

150 / 230 / 270











# REDEFINING THE STANDARD

The Mercury<sup>®</sup> Diesel 3.0L common-rail high-speed engine delivers exceptional performance and offers substantial improvements in acceleration and top speed – all made possible via a water-cooled variable geometry turbocharger design (VGT). This matched system, plus an advanced engine-control system, provides reduced time to plane and outstanding overall performance.

This powerful, compact package can fit in virtually any installation while low fuel consumption results in affordable operating costs and extended travel range.

The Mercury Diesel 3.0L highspeed engine was designed to be durable, with features and materials specific to marine applications, and it has proved itself by meeting rigorous test standards. The engine is assembled in a highly technical manufacturing facility that employs the latest in quality practices and controls, further underscoring confidence in reliability.

The 3.0L engine is compatible with all Mercury controls and SmartCraft® digital technologies, and it's serviceable through the Mercury global service network. SmartCraft compatibility offers boaters a choice between conventional mechanical throttle and shift or Mercury Digital Throttle & Shift (DTS) controls. The DTS system includes optional Joystick Piloting for Inboards (JPI) and Joystick Piloting for Sterndrives (JPS).

General Specifications					
Configuration	6-cylinder (V6), 4-stroke diesel				
Bore and stroke mm (inch)	83 x 92 (3.27 x 6.62)				
Displacement L (in3)	3.0 (183)				
Air handling	Turbocharged and aftercooled				
Fuel system	High-pressure common rail				
Rotation	Counterclockwise facing flywheel				

Bobtail Dimensions and Weight					
Overall length mm (inch)	931 (36.6)				
Overall width mm (inch)	851 (33.5)				
Overall height mm (inch)	784 (30.9)				
Dry weight SD/IB	358kg (789lbs) / 348kg (767lbs)				

\*Weight includes engine mount supports, alternator and engine cover



Propulsion

Sterndrive\*

n System	Model	3.0L 150hp	3.0L 230hp	3.0L 270hp	Weight (kg/lb)
e*	Bravo One X®	1.36:1 / 1.50:1 / 1.65:1	1.36:1 / 1.50:1 / 1.65:1	1.36:1/1.50:1/1.65:1	100 / 220
	Bravo Two X®	1.50:1 / 1.65:1 / 1.81:1 / 2.00:1 / 2.20:1	1.50:1 / 1.65:1 / 1.81:1 / 2.00:1 / 2.20:1	1.50:1 / 1.65:1 / 1.81:1 / 2.00:1 / 2.20:1	105 / 231
	Bravo Three X®	1.36:1 / 1.50:1 / 1.65:1 / 1.81:1 / 2.00:1 / 2.20:1	1.36:1 / 1.50:1 / 1.65:1 / 1.81:1 / 2.00:1 / 2.20:1	1.36:1 / 1.50:1 / 1.65:1 / 1.81:1 / 2.00:1 / 2.20:1	109 / 240
	Bravo One XR	1.36:1 / 1.50:1	1.36:1 / 1.50:1	1.36:1 / 1.50:1	100 / 220
	Bravo Two XR	1.65:1	1.65:1	1.65:1	105 / 231
	Bravo Three XR	1.65:1 / 1.81:1 / 2.00:1	1.65:1 / 1.81:1 / 2.00:1	1.65:1 / 1.81:1 / 2.00:1	109 / 240
	ZF 45C	-	1.00:1	1.00:1	31/69
	ZF 68	-	1.25:1 / 1.75:1 / 2.78:1	1.25:1 / 1.75:1 / 2.78:1	46 / 103
	ZF 68A	-	1.21:1 / 1.56:1 / 2.03:1 / 2.52:1 / 2.68:1	1.21:1 / 1.56:1 / 2.03:1 / 2.52:1 / 2.68:1	44 / 97
	ZF 68IV	-	1.29:1 / 1.56:1 / 1.99:1	1.29:1 / 1.56:1 / 1.99:1	62/136

\*Weights reflect sterndrive & transom



# DIESEL

Mercury Diesel engines offer an exhilarating yet refined experience. Advanced turbocharging and injection technologies produce a power band that's precisely calibrated for marine performance and outstanding economy. Lightweight designs further boost performance, while clean and quiet operation enhance your day on the water.

# 3.0L

## 150 / 230 / 270 sterndrive

#### Engine

- Aluminum cylinder heads
- Compacted Graphite Iron cylinder block, light weight, high strength with max heat transfer for optimal cooling
- 60-degree V6 block
- Fracture-split connecting rods
- Front chain-driven timing system
- Glow plug system standard

#### Fuel System

- Bosch<sup>®</sup> CP4.2 w/ integrated gear-driven lift pump
  Bosch CRS 2.2 solenoid fuel injectors
- Engine-mounted 4 micron filter protecting the system

#### **Electrical System**

12VHigh-output alternator: 12V 110 Amp

#### Air Intake

• Air filter/silencer included for noise reduction

#### **Engine Controls**

- Bosch EDC17 Controller
- Rubber-isolated controller mounting to ensure durability

#### Turbocharger

- Single turbo
- Electrically actuated VGT
- Oil- and glycol-cooled center section
- Glycol-cooled turbine housing

#### Exhaust System

- Closed-cooled manifold
- Closed-cooled turbocharger
- Seawater-cooled riser

## 230 / 270 INBOARD

#### **Cooling System**

- Thermostatically controlled
- Closed-cooled engine for corrosion protection

3.0L

- Seawater-cooled charge air cooler
- Standard cabin heater connections
- On-engine sea strainer
- Seawater-cooled fuel cooler

#### Emissions

- EPA Tier 3
- RCD 2
- IMO Tier 2
- BSO 2

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#### **FRONT VIEW FEATURES**

- 1. Raw-Water Pump
- 2. High Pressure Fuel Pump
- 3. Coolant Reservoir
- 4. Optional Belt Cover



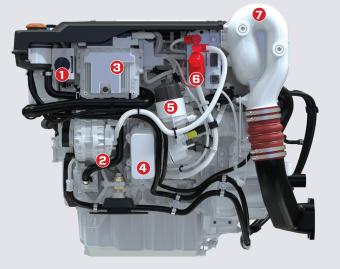
#### PORT SIDE VIEW FEATURES

- 1. Diagnostic Port
- 2. Alternator
- 3. ECU
- 4. Engine Oil Cooler
- 5. Oil Filter
- 6. Hot Stud
- 7. Riser





#### **TOP VIEW FEATURES** 1. Fuse Box 2. MerCathode<sup>®</sup> LED



#### **REAR VIEW FEATURES**

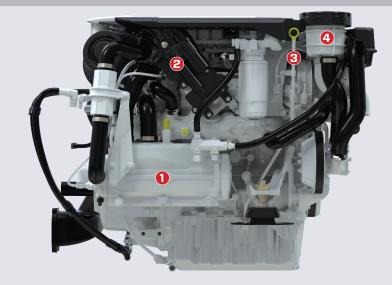
- 1. Water-Cooled VGT Turbocharger
- 2. Turbo Compressor
- 3. Air Filter & Silencer
- 4. Engine mount
- 5. Power Steering Cooler

#### **TOP VIEW FEATURES**

- 1. Maintenance Label Decal
- 2. Oil-Fill Cap
- 3. Coolant Fill
- 4. Drive Lube (Sterndrive Only)
- 5. Power Steering (Sterndrive Only)

#### STARBOARD SIDE VIEW FEATURES

- 1. Heat Exchanger
- 2. Shift Plate
- 3. Dipstick
- 4. On-Engine Seawater Strainer

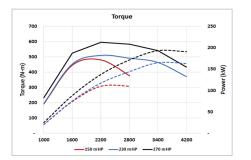


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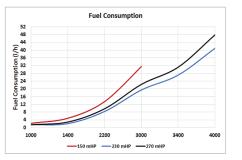
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Specifications	150 mHP 230 mHP 270 mHP					
Compression ratio	16.5:1					
Fuel pre-filtration requirement	Not required but feasible					
Fuel lift pump	On engine					
High-pressure fuel pump	Bosch CP 4.2 w/ integrated gear lift pump					
Valves per cylinder	4					
Pistons	Oil jet cooled					
Fuel injectors	Bosch CRS 2.20 (Solenoid)					
Air inlet (port rear)	Filtered and silenced					
Turbocharger	Honeywell VGT					
Engine and turbocharger cooling	Closed cooled					
Coolers; CAC, oil, fuel and engine	Tube and shell					
Seawater pump/inlet mm (in)	38 (1.5)					
Peak torque at rpm Nm	493 Nm @ 2000 rpm 503 Nm @ 2200 rpm 594 Nm @ 2200 rpm					
Oil sump volume	8.5L					
Dipstick range	1.0L					
Oil maintenance interval hr	200					
Flywheel size mm (in)	290 (11.42)					
Flywheel housing	SAE 8					
Electrical system	12V 110A					
Engine stop	ECU Controlled					
Engine Control Unit (ECU)	Bosch EDC17					
Throttle and shift	Mercury DTS or mechanical cable					
Helm and gauge compatibility	Mercury SmartCraft					
Mercury Joystick Piloting - Inboard & Sterndrive	Compatible					
Engine and ECU covers	Texture-coated aluminum; protects engine and provides step-capable platform					
Inboard: ZF 68A	1.21, 1.56, 2.03, 2.52, 2.68					
Inboard: ZF 68	1.25, 1.75, 2.78					
Inboard: ZF 68IV	1.29, 1.56, 1.99					
Inboard: ZF 45C	1.00					
Sensors	Crank & cam position, intake manifold pressure/temp, compressor outlet temp, exhaust gas temp, fuel temp, rail pressure, water in fuel (WIF), oil pressure/temp, coolant temp, seawater pressure/temp, atmospheric pressure					

#### TORQUE & POWER [full load at crankshaft]



#### **BOAT LOAD FUEL CONSUMPTION**

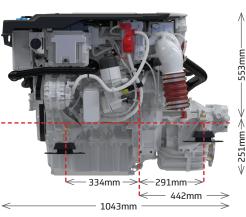


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Model	Driveline Options	Output Power		Fuel Use At Rate		Idle	Max Rated	Emissions Ratings (no after treatment)		
		mHP	kW	Rated Speed L/hr (gal/hr)	Use	Speed (RPM)	Engine Speed (RPM)	EPA	EU	IMO
150	Bobtail Inboard	150	110	31.5 (8.3)	REC		3000	Tier 3		
230	Bobtail Inboard	230	169	49 (12.9)	650 REC		Tier	RCD 2	Tier 2	
270	Bobtail Inboard	270	199	55 (14.3)		REC	4200	3		

#### **ENGINE DIMENSIONS - INBOARD** 931mm

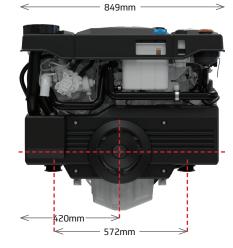
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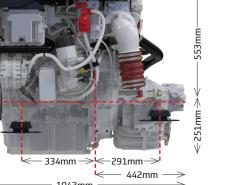


#### **ENGINE DIMENSIONS - STERNDRIVE**



# 851mm -<mark>4</mark>23mm- $\sim$ 572mm 4





#### GO BOLDLY. / 8