

QSB5.9

Cummins MerCruiser Diesel

Quantum Engine Series

POWER RATINGS

Rating	High Output	High Output	High Output	Intermittent Duty	Medium Continuous	Heavy Duty
Metric hp	425	380	330	355	305	230
bhp	420	375	325	350	300	225
kW	313	280	243	261	224	168
Rated rpm	3000	3000	2800	2800	2600	2600
Max Torque ft-lbs	908	898	830	830	783	670
Max Torque N-m	1231	1218	1125	1125	1062	908
rpm	2000	2000	2000	1800	1800	1600

Meets EPA Tier 2 recreational and commercial emission standards

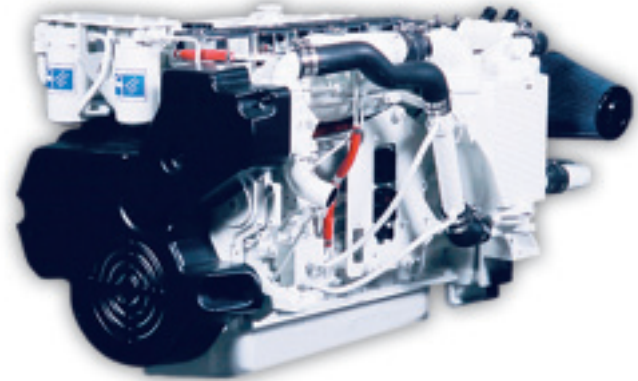
ENGINE SPECIFICATIONS

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 liters (359 in ³)

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 engine includes a new cylinder head with four valves per cylinder, which allows the engine to breathe easier for increased acceleration and torque. The new 425 HP rating uses a larger heat exchanger than other ratings. Other engine updates include a low profile center sump oil pan. The engine also includes a new water pump, oil cooler, and aftercooler.



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 available. Keel cooled cooling system also available on some ratings.

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 and shift

Instrumentation: SmartCraft® digital displays and/or analog gauges provide data on engine speed, oil pressure and engine load.

Vessel System Integration: SmartCraft monitors fluid level, vessel range, depth, vessel speed, rudder position, temperatures and more.

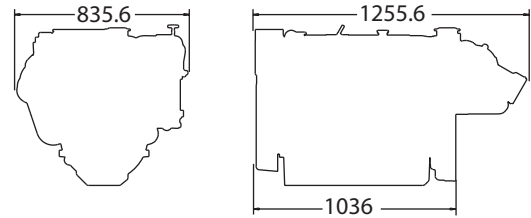


Quantum Engine Series

ENGINE DIMENSIONS

Length*		Width*		Height		Weight (Dry)	
mm	in	mm	in	mm	in	kg	lb
1036	40.8	835.6	32.9	814.5	32.1	588	1296

*Does not include exhaust connection. Weights vary by rating. Length to flywheel housing.



FUEL CONSUMPTION (PROP CURVE)

Rating	High Output QSB5.9-425				High Output QSB5.9-380				High Output QSB5.9-330			
rpm	3000	2800	2600	2400	3000	2800	2600	2400	2800	2600	2400	2200
kW	313	307	300	292	280	279	281	271	243	238	240	238
l/hr	87.6	68.1	55.2	43.8	76.2	60.6	48.1	39.5	63.3	50.8	41.6	33.5
bhp	420	411	401	391	375	374	377	364	325	319	321	320
gal/hr	23.1	18	14.6	11.6	20.1	16	12.7	10.4	16.7	13.4	11	8.9

Rating	Intermittent Duty QSB5.9-355 INT/HO				Medium Continuous QSB5.9-305 MCD/HO				Heavy Duty QSB5.9-230			
rpm	2800	2600	2400	2200	2600	2400	2200	2000	2600	2400	2200	2000
kW	261	259	256	254	224	221	222	213	168	162	167	165
l/hr	68.1	55.2	44.3	36.2	57.3	47	37.9	30.8	42.2	35.7	28.7	21.6
bhp	350	347	343	340	300	296	297	286	225	217	225	222
gal/hr	18	14.6	11.7	9.6	15.1	12.4	10	8.1	11.1	9.4	7.6	5.7

Fuel consumption data represents performance along a 2.7 fixed pitch propeller curve (3.0 for HD rating). 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.

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Rating Definitions

Ratings are based on ISO 8665 conditions of 100kPa (29.612 in Hg) and 25°C (77°F) and 30% relative humidity. 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 (Quantum only) 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.