

Product Specifications SE 170/250 TC



With counter rotating four-bladed propellers, mechanically built like its larger brothers, the reliable and powerful SE 170/210 TC thruster has become the market leader in its size range.

With the SE170/250TC you get all the important and unique **Side-Power** features and qualities - **why settle for less.**

Easy and safe to install:

- Easy access terminals for easy, fast and safe fitting of main battery cables (as opposed to having to fit directly onto "crowded" solenoid studs), own by over-heat sensor in motor.
- Plug and go control wiring.
- Fast, easy and safe fitting of propeller with locknut as opposed to difficult and unreliable setscrew fastening.
- Self aligning drilling template available for OEM customers.

Description:

Typical boat size	50 - 70 foot / 15 - 22m
Tunnel inside diameter	250 mm/9,8" (see back for more measurements)
Propulsion system	Twin Counter rotating
Available for DCsystem	24V (12V kit available)
Weight	44kg/97lbs.

Gearleg:

- Seawater resistant bronze, CNC machined in one process to ensure 100% correct tolerances, angles and measurements. Galvanically insulated from motor and motorbracket.
- Sealed gearleg with long-life "mechanical" seal where polished ceramic and carbon surfaces form the only moving sealing surfaces, ensuring protection against damaging water intrusion into gear leg.
- Lifetime lubricated with special gear-oil.
- Hardened and ground precision spiro-conical gears.
- Propeller shaft with double ball bearings fitted in correct tolerances.
- Driveshaft with ball bearing and special sleeve bearing in correct tolerances.
- Connection between motor and driveshaft by flexible coupler
- 5 bladed composite "Q-prop" propellers, skew design.
- Zinc anode protection outside propellers, easy to access and change.
- Gearleg galvanically insulated from bracket/motor

Performance and specifications*:

	At 21V	At 24V
Thrust	170kg/374lbs.	< 210kg/462lbs.
Output power	8kW/10,7 Hp	<8,8kW/11,8Hp
Average current draw	nom. 500A	<550A
Continuous run time (20°C)	3 min.	> 2,5 min.
Approx. long term run time	10% of time	7% of time
Min. battery CCA rating 24V	550 CCA DIN/1045 CCA SAE	
Sidepower fuse size:	ANL400	

Safety features on thruster (see separate sheet for control panels):

- Forced shut-down by overheat sensor in motor
- All internal leads with extra insulation of webbed silicon increase resistance to heat and mechanical wear. Connectors have positive locking so that you have to pull by the insulator to release, can not be pulled off by the wires or loosen by themselves. Self extinguishing solenoid cover.
- IPC Standard electronic control box for protection against:
 - direct drive direction change
 - unique, patented protection of solenoid from extra wear and damages in low voltage situations for example caused by drained or damaged batteries as well as "auto-stop" without the need for the skipper to shut down the main switch immediately to stop the thruster in case of a solenoid lock-in**
 - auto-stop if control signal is continuous for more than 3 minutes to protect against potential short circuit in control cables.

Notes !

* Actual thrust performances and current consumption will vary for each installation depending on many factors. Specifications here given at one tunnel diameter depth and with voltage at thruster as shown. If you install deeper the thrust will be more as well as the current consumption, and the running time will be reduced. Electromotors power and efficiency tolerances are +/- 6%.

** Patented safety features in the thruster controlbox.



Confidence by Control

SIDE-POWER.com

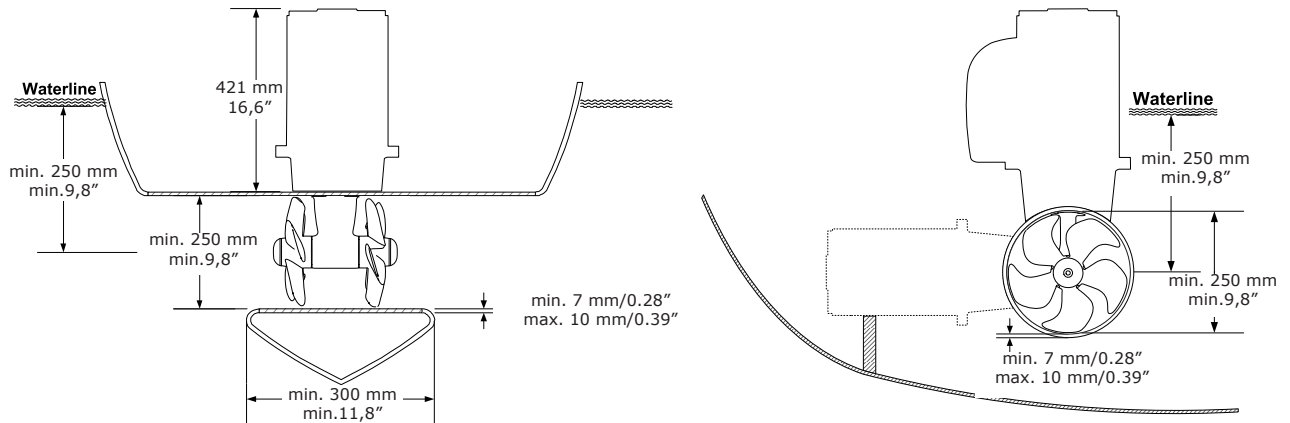
PRODUCT SPECIFICATIONS

SE 170/250 TC



Product Specifications SE 170/250 TC

Installation planning



Battery & cable recommendations:

Table for selection of main cable, battery, fuse and main-switch sizes.				up to 7m total + and -		7 - 14m total + and -		14 - 21m total + and -		21 - 28m total + and -		28 - 35m total + and -		over 35m total + and -	
		Voltage	Amp. Draw	Min. Cable size	Min. Battery cold crank	Min. Cable size	Min. Battery cold crank	Min. Cable size	Min. Battery cold crank	Min. Cable size	Min. Battery cold crank	Min. Cable size	Min. Battery cold crank	Min. Cable size	Min. Battery cold crank
SE170/250TC	Direct to battery bank	24 V	480A to 540A	50 mm ² O	500 CCA DIN 950 CCA SAE	70 mm ² OO+	500 CCA DIN 950 CCA SAE	70 mm ² OO+	560 CCA DIN 1045 CCA SAE	90 mm ² OOO+	600 CCA DIN 1140 CCA SAE	100 mm ² OOOO	600 CCA DIN 1140 CCA SAE	120 mm ² OOOO+	600 CCA DIN 1140 CCA SAE
	Bow battery min. 250A 24V crank capacity*	24 V		N / A		N / A		N / A		50 mm ² O	250 CCA DIN 475 CCA SAE	70 mm ² OO+	300 CCA DIN 570 CCA SAE	70 mm ² OO+	300 CCA DIN 570 CCA SAE



SAILTEC GmbH - Hasselbinnen 28 - D-22869 Schenefeld
 Tel. +49-(0)40-8229940 - Fax +49-(0)40-8304279
 Email info@sailtec.de - Internet www.sailtec.de