

## *Quantum Engine Series*

### POWER RATINGS (PRELIMINARY)

Rating	High Output*	High Output*	Intermittent Duty*	Medium Continuous*	Heavy Duty*
Metric HP	380	330	355	305	230
BHP	375	326	350	301	227
kW	280	243	261	224	169
Rated RPM	3000	2800	2800	2600	2600
Max Torque FT-LBS	875	842	850	812	686
Max Torque N-m	1186	1142	1153	1101	930
RPM	2000	2000	1800	1800	1600

\*Meets EPA Tier 2 recreational and commercial emission standards

### ENGINE SPECIFICATIONS

Configuration	In-line 6-cylinder, 4-stroke diesel
Bore & Stroke	102 mm x 120 mm (4.02 in x 4.72 in)
Displacement	5.9 L (359 in <sup>3</sup> )
Rotation	Counterclockwise facing flywheel

### FEATURES AND BENEFITS

#### Engine Design

With its roots going back to the proven 6BTA5.9, the **QSB5.9** is providing a Quantum Leap in the marine industry by incorporating the latest diesel 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 base engine uses the same components as found in the 2004 Dodge Ram Pick-up Truck powered by the Cummins Turbo Diesel. 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:

Front mounted spin on Fleetguard fuel filter

#### Lubrication System:

Front mounted 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)

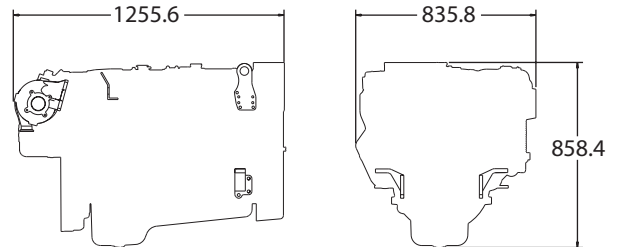


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### ENGINE DIMENSIONS

Length*		Width*		Height		Weight (Dry)	
mm	in	mm	in	mm	in	kg	lb
1255.6	49.43	835.8	32.91	858.4	33.80	588	1296

\*Does not include exhaust connection



### FUEL CONSUMPTION (PROP CURVE) PRELIMINARY

Rating	High Output QSB5.9-380				High Output QSB5.9-330			
rpm	3000	2800	2600	2400	2800	2600	2400	2200
kW	280	232	190	152	243	199	160	173
L/hr	75.2	58.9	47.6	38.4	62.7	45.2	40.1	33.0

bhp	375	311	255	204	325	267	215	170
lb/hp-hr	.371	.351	.345	.348	.356	.340	.344	.360
gal/hr	19.9	15.6	12.6	10.1	16.6	13.0	10.6	8.7

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	Intermittent Duty QSB5.9-355				Medium Continuous QSB5.9-305				Heavy Duty QSB5.9-230			
rpm	2800	2600	2400	2200	2600	2400	2200	2000	2600	2400	2200	2000
kW	261	214	172	136	225	181	143	110	169	136	108	83
L/hr	69.7	55.1	43.3	34.6	56.8	45.0	36.8	28.8	42.7	35.1	28.1	22.3

bhp	350	286	231	183	301	242	191	148	227	183	145	112
lb/hp-hr	.368	.357	.346	.349	.349	.343	.355	.358	.352	.356	.360	.366
gal/hr	18.4	14.6	11.4	9.1	15.0	11.9	9.7	7.6	11.4	9.3	7.4	5.9

#### 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.

#### High Output (HO) Quantum Engines Only

Intended for use in variable load applications where full power is limited to one hour out of every eight hours of operation. This rating is for pleasure/non-revenue generating applications that operate less than 500 hours per year.

#### 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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