

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.



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	i1	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		M&M
Engine brand		
Engine model / norm		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		Carrao
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

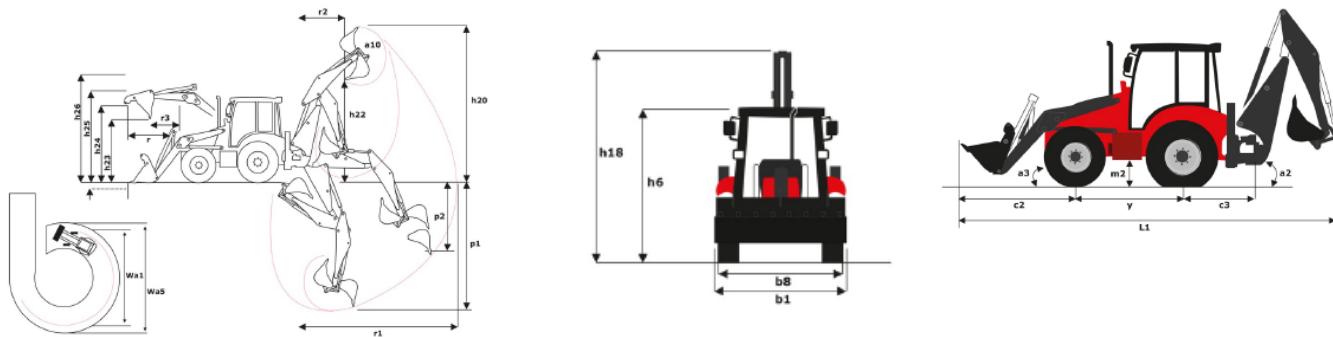
Performance backhoe

	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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