Fin stabilizers

The stabilization actuators range by SPARK is engineered to be installed on vessel up to 150 feet of LOA.

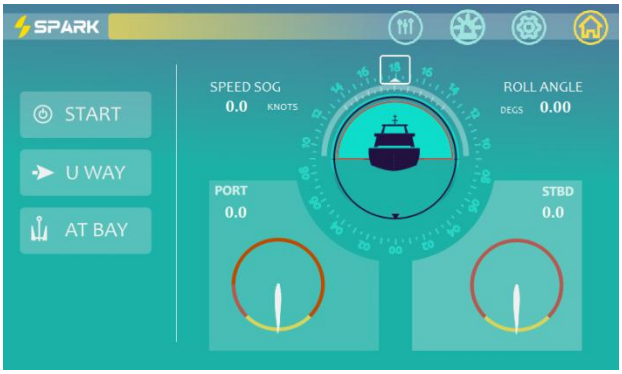
Model	Vessel size (LoA)	
SK10	from 70 ft	to 95 ft
SK14	from 90 ft	to 120 ft
SK18	from 120 ft	

*The assessment of the suitable size is made by our Technical Department. A dynamic simulation based on the geometry and inertia of the vessel is carried out.

Electrical The SK fin systems are powered with 230VAC 1ph/3ph or 400VAC 3ph sources. Neither hydraulic piping installation, nor time demanding power packs installations are required. No large battery packs are necessary near the drive.

Simplified installation Components and electrical cables are easy to be installed on board. The actuators are suitable for the installation on GRP, wood and metal hulls, though the installation of bushings.

Cooling The drives and motors are naturally cooled through convection and conduction, no forced cooling system is required.



Control system

U-way: Mode of operation for the decrease of the roll during navigation, adaptive based on the speed of the vessel and the sea condition.

At bay: Mode of operation for the decrease of the roll during harboring, adaptive to the sea condition.

Efficient mode: Optimizes the power consumption of the system.

Harbour mode: Reduces the overall fins swing to avoid shafting and collisions with other nearby vessels or ropes.

Adm. office:
via Giosuè Carducci, 8
50053, Empoli (FI)
Italy

Operative office:
via della Canapiglia, 7
56019, Vecchiano (PI)
Italy

P.iva/CF 07109580485
email: spark@spark07.com
www.spark-industry.it

Emergency stop: In case of power failure the safety braking system allows to lock the fins. The vessel can be maneuvered avoiding risks of damages to the system. During the hauling, fins are locked in zero position.

Manual maneuvering By simply removing the electrical motor it is possible to manually operate the fins during the installation or in case of power failure.

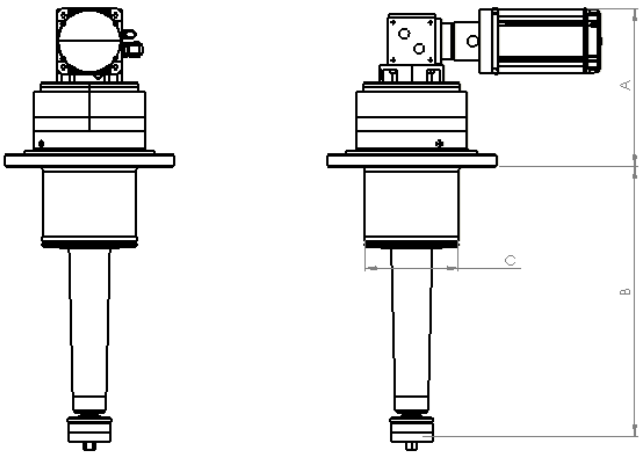
Integration, superior control level Thanks to the collaboration with World Yacht, each SPARK system flawlessly communicates with both hydraulic and electrical rudder systems on board achieving an advanced control structure increasing the vessel performance both during the steering and during the navigation with autopilot.

Connectivity The stabilization system allows the management via smartphone, thanks to a user friendly, intuitive application which duplicates the functions already present on the on-board 7'' touch-screen.

IoT Connecting the system to the internet, it can be managed remotely with Smart Object implementing the functionalities of the IoT. The connection has maintenance, assistance and data collection purposes in order to improve the roll control.

Technical data

Model	SK10	SK14	SK18
Height inside the hull (A)	360 mm	390 mm	460 mm
LOA (B)	540 mm	612 mm	790 mm
Installation hole diameter (C)	180 mm	240 mm	274 mm
Weight	110 kg	230 kg	350 kg
Power	3.5 kW – 5 kW	5 kW – 7 kW	7 kW – 11 kW



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