



VETUS HPM4.45 HYDRAULIC PROPULSION 42 HP

Reference: HPM4.45

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VETUS HPM4,45 is a hydraulic propulsion system equipped with a 4-cylinder VETUS M4.45 engine capable of delivering a maximum mechanical power of 42 Hp.

The hydraulic engines of the VETUS HPM4,45 are quiet, reliable and offer high values of power and torque ratio. The fuel line is self-purging, a nice convenience when replacing the fuel filter. The VETUS HPM4,45 propulsion system engine is equipped with a high-power marine alternator for fast battery charging.

A rotary hydraulic pump is installed on the engine of the VETUS HPM4,45, instead of the inverter. This pump draws fluid from a special reservoir and pushes it under pressure to the control valve. The valve determines the direction and volume of fluid to be sent to the motor, which can then turn to the right or left depending on the direction chosen.

The hydraulic motor drives the axis via a flexible coupling. The VETUS HPM4,45 system uses a pump and motor with a fixed flow rate.

The transmission (reduction) ratio of the drive is determined by the difference in displacement between the rotary pump and the hydraulic motor. The reduction ratio from RPM at the shaft to RPM at the propeller is 2:1 for the VETUS HPM4,45. The maximum speed of the main motor, shall be 3000.

The maximum power of the main motor must be 50 kW, so an axle with a diameter of 25 mm will be sufficient. The flange of the VETUS HPM4,45 hydraulic motor is suitable for all types of flexible couplings.

TECHNICAL CHARACTERISTICS VETUS HPM4,45

Maximum power: 30.9 KW (42 Hp)
Power supply: Diesel
Maximum RPM: 3000
Maximum torque: 106.4 Nm/1750 rpm
Bore and Stroke: 78 mm x 92 mm
Displacement: 1758 cm³
Number of cylinders: 4 in line
Combustion system: Indirect injection
Compression ratio: 22:1
Injection order: 1-3-4-2
Aspiration: natural
Electrical system: 12 Volt - 110 Amps
Cooling: Indirect
Fuel consumption at 2500 rpm: 252 g / kW.h (185 g / hp.h)
Engine width: 872 mm

Engine length: 490 mm
Engine height: 594 mm
Engine dry weight: 200 kg

THE VETUS HPM4,45 SYSTEM INCLUDES:

- Hydraulic pump
- Adapter flange and coupling for engine installation
- Hydraulic motor
- 35 liters hydraulic tank
- Heat exchanger
- Control valve
- Flexible supports
- Engine instrument panel and wiring

Looking for a hydraulic propulsion system with different technical features? [Here](#) you can find the full range of VETUS or other brands specializing in this field.

Images and technical data are not binding and may be subject to revisions by the manufacturer.

Technical Sheet

Fuel	Diesel
Engine	VETUS M4.45
Engine rpm (rpm)	3000
Starting system	Electric
Engine capacity (cm ³)	1758
Number cylinders	4
Cylinders' position	In line
Cooling	Indirect
Bore x stroke (mm)	78 x 92
Compression ratio	22 : 1
Net power (kW)	30.9
Maximum torque	106.4 Nm/1750 rpm
Mechanical power (hp)	42
Engine manufacturer	VETUS