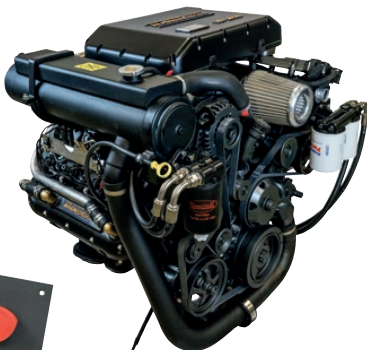


# MarineDiesel VGT450

336 kW (450 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 VGT450 is intended for light 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

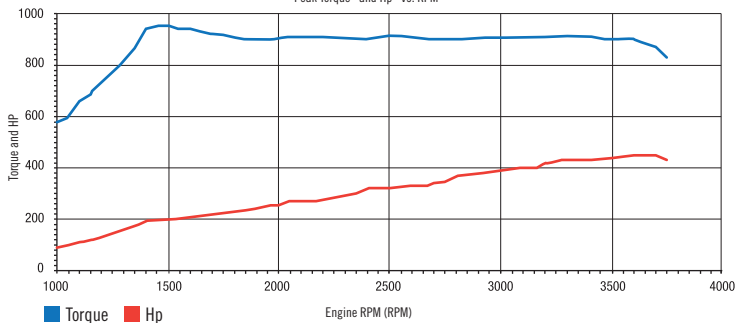
|                |     |
|----------------|-----|
| Length, mm     | 779 |
| Width, mm      | 825 |
| Height, mm     | 973 |
| Weight dry, kg | 510 |

## Air System

|  |                               |
|--|-------------------------------|
| Max intake restriction, kPa                      | 6                             |
| Engine air flow m <sup>3</sup> /min              | 30                            |
| Rec air intake pipe diam, mm (min)               | 100                           |
| Minimum intake air per engine (cm <sup>2</sup> ) | 1200                          |
| 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 <sup>3</sup> /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 |