

## Worldwide Marine Power Solutions

### ENGINE SPECIFICATIONS

Configuration	In-line 6-cylinder, 4-cycle diesel
Bore & Stroke	114 mm x 135 mm (4.49 in x 5.32 in)
Displacement	8.3 L (504.5 in <sup>3</sup> )
Rotation	Counterclockwise facing flywheel
Aspiration	Turbocharged, Aftercooled

### POWER RATINGS

Rating	Continuous Duty* (JWAC)	Intermittent Duty* (SWAC)	
Engine ID	6CTA8.3-M	6CTA8.3-M	6CTA8.3-M
Rated RPM	1800	2500	2600
kW (Hp)	190 (255)	261 (350)	321 (430)
Max Torque N-m (ft-lb)	1193 880	1125 (830)	1395 (1029)
RPM	1200	1900	1800

\*Ratings are IMO emissions compliant.

JWAC - Jacketwater Aftercooled

SWAC - Seawater Aftercooled

### FEATURES AND BENEFITS

#### Engine Design

Compact size for ease of installation with easy access for routine maintenance. Four stroke cycle combustion for quiet and fuel efficient operation. Alloy cast iron cylinder block with removable wet liners for longer life and serviceability. One piece cross flow cylinder head for small package size and maximum stiffness, with replaceable valve guides and seat inserts.

#### Cooling System

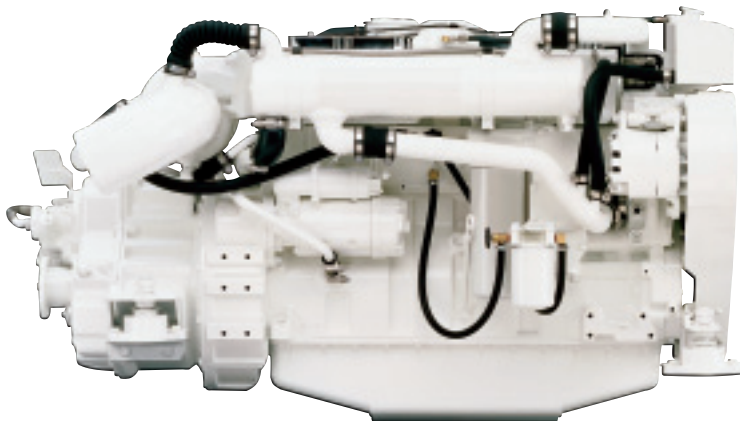
Low profile heat exchanger configuration. Keel cooled configuration also available on continuous duty rating. Spin-on Fleetguard water treatment filter.

#### Fuel System

Bosch inline fuel pump with high injection pressure for improved performance.

#### Lubrication System

17 L (4.5 g) marine grade, cast aluminum oil pan. Spin-on Fleetguard lube oil filters. Handed filter and dipstick locations for ease of maintenance.



#### Electrical System

12-volt and 24-volt systems available. Marine grade wiring harness and instrument panels.

#### Manufacturing

ISO certified plants.

#### U.S. Navy Certified

Tested and certified for the U.S. Navy's 1,000 hour abuse cycle test.

#### IMO Emissions Certified

Certificates of Compliance are available from the U.S. EPA and Lloyd's Register of Shipping.

### AVAILABLE ACCESSORIES

**Air Cleaner:** Light or heavy duty.

**Auxiliary Pump**

**Hydraulic Pump Drive:** SAE A or B Flange.

**Flywheel Housing:** SAE #2 or #3

**Walker Air Sep:** Closed crankcase ventilation system

**Accessory Drive Pulley:** Belt or gear driven

**Marine Classification Society Approvals:** Check with your local Cummins professional for an updated listing.

# C Series

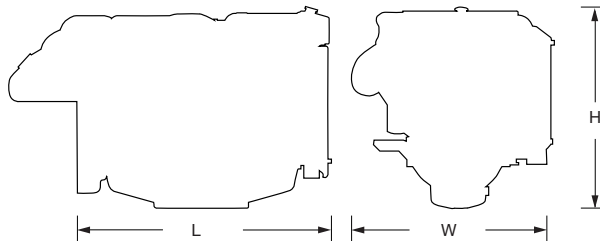
**Cummins MerCruiser Diesel**

**Worldwide Marine Power Solutions**

## ENGINE DIMENSIONS

	Length		Width		Height		Weight	
	mm	in	mm	in	mm	in	kg	lb
JWAC*	1177.3	41.02	848.9	33.42	953.6	37.54	712	1570
SWAC	1161.5	45.7	908.8	35.78	921.5	36.28	856	1885

\*Keel Cooled



## PERFORMANCE DATA

Rating	Continuous Duty 255 bhp*				Intermittent Duty 350 bhp*				Intermittent Duty 430 bhp*			
rpm	1800	1600	1400	1200	2500	2100	1700	1300	2600	2200	1800	1400
kW	190	138	97	64	261	163	92	44	321	204	119	60
g/kW-hr	224	209	208	210	224	214	222	244	239	212	218	228
L/hr	50.9	34.4	23.7	15.9	69.7	41.6	24.4	12.8	91.6	51.5	30.9	16.3
bhp	255	186	129	85	350	218	123	59	430	274	159	81
lb/hp-hr	.368	.343	.342	.346	.368	.353	.370	.403	.394	.347	.361	.372
gal/hr	13.4	9.1	6.3	4.2	18.4	11	6.5	3.4	24.2	13.6	8.2	4.3

\*Ratings are IMO emissions compliant

Above data represents performance along a 2.7 fixed pitch propeller curve. Fuel consumption has a tolerance of +5% and is based on fuel of 35° API gravity at 16 °C (60 °F) having an LHV of 42, 780 KJ/KG (18,390 BTU/lb) when used at 29 °C (85 °F) and weighing 838.9 g/liter (7.001 lb/US gal). Observed horsepower is certified within ± 5% of rated horsepower. Cummins has always been a pioneer in product improvement. Thus specifications may change without notice. Consult your local Cummins professional for further information.

### Rating Definitions

Ratings are based on ISO 8665 conditions of 100kPa (29.612 in Hg) and 25°C (77°F) and 30% relative humidity. Propeller shaft power represents the net power available after typical gear losses and is 97% of rated power. Power rated in accordance with IMCI procedures.

### Continuous Duty

Intended for continuous use in applications requiring uninterrupted service at full power. This rating is an ISO 3046 standard power rating.

### Intermittent Duty

Intended for intermittent use in variable load applications where full power is limited to two hours out of every eight hours of operation. Also, reduced power operations must be at or below 200 rpm of the maximum rated rpm. This rating is an ISO 3046 fuel stop power rating and is intended for applications that operate less than 1,500 hours per year.



www.cmdmarine.com  
 4500 Leeds Ave. #301  
 Charleston, SC 29405  
 email: wavemaster@cummins.com  
 1-800-DIESELS  
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