

# TECHNICAL SPECIFICATIONS SHEET

# MAGNUM



TECHNICAL SPECIFICATIONS		MAGNUM EB EVO	MAGNUM HDK	MAGNUM HGK LPG
<b>MAIN SPECIFICATIONS</b>	Cleaning path with two side brushes		1.570 mm	
	Cleaning path with side brush		1.250 mm	
	Cleaning path with main brush		900 mm	
	Hourly performance with 2 side brushes	13.820 m <sup>2</sup> /h		18.840 m <sup>2</sup> /h
	Hourly performance with side brush	11.000 m <sup>2</sup> /h		15.000 m <sup>2</sup> /h
	Hourly performance with main brush	7.920 m <sup>2</sup> /h		10.800 m <sup>2</sup> /h
	Forward speed	0 - 8,8 km/h		0 - 12 km/h
	Reverse speed	0 - 4,5 km/h		0 - 7 km/h
	Dirt container volume		236 L	
	Dirt container capacity		220 kg	
	High dump height		1.565 ± 1% mm	
	Maximum working gradient	10 - 11 %		18 %
	Maximum gradient	18 - 20 %		20 %
	Turning radius		1.725 mm	
	U-turn space	3.300 mm		2.900 mm
<b>DIMENSIONS AND WEIGHT</b>	Dimensions (with side brush)		2.420 x 1.400 x 1.600 mm	2.533 x 1.400 x 1.600 mm
	Dimensions (with 2 side brushes)		2.420 x 1.540 x 1.600 mm	2.533 x 1.540 x 1.600 mm
	Dimensions (without side brush)		2.263 x 1.260 x 1.600 mm	2.415 x 1.260 x 1.600 mm
	Height with overhead guard		2.435 mm	
	Weight	948 kg	1.175 kg	1.163 kg
	Weight (with type A batteries)	1.398 kg		\
	Weight (with type B batteries)	1.428 kg		\
	Packaging dimensions		2.270 x 1.360 x 1.770 mm	
	Packaging weight		115 kg	
Packaging volume		5,46 m <sup>3</sup>		
<b>BRUSHES</b>	Main brush dimensions		900 x Ø 340 mm	
	Main brush RPM	285 - 290 RPM		320 - 340 RPM
	Side brush diameter		600 mm	
	Side brush RPM		65 - 70 RPM	
<b>TRACTION SYSTEM</b>	Traction type	Rear wheel drive via electric drive wheel		Hydraulic rear wheel drive
	Traction motor model	36V - 2200 W - 88 A		\
	Traction electronic card	CURTIS 1234E - 5221 AC 36-48 V. 275 A		\
	Hydraulic traction motor model	\		EATON 4000 series, 310 cm <sup>3</sup>
	Traction pump	\		Bondioli Pavesi variable displacement piston pump (20cm <sup>3</sup> )
	Accelerator type			Double pedal
<b>PRIMARY ELECTRIC MOTOR</b>	Primary motor model	36V - 1800W (kW 1,8) 3100 RPM - 70A - S1		\

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ENGINE	Engine model	\	Kubota D902 three cylinder, liquid cooled, diesel engine 900 cc	Kubota WG972 three cylinder, liquid cooled, dual-fuel (Petrol-LPG) engine 962 cc
	Maximum output	\	25 Hp 18,5 Kw	31 Hp 23,2 Kw
	Power used	\	22,5 Hp 16,8 Kw (2.950 - 3.000 RPM)	28,5 Hp 21,2 Kw (2.950 - 3.000 RPM)
	Electric starter	\	12V (automotive type)	
	Starter battery	\	12V - 74 Ah	
	Engine air filter	\	VORTEX cyclone + double cartridge filter	
	Fuel tank capacity	\	17,3 L	8,5 L
	Fuel consumption (3000 rpm)	\	2 - 2,5 L/h	\
	Fuel consumption (petrol) at 3000 RPM	\	\	6 L/h
	Fuel consumption (LPG) at 3000 RPM	\	\	3,5 kg/h
	Autonomy with full tank	\	6 - 8 h	1h 20 min + 17 min (reserve)
	Fuel gauge	\	Present	
	Liquid cooling	\	50 + 50 %	
	Oil	\	TOTAL RUBIA 7400 15W40	
	Carter oil quantity	\	3,7 L	3 L
BATTERIES	Batteries	1 x 36 V	\	
	Battery tray dimensions	765 x 485 x 505 mm	\	
TYPE A BATTERIES	Type	1 lead acid battery 36V 360A (5H) with auto watering system		\
	Dimensions ea.	762 x 415 x 505 mm		\
	Weight (with acid) ea.	450 kg		\
	Autonomy (theoretical)	3 h 30 min		\
TYPE B BATTERIES	Type	1 gel battery 36V 320A (5H)		\
	Dimensions ea.	762 x 415 x 505 mm		\
	Weight ea.	480 kg		\
	Autonomy (theoretical)	3 h 15 min		\
HYDRAULIC SYSTEM	Hydraulic movement	Hopper and power steering	Traction, main brush, vacuum and hopper	
	Hydraulic oil type	Mobil Hydro HV46		
	Oil tank capacity	10 L	20 L	
	Total hydraulic system capacity	12 L	25 L	
	Oil flow	15,5 L/min	36 L/min	
	Hydraulic oil filter	ARGO (30 L)	ARGO (80 L)	
	Filtering capacity	33 absolute microns	15 absolute microns	
	Traction motor	\	EATON 4000 series, 310 cm <sup>3</sup>	
	Main brush motor	\	EATON T series, 49 cm <sup>3</sup>	
	Vacuum fan motor	\	MZ gear motor (4,5 cm <sup>3</sup> )	
	Traction pump	\	Bondioli Pavesi variable displacement piston pump (20cm <sup>3</sup> )	
	Gear pump for vacuum fan, main brush and dirt container	\	MZ gear pump (6,4 cm <sup>3</sup> )	
	Gear pump for dirt container and power steering	Tandem 2.5 cm <sup>3</sup> + 2.5 cm <sup>3</sup>	\	
SIDE BRUSH SYSTEM	Motor model	36V - 200 W	12 V - 200 W	
	RPM	100 RPM		

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<b>FILTER SYSTEM</b>	Filter type (standard)	Polyester MultiPocket® filter, T452 KLEENTES, 450 g/m <sup>2</sup> , class L		
	Total surface area	9 m <sup>2</sup>		
	Vacuum depression	165 pH <sub>2</sub> O	269 pH <sub>2</sub> O	
	Vacuum capacity	707 m <sup>3</sup> /h	930 m <sup>3</sup> /h	
	Filter type (optional)	Polyester MultiPocket® filter, with a polyurethane coating, T452 NOVATES, 470 g/m <sup>2</sup> , class M		
	Filter shaker mechanism	Automatic and time-delayed system		
<b>WHEELS</b>	Type of wheels	Solid rubber, non-marking	Solid rubber, super elastic, non-marking	
	Number of wheels	3		
	Front wheels	Two super elastic wheels (Ø 381 - 386) x 113 mm		
	Rear wheel	One wheel in polyurethane Ø 350 x 148 mm	One rear wheel (Ø 381 - 386) x 113 mm	
	Brakes	Drum brakes on front wheels		
<b>SOUND LEVEL (MEASURED ACCORDING TO ISO 3744)</b>	Average acoustic pressure level L <sub>pm</sub>	69 dB	85 dB	84 dB
	Sound level L <sub>wa</sub>	85 dB	102 dB	101 dB
	Granted sound level L <sub>wa,g</sub>	88 dB	106 dB	105 dB
	Sound level at operator's ear	69 dB	84 dB	83 dB