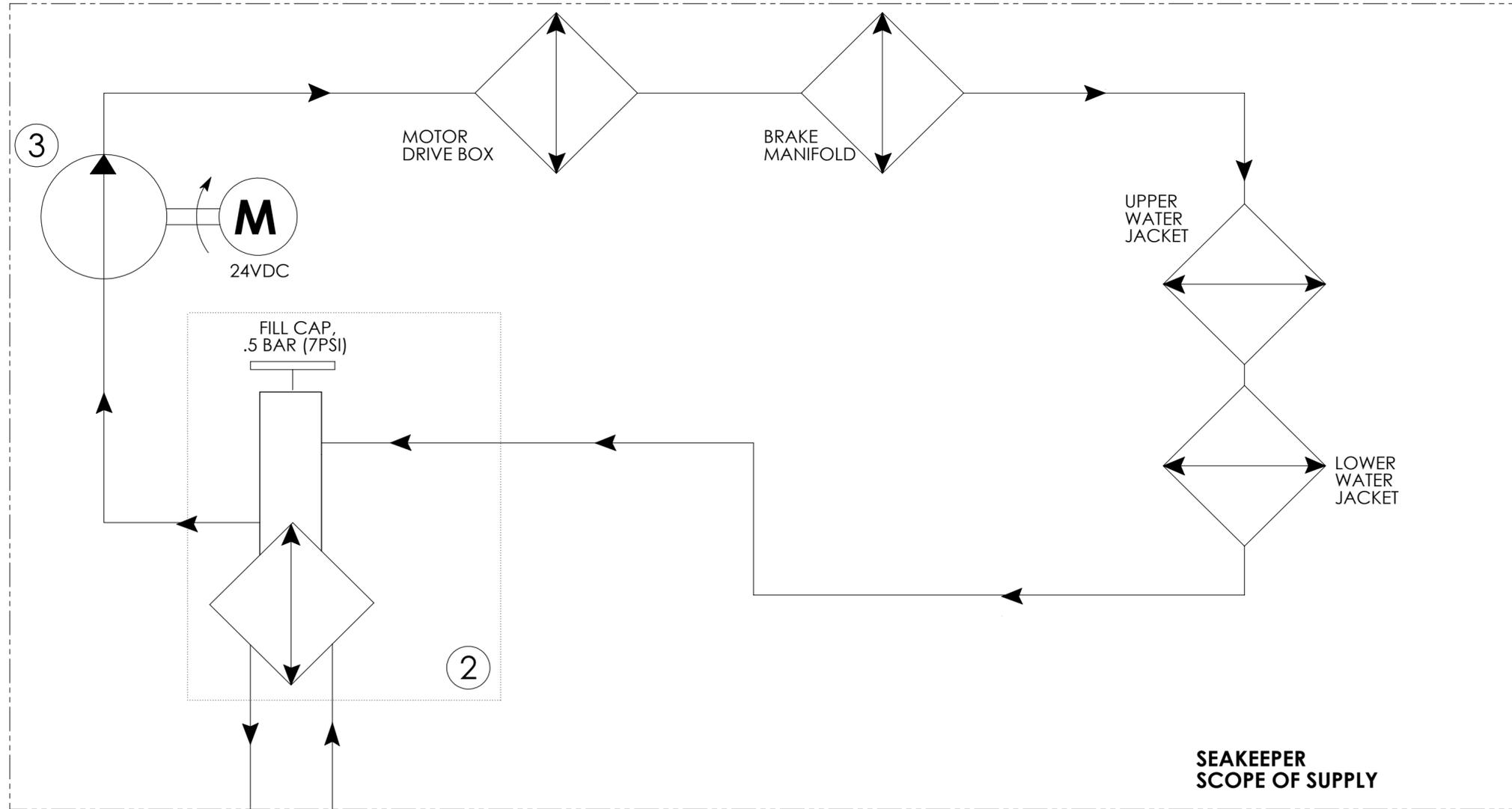


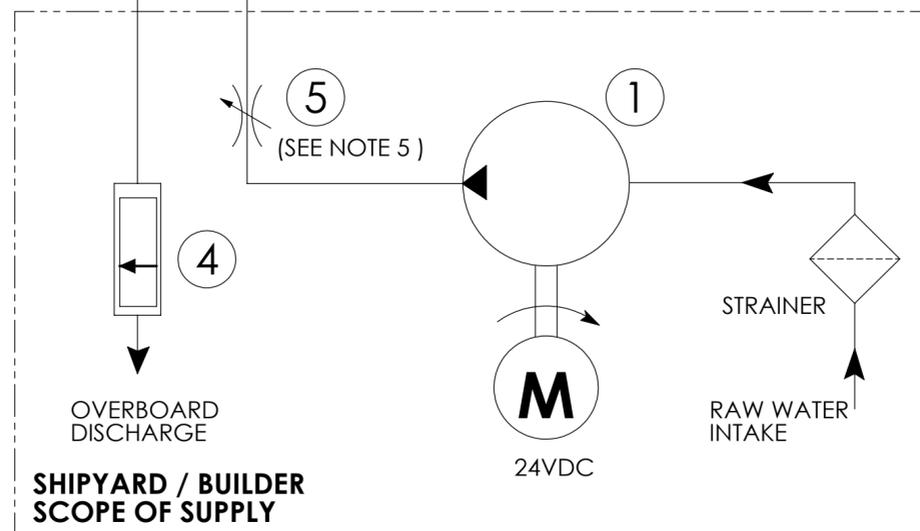
NOTES:

- 1) THE COOLANT CIRCUIT WILL BE FILLED WITH A 50% ETHYLENE GLYCOL / 50% DISTILLED WATER MIXTURE.
- 2) SEAWATER FLOW REQUIREMENT THROUGH HEAT EXCHANGER IS 4 GPM (15.1 LPM) MINIMUM AND 8 GPM (30.3 LPM) MAXIMUM UNDER ALL OPERATING CONDITIONS OF THE BOAT. MAXIMUM SEAWATER PRESSURE TO BE 20 PSI (1.4 BAR). WHEN SIZING SEAWATER PUMP, INSTALLER SHOULD FACTOR IN LOSSES FOR RAW WATER PLUMBING. IN ADDITION TO INITIAL OPERATION AT DOCK, NEW SEAKEEPER INSTALLATIONS SHOULD BE CHECKED FOR MINIMUM 4 GPM (15.1 LPM) FLOW WHILE VESSEL IS AT SPEED AND WHEN BACKING DOWN. SEE SEAKEEPER DRAWING #30322, FOR RECOMMENDED DC SEAWATER PUMP.
- 3) CONNECTIONS FOR SEAWATER INLET /OUTLET ARE 3/4 INCH (19 mm) DIAMETER HOSE BARBS.
- 4) IF USING POWER FROM SEAKEEPER TO OPERATE SEAWATER PUMP, PUMP SHOULD BE 220VAC AND DRAW 5 AMPS MAX .
- 5) IF SEAWATER FLOW RATE FROM DEDICATED PUMP OR CENTRAL SYSTEM IS HIGHER THAN MAXIMUM RECOMMENDED VALUE, AN APPROPRIATE RESTRICTOR VALVE SHOULD BE INSTALLED BETWEEN THE PUMP AND THE HEAT EXCHANGER TO DECREASE THE FLOW RATE.

REV.	ECN NO.	ZONE	DESCRIPTION	DATE	APPROVED
1	0757		INITIAL RELEASE	11/18/2019	WMG



**SEAKEEPER
SCOPE OF SUPPLY**



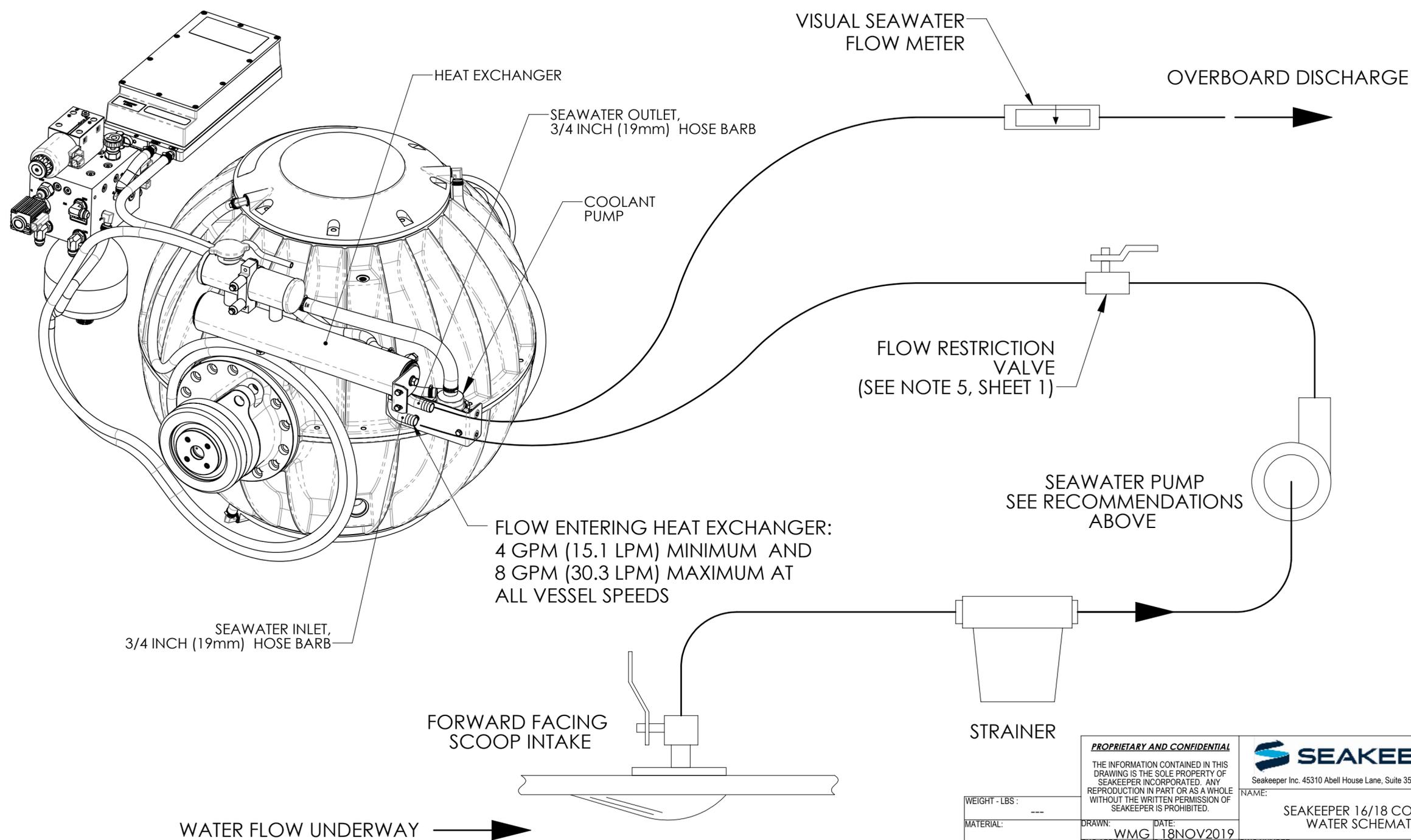
**SHIPYARD / BUILDER
SCOPE OF SUPPLY**

5	-	FLOW RESTRICTION VALVE	BUILDER
4	-	SEA WATER FLOW METER	BUILDER
3	40435	COOLANT CIRCULATION PUMP	SEAKEEPER
2	40670	HEAT EXCHANGER WITH NO THERMOSTAT	SEAKEEPER
1	-	SEA WATER PUMP, SEE NOTE 2	BUILDER
ITEM	SEAKEEPER PART NO.	DESCRIPTION	SUPPLIER

<p>PROPRIETARY AND CONFIDENTIAL</p> <p>THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF SEAKEEPER INCORPORATED. ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF SEAKEEPER IS PROHIBITED.</p>		<p>Seakeeper Inc. 45310 Abell House Lane, Suite 350 California, MD 20619</p>	
<p>WEIGHT - LBS : ---</p>		<p>NAME: SEAKEEPER 16/18 COOLING WATER SCHEMATICS</p>	
<p>MATERIAL: ---</p>		<p>DRAWN: WMG DATE: 18 NOV 2019</p> <p>ENG APPR: WHK DATE: 19 NOV 2019</p> <p>PROD APPR: --- DATE: ---</p>	
		<p>DWG NUMBER: 90540</p>	
		<p>REV. NO. SHEET NO.: 1 1 OF 2</p>	

GENERAL RECOMMENDATIONS FOR SEAKEEPER COOLING CIRCUIT:

- SEAKEEPER RECOMMENDS A CONTINUOUS DUTY CENTRIFUGAL STYLE PUMP FOR THIS APPLICATION.
- A SELF PRIMING PUMP IS NOT A REQUIREMENT IF THE LOCATION OF THE INSTALLED PUMP IS BELOW THE VESSEL WATERLINE.
- SEA WATER PUMP SHOULD BE APPROPRIATELY SIZED TO ACCOUNT FOR PLUMBING LOSSES BETWEEN PICK-UP AND OVERBOARD DISCHARGE.
- THE PUMP MUST NOT BE AT A LOCAL HIGH POINT THAT CAN TRAP AIR AND PREVENT PROPER OPERATION.
- THE DISCHARGE HOSE OF THE PUMP SHOULD BE ROUTED CONTINUOUSLY UPHILL AS MUCH AS PRACTICAL TO ALLOW PUMP TO MAINTAIN PRIME SHOULD A SMALL AMOUNT OF AIR ENTER THE PLUMBING.
- SEA WATER PUMP SHOULD BE RATED FOR SAME MAXIMUM AMBIENT AIR TEMPERATURE (60 °C) AS SEAKEEPER.
- FOR MULTIPLE SEAKEEPER INSTALLATIONS, ONE SEA WATER PUMP PER INSTALLED SEAKEEPER IS RECOMMENDED.
- SEA WATER SCOOP INTAKE SHOULD FACE FORWARD AND SHOULD NOT BE LOCATED NEAR PROPELLERS OR BEHIND HULL PROTRUSIONS THAT WILL DISTURB FLOW.
- IF SEA WATER COOLING WATER TO SEAKEEPER IS PROVIDED FROM A MULTI-PURPOSE PUMP/CIRCUIT , AN AUTOMATIC SHUT-OFF VALVE SHOULD BE INSTALLED TO PREVENT FLOW THROUGH SEAKEEPER HEAT EXCHANGER WHEN SEAKEEPER IS NOT IN USE.
- IF MEASURED FLOW FROM DEDICATED OR CENTRAL SEA WATER PUMP IS ABOVE RECOMMENDED LIMITS, A RESTRICTOR VALVE SHOULD BE INSTALLED BETWEEN PUMP AND SEAKEEPER HEAT EXCHANGER TO LIMIT FLOW RATE AND EXTEND LIFE OF THE HEAT EXCHANGER.



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