# V8-225/270/300/320-C



# **Technical Data**

roommour Butu				
Engine designation	V8-225-C	V8-270-C	V8-300-C	V8-320-C
Horsepower, kW (hp)	165 (225)	199 (270)	221 (300)	235 (320)
Engine speed, rpm	4800	5000	5000	5200
Displacement, I (cu.in.)	5.7 (350)	5.0 (305)	5.7 (350)	5.7 (350)
Number of cylinders	V8	V8	V8	V8
Bore/stroke, mm	101.6/88.4	94.7/88.4	101.6/88.4	101.6/88.4
Bore/stroke, in.	4.00/3.48	3.73/3.48	4.00/3.48	4.00/3.48
Compression ratio	9.4:1	9.4:1	9.4:1	9.4:1
Volvo Penta Aquamatic drive	SX	SX	SX	SX
Ratios	1.60:1, 1.66:1, 1.79:1, 1.89:1*, 1.97:1*	1.51:1, 1.60:1, 1.66:1*, 1.79:1*	1.51:1, 1.60:1**	1.51:1, 1.60:1**
Volvo Penta Duoprop drive	DPS	DPS	DPS	DPS
Ratios	1.95:1, 2.14:1, 2.32:1	1.78:1, 1.95:1, 2.14:1, 2.32:1**	1.78:1, 1.95:1, 2.14:1, 2.32:1**	1.78:1, 1.95:1, 2.14:1, 2.32:1**
Dry weight with DP, kg (lb)	490(1081)	490(1081)	490(1081)	490(1081)
Rating	R5***	R5***	R5***	R5***
Emission Compliance	US EPA, CARB, EU RCD, BSO****			

Horsepower according to ISO 8665



<sup>\*</sup> High altitude 1000 m (3500 ft)

<sup>\*\*</sup> High altitude 1500 m (5000 ft)

<sup>\*\*\*</sup> RATING 5. For pleasure craft applications

<sup>\*\*\*\* 225/270/300</sup> 

# V8-225/270/300/320-C

# **Technical description:**

### Engine block and head

- Cylinder block and cylinder heads made of cast iron for good corrosion resistance
- Pistons with two compression rings and one oil scraper ring
- · Five-bearing crankshaft
- Valve train consisting of single camshaft, hydraulic valve lifters, push rods and two overhead valves per cylinder
- · Color-coded service points
- Four adjustable rubber mounts, one on each side of the engine, and two between transom shield assembly and engine

#### Lubrication system

- Pressure lubrication system with full-flow environmentally friendly paper oil filter
- · Remote oil filter for easy service access

# Electronic engine control

- Electronic Control Module (ECM) ensures constant, optimum performance, greater fuel efficiency and reduced emissions
- 4G ECM supports full diagnostics through connection on engine harness
- Closed loop system with pre- and post catalyst oxygen sensors helps control fuel delivery and reduce emissions

#### Fuel system

- Multi-Port Fuel Injection system
- · High capacity water separating fuel filter

· Two electric fuel pumps

#### Intake and exhaust system

- · Integral Air Fuel Module intake manifold
- Lightweight aluminum exhaust system with catalytic converters and oxygen sensors
- Complete exhaust line with pipe and bellows for exhaust outlet through the drive

#### Cooling system

- · Thermostatically controlled seawater cooling
- · Freshwater cooling available as an option
- Crank mounted seawater pump
- Flush fitting hose connection to flush cooling system with freshwater
- Advanced Volvo VCS (yellow) coolant for superior corrosion and thermal protection

# Electrical system

- 12V corrosion-protected electrical system
- 14-pin engine to boat connection
- ECM unit ensures constant optimum performance with diagnostic capability
- Charging regulator with battery sensor for voltage drop compensation
- 75A marine alternator with internal transistorized voltage regulator
- · Re-settable circuit breaker for trim system
- Fuse protection of the fuel pumps and the fuel injection system

# **Available instruments**

(optional in some markets)

· Complete instrument panel including:

Tachometer, temperature gauge, oil pressure gauge, voltmeter, key switch, two fuses, instrument light switch

- Wiring harness from engine to instrument panel
- Control switch for power trim
- Wiring harness from trim pump to switch for power trim and trim gauge

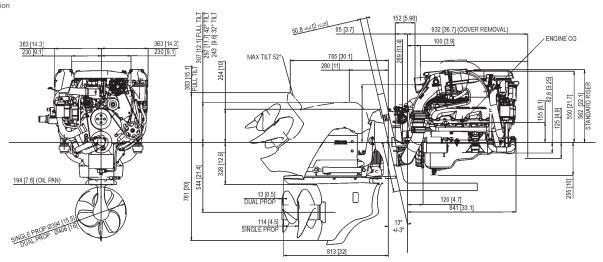
#### Drive

- · Cone clutch for smoother shifting
- Pattern-matched spiral bevel gears
- Exhaust through propeller hub, cavitation plate
- · Break-away coupling between vertical shafts
- Standard tilt specification 52° (42° and 32° available as option on engine order)
- The drive can be turned 28° in each direction
- Built-in kick-up function to reduce damage, in the event the drive strikes an underwater object
- Easy access drive and transom shield anodes

#### Power trim

 High capacity trim pump integrated with transom shield to ease installation and save space in engine compartment

# Dimensions V8-225/270/300/320/DPS



#### More information

Contact your nearest Volvo Penta dealer for more information about Volvo Penta engines and optional equipment/accessories or go to www.volvopenta.com





Download the Volvo Penta dealer locator App for your IPhone or Android