

WE INNOVATE AND BUILD EFFICIENT, PREMIUM DIESEL PROPULSION FOR MARINE PROFESSIONALS. WE ARE NEANDER.

The Dtorque 50 offers the power, reliability, convenience, and low costs of a diesel inboard while matching the weight, maneuverability, and serviceability of a petrol outboard. As a result, it has been chosen by numerous companies and organizations around the world, proving its value in diverse and demanding applications. With a focus on minimum downtime and maximum performance, the Dtorque 50 continues to set the standard for reliability and efficiency in the global market, where power and torque play key roles.

So, the pivotal question arises: Is horsepower (hp) or torque more crucial for your needs? The answer lies in your specific application, but for many professionals who must transport equipment and crew throughout long workdays, torque often takes precedence. It serves as the initial factor to consider, followed by a careful examination of propeller speed to ensure you attain the desired top-end velocity. While most gasoline outboard manufacturers keep torque curve data closely guarded, providing limited access to this vital information, we take a different approach. At our innovative UK-based engine manufacturing company, we provide transparent access to torque and power curves for the Dtorque engine on our website, empowering you with the knowledge needed to make informed decisions for your marine endeavors.

TORQUE EQUIVALENT TO 90HP

Dtorque  **111 NM** at 2500 rpm

70 HP Gasoline Outboard  **88 NM** at 5000 rpm

60 HP Gasoline Outboard  **78 NM** at 5000 rpm

40% LESS FUEL CONSUMPTION

6 LPH cruise  **Dtorque**

9,5 LPH cruise  **24 LPH max 70 HP** Gasoline Outboard

9 LPH cruise  **20 LPH max 60 HP** Gasoline Outboard

60% LESS SERVICE INTERVALS

5 stops (50H, 250H, 500H, 750H, 1000H)  **Dtorque**

11 stops (50H, 100H, 200H, 300H, 400H ... until 1000H) with any Gasoline Outboard

= 60% LESS OPERATING COSTS

Dtorque  **TCO** Break Even at 9 month

75 HP Gasoline Outboard

DEPENDABLE, RELIABLE, NEVER DEPLETED

With more than 1.5 Million engine hours in the field, in addition to our own testing, the Dtorque 50 is an engine that will always get you home safely.

LIFE MADE EASIER, CLEANER AND GREENER.

With full compliance with EU RCD Stage II regulations, the Dtorque 50 is a low emissions outboard engine. Besides using on average 40% less fuel than equivalent gasoline outboards, a huge advantage to running a Neander Dtorque 50 is the ability to access low emissions zones.

This makes it an ideal choice for a wide range of applications, including oil & gas, rescue boats, fish farms, SOLAS, cruise ships and explorer cruise ships, in-harbour operations, superyacht tenders, military and governmental vessels, as well as renewable energy projects.





WHAT IF THERE WERE A WAY TO MAKE A DIESEL ENGINE THAT IS SMOOTHER, LIGHTER, OR MORE COMPACT?

We took this challenge and engineered the Dtorque 50 from the ground up. Refined engineering for unrefined environments, the Dtorque has been crafted using innovative technologies to deliver optimum performance, even in the most challenging conditions. This is the diesel engine reimagined — smoother, lighter (than an inboard), and more compact. For diesel people.

SPACEBALL TECHNOLOGY, DESIGNED FOR SMOOTHNESS

Two of the key innovations of the Neander Dtorque 50 are the Dual Crankshaft and revolutionary Spaceball Design. By generating opposing forces, the Dual Crankshaft eliminates almost all vibrations and oscillations that would otherwise arise on the control axis, which would make it difficult to use such a small and powerful two-cylinder diesel engine. The advantages for the user are obvious: reduced noise and vibration, and greatly improved manoeuvrability.



BOSCH COMMON RAIL FUEL SYSTEM

Our Dtorque 50 is equipped with a state-of-the-art Bosch common rail fuel system designed to deliver optimal fuel efficiency and performance. With an impressive injection pressure of 1400 bar, this system precisely pressurizes only the amount of fuel required by the engine at any given moment. This reduces the demand on the crankshaft, allowing for more efficient power delivery, significantly lowering fuel consumption and reducing odour. The result is an engine that not only provides exceptional performance but also operates with enhanced fuel efficiency, making it ideal for demanding marine environments.



TURBO CHARGER

The Dtorque 50 features a water-cooled Borg Warner turbocharger, specifically engineered to maintain low internal cowling temperatures while delivering exceptional performance. With its low inertia design, it ensures rapid throttle response, allowing for smooth acceleration. The turbocharger reaches 1.6 bar gauge pressure at just 2350 r/min, enabling the engine to generate an impressive 111 Nm of torque from its compact 804cc twin-cylinder design. This level of performance is comparable to modern inline 3 or 4-cylinder gasoline engines, making the Dtorque 50 an unmatched performer in its class.



DEEP GEAR RATIO

The Dtorque 50 is equipped with a low gear ratio of 2.07:1, allowing it to run propellers with a higher pitch for enhanced efficiency. By running at a lower propeller speed minimizes friction losses, resulting in a smoother and more economical operation. This deep gear ratio also translates into greater torque at lower RPMs, delivering impressive pulling power and reducing power losses. The result is not only superior performance at low speeds but also improved fuel economy, making the Dtorque 50 an ideal choice for commercial applications.



TECHNICAL SPECIFICATIONS

Power	36,8 kW/50 hp at 3.500 - 4.000 min-1	Fuel	Diesel (Low Sulphur, EN 590, Road Diesel)
Max. Torque	111 Nm at 2250 - 3000 min-1	Injection	Bosch common rail direct injection
Engine Type	Turbocharged parallel twin diesel engine	Alternator	Standard 12 V/300 W
Balance	Dual counter-rotating crankshafts	Controls	Tiller/Remote Control, single and twin, side mount/top mount
Engine Capacity	804 cc	Trim	Power trim
Bore x Stroke	80 x 80 mm	Transmission	Ratio 13/27 (2.07:1)
No. Cylinders	2 In-Line, twin	Available Length	Versions 20" (L) and 25" (XL)
Intake	Water cooled turbo charger and charge air cooling	Weight	185kg (dry)

INSTRUMENTS

NEANDER 5" TACHO – ANALOGUE & DIGITAL



1 PER ENGINE	RPM	ENGINE HOURS	OIL PRESSURE	COOLANT TEMP
% ENGINE LOAD	FUEL RATE (LPH)	AIR TEMP	FUEL TEMP	MANIFOLD AIR PRESSURE

DTORQUE 50 VERSIONS AND ACCESSORIES

Description	Leg length	Single		Twin	
		Tiller	Side Mount Remote Control	Top Mount Remote Control	Top Mount Remote Control
Dtorque 50 *	L			o	o
	XL			o	o
Dtorque 50 HTT/TH HTT - Hydraulic Tilt & Trim, TH - Tiller Handle	L	X			
	XL	X			
Dtorque 50 HTT/HC HTT - Hydraulic Tilt & Trim, HC - Helm Control	L		X		
	XL		X		
Dtorque 50 Solas */**	L			o	o
	XL			o	o
Dtorque 50 Solas HTT/TH ** HTT - Hydraulic Tilt & Trim, TH - Tiller Handle	L	X			
	XL	X			
Dtorque 50 Solas HTT/HC ** HTT - Hydraulic Tilt & Trim, HC - Helm Control	L		X		
	XL		X		
Part Number	Rigging Kits (Optional for Dtorque 50/Dtorque 50 Solas models)				
008617-07	Single Engine Installation Kit W/Top Mount Throttle			1	
008620-07	Twin Engine Installation Kit W/Top Mount Throttle				1
008616-07	Single Engine Installation Kit Tiller	1			
008619-07	Single Engine Installation Kit Side Mount		1		
Part Number	Mandatory 1 Per Outboard With Top Mount Control Head - Select Length depending on Vessel Installation				
503703-00	Control Extension Harness 5M			1	2
503704-00	Control Extension Harness 7M			1	2
503705-00	Control Extension Harness 9M			1	2
503706-00	Control Extension Harness 11M			1	2
Part Number	Optional Extras for All Installations (1 per outboard)				
503700-00	Tachometer Extension Harness 7m		1	1	2
503701-00	Tachometer Extension Harness 9m		1	1	2
503702-00	Tachometer Extension Harness 11m		1	1	2
503147-00	Portable fuel tank, 25 ltr (1)	1	1	1	2
504346-00	Fixed Fuel Tank 40 ltr (2)	1	1	1	2
504347-00	Fixed Fuel Tank 60 ltr (2)	1	1	1	2
008935-00	Kit, Cable Steering	1	1	1	
304020-00	Kit, Seal Trim Axis	1	1	1	
204497-00	Hose, Reel Fuel, 100m	1	1	1	1
503943-00	Hose, Fuel Tank to Engine, 5m	1	1	1	2
008622-00	Fuel Hose ID=7,9; OD=15,5; L=1m				
303976-00	Propeller Guard with Drill Template (Standard with Solas model (3))	1	1	1	2
008825-00	Propeller, Aluminium 3x13.5x15	1	1	1	2
008824-00	Propeller, Aluminium 3x13.25x17	1	1	1	2

ITEMS NOT SUPPLIED BY NEANDER FOR INSTALLATION

- » Outboard(s) and House Batteries
- » Battery Switches
- » Bowden Cables
- » Steering System (non tiller kits)
- » Rigging Tube
- » Charging Diode



(1) Portable Fuel Tank 25l (2) Fixed fuel tank 40 or 60 l



(3) Propeller Guard (4) Aluminium Propeller

* Engine without installation kit

** Solas approved model subject to individual application

x = mandatory

o = optional

NEANDER 2" FUEL GAUGE – ANALOGUE



1 PER TANK	COMPATIBLE WITH F3-180
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NEANDER ADVANCE 3.5" MULTIFUNCTION GAUGE

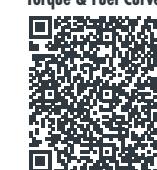
0 00 SINGLE & DUAL ENGINE	Day & Night	DIGITAL & ANALOGUE RPM	MAINTENANCE WARNING	ENGINE HOURS	OIL PRESSURE
COOLANT TEMP	THROTTLE POSITION	% ENGINE LOAD	FUEL RATE (LPH)	AIR TEMP	FUEL TEMP
MANIFOLD AIR PRESSURE	FUEL TANK LEVEL UP TO 2 TANKS	NMEA 2000	MIL ENGINE ERROR CODES	ADVANCE ENGINE LIVE DATA (DIAGNOSIS)	



DTorque 50

TORQUE & FUEL CURVE, TECH SPECS & DRAWINGS

Torque & Fuel Curve



Technical Specifications



Technical Drawings



Disclaimer: Neander Marine SE / NM Network Services Ltd. reserves the right to change specifications, colours and other characteristics without notice. Please consult a official Neander Distributor for detailed information. All torque, fuel consumption, maintenance schedule, and operational cost figures presented in this catalogue are based on tests and data published by gasoline outboard manufacturers on their respective websites or public manuals. These figures are provided for comparison purposes only. Actual performance and costs may vary depending on specific operational conditions, maintenance practices, and other factors. Please refer to manufacturer documentation for further details.



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