

# QSL9

Cummins MerCruiser Diesel

## Quantum Engine Series

### POWER RATINGS (PRELIMINARY)

Rating	Medium Continuous*	Heavy Duty*	Continuous Duty*
Metric HP	405	330	285
BHP	400	326	281
kW	298	243	209
Rated RPM	2100	1800	1800
Max Torque FT-LBS	1145	1111	969
Max Torque N-m	1553	1507	1314
RPM	1500	1400	1400

\*Meets EPA Tier 2 recreational and commercial emission standards



### ENGINE SPECIFICATIONS

Configuration	In-line 6-cylinder, 4-stroke diesel
Bore & Stroke	114 mm x 144 mm (4.49 in x 5.69 in)
Displacement	8.9 L (540 in <sup>3</sup> )
Rotation	Counterclockwise facing flywheel

### FEATURES AND BENEFITS

#### Engine Design

With its roots going back to the proven 6CTA8.3, the **QSL9** is providing a Quantum Leap in the marine industry by incorporating the latest engine technology. A high pressure common rail fuel system virtually eliminates start up white smoke and black smoke, improves fuel economy and significantly reduces noise. The engine includes a new cylinder head with four valves per cylinder, which allows the engine to breathe easier for increased acceleration and torque.

#### Fuel System:

Handed spin on Fleetguard fuel filter

#### Lubrication System:

Handed spin on Fleetguard lube filter

**Electrical System:** 12-volt and 24-volt systems available

**Emissions:** EPA Tier 2 and IMO Compliant

**Coolant System:** Sea water heat exchanger cooling system or keel cooled cooling system available with electronic low coolant water level alarm

### AVAILABLE ACCESSORIES

**Air Intake System:** Light duty or serviceable type air cleaner

**Breather System:** Open or closed

**Engine Controls:** C-Cruise Package (engine synchronization, slow idle, cruise 1 and 2, RPM +/-), back-up throttles, electronic throttle

**Instrumentation:** SmartCraft® (digital displays, analog gauges)

**Vessel System Integration:** SmartCraft® (fluid level monitoring, vessel range, depth, vessel speed, rudder position)

**Accessory Drives:** Single & dual groove pulleys, SAE A and SAE B hydraulic drives

**Electrical:** 80A isolated 24V alternator, isolated 12V and 24V starter





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**ENGINE DIMENSIONS**

Length		Width		Height		Weight (Dry)	
mm	in	mm	in	mm	in	kg	lb
1174	46.2	842	33.1	1091	43.0	907	2000

**FUEL CONSUMPTION (PROP CURVE) PRELIMINARY**

Rating	Medium Continuous QSL9-405/HO				Heavy Duty QSL9-330/HO			Continuous Duty QSL9-285/HO		
	2100	1900	1700	1500	1800	1600	1400	1800	1600	1400
rpm	2100	1900	1700	1500	1800	1600	1400	1800	1600	1400
kW	298	227	169	120	243	177	123	209	152	106
L/hr	79.4	59.0	43.5	31.7	62.7	44.6	30.5	54.5	38.6	26.7
bhp	400	305	226	161	326	237	165	281	204	143
lb/hp-hr	.367	.357	.356	.365	.356	.348	.344	.359	.350	.348
gal/hr	21.0	15.6	11.5	8.4	16.6	11.8	8.1	14.4	10.2	7.1

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). 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 (CON)**

Intended for continuous use in applications requiring uninterrupted service at full power. This rating is an ISO 3046 standard power rating. Typical vessel applications include: ocean-going displacement hulls such as fishing trawlers, freighters, tugboats, bottom drag trawlers, and towboats.

**Intermittent Duty (INT)**

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.

**Medium Continuous Duty (MCD)**

Intended for continuous use in variable load applications where full power is limited to six hours out of every twelve 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 for applications that operate less than 3,000 hours per year.

**Heavy Duty (HD)**

Intended for continuous use in variable load applications where full power is limited to eight (8) hours out of every ten (10) hours of operation. Also, reduced power operations must be at or below 200 rpm of the maximum rated rpm. This is an ISO 3046 fuel stop power rating and is for applications that operate 5,000 hours per year or less.



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