

SIDE-POWER

Thruster systems



Product Specifications SP40 S2i IP



Description

Typical boat size:	25 - 32 foot
Tunnel inside diameter:	125 mm / 4.92"
Propulsion system:	Single 4bl composite
Available for DC system:	12V
Weight:	11kg /24.3 lbs.

Ignition Protected Features:

- Certified and individually tested to ISO 8846 Ignition Protected standards
- Water Proof (not for fully submerged mounting due to corrosion of metal parts)
- Stainless cable seals
- Secondary overheat switch secures general temperature in housing
- Rugged plastic housing in VO self extinguishing material
- Supplied with 100 cm/39.4 in main power cables and bulkhead mount terminals for easy and safe hook up of power supply
- Supplied with 10 m/32.8 ft control cable with connector for connection outside or ignition protection area

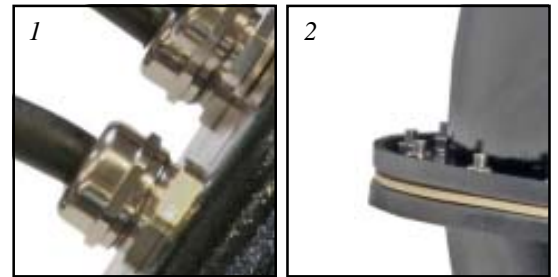
Thrusters are not only helpful for large yachts, typically a light weight boat with a single out-board or stern-drive are even more difficult and stressful to handle in tight spots than larger yachts that are less effected by the wind. With its outstanding performance, excellent energy efficiency and very compact installation size, the **SP40 S2i IP** includes all the important and unique **Side-Power** features and qualities - **why settle for less.**

Easy and safe to install:

- Pre-fitted main power cables and termination terminals to fasten on a bulkhead nearby is included. Provides safe and easy power connection.
- Plug and go control wiring.
- Fast, easy and safe fitting of propeller with lock-nut as opposed to difficult and unreliable set-screw fastening.
- Self aligning drilling template available for OEM customers.

1. Robust stainless cable seals ensures troublefree electrical connections

2. Ignition protected housing still retains serviceability for internal components



Gearleg:

- Seawater resistant bronze, CNC machined in one process to ensure 100% correct tolerances, angles and measurements.
- Sealed gear leg 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 shear-pin, changable from inside the boat.
- Symmetrical 4 bladed composite kaplan propeller.
- Zinc anode protection directly on gearleg, easy to access and change.

Performance and specifications at one tunnel diameter depth * :

	at 10,5V	at 12,0V
Thrust	40 kg / 88 lbs.	47 kg / 99 lbs.
Output power	2,2 kW / 3 Hp	2,6 kW / 3,5 Hp
Average current draw	310 A	390 A
Continous run time (20°C)	3 min.	2 min 40 sec
Approx. long term run time	12% of time	10% of time
Min. battery CCA rating	300 by DIN / 525 by BCI/SAE	
Sidepower fuse size:	ANL250	

Notes !

* Actual performances, current consumption etc. 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%.





Product Specifications SP40 S2i IP

Measurements ref. mm / inch	SP40 S2i IP
A	200mm / 7.87"
B	190mm / 7.48"
C	135mm / 5.31"
D	197mm / 7.76"
E	ø217mm / 8.54"
F	ø160mm / 6.30"
G	6x ø6.5mm / 0,26"
H	ø98mm / 3.86"
Inside tunnel dia.	125mm / 4.92"
Max. stern thickness	14mm / 0.55"
Motor output	2.2 KW / 3 HP
Voltage	12 Volt

W.L.
B
C
D
60°
E
F
G
H
Cut in stern: F
Outside of flange: E
Bolt holes dia: G
Bolt position radius: H

Table for selection of main cable, battery, fuse and main-switch sizes.			up to 7m total + & -		8 - 11m total + & -		12 - 15m total + & -		16 - 19m total + & -		20 - 23m total + & -		24 - 27m total + & -	
Model	Voltage	Current draw	Min. Cable dimension	Min. Battery CCA by DIN	Min. Cable dimension	Min. Battery CCA by Din	Min. Cable dimension	Min. Battery CCA by DIN	Min. Cable dimension	Min. Battery CCA by Din	Min. Cable dimension	Min. Battery CCA by DIN	Min. Cable dimension	Min. Battery CCA by Din
SP40S2i IP	12 V	280 A DIN	35 mm ²	300 CCA DIN	50 mm ²	300 CCA DIN	70 mm ²	300 CCA DIN	95 mm ²	300 CCA DIN	95 mm ²	300 CCA DIN	95 mm ²	350 CCA DIN
			AWG 2	570 CCA SAE	AWG 1	570 CCA SAE	AWG 00	570 CCA SAE	AWG 000	570 CCA SAE	AWG 0000	570 CCA SAE	AWG 0000	665 CCA SAE

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 !

* New patented safety features in the thruster controlbox available from 2005 model year units.

This document may contain typographical errors, to which Sleipner Motor assumes no responsibility.



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