

# QSD2.0 QUANTUM SERIES ENGINE

## Engine Overview

- Quiet, smooth performance and enhanced sociability produced from the proven High-Pressure Common-Rail fuel system
- Impressive acceleration and precise throttle response is another product of the fuel system on this four valve electronic engine
- Enhanced fuel economy delivered by the full-authority electronic engine control
- Maximize vessel performance and access comprehensive vessel diagnostic information via SmartCraft® electronics

## Power Ratings

Rating	HO	HO	HO	HO
Metric hp	115	130	150	170
bhp	115	128	148	168
KW	84	95	110	126
Rated rpm	3000	4000	4000	4000
Max Torque ft-lbs	228	222	227	229
Max Torque N-m	310	301	308	311
rpm @ max torque	2200	2600	2600	3000

115 rating for inboards only.

## Engine Specifications

Configuration	In-line 4-cylinder, 4-stroke diesel
Bore & Stroke	83 mm x 92 mm (3.27 in x 3.62 in)
Displacement	2.0 L (122 in <sup>3</sup> )
Aspiration	Turbocharged / Sea Water Aftercooled
Rotation	Counterclockwise facing flywheel

Ratings and specifications subject to change without notice. Not responsible for typographical errors.

## Features

**Fuel System:** Bosch Common-Rail (CRS 2.0); Integrated WIF sensor in secondary fuel filter

**Lubrication System:** Cast aluminum oil pan

**Electrical System:** 12 Volt system

**Cooling System:** Sea Water Aftercooled; Heat Exchanger only

**Emissions:** EPA Tier 2, IMO, RCD certified, BSO/SAV (select ratings)

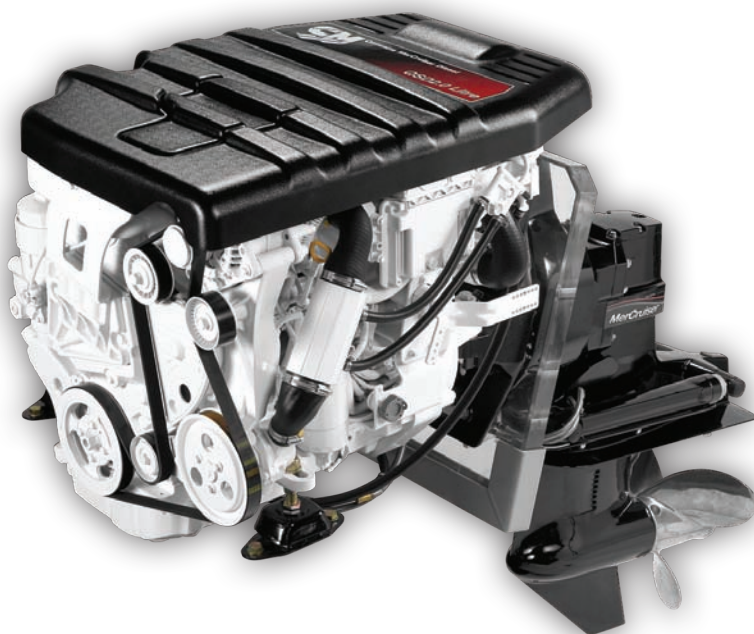
Available for recreational applications only

Tailor a propulsion package based on budget and needs:

QSD2.0 130, 150 & 170 available with Alpha drive (Standard)

QSD2.0 170 available with Bravo 1X, 2X & 3X drives and DTS for improved performance and smooth handling (Premium)

QSD2.0 115, 130, 150 & 170 available for inboard applications with TM345 or TM485 gears (mech/12V electric shift) and optional trolling valve



**Cummins MerCruiser Diesel**

RELIABILITY THROUGH INNOVATION

1-800-DIESELS

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## Fuel Consumption (Prop Curve)

Rating	QSD2.0 - 115 HO				QSD2.0 - 130 HO				QSD2.0 - 150 HO				QSD2.0 - 170 HO			
rpm	3000	2800	2600	2400	4000	3800	3600	3400	4000	3800	3600	3400	4000	3800	3600	3400
KW	84	70	57	46	95	83	72	62	110	96	83	71	125	108	93	80
l/hr	21.8	17.4	14.4	11.6	29.5	23.8	20.1	16.8	34.1	26.6	6.1	5.0	37.4	30.2	25.3	21.1
bhp	113	94	77	62	128	111	96	83	148	129	111	95	168	146	126	108
gal/hr	5.8	4.6	3.8	3.1	7.8	6.3	5.3	4.4	9.0	7.0	6.1	5.0	9.9	8.0	6.7	5.6

Fuel consumption data represents performance along a 2.7 fixed pitch propeller curve. Fuel consumption 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. Consult your local CMD professional for further information.

## Engine Dimensions

Length		Width		Height		Weight (Dry)*	
mm	in	mm	in	mm	in	kg	lb
786.5	30.96	823	32	763	30	250	551

\*Weight is engine with heat exchanger system - average. Overall width and height; length to rear face of flywheel housing.

## Available Accessories

**Engine Controls:** Mechanical and Digital Throttle and Shift options (DTS not available with Alpha Drives)

**Instrumentation:** SmartCraft digital displays and / or analog style gauges provide data on engine speed, oil pressure, coolant temp, battery voltage, vessel speed, and drive trim position.

**Vessel System Integration:** New Vessel Interface Panel (VIP)



## Ratings Definitions

High Output (HO): Intended for infrequent use in variable load applications, where full power is limited to one hour out of every eight 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), Refer to Table 1 below. For applications operating less than 500 hours per year. Engines with this rating are intended for powering recreational/pleasure use vessels only. 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.

Rating Conditions: Declared power ratings are based upon ISO 15550 reference conditions/ air pressure of 100kPa (29.612 in Hg) air temperature of 25° C (77°F) and 30% relative humidity. Propeller Shaft Power represents the net power available after typical reverse/reduction gear losses and is 97% of rated power. Power rated in accordance with IMCI procedures.

Table 1

Rated Speed	Cruise Speed (reduction from rated)
2000 to 2800 rpm	200 rpm
2801 to 3500 rpm	300 rpm
3501 to 4500 rpm	400 rpm

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