

MarineDiesel VGT500

373 kW (500 bhp) @3600 rpm

All MarineDiesel VGT Common-Rail engines are based on the 6.6L V8 configuration and are designed to be as compact and light weight as possible while maintaining durability and serviceability. The VGT500 is intended for light, very high speed vessels. Laptop based diagnostics tool is available for all VGT and TSC engines. J1939 and NMEA2000 CAN communication.



General Data

Model	MD-VGT32
Number of cyl	8
Displacement	6.6L
Bore X stroke	103 X 98 mm
Compression ratio	16:18:1
Valves per cyl	4
Firing order	1-2-7-8-4-5-6-3
Combustion system	DI Common rail
Engine type	V8
Aspiration	Variable geometry turbo
Charge air cooling	Air to water
Max crankcase press kPa	0.5

Physical Data

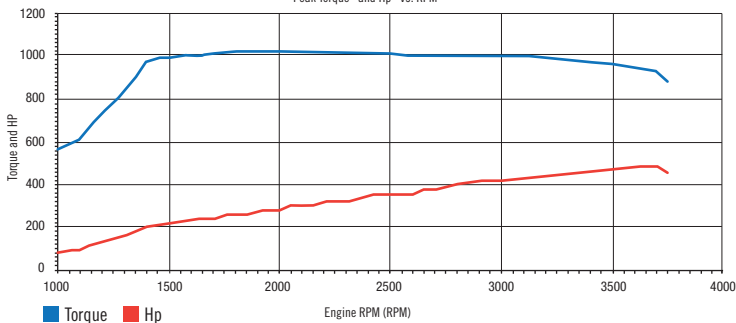
Length, mm	779
Width, mm	825
Height, mm	973
Weight dry, kg	510

Air System

Max intake restriction, kPa	6
Engine air flow m ³ /min	30
Rec air intake pipe diam, mm (min)	100
Minimum intake air per engine (cm ²)	1400
Engine bay temp. vs. amb. temp. ΔT max °C	15
Emission	RCD, IMO, EPA, Tier 3 and CE3

Power / Torque Curve

Peak Torque* and Hp* vs. RPM



Cooling System

Cooling System	closed cooling
Closed system coolant flow L/min	304
Raw water pumpflow L/min	150
Thermostat start to open °C	70
Thermostat fully open °C	78
Engine coolant capacity L	18
Recommended press ca psi	16
Raw water intake Ø, mm	38

Fuel System

Fuel injection pump	Bosch common rail
Governor regulation	1%
Governor type	Electronic
Maximum fuel transfer pump suction	
Distance of fuel m	2.5
Fuel filter micron size	10

Lubrication System

Oil pressure at 2000 rpm - psi	30-45
Oil pressure at low idle - psi	12
In pan oil max temperature °C	120

Exhaust System

Exhaust flow m ³ /min (max)	70
Exhaust temperature °C (max)	750
Max. allowable exhaust backpress kPa	7.5
Exhaust hose ID, mm	127

Electrical System

Recommended battery capacity CCA	
12 volt system - amp	1050
Maximum allowable start circuit resistance	
12 volt system - ohm	0.001