

4B/4BT

Cummins MerCruiser Diesel

Worldwide Marine Power Solutions

ENGINE SPECIFICATIONS

Configuration	In-line 4 Cylinder, 4-Stroke Diesel
Bore & Stroke	102 mm x 120 mm (4.02 in x 4.72 in)
Displacement	3.9 L (239 in ³)
Rotation	Counterclockwise facing flywheel

POWER RATINGS

Power Rating	Medium Continuous		Intermittent	
	Naturally Aspirated	Turbocharged	Naturally Aspirated	Turbocharged
Rated RPM	2500	2500	2800	2800
kW (BHP)	57 (76)	97 (130)	60 (80)	112 (150)
Max Torque N-m (ft-lb)	185 (136)	280 (207)	185 (136)	300 (221)
RPM	1200	2200	1200	2200

FEATURES AND BENEFITS

Engine Design

Compact size for ease of installation with easy access for routine maintenance. Four stroke cycle combustion for quiet and fuel efficient operation.

Cooling System

Heat exchanger or keel cooled configurations available for application flexibility.

Fuel System

CAV rotary fuel pump.

Lubrication System

9.5 L (2.5 g) marine grade, cast aluminum oil pan. Spin-on Fleetguard lube oil filters.

Electrical System

12-volt and 24-volt systems available. Marine grade wiring harness and instrument panels.

Manufacturing

ISO certified plants.

U.S. Navy Certified

Tested and certified for the U.S. Navy's 1,000-hour abuse cycle test.

AVAILABLE ACCESSORIES

Air Cleaner: Light or heavy duty.

Auxiliary Pump

Hydraulic Pump Drive: SAE A or B flange.

Walker Air Sep: Closed crankcase ventilation system.

Accessory Drive Pulley: Belt or gear driven.

Marine Classification Society Approvals: Check with your local Cummins professional for an updated listing.

ENGINE DIMENSIONS

		Length		Width		Height		Weight	
		mm	in	mm	in	mm	in	kg	lb
Cool Cooled	NA	790	31	711	28	894	35	381	840
	T	779.9	30.70	703.7	27.7	771.2	30.36	390	860
Heat Exchanger	NA	790	31	711	28	894	35	414	912
	T	779.9	30.70	703.7	27.7	771.2	30.36	423	932

NA - Naturally Aspirated

T - Turbocharged

PERFORMANCE DATA

Rating	Medium Continuous (NA)				Medium Continuous (T)			
rpm	2500	2300	2100	1900	2500	2300	2100	1900
kW	57	44	34	25	97	75	57	43
g/kW-hr	228	231	225	228	214	220	228	236
L/hr	15.5	12.1	9.1	6.8	24.8	19.7	15.6	12.1
bhp	76	59	45	34	130	101	77	57
lb/hp-hr	.378	.380	.373	.371	.350	.360	.373	.383
gal/hr	4.1	3.2	2.4	1.8	6.5	5.2	4.1	3.2

Rating	Intermittent (NA)				Intermittent (T)			
rpm	2800	2600	2400	2200	2800	2600	2400	2200
kW	60	46	37	29	112	90	70	54
g/kW-hr	239	225	222	220	216	219	216	224
L/hr	17.1	12.9	9.6	7.6	28.8	23.5	18.2	14.4
bhp	80	64	50	39	150	120	94	73
lb/hp-hr	.394	.372	.364	.359	.355	.362	.357	.364
gal/hr	4.5	3.4	2.6	2.0	7.6	6.2	4.8	3.8

Above data represents performance along a 3.0 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 (16,300 BTU/lb) when used at 29 °C (85 °F) and weighing 688.9 g/liter (7.001 lb/US gal). Observed horsepower is certified within ± 3% of rated horsepower. 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 IMC procedures.

Medium Continuous Duty

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.

Intermittent Duty

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.



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