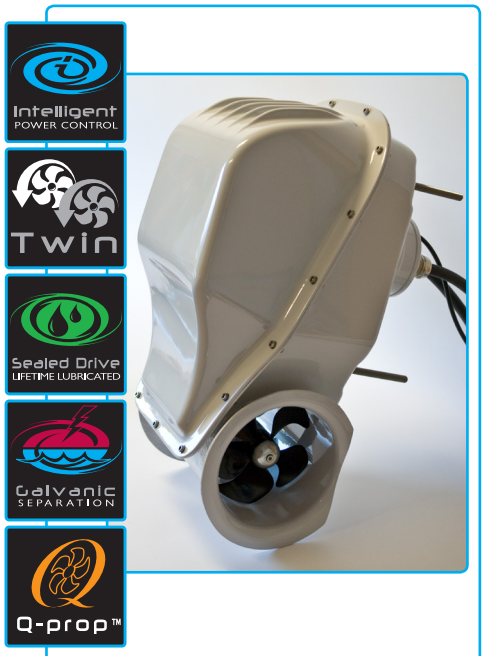
Product Specifications SX 80/185 T



*The **SX80/185T** is the perfect choice for boats where the inside configuration of the boats stern makes a standard thruster installation impractical. When fitted with the optional cowls, the sternthuster assembly is perfect for boats with twin stern drives. The special cowls enables good performance by diverting the waterflow past the stern drive legs which normally blocks the waterflow and the thrust.*

*The **SX80/185T** includes all the important and unique **Side-Power** features and qualities - **why settle for less**.*

Easy and safe to install:

- *Pre-assembled thruster unit in a rugged GRP casing for external installation.*
- *Waterproof and ignition protected, can be installed in gasoline powered boats.*
- *Requires only small holes in the boat's transom for power/control cables and mounting.*
- *Serviceable when boat is lifted (refitted with new O-ring seal).*

Description:

Typical boat size	35 - 48 foot
Propulsion system	Twin
Available for DCsystem	12V or 24V
Weight	30kg/66lbs.

Casing:
- Strong exterior casing in GRP
- Lid sealed with replaceable O-ring
- Waterproof and Ignition Protected
- Supplied with 1 meter/3.28 feet main power cables w/ termination blocks and control cables w/ control connectors for easy installation

Gearleg:
- Seawater resistant bronze, CNC machined in one process to ensure 100% correct tolerances, angles and measurements.
- 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" propeller, skewback design.
- Zinc anode protection directly on gearleg, easy to access and change.
- Gearleg galvanically insulated from bracket/motor

Performance and specifications at one tunnel diameter depth* :

	At 10,5V/21V	**At 12,0V/24V**
Thrust**	80kg/176lbs.	< 96kg/212lbs.
Output power	4,4kW/6 Hp	< 5,6kW/7,6Hp
Average current draw	530A/260A	< 600A/320A
Continous run time (20^{0}C)	3 min.	> 2,5 min.
Approx. long term run time	10% of time	6% of time
Min. battery CCA rating 12V/24V	550/300 CCA DIN - 1045/570 CCA SAE	
Sidepower fuse size:		ANL400/ANL250

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 connectors to release. You cannot pull off by the wires and they will not loosen by themselves.
- 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 continous for more than 3 minutes to protect against potential short circuit in control cables.

Notes !

* Actual performances, current consumption etc. will vary for each installation depending on many factors. Spesifications 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%.

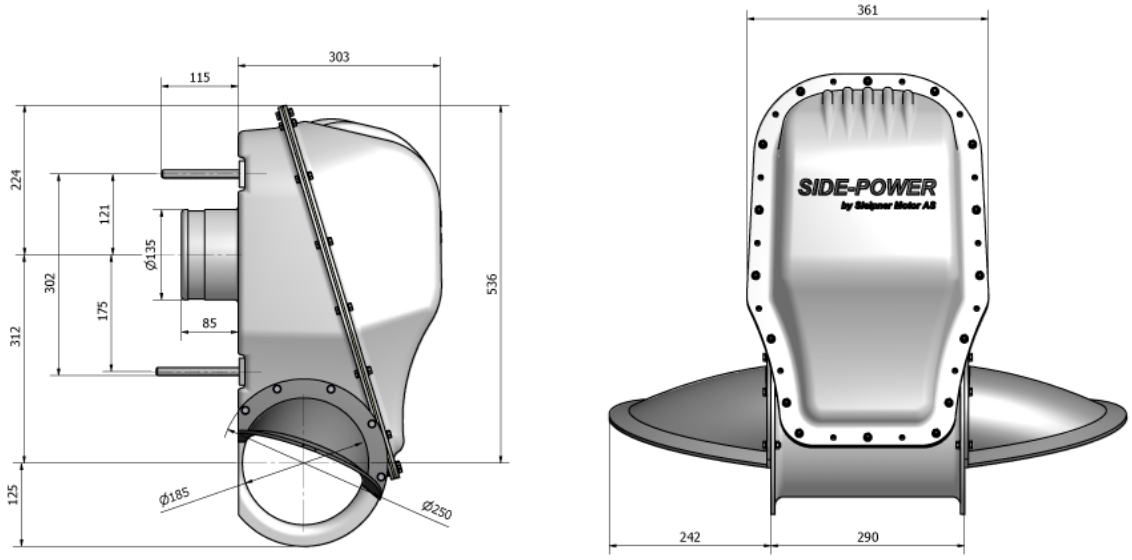
** Thrust will be reduced with 15-30% when the optional cowls are fitted

*** Patented safety features in the thruster controlbox.

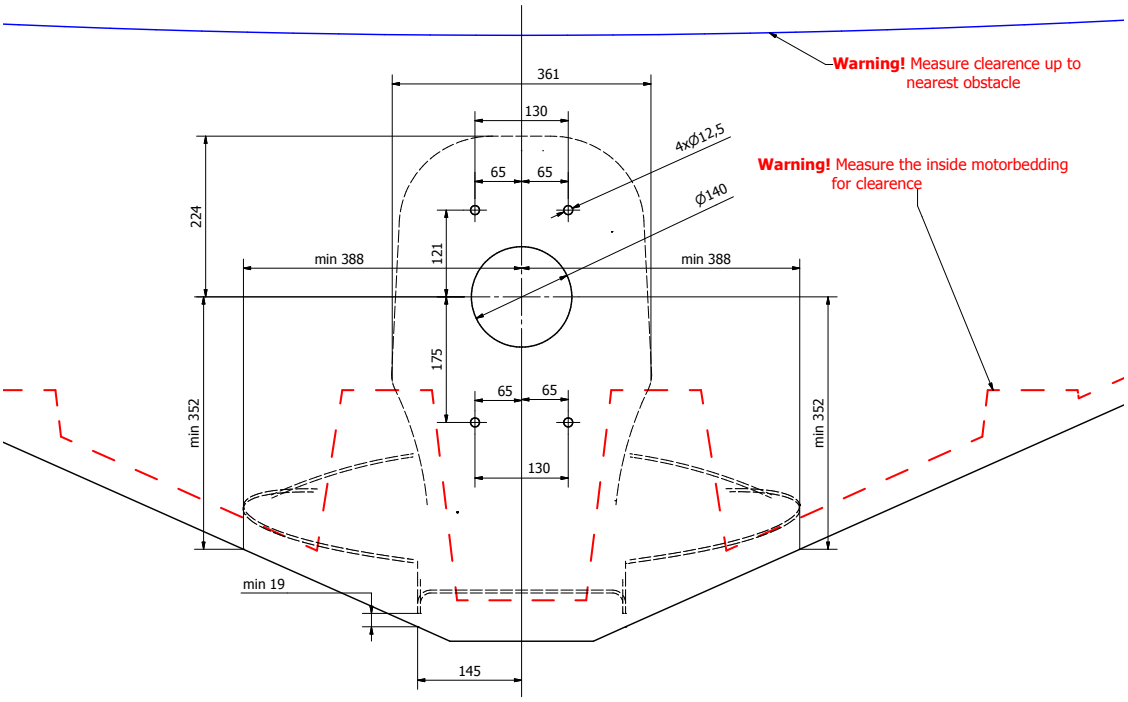
PPRODUCT SPECIFICATIONS
SX 80/185 T

SIDE-POWER
Thruster systems

Dimensions



Installation planning



Battery & cable recommendations:

Model	Voltage	Nominal current draw	Min. battery CCA		>7m total + & -		7-14m total + & -		15-21m total + & -		22-28m total + & -		28-35m total + & -		36-45m total + & -	
					Min.	Rec.	Min.	Rec.	Min.	Rec.	Min.	Rec.	Min.	Rec.	Min.	Rec.
SX80/185T	12 V	530 A	DIN: 550 SAE:1045	mm^2 AWG	60 2/0	70 2/0	95 3/0	2x 70 2x 2/0	2x 70 2x 2/0	2x 95 2x 2/0	2x 95 2x 3/0	*270**	2x 120 2x 4/0	*340**	NA	NA
	24 V	260 A	DIN: 300 SAE: 570	mm^2 AWG	25 1	35 1	35 1	50 1/0	60 2/0	70 2/0	70 2/0	95 3/0	95 3/0	120 4/0	120 4/0	2x 95 2x 3/0

Minimum and recommended cable dimensions can be identical due to safety margins and cable heat considerations for short cable lenghts.

* Minimum or recommended cable cross section in mm^2

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