

## DESCRIPTION

The following guidance is offered to help size and design seawater cooling systems for each of the Seakeeper products. Final pump selection and system design are the responsibility of the installer.

## SEAWATER REQUIREMENTS PER MODEL

Model	Flow Rate Range (GPM/LPM)	Cooling Water Schematic Drawing #	Power Supply
SEAKEEPER 1	2 – 4 / 7.6 – 15.1	90512	12 VDC, 15A
SEAKEEPER 2	2 – 6 / 7.6 - 22.7	90490	12 VDC, 3A
SEAKEEPER 3	2 – 6 / 7.6 - 22.7	90376	12 VDC, 3A
SEAKEEPER 5 (EARLY MODEL)	4 – 8 / 15.1 – 30.3	90295	110/220 VAC, 5A
SEAKEEPER 5/6	4 – 8 / 15.1 – 30.3	90397	110/220 VAC, 5A
SEAKEEPER 9	4 – 8 / 15.1 – 30.3	90251	220 VAC, 5A
SEAKEEPER 16 (EARLY MODEL)	4 – 8 / 15.1 – 30.3	90305	220 VAC, 5A
SEAKEEPER 16/18	4 – 8 / 15.1 – 30.3	90540	24V, 10A (20 Max)
SEAKEEPER 26	4 – 8 / 15.1 – 30.3	90320	220 VAC, 5A
SEAKEEPER 35	10 – 14 / 37.9 - 53	90290	220 VAC, 5A

Note: Pumps requiring other voltages or higher current can still be controlled by using this supply from motor drive to trigger an installer-supplied contactor, but a separate source of power must be provided. Refer to installation manual for additional details.

## SYSTEM DESIGN NOTES

- For multiple Seakeeper installations, Seakeeper recommends that one dedicated seawater pump be installed per Seakeeper, so a pump failure does not render multiple Seakeepers inoperative. Each pump should be powered via the provided connections on the Seakeeper’s motor drive box.
- Seawater pumps should be sized to account for friction losses throughout the plumbing. If an oversized pump is used, and flow is found to exceed the maximum a flow-restrictor valve can be installed to regulate the flow. It is the responsibility of the installer to verify the flow rate through the system (at rest and at speed) via a flow meter, or, if no other method of confirming flow is available, the discharge line may be temporarily diverted to a bucket. Flow is then calculated from time to fill a known volume.

- It is recommended that seawater travel in a continual upward direction from intake to outlet as much as practical to avoid air traps in the system.
- A complete list of plumbing recommendations for each Seakeeper model can be found in the Cooling Water Schematic (drawing numbers listed above).

## PUMP RECOMMENDATIONS

The following list shows pumps that we have seen used with success in existing installations. This list is not meant to be complete and may be used only as a guide in the selection process.

### 12 VOLT DC PUMPS

Pump Manufacturer	Pump Model	Max Flow	Power Requirement
Jabsco Par-Max	31395-0092	2.9 GPM	12 VDC, 10A*
Seaflo 51-Series <sup>†</sup>	SFDP2-055-060-51	2.5 GPM	12 VDC, 15A*
Jabsco Washdown Pump	82405-0092	4 GPM	12 VDC, 13A*
Pentair Shurflo Pro Blaster II	4248-153-A09	4 GPM	12 VDC, 10A*
Rule 500 GPH Baitwell Pump	401 C	8 GPM	12 VDC, 2.5A
Pro Blaster II Deluxe 4.0(A)	4248-153-E09	4 GPM	12 VDC, 10A*
Primetime	PT-12VDC-W	21 GPM	12 VDC, 15A*

\*For the Seakeeper 2 and Seakeeper 3, seawater pumps rated for more than 3 amps will need to be wired with a separate 1-pole relay and harness assembly. Seakeeper offers the assembly of the switching harness and power relay for purchase (P/N 20458).

<sup>†</sup>Seaflo 12V Diaphragm Pump can be purchased through Seakeeper (P/N: 30331)

**24 VOLT DC PUMPS**

Pump Manufacturer	Pump Model	Max Flow	Power Requirement
Jabsco 24V Pump *	82601-7004	6 GPM	24 VDC, 9A
Primetime	PT-24VDC-W	21 GPM	24 VDC, 10A
Pentair Shurflo Pro Blaster II Washdown	4258-163-A09	5 GPM	24 VDC, 7A

\*Jabsco 24V Pump can be purchased through Seakeeper (P/N: 30322)

**110 VOLT AC PUMPS**

Pump Manufacturer	Pump Model	Max Flow	Power Requirement
PrimeTime	PT-115VT-60-W	21 GPM	115 VAC, 0.250 KW
March	AC-5C-MD	17 GPM	110/220 VAC, 0.093KW

**220 VOLT AC PUMPS**

Pump Manufacturer	Pump Model	Max Flow	Power Requirement
PrimeTime	PT-230VT-50/60-W	21 GPM	230 VAC, 0.250 KW
March	AC-5C-MD	17 GPM	110/220 VAC, 0.093KW

REVISION	DESCRIPTION OF CHANGES	DATE	APPROVED
3	Update Format, Include 24 V Pumps	21APR2020	JFK
4	Include Seakeeper 1 Details and 2 - 4 GPM 12 V Pumps	16JUN2020	JFK