadover height (mm) | 3310 |
| h25 - Max hinge pin height (mm) | 3570 |
| r3 - Max reach at full height 45° (mm) | 710 |
| p3 - Below ground dig depth (mm) | 156 |
| a13 - Rollback at ground (°) | 45 |
| Shovel breakout (kgf) | 5229 |
| Arms breakout (kgF) | 4691 |
| Lifting capacity at full height (kg) | 3467 |

MBL 745 HT + (BSV) - Dimensional drawing





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