

Image shown may not reflect actual configuration

Cat® 3516E High Output

Marine Propulsion Engine

Yachting & Sportfishing Applications

Building on the proven durability of the 3500 platform, the Cat® 3516E High Output (HO) delivers up to 19% more rated power, lower ambient heat rejection, and improved acceleration over the previous generation. Its V 16 sequential turbocharged architecture and compact packaging make it an ideal propulsion solution for performance yachts demanding uncompromising power, efficiency, and reliability in a space-optimized footprint.

Features and Benefits:

ENGINE DESIGN

- Advanced combustion and sequential air system for optimized engine performance, acceleration, and efficiency*
- Optimized power density (Rated Power vs. Weight) and streamlined engine packaging (L x W x H)
- Enhanced fuel injection optimized through crank timing and the latest A5 ECM technology
- Closed loop air assisted DEF dosing strategy that contributes to efficient mixing and control, extended service life before replacement, adapts to urea quality
- Optimized fuel injector nozzle geometry and electronic injection control for improved fuel delivery
- Improved low speed torque capability designed for high performance and hybrid configurations*
- Global dealer network for service around the clock
- Caterpillar's SCR technology used for IMO III certification

* Compared to previous 3516E models

COMMANDING POWER

- V 16, 78.1 L sequential turbo diesel delivering up to 4023 bhp, up to 19% more than the previous 3516E. Fast idle-to-full response, strong acceleration, high low-RPM torque for maneuvering, and reinforced components for durability.

COMPACT DESIGN

- Compact by design with an up to 14% smaller footprint than previous 3516E models, this engine maximizes engine room space while minimizing atmospheric heat rejection for a cooler, quieter onboard experience. Advanced cooling and low-maintenance systems ensure effortless, extended cruising.

INTELLIGENT DESIGN

- Dual A5 control modules deliver built-in redundancy for exceptional reliability, enhanced by optional alarm and protection systems. Seamless digital integration streamlines operation, while switchable IMO II / III modes optimize efficiency and reduce wear worldwide.

Specifications

Configuration	V 16, 4 -Stroke-Cycle Diesel	Bore x Stroke	170 mm x 215 mm / 6.69 in x 8.46 in
Emissions	IMO II / III Switchable	Refill Capacity	250 hour Shallow Sump: 189 L / 50 US gal
Rated Engine Speed	1800 rpm	Lube Oil System w/ Oil Filter Change	1000 hour Deep Sump: 798 L / 211 US gal
Displacement	78.1 L (4766 in³)	Oil Change Interval	250 hours (Shallow Sump) 1000 hours (Deep Sump)
Aspiration	Sequential Turbocharged / Aftercooled	Rotation (from flywheel end)	Clockwise or Counterclockwise
Governor	Electronic (A5 ECM)	Cooling	Heat Exchanger or Keel Cooled
Flywheel Housing	SAE No. 00 with SAE No. 00 Flywheel (183 teeth)		



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Ratings and Fuel Consumption

Commercial Propulsion Engines

Rating	mhp	bhp	bkW	rpm	U.S. g/h	g/bkWh	IMO	U.S. EPA	EU	China
C	3195	3151	2350	1800	147.9	202.6	II/III	NC ¹	NC	NC
D	3549	3500	2610	1800	165.6	204.1	II/III	T4 ¹	NC	NC
D	3807	3755	2800	1800	178.1	204.6	II/III	T4 ¹	NC	NC
D	4079	4023	3000	1800	192.3	206.2	II/III	T4 ¹	NC	NC

¹ Contact factory for T4 availability

ISO 3046 / fluid consumption tolerance of -0 /+5 %

Compact by design with a 14% smaller footprint, this engine maximizes yacht space while minimizing heat for a cooler, quieter onboard experience.

Advanced cooling and low-maintenance systems ensure effortless, extended cruising*

*Compared to previous 3516E models

Marine Rating Definition for Propulsion Engines:

C Rating (Maximum Continuous)

Typical Applications: For vessels operating at rated load and rated speed up to 50% of the time with cyclical load and speed (20% to 80% load factor).

Typical operation ranges from 2000 to 4000 hours per year.

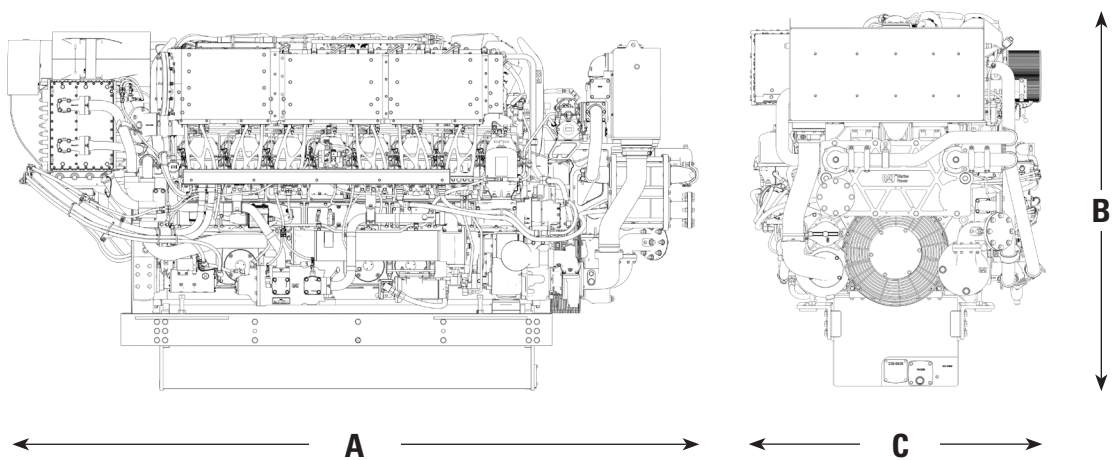
D Rating (Intermittent Duty)

Typical Applications: For vessels operating at rated load and rated speed up to 16% of the time (up to 50% load factor).

Typical operation ranges from 1000 to 3000 hours per year.

Dimensions

All dimensions are approximate.



A Length (Approx)	4140 mm	123.0 in	C Width (Approx)	1800 mm	71.0 in
B Height (Approx)	2263 mm	89.0 in	Dry Weight (Approx)	11500 kg	25353 lb

Note: Do not use for installation design. See general dimension drawings for detail. Weights and dimensions are approximations.

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Standard and Optional Equipment

Standard Equipment

- Corrosion-resistant aftercooler core
- Dual A5 engine control modules with electronic unit injection and low pressure fuel system
- Sequential water-cooled turbochargers
- Water-cooled exhaust manifold
- Vibration damper and guard
- Duplex fuel filtration
- Self-cleaning (maintenance free) & centrifugal oil filtration
- Serviceable hard heat shields
- Meets SOLAS regulations
- LECP2 instrument control panel

Optional Equipment

- Front-mounted plate-type heat exchanger
- Marine Classification Society compliance
- Power take-off
- Certified Marine alarm and protection system
- LECP3 instrument control panel
- Seawater auxiliary pump
- Mounting rails
- CW or CCW rotation
- Closed crankcase ventilation

For more complete information on Cat products, dealer services, and industry solutions, visit us on the web at www.cat.com

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