



Recreational Marine Products Guide



QSB5.9

Engine Specifications

Configuration	Inline 6-cylinder, 4-stroke
Aspiration	Turbocharged / Aftercooled
Displacement	5.9 L (359 in ³)



Engine Ratings

Rating	kW	MHP	Rated RPM	Max Torque N-m	RPM	Fuel Cons* L/hr	G/hr	Emissions
HO/GS	353	480	3400	1278	2200	79.4	21	IMO Tier II EPA Tier 2 RCD EU Stage IIIa
HO	324	440	3400	1238	2000	72.6	19.2	
ID/HO	313	425	3000	1231	2000	68.1	18	
HO/GS	280	380	3000	1218	2000	60.6	16	
ID/HO	261	355	2800	1156	2000	55.2	14.6	
HO	242	330	2800	1125	1800	50.8	13.4	
MD/HO	224	305	2600	1062	1800	47	12.4	
HD/HO	169	230	2600	908	1600	35.7	9.4	
ID/HO	169	230	3000	691	1400	40	10.6	

* At Cruise, defined as 80% of rated RPM.

Engine Dimensions

Length		Width		Height		Weight (Dry)	
mm	in	mm	in	mm	in	kg	lb
1036	40.8	836	32.9	831	32.7	658	1450

Does not include exhaust connection. Weights vary by rating. Length measured from back of flywheel to engine front. Overall height includes dipstick.

QSB6.7

Engine Specifications

Configuration	Inline 6-cylinder, 4-stroke
Aspiration	Turbocharged / Aftercooled
Displacement	6.7 L (408 in ³)



Engine Ratings

Rating	kW	MHP	Rated RPM	Max Torque N-m	RPM	Fuel Cons* L/hr	G/hr	Emissions
HO/GS	404	550	3300	1695	2000	110.3	29.1	IMO Tier 2 EPA Tier 3 RCD EU Stage IIIa
HO/GS	353	480	3300	1580	2000	96.2	25.4	
ID/HO	312	425	3000	1425	2000	82	21.7	
ID/HO	280	380	3000	1335	2000	73.9	19.5	
ID	261	355	2800	1150	2000	68.1	18	
HO	261	355	3000	1150	2000	67.6	17.9	
MD/HO	224	305	2600	1174	1700	55.7	14.7	
HD/HO	184	250	2600	976	1700	46.9	12.4	
ID	169	230	3000	691	1200	46	12.14	

*Fuel Consumption measured at rated speed.

Engine Dimensions

Length		Width		Height		Weight (Dry)	
mm	in	mm	in	mm	in	kg	lb
1097	43.1	910	35.8	857	33.74	659	1450

Length measured from back of flywheel to engine front.

QSC8.3

Engine Specifications

Configuration	Inline 6-cylinder, 4-stroke
Aspiration	Turbocharged / Aftercooled
Displacement	8.3 L (505 in ³)



Engine Ratings

Rating	Power		Torque		Fuel Cons*		Emissions	
	kW	MHP	Rated RPM	Max Torque N-m	RPM	L/hr		G/hr
HO/ID	442	600	3000	1799	1800	101.4	26.8	IMO Tier II EPA Tier 2 RCD EU Stage IIIa
HO	404	550	3000	1799	1800	85.4	22.6	
HO/GS	368	500	2600	1799	1800	78.4	20.7	

* At Cruise, defined as 80% of rated RPM.

Engine Dimensions

Length		Width		Height		Weight (Dry)	
mm	in	mm	in	mm	in	kg	lb
1174	46.2	839	33	982	38.7	896	1975

Weight varies by rating and does not include exhaust connection. Length measured from back of flywheel to engine front.

QSL9

Engine Specifications

Configuration	Inline 6-cylinder, 4-stroke
Aspiration	Turbocharged / Aftercooled
Displacement	8.9 L (542 in ³)



Engine Ratings

Rating	kW	MHP	Rated RPM	Max Torque N-m	RPM	Fuel Cons* L/hr	G/hr	Emissions
MD/HO	298	405	2100	1619	1400	55.6	14.7	IMO Tier II EPA Tier 2 RCD EU Stage IIIa
HD/HO	243	330	1800	1553	1400	44.3	11.7	
CD/HO	210	285	1800	1332	1400	37.9	10	

* At Cruise, defined as 80% of rated RPM.

Engine Dimensions

Length		Width		Height		Weight (Dry)	
mm	in	mm	in	mm	in	kg	lb
1174	46.2	842	33.2	1086	42.8	907	2000

Does not include exhaust connection. Weights vary by rating. Length measured from back of flywheel to engine front.

QSM11

Engine Specifications

Configuration	Inline 6-cylinder, 4-stroke
Aspiration	Turbocharged / Aftercooled
Displacement	10.8 L (661 in ³)



Engine Ratings

Rating	kW	MHP	Rated RPM	Max Torque N-m	Max Torque N-m	Fuel Cons* L/hr	Fuel Cons* G/hr	Emissions
HO/GS	526	715	2500	2346	1800	106.3	28.1	IMO Tier II EPA Tier 2 RCD EU Stage IIIa
HO/GS	493	670	2300	2373	1700	93.4	24.7	
HO	474	645	2300	2373	1700	91.3	24.1	
ID/HO	449	610	2300	2135	1700	84.3	22.3	
MD/HO	336	455	2100	1966	1400	64.6	17.1	
HD/HO	298	405	2100	1822	1300	56.2	14.8	
CD/HO	261	355	1800	1695	1200	47	12.4	
CD/HO	220	300	1800	1573	1200	38.9	10.3	

* At Cruise, defined as 80% of rated RPM.

Engine Dimensions

MHP		Length		Width		Height		Weight (Dry)	
715	670	mm	in	mm	in	mm	in	kg	lb
645	610	1329	52.3	1104	43.5	1012	39.9	1188	2620
455	405	mm	in	mm	in	mm	in	kg	lb
355	300	1329	52.3	1081	42.5	1039	40.9	1184	2610

Does not include exhaust connection. Weights vary by rating. Length measured from back of flywheel to engine front. Overall height includes dipstick.

ReCon – 4BT

Engine Specifications

Configuration	Inline 4-cylinder, 4-stroke
Aspiration	Turbocharged
Displacement	3.9 L (239 in ³)

Engine Ratings

Rating	kW	BHP	MHP	Rated RPM	Max Torque N-m	RPM	Emissions
ID/HO	112	150	155	2800	300	2100	None

Engine Dimensions

Length		Width		Height		Weight (Dry)	
mm	in	mm	in	mm	in	kg	lb
707	27.8	772	30.4	793	31.2	360	794

Dimensions and weights may vary by rating and options.

Part Number	Product Description
DR6503-RX	ENG 4BT TO M 150/155@2800 ID/HO R

ReCon – 6BT

Engine Specifications

Configuration	Inline 6-cylinder, 4-stroke
Aspiration	Turbocharged
Displacement	5.9 L (359 in ³)

Engine Ratings

Rating	kW	BHP	MHP	Rated RPM	Max Torque N-m	RPM	Emissions
ID/HO	157	210	220	2600	719	1700	IMO Tier I, RCD
MD	134	180	N/A	2500	630	1700	None
MD	113	152	N/A	2500	414	1600	None

Engine Dimensions

	Length		Width		Height		Weight (Dry)	
	mm	in	mm	in	mm	in	kg	lb
Heat Exchanger	1073.65	42.27	710.9	27.99	812.2	31.98	465	1025
Keel Cooled	1073.65	42.27	710.9	27.99	812.2	31.98	508	1120

Dimensions and weights may vary by rating and options.

Part Number	Product Description
DR6721-RX	ENG 6BT T0 M 152@2500 MD R 24V KC
DR1505-RX	ENG 6BT T0 M 180@2500 MD S 24V
DR6512-RX	ENG 6BT T1 M 210/220@2600 ID/HO X
DR6055-RX	ENG 6BT T1 M 210/220@2600 ID/HO S 24V
DR6500-RX	ENG 6BT T1 M 210/220@2600 ID/HO R
DR6472-RX	ENG 6BT T1 M 210/220@2600 ID/HO R 24V
DR6746-RX	ENG 6BT T1 M 210/220@2600 ID/HO R KC

ReCon – 6BTA



Engine Specifications

Configuration	Inline 6-cylinder, 4-stroke
Aspiration	Turbocharged, Aftercooled
Displacement	5.9 L (359 in ³)

Engine Ratings

Rating	kW	BHP	MHP	Rated RPM	Max Torque N-m	Max Torque RPM	Emissions
HO	265	NA	370	3000	987	2200	IMO Tier I, RCD
ID/HO	235	315	330	2800	926	2000	IMO Tier I, RCD
HO	214	NA	300	2800	NA	NA	None
ID/HO	194	260	270	2600	921	1600	IMO Tier I, RCD
HO	184	NA	250	2600	NA	NA	None

Engine Dimensions

	Length		Width		Height		Weight (Dry)	
	mm	in	mm	in	mm	in	kg	lb
Keel Cooled, JWAC	1028.1	40.5	825.9	32.52	837.2	32.96	469	1035
Keel Cooled, SWAC	1041	41	816	32.15	771.2	30.4	538	1185
Heat Exchanger, JWAC	1028.1	40.5	825.9	32.52	837.2	32.96	517	1140
Heat Exchanger, SWAC	1028.1	40.5	825.9	32.52	837.2	32.96	581	1280

Dimensions and weights may vary by rating and options.

JWAC=Jacket Water Aftercooled; SWAC=Sea Water Aftercooled.

Part Number	Product Description
DR991-RX	ENG 6BTA T0 M 250@2600 HO X
DR6509-RX	ENG 6BTA T1 M 260/270@2600 ID/HO X
DR6510-RX	ENG 6BTA T1 M 260/270@2600 ID/HO R
DR6486-RX	ENG 6BTA T1 M 260@2600 ID R KC
DR6745-RX	ENG 6BTA T0 M 300@2800 HO S 24V
DR6488-RX	ENG 6BTA T1 M 315/330@2800 ID/HO X
DR6489-RX	ENG 6BTA T1 M 315/330@2800 ID/HO R
DR6487-RX	ENG 6BTA T1 M 315/330@2800 ID/HO R 24V
DR6502-RX	ENG 6BTA T1 M 370@3000 HO X
DR6491-RX	ENG 6BTA T1 M 370@3000 HO R

ReCon – 6CTA

Engine Specifications

Configuration	Inline 6-cylinder, 4-stroke
Aspiration	Turbocharged, Aftercooled
Displacement	8.3 L (504.5 in ³)



Engine Ratings

Rating	kW	BHP	MHP	Rated RPM	Max Torque N-m	RPM	Emissions
ID/HO	316	430	450	2600	1423	2000	IMO Tier I, RCD
MD	221	300	NA	2500	NA	NA	None

Engine Dimensions

	Length		Width		Height		Weight (Dry)	
	mm	in	mm	in	mm	in	kg	lb
Keel Cooled, JWAC	1177.3	41	848.9	33.42	953.6	37.54	712	1570
Heat Exchanger, SWAC	1161.5	45.7	908.8	35.78	921.5	36.28	856	1885

Dimensions and weights may vary by rating and options.

JWAC=Jacket Water Aftercooled; SWAC=Sea Water Aftercooled.

Part Number	Product Description
DR6294-RX	ENG 6CTA T0 M 300@2500 MD R KC
DR6474-RX	ENG 6CTA T1 M 430/450@2600 ID/HO X
DR6508-RX	ENG 6CTA T1 M 430/450@2600 ID/HO R
DR6473-RX	ENG 6CTA T1 M 430/450@2600 ID/HO R 24V

ReCon – QSB5.9



Engine Specifications

Configuration	Inline 6-cylinder, 4-stroke
Aspiration	Turbocharged, Aftercooled
Displacement	5.9 L (359 in ³)

Engine Ratings

Rating	kW	BHP	MHP	Rated RPM	Max Torque N-m	RPM	Emissions
HO/GS	352	NA	480	3400	1278	2200	EPA Tier 2
HO	325	NA	440	3400	1238	2000	
HO/GS	280	NA	380	3000	1218	2000	
ID/HO	261	NA	355	2800	1156	2000	
HO	242	NA	330	2800	1125	1800	
MD/HO	224	NA	305	2600	1062	1800	
HD/HO	169	NA	230	2600	908	1600	

Engine Dimensions

Length		Width		Height		Weight (Dry)	
mm	in	mm	in	mm	in	kg	lb
1036	40.8	836	32.9	831	32.7	658	1450

Dimensions and weights may vary by rating and options.

Part Number	Product Description
DR6587-RX	ENG QSB T2 M 480@3400 HO R
(derate)	ENG QSB T2 M 440@3400 HO R
DR6496-RX	ENG QSB T2 M 380@3000 HO R
(derate)	ENG QSB T2 M 355@2800 ID R
(derate)	ENG QSB T2 M 330@2800 HO R
(derate)	ENG QSB T2 M 305@2600 MD R
(derate)	ENG QSB T2 M 230@2600 HD R

ReCon – QSC8.3

Engine Specifications

Configuration	Inline 6-cylinder, 4-stroke
Aspiration	Turbocharged, Aftercooled
Displacement	8.3 L (504.5 in ³)



Engine Ratings

Rating	kW	BHP	MHP	Rated RPM	Max Torque N-m	Max Torque RPM	Emissions
HO/GS	442	NA	600	3000	1799	1800	EPA Tier 2
HO	405	NA	550	3000	1799	1800	
ID/HO	368	NA	500	2600	1799	1800	

Engine Dimensions

Length		Width		Height		Weight (Dry)	
mm	in	mm	in	mm	in	kg	lb
1036	40.8	836	32.9	831	32.7	658	1450

Dimensions and weights may vary by rating and options.

Part Number	Product Description
DR6497-RX	ENG QSC T2 M 600@3000 HO R
(derate)	ENG QSC T2 M 550@3000 HO R
(derate)	ENG QSC T2 M 500@2600 ID R

ReCon – QSM11

Engine Specifications

Configuration	Inline 6-cylinder, 4-stroke
Aspiration	Turbocharged, Aftercooled
Displacement	10.8 L (661 in ³)



Engine Ratings

Rating	kW	BHP	MHP	Rated RPM	Max Torque N-m	Max Torque RPM	Emissions
HO	493	NA	670	2300	2373	1700	EPA Tier 2
HO	474	NA	645	2300	2373	1700	
ID/HO	449	NA	610	2300	2135	1700	
MD/HO	336	NA	455	2100	1966	1400	
HD/HO	298	NA	405	2100	1822	1300	
CD/HO	261	NA	355	1800	1695	1200	
CD/HO	220	NA	300	1800	1573	1200	

Engine Dimensions

	Length		Width		Height		Weight (Dry)	
	mm	in	mm	in	mm	in	kg	lb
670, 645, 610	1329	52.3	1104	43.5	1012	39.9	1188	2620
455, 405, 355, 300	1329	52.3	1081	42.5	1081	40.9	1184	2610

Dimensions and weights may vary by rating and options.

Part Number	Product Description
DR6504-RX	ENG QSM11 T2 M 670@2300 HO X
(derate)	ENG QSM11 T2 M 645@2300 HO X
(derate)	ENG QSM11 T2 M 610@2300 ID X
DR6498-RX	ENG QSM11 T2 M 670@2300 HO R
(derate)	ENG QSM11 T2 M 645@2300 HO R
(derate)	ENG QSM11 T2 M 610@2300 ID R
DR6744-RX	ENG QSM11 T2 M 455@2100 MD R KC
(derate)	ENG QSM11 T2 M 405@2100 HD R KC
(derate)	ENG QSM11 T2 M 355@1800 CD R KC
(derate)	ENG QSM11 T2 M 300@2100 CD R KC

ZEUS®



Configuration	Twins, Triples, Quads
Weight	860 lbs (920 lbs w/drop box)

Engine Rating	Configuration	Ratios	WOT knots	
			Good	Ideal
QSB5.9 355 @ 2800	Twins	2.24, 2.06, 2.06 (no drop box), 1.79	25 - 28	29 - 37
QSB5.9 380 @ 3000		2.24, 2.06, 2.06 (no drop box), 1.79	26 - 29	30 - 39
QSB5.9 425 @ 3000		2.24, 2.06, 2.06 (no drop box), 1.79	26 - 29	30 - 39
QSB5.9 440 @ 3400		2.24, 2.06, 2.06 (no drop box), 1.79	28 - 30	31 - 43
QSC 550 @ 3000		1.95, 1.79	29 - 31	32 - 40
QSB5.9 480 @ 3400	Twins Triples Quads	2.24, 2.06, 2.06 (no drop box), 1.79	28 - 30	31 - 43
QSC 600 @ 3000		1.95, 1.79	29 - 32	33 - 40
QSM 670 @ 2300		1.34	33 - 36	37 - 42
QSM 715 @ 2500		1.34	35 - 38	39 - 43

Consult Cummins for vessels close to but below good speed range.

RATING DEFINITIONS

Ratings are based on ISO 8665 conditions of 100kPa (29.612 in Hg) and 25°C (77°F) and 30 percent relative humidity. Propeller shaft power represents the net power available after typical gear losses and is 97 percent of rated power. Power rated in accordance with IMCI procedures. All information in this brochure is subject to change without notice. Cummins Inc. is not responsible for typographical errors or incorrect data.

Continuous (CD)

Intended for use in applications requiring uninterrupted and unlimited service at full power. Typical vessel applications include: ocean-going displacement hulls such as deep-water fishing trawlers, freighters, tugboats, pushboats, bottom drag trawlers and towboats.

Heavy Duty (HD)

Intended for nearly continuous use in variable load applications where full power is limited to eight hours out of every 10 hours of operation. Also, reduced power operation must be at or below cruise rpm, which is 200 rpm below the maximum rated speed. This rating is for applications operating less than 5000 hours per year. Typical vessel applications include: displacement hull vessels such as mid-water fishing trawlers, purse seiners, and towboats where frequent slowing is common and engine speed and load is stable. They may also be used in high speed vessels such as ferries and crewboats. Typical auxiliary applications include: cargo pumps and thrusters in dynamic positioning modes.

Medium Duty (MD)

Intended for moderate use in variable load applications where full power is limited to six hours out of every 12 hours of operation. Also, reduced power operation must be at or below cruise rpm, which is 200 rpm below the maximum rated speed. This rating is for applications operating less than 3000 hours per year. Typical vessel applications include: planning hull ferries, fishing boats designed for high speeds to and from fishing grounds, (non-cargo) displacement hull yachts, and short trip coastal freighters where engine load and speed are cyclical. Typical auxiliary applications include: powerpacks and some cargo pumps.

RATING DEFINITIONS

Intermittent (ID)

Intended for intermittent use in variable load applications where full power is limited to two hours out of every 8 hours of operation. Also, reduced power operation must be at or below cruise rpm. Cruise speed (rpm) is dependent on the engine rated speed.

Rated Speed (rpm)	Cruise Speed (reduction from rated speed, rpm)
Less than 2800 rpm	200 rpm
2801 to 3500 rpm	300 rpm
3501 to 4500 rpm	400 rpm
4501 to 5000 rpm	500 rpm

This rating is for applications operating less than 1500 hours per year. Typical vessel applications include: planning hulls such as customs, military and police vessels, charter fishing, and some non-net dragging fishing vessels. Typical auxiliary applications include: hydraulic powerpacks, thrusters for maneuvering, and emergency fire pumps.

Government Service (GS)

Intended for infrequent use in variable load applications where full power is limited to one hour out of every 8 hours of operation. Also, reduced power operation must be at or below cruise speed (rpm). Cruise speed (rpm) is dependent on the engine rated speed (rpm):

Rated Speed (rpm)	Cruise Speed (reduction from rated speed, rpm)
Less than 2800 rpm	200 rpm
2801 to 3500 rpm	300 rpm
3501 to 4500 rpm	400 rpm
4501 to 5000 rpm	500 rpm

RATING DEFINITIONS

Government Service (GS) cont.

This rating is for applications operating less than 500 hours per year. Engines with this rating are restricted to non-revenue-generating government service propulsion applications. It is not to be used in any revenue-generating commercial applications nor is it to be used in recreational/pleasure applications. Government Service rating misapplications will, at Cummins' discretion, void the warranty. Typical Government Service applications are patrol, rescue, fire, and assault vessels used by federal and state/local agencies such as military, Coast Guard, Homeland Security, research, police departments, fire departments, and department of natural resources.

High Output (HO)

Intended for infrequent use in variable load applications where full power is limited to one hour out of every 8 hours of operation. Also, reduced power operation must be at or below cruise speed (rpm). Cruise speed (rpm) is dependent on the engine rated speed (rpm):

Rated Speed (rpm)	Cruise Speed (reduction from rated speed, rpm)
Less than 2800 rpm	200 rpm
2801 to 3500 rpm	300 rpm
3501 to 4500 rpm	400 rpm
4501 to 5000 rpm	500 rpm

This rating is for applications operating less than 500 hours per year. Engines with this rating are intended for powering recreational/pleasure use vessels only. Uses of High Output ratings in commercial applications will, at Cummins' discretion, void the warranty. Commercial use is defined as any work or employment related use of the product, or any use of the product which generates income, for any part of the warranty period, even if the product is only occasionally used for such purposes. Typical High Output applications are sportfishers, motoryachts, and cruisers.

MARINE EMISSIONS CERTIFICATIONS

IMO

The International Maritime Organization issued Regulation 13 to Annex VI of MARPOL 73/78, which was enforceable from January 1, 2000 for diesel engines above 130 kW (174 hp) installed on a vessel, and IMO Tier II went into effect on January 1, 2011. This regulation exempts diesel engines used exclusively in emergency applications.

EPA

On January 1, 2004, the Environmental Protection Agency mandated Tier 2 emission regulations for new commercial/recreational marine diesel engines installed on vessels flagged or registered in the United States. EPA Tier 3 went into effect in 2012 with a phased implementation over three years based upon displacement per cylinder.

EU Stage IIIA

The Nonroad Mobile Machinery Directive regulates exhaust emissions from various mobile sources in the European Community. As of January 1, 2007, the scope of the Directive extends to those propulsion and auxiliary engines used aboard inland waterway vessels. The Directive contains a phased implementation based upon per cylinder displacement and application of the subject engine.

CCNR

In July 2007, the Central Commission for the Navigation of the Rhine (CCNR) implemented its Stg II emissions regulation for diesel engines. In an amendment to the CCNR regulation, EC type certification according to the directives of the European Union is considered equal to the CCNR's Stg II certification. Therefore, engines certified to the EC Nonroad Mobile Machinery Directive will be accepted without direct certification to the CCNR regulation.

Certain ratings will not be available for sale in some areas due to emissions compliance. Other local certifications may be available. For more information on current emissions regulations in your area, contact your local Cummins representative.

SERVICE AND WARRANTY

Global Support Network

- On-demand support at 1-800-DIESELS.
Make one call for service or information about your engines 24/7.
- cumminsengines.com — Locate the service provider nearest you using the Service Locator.
- Certified mobile marine technicians to travel to vessel site.
- Marine Applications Engineers on staff, available for technical support directly with customer or service provider.
- Professional support from thousands of authorized service locations spanning the globe.
- Captain's Briefings: At no charge to the owner, Cummins Captain's Briefing provides the owner with an overview on operation and maintenance of their Cummins recreational marine engines.

MeRL

Cummins MeRL is a dedicated staff that is available to help Zeus owners with the following:

- General Zeus Information
- Locating Service Provider
- Parts Expediting
- Warranty Support
- Repair Event Management

MeRL is much more than a call center. It's one point of contact for resolution to any unscheduled repair event. MeRL is free to owners of Zeus vessels.

SERVICE AND WARRANTY

Warranty Programs

- **Quantum Warranty:** For recreational applications, the Quantum Engine Series includes an upgraded warranty package with base engine coverage of 24 months or 1,000 hours. The base warranty for select Quantum engines includes extended major components coverage for an additional 48 months or 2,000 hours. Commercial engine warranties provide coverage for 24 months or 1,000 to 9,000 hours, depending on the rating.
- **Encompass Extended Service Coverage:** Cummins offers an optional extended service contract plan that will provide additional repair service for up to four years (available on QSB, QSC, QSL, and QSM engines). Encompass extended coverage is currently not available for the Zeus pods or sterndrives. Please contact your Cummins representative for the latest in Encompass information.

Notes:

Lined paper for writing notes, consisting of 20 horizontal lines.



Cummins Inc.
4500 Leeds Avenue - Suite 301
Charleston, SC 29405-8539
U.S.A.

Bulletin 4087295 Printed in U.S.A. 1/13
©2013 Cummins Inc.