



# OWNER'S MANUAL

## BAVARIA C38



**BAVARIA**  
YACHTS

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## 1. Introduction

For your own safety, please make sure you have received all the information and documents about the boat's systems from the previous owner. Please keep this Owner's Manual in a safe place and hand it over to the new owner if you sell the craft. It is recommended to keep the manual in a water-proof cover on board.

This manual is intended to help you enjoy your BAVARIA C38 and sail it safely. Along with information about the yacht itself, information about the accessories supplied and the yacht's systems, the manual also contains information about operation and servicing. It is imperative precautions are taken before the appliances are switched on, particularly for appliances that rely on a supply of sea water for cooling (cooling water for the air conditioning unit, etc.). Before a voyage, please familiarise yourself with this manual and the manuals provided for the components; also make sure everyone who sails this vessel reads these documents.

If this is your first sailing yacht or if you are not familiar with the special characteristics of such a comfortable, sporting sailing yacht, for your safety and comfort make sure you familiarise yourself with how to handle and operate the boat before a voyage. The yard or your dealer will also be pleased to inform you about training courses if you would like to expand or refresh your knowledge in this manner.

Irrespective of the seaworthiness of the vessel and its design category, protection against high seas and strong winds cannot be guaranteed. Always pay attention to the wind and the current. Before a trip, always take into consideration the ability, stamina and above all the qualifications of your crew.

Because the scope of delivery varies depending on the order, the equipment on your yacht may vary from some of the descriptions and illustrations. To be able to adapt our yachts to the continually advancing state-of-the-art, we must reserve the right to make changes to the form, equipment and technology. For these reasons, no claims can be derived from any of the data, illustrations or descriptions in this manual.

BAVARIA YACHTBAU GmbH would like to welcome you warmly to the world of BAVARIA yacht owners and thank you for the confidence you have placed in our products by acquiring this yacht.

Your dealer along with the management and employees at BAVARIA YACHTBAU GmbH wish you much pleasure with your new sailing yacht.

*We wish you a safe voyage at all times; may there always be enough water beneath your keel*

BAVARIA YACHTBAU GmbH  
The Management

A handwritten signature in blue ink, appearing to read 'Michael Müller', is positioned below the company name.

Michael Müller [CEO]



## 2. Responsibility of the skipper

**The owner/skipper is fully responsible and must comply with the following basic rules:**

1. Know the limitations of your boat!
2. Follow the German regulations on maritime waterways [Seeschiffahrtsstraßen-Ordnung, SeeSchStrO] or the rules that apply to the maritime area you chose to frequent.
3. Keep a careful lookout for people, animals and objects in the water.
4. Make sure the expected wind and sea conditions always correspond to the category of your boat and your crew can handle the boat in these conditions.
5. At all times pay attention to the safety of your crew and the passengers.
6. Never sail under the effects of alcohol and/or drugs or medication.
7. Make sure the crew receives suitable training, particularly in relation to the location and usage of safety equipment [life vests, life rafts, distress signals, etc.].
8. Reduce your speed in bad visibility, rough seas, if there are people in the water, or there are boats or floating structures nearby.
9. Do not overestimate your own abilities! It is sensible and advisable to seek advice and obtain specific information from the authorities, related departments or experienced skippers in good time.
10. Practice important manoeuvres with your guests and crew members, above all the man overboard manoeuvre. Every person on board should be able to execute these manoeuvres on their own – the experienced skipper could also fall overboard and need rescuing.
11. Have your vessel inspected by qualified personnel at regular intervals and have it serviced and repaired properly if faults occur.
12. Follow the regulations in the area you are sailing. This statement also applies to the regulations on carrying safety equipment, having an appropriate skipper's licence and respecting the rules on the protection of the environment.
13. The water level in the bilge should be checked at regular intervals. Bilge water or other liquids will reduce the stability and therefore your safety.
14. Irrespective of the seaworthiness of the boat and its design category, protection against high seas, strong winds and currents as well as the related phenomena cannot be guaranteed. Always pay attention to the wind and the current. Before a voyage, always take into account the crew's abilities and qualifications.
15. This boat is only allowed to be sailed by persons who meet the related statutory requirements. In many countries a licence is now compulsory or there are other statutory arrangements. Therefore, obtain information on the local situation before starting a trip.



If you are equipped for an emergency, in most cases it will not occur. If an emergency nevertheless occurs, the yacht should be equipped with the correct equipment for all these situations. Prepare each trip carefully, even if it is short and apparently insignificant or harmless because:

weather conditions can change suddenly and accidents are possible on board even without a swell or adverse weather.

## 2.1. Servicing intervals

This section contains a general table with typical inspection and maintenance intervals.

System	Necessary measures	Interval						
		Each time before use	Follow manufacturer's manual	Replace every X years	Every 25 operating hours	Every 6 months	Annually	
Batteries	Check poles for corrosion and correct seating of the terminals	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>		<input checked="" type="checkbox"/>			
Outlets and inlets as well as valves	Check for leaks and correct function	<input checked="" type="checkbox"/>		5				
	Check for corrosion	<input checked="" type="checkbox"/>		5				
Navigation lights	Check for correct function	<input checked="" type="checkbox"/>						
Bilge area	Clean the bilge and the openings					<input checked="" type="checkbox"/>		
Keel bolts	Check and, if necessary, re-tighten and secure					<input checked="" type="checkbox"/>		
	Check the structure and the load plates					<input checked="" type="checkbox"/>		
Bilge pumps	Check the switch functions correctly					<input checked="" type="checkbox"/>		
Zinc anodes	Check the condition	<input checked="" type="checkbox"/>	As often as possible					<input checked="" type="checkbox"/>
Hull	Check for loose or damaged parts	<input checked="" type="checkbox"/>						
Rudder system	Check for correct operation, check rudder for corrosion	<input checked="" type="checkbox"/>						
Safety and rescue equipment	Check for good condition and completeness, observe the stipulated servicing intervals, check inspection sticker		<input checked="" type="checkbox"/>					
Electrics	Check for loose connections						<input checked="" type="checkbox"/>	
Smoke detector	Check smoke detector for correct function		<input checked="" type="checkbox"/>	10			<input checked="" type="checkbox"/>	
Engine	Replace filters and wearing parts, check V-belt, engine in general and propeller/propulsion system		<input checked="" type="checkbox"/>					
Hoses and connections	Check for leaks and the condition of the material			5			<input checked="" type="checkbox"/>	
Rigging, mast, boom and spars, standing and running rigging	Visual inspection of shrouds, stay screw and rivet joints on the mast/boom			10 12			<input checked="" type="checkbox"/>	
	Condition of sheet ropes and halyards			5-7			<input checked="" type="checkbox"/>	

We place the highest requirements on the quality and safety of our products. As part of the routine service work on yachts we have manufactured, we again refer to the need to inspect the following components and equipment, and to replace them if necessary. Regular checks and maintenance are important tasks to ensure your boat has a long service life and to ensure the safety of the crew.

Every point may not apply to your vessel and some sections may not apply because options are not installed or different options are installed. The frequency of the servicing and maintenance intervals is dependent on environmental effects and the area in which the vessel is sailed. The intervals given should be considered upper limits. Failure to comply with regular inspection and replacement intervals for these safety-related components can involve an increased hazard for life and limb.



#### Attention

- » Changes that affect the safety of the vessel should be assessed before they are implemented and should only be documented by competent persons.
- » Any change to the distribution of the weight can significantly affect the stability, the trim and the handling of the boat.

## 3. About this manual

This manual has been compiled for your safety and to help you handle your vessel. It contains data and information about the systems and equipment fitted. Before a voyage, please familiarise yourself with this manual and the manuals provided for the components; also make sure everyone who sails this vessel reads these documents. This manual complies with the regulations for recreational boats and must not be considered a complete set of operating instructions. A prerequisite for a successful trip is sufficient nautical experience that will enable you to react correctly in every situation. A manual is no substitute for experience, nautical training and common sense!

### 3.1.1. Additional information about your boat

The videos and manuals about the components available at [https://www.bavariaplus.de/de/s/bavis\\_start](https://www.bavariaplus.de/de/s/bavis_start) for download in various languages are very helpful. Familiarise yourself with the specific characteristics of your boat and its equipment before your planned trip.



### 3.1. Manuals for products bought-in and integrated

This manual does not contain any manufacturer information about the systems and equipment supplied by other manufacturers. You will find detailed information and operating instructions for this equipment in the original manufacturer manuals. These manuals are included with your documentation if these options were fitted to your yacht.

## 3.2. Signs

On the vessel and in the manual there are pictograms with information for the owner/skipper and the crew about mandatory instructions related to safety and precautions to be taken during the operation and handling of the vessel. You will find the following symbols on your vessel. They should always be heeded.



Danger [with descriptive text]  
The symbol can be in colour or B/W  
[see following sections].



Read the manual. The specific information on the component/system is explained there.



Electrical hazard  
Hazard due to electrical power



Fuel filler:  
The letter "D" signifies  
"Diesel"



Fire hazard - danger



Sling position for lifting the boat safely



Fire extinguisher  
can also mark a space where the fire extinguisher is stowed



Opening for discharging the fire extinguisher from the outside



Risk of falling overboard



Stowage space for rescue equipment. Life vests or life rafts



Escape route



Life raft - stowage space



Warning about equipment that operates based on electromagnetic waves in the radio frequency band: radar



Do not enter/crushing hazard



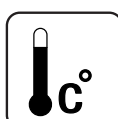
Escape route that can be reached via additional step or ladder



Slipping hazard



Corrosive and irritating chemicals



Hot components/hazard due to scalding



### 3.3. Explanation of the hazard instructions

In many chapters of this Owner's Manual you will find instructions related to trouble-free operation and servicing, or that provide a warning about hazards. For improved clarity, these instructions are highlighted in boxes or warning triangles, in some cases printed in half tones. The pictograms are always supplemented with a note in the form of text.



Always apply good seamanship! As the skipper, you are responsible for the boat and the well-being of the crew.  
Never remove or cover a safety sign. Replace a damaged or missing sign without delay.



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**Danger**

Signifies that there is an extreme, real source of danger that with high probability will result in fatality or irreversible injuries or damage, if appropriate precautions and measures are not taken.



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**Warning**

Signifies that there is a source of danger that may result in injuries or fatality if appropriate precautions are not taken.



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**Attention**

Represents a reminder about safety precautions or brings to your attention actions that could be dangerous or result in injuries, or damage to the vessel or its components.



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**Information**

Information about useful, important facts or suggestions that contribute to improving safety while handling the vessel.

## 4. Design category and certification



This boat bears the CE marking as shown here. This marking states that the requirements of the EU Recreational Craft Directive 2013/53/EU are met. The design category assigned to the boat is explained in the following section:

### The sailing yacht BAVARIA C38 is in design categories A, B and C

A boat in design category A is designed for extended voyages where conditions may exceed wind force 8 [Beaufort scale] and significant wave heights of 4 m and above may occur; these boats must be able to withstand these conditions largely self-sufficiently. Here extreme conditions, as are caused for instance by hurricanes or tornadoes, are excluded.

A recreational boat in design category B is designed for a wind force up to and including 8 and significant wave height up to and including 4 m.

A vessel in design category C is designed for a wind force up to and including 6 and significant wave height up to and including 2 m.

### 4.1. Certification

The EC directive stipulates, among other issues, certification module B+C with the assistance of a "notified body" for yachts of this size. DNV-GL, based in Hamburg, as an approved inspection body according to the Recreational Craft Directive, was tasked with this assessment, on this issue see chapter "4.4. Certification - DNV-GL certificate" on page 12

### 4.2. Marking of the boat & CE certification of the design category

#### a. Identification

The hull identifier [WIN] has been affixed aft on the starboard side. This is a globally unique sequence of numbers and letters. See the following explanation about the structure of this identifier.

#### Builder's plate





The builder's plate, which is affixed in the cockpit or at the steering position, corresponds to a requirement in the directive. Certain information is stipulated that will be explained here.

<div> <div>Bavaria Yachtbau GmbH</div> <div>Bavariastrasse 1; D-97232 Giebelstadt</div> <div>BAVARIA C 38</div> </div>			
Category	A	B	C
Max.	8	12	14
Max.  +	1653 kg	2085 kg	2301 kg
<div> <div>CE</div> </div>			

### 4.3. Explanations on the WIN and the builder's plate

The WIN consists of a globally unique sequence of numbers and letters. At BAVARIA this code starts with the sequence of two letters DE for Germany, followed by the three-letter code for the yard, BAV. The five letters and/or digits that then follow are specified by the yard and are managed internally at BAVARIA. The letter at the fourth from last position identifies the month when building began (A - January, B - February, C - March, etc.), the next digit corresponds to the last digit of the year when construction of the boat started. The last two digits identify the model year, that is 20 for the year 2020, for example.

The builder's plate is affixed near the cockpit and contains the following information in black lettering on a white background.

Design category A	A recreational craft in design category A is designed for wind forces above 8 [Beaufort scale] and significant wave height above 4 m, however not for extreme weather conditions such as a storm, heavy storm, hurricane, cyclone, extreme sea conditions or giant waves.
Design category B	A recreational boat in design category B is designed for a wind force up to and including 8 and significant wave height up to and including 4 m.
Design category C	A vessel in design category C is designed for a wind force up to and including 6 and significant wave height up to and including 2 m
Max. 	Maximum number of people X recommended by the manufacturer, if the boat is in a maritime area that corresponds to its design category (wave height and wind force).
Max.  + 	Maximum payload consisting of the X persons (75 kg each), supplies, provisions and personal equipment. This figure does not include the weight of the contents of the tanks.
	CE marking as evidence that the boat has been planned and built according to the requirements of the directive.



#### Information - reefing

The sail area must be reduced if the wind force exceeds Beaufort 4. Special measures should be taken in heavy weather conditions.

## 4.4. Certification - DNV-GL certificate

The "EC-Type Examination Certificate" issued by DNV-GL is attached.

Job Id: **341.3-000790-1**  
Certificate No: **RCDB00000BD**

### Jurisdiction

DNV GL is appointed by the Central Authority of the German Federal States for Safety (ZLS) as a "Notified Body" in accordance with § 15(1) of the Product Safety Act (ProdSG) to carry out conformity assessment procedures on Recreational Crafts in the scope of ProdSG and Directive 2013/53/EU according to the administrative decision No. ZLS-Z1471-2020/3-1.

### Certificate history

This is the original Certificate.

### Product description

Type designation:	SE30 / C38		
Type of craft:	Sailing Yacht	Model code*:	DE-BAVV38A
Type of hull:	Monohull	Construction material:	FRP
Length of hull (Lh), m:	10.99	Light craft cond. mass (m <sub>LC</sub> ), kg:	9386 (s) 9658 (d)
Beam of hull (Bh), m:	3.98	Fuel system: (fixed or portable):	Fixed
Propulsion:	Sail	Type of engine(s):	Inboard Diesel
Draft (sailing), m **: 2.05 (s) 1.65 (d)			

\*First characters of the WIN code.

\*\*Ballast keel variants standard(s), short (d)

### Applications/Limitations

Design category:	A	B	C
Maximum number of persons, CL:	8	12	14
Maximum engine power, prop. shaft, kW:	35		
Maximum load (m <sub>L</sub> ), kg:	2365	2797	3013
Maximum load as stated on Builder's Plate, kg:	1653	2085	2301

### Technical documentation

DNV GL NPS Job Id 341.3-000790-1

### Applied Standards/Tests carried out

Applied standards specified in the technical documentation



**DNV·GL**Certificate No:  
**RCDB00000BD****EC-TYPE EXAMINATION  
CERTIFICATE (MODULE B)****This is to certify:****That the Recreational Craft**with type designation(s)  
**SE30/C38**

Manufacturer

**Bavaria Yachtbau GmbH  
Giebelstadt, Germany**

Has been assessed with respect to Directive 2013/53/EU of the European Parliament and of the Council according to conformity assessment procedure "Module B" described in Annex II of the Decision No 768/2008/EC of the European Parliament and of the Council, and found to comply with the applicable requirements.

Further details are given overleaf.

Issued at **Hamburg** on **2021-01-28**DNV GL local station:  
**Hull Structure & Outfitting**for **DNV GL SE**Approval Engineer:  
**Johannes Werner**Notified Body  
No.: **0098****Dirk Masanneck  
Head of Certification Body**

The certificate is subject to terms and conditions overleaf. Any significant changes in design or construction of the product, or amendments to the Directive or the applied standards may render this certificate invalid. The product liability rest with the manufacturer or his representative in accordance with Directive 2013/53/EU of the European Parliament and of the Council.

LEGAL DISCLAIMER: Unless otherwise stated in the applicable contract with the holder of this document, or following from mandatory law, the liability of DNV GL AS, its parent companies and subsidiaries as well as their officers, directors and employees ("DNV GL") arising from or in connection with the services rendered for the purpose of the issuance of this document or reliance thereon, whether in contract or in tort (including negligence), shall be limited to direct losses and under any circumstance be limited to 300,000 USD.



Form code: RCD.Ba

Revision: 2020-01

www.dnvgl.com

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## 5. Data on the boat

### 5.1. Primary dimensions

Primary dimensions of the Standard and Shallow versions

Description of the dimension	Abbr.	Standard	Shallow
Length overall [incl. anchor fitting]	L <sub>MAX</sub>	10.99 m	10.99 m
Length overall without anchor fitting [hull]	L <sub>H</sub>	11.38 m	11.38 m
Width - total	B <sub>max</sub>	3.98 m	3.98 m
Height of the boat above the DWL, air draught *	H <sub>a</sub>	18.57 m	18.57 m
Maximum draught	T <sub>MAX</sub>	2.05 m	1.65 m

\* The air draught can be the critical dimension while passing bridges, high-voltage cables and other barriers. This dimension states the difference between the surface of the water and the highest point on the mast; it is stated without any antennae or radar reflector and does not include the dimensions for optional accessories or accessories added later. It is imperative you correct this dimension to suit the equipment you have fitted. Make a note of the resulting dimension in the Owner's Manual with the date and carry across to any copies made.

### 5.2. Sail dimensions

Description of the dimensions	Abbr.	Dimension
<b>Mainsail</b>		
Length of mainsail luff [gooseneck fitting to the sail head]	P	15.001 m
Length of mainsail foot [gooseneck to the clew]	E	5.285 m
Area of mainsail [standard with battens/furling]	A <sub>MS</sub>	44.25/41.8 sq m
<b>Headsail [standard furler on deck]</b>		
Height of forestay attachment [deck to top of forestay]	I	15.45 m
Forestay to front edge of mast	J	4.280 m
Area of furling jib [104 %]	A <sub>FT</sub>	35.0 sq m
Area of storm jib	A <sub>ST</sub>	29.3 sq m
<b>Flying headsail</b>		
Code 0	A <sub>CO</sub>	70.0 sq m
<b>Gennaker</b>	A <sub>Gennaker</sub>	130 sq m
Nominal sail area [12217-2:2015]	A <sub>S</sub>	73.0 sq m



### 5.2.2. Displacement, weights

This information is stated on the assumption that all the standard equipment is on board and the following weights apply:



#### Warning

The boat should never be loaded with more weight than recommended by the manufacturer. Load the yacht carefully and evenly. The weights should be positioned as far down as possible so that the trim and heel are maintained as foreseen by the manufacturer. Please note that the stability will be significantly reduced by additional weight high up on the boat.

The following weights are the basis for the stability determined according to the EN-ISO standard for category **A**:

Description	Abbrev.	Deep	Shallow
Weight empty including engine	$m_{EC}$	9181 kg	9453 kg
Maximum weight of persons [8 persons], 75 kg each		600 kg	600 kg
Displacement of the empty boat [light craft condition]	$m_{LC}$	9386 kg	9658 kg
Personal luggage & additional weight carried			264 kg
Max. contents of the permanently installed fuel tank [kg]			199.5 kg
Contents of the permanently installed fresh water tank [kg]			437 kg
Max. contents of the permanently installed grey water tank [kg]			0 kg
Max. contents of the permanently installed black water tank [kg]			76 kg
SOLAS equipment and life raft I			80 kg
Spare parts, provisions and payload [if present]			0 kg
Optional equipment [in addition to the basic equipment]			349 kg
Max. recommended load [in add. to the weight empty]	$m_L$		2365.5 kg
Other recreational craft on board the vessel			60 kg
Margin for calculations and uncertainties			300 kg
Mass of the fully laden boat with all options	$m_{LDC}$	11751.5 kg	12023.5 kg

The following weights are the basis for the stability determined according to the EN-ISO standard for category **B**:

Description	Abbrev.	Deep	Shallow
Weight empty including engine	$m_{EC}$	9181 kg	9453 kg
Maximum weight of persons [12 persons], 75 kg each		900 kg	900 kg
Displacement of the empty boat [light craft condition]	$m_{LC}$	9386 kg	9658 kg
Personal luggage & additional weight carried			396 kg
Max. contents of the permanently installed fuel tank [kg]			199.5 kg
Contents of the permanently installed fresh water tank [kg]			437 kg
Max. contents of the permanently installed grey water tank [kg]			0 kg
Max. contents of the permanently installed black water tank [kg]			76 kg
SOLAS equipment and life raft I			80 kg
Spare parts, provisions and payload [if present]			0 kg
Optional equipment [in addition to the basic equipment]			349 kg
Max. recommended load [in add. to the weight empty]	$m_L$		2797.5 kg
Other recreational craft on board the vessel			60 kg
Margin for calculations and uncertainties			300 kg
Mass of the fully laden boat with all options	$m_{LDC}$	12183.5 kg	12455.5 kg



The following weights are the basis for the stability determined according to the EN-ISO standard for category **C**:

Description	Abbrev.	Deep	Shallow
Weight empty including engine	$m_{EC}$	9181 kg	9453 kg
Maximum weight of persons (14 persons), 75 kg each		1050 kg	1050 kg
Displacement of the empty boat (light craft condition)	$m_{LC}$	9386 kg	9658 kg
Personal luggage & additional weight carried		462 kg	
Max. contents of the permanently installed fuel tank [kg]		199.5 kg	
Contents of the permanently installed fresh water tank [kg]		437 kg	
Max. contents of the permanently installed grey water tank [kg]		0 kg	
Max. contents of the permanently installed black water tank [kg]		76 kg	
SOLAS equipment and life raft I		80 kg	
Spare parts, provisions and payload (if present)		0 kg	
Optional equipment (in addition to the basic equipment)		349 kg	
Max. recommended load (in add. to the weight empty)	$m_L$	3013.5 kg	
Other recreational craft on board the vessel		60 kg	
Margin for calculations and uncertainties		300 kg	
Mass of the fully laden boat with all options	$m_{LDC}$	12399.5 kg	12671.5 kg

### 5.2.3. Maximum recommended load

Please note that the mass stated for the maximum recommended load on the builder's plate after the symbol for persons and the suitcase symbol is "not including the contents of the permanently installed fuel and water tanks".

The maximum recommended payload as per the stability calculations according to EN ISO 12217-2:2013 consists of the following individual components:

- » Weight of all persons (where each person is calculated at 75 kg)
- » Personal luggage of the persons on board and the provisions carried
- » Equipment that is not included in the empty weight of the boat, that is items of equipment that are offered by the yard as options, for instance autopilot, Bimini, spray-hood, hot air heating or similar
- » Provisions, also drinks (not including fresh water in tanks, see next point), payload
- » Consumables such as diesel and fresh water in permanently installed tanks filled to the top
- » Life raft or dinghy
- » An estimated figure for optional equipment that is not supplied in the basic equipment from the yard

### 5.2.4. Options and their weights



#### Attention

Vessels in each design category must be designed and constructed to withstand these parameters in respect of stability, buoyancy, and other relevant essential requirements listed in the Annex, and to have good handling characteristics.

The maximum payload also includes options that are fitted to your yacht. Please note that the maximum payload given on the CE plate is reduced by the options fitted. To determine the specific maximum payload for your yacht, reduce this by the weight data according to the following table

### 5.2.5. Weights of the options relevant for this boat

Options	Additional weight
Anchor with chain	80
Bow thruster	70
Bimini	25
Spray-hood	15
Grey water system	35
Air conditioning unit	80
Add. service batteries	44

### 5.2.6. Structural fittings and materials



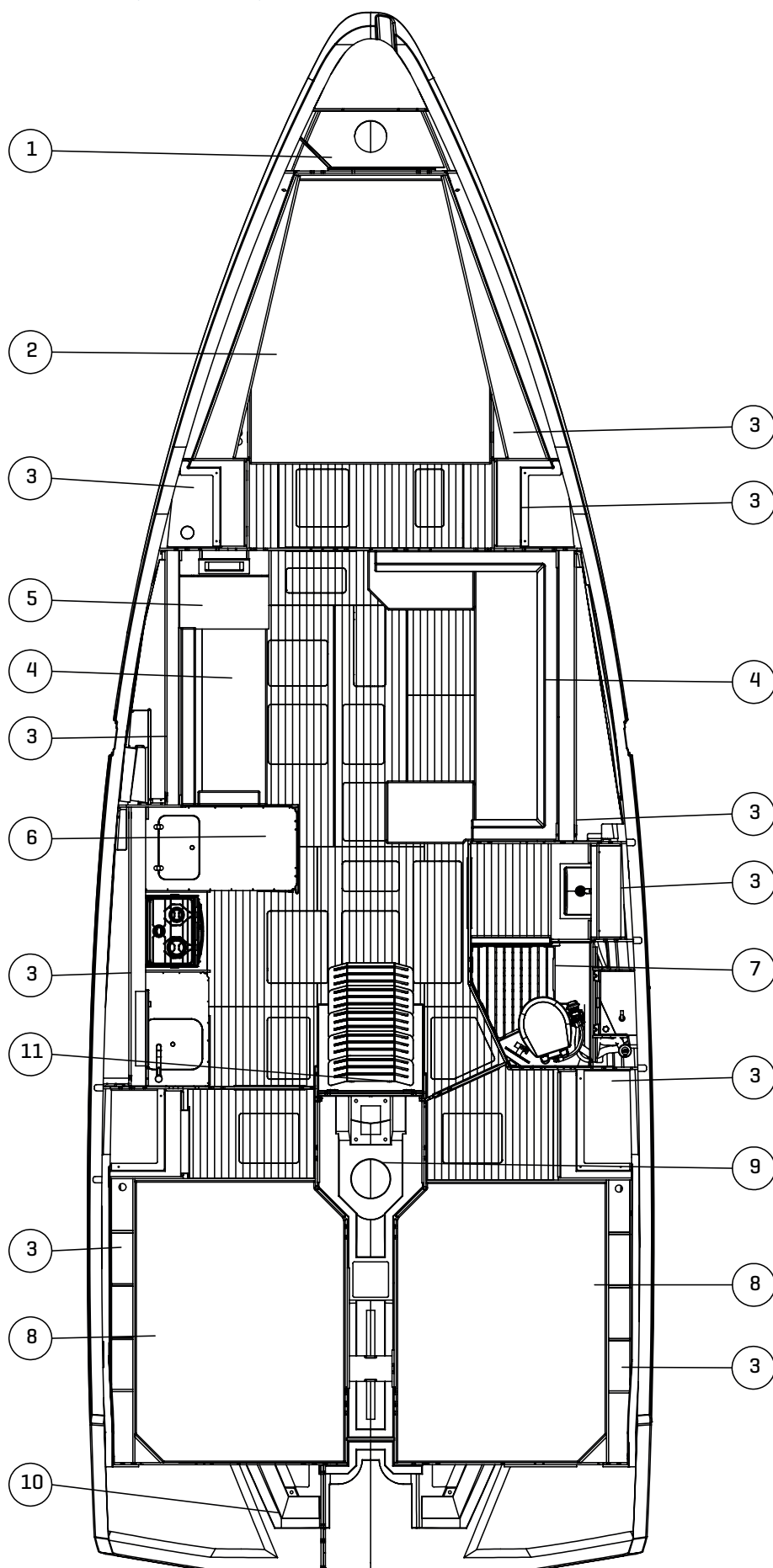
#### Warning

The outer hull of the vessel is designed so that it is strong enough to withstand pressing due to contact in normal operation, however not local damage due to impacts from hard / sharp objects. If the outer hull is damaged, it must be repaired immediately

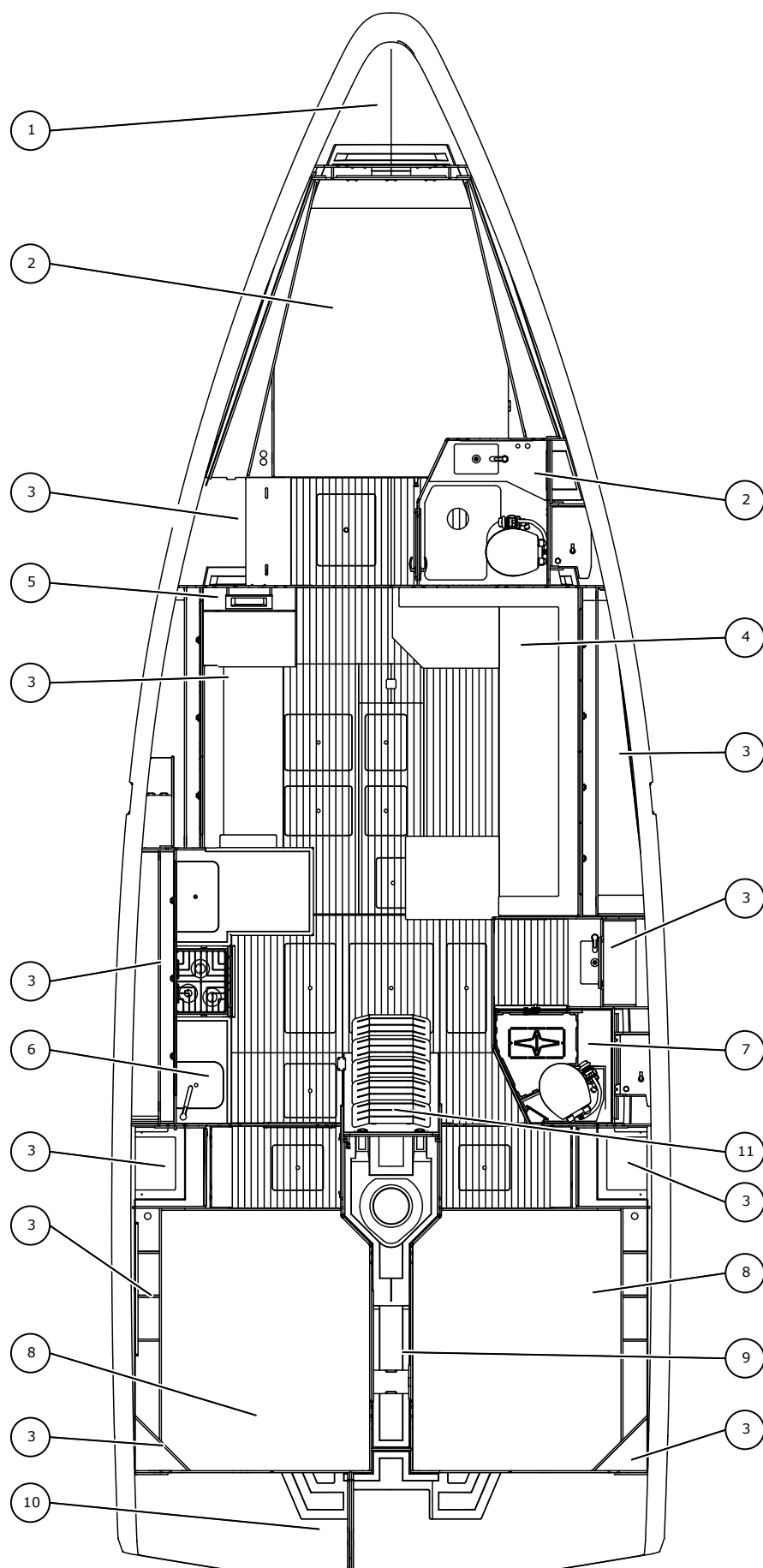
## 5.3. Interior of the boat

Item	Description
1	Anchor locker area
2	Forebody
3	Cabinet/storage compartment
4	Seat unit
5	Navigation area, seat unit
6	Galley with sink, dishwasher, hob, combination fridge/freezer
7	Toilet with wash basin and shower
8	Aft berth
9	Engine compartment, installation duct
10	Rudder compartment
11	Companionway

## 5.3.1. Interior of the boat in plan view, layout 1

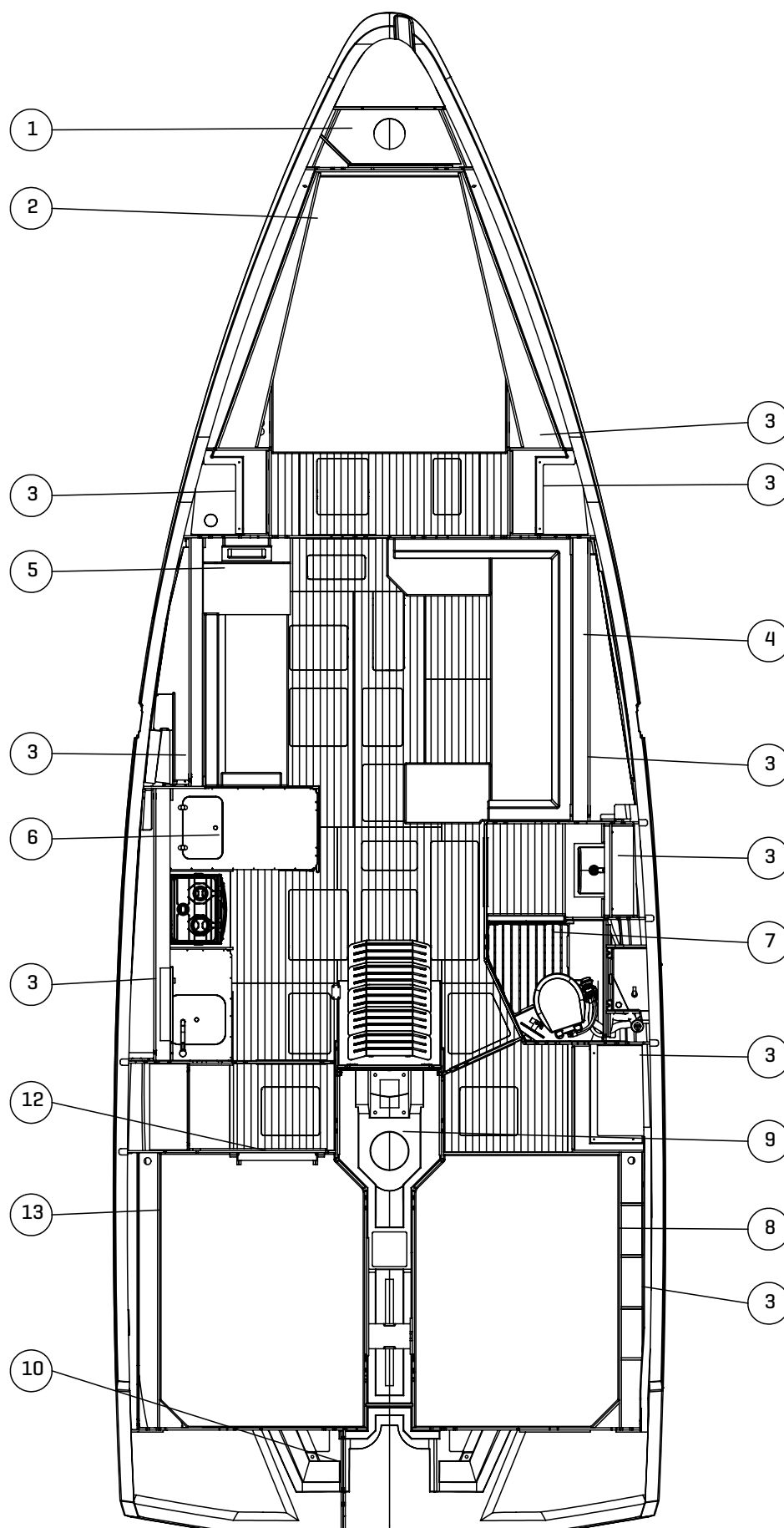


## 5.3.2. Interior of the boat in plan view, layout 2

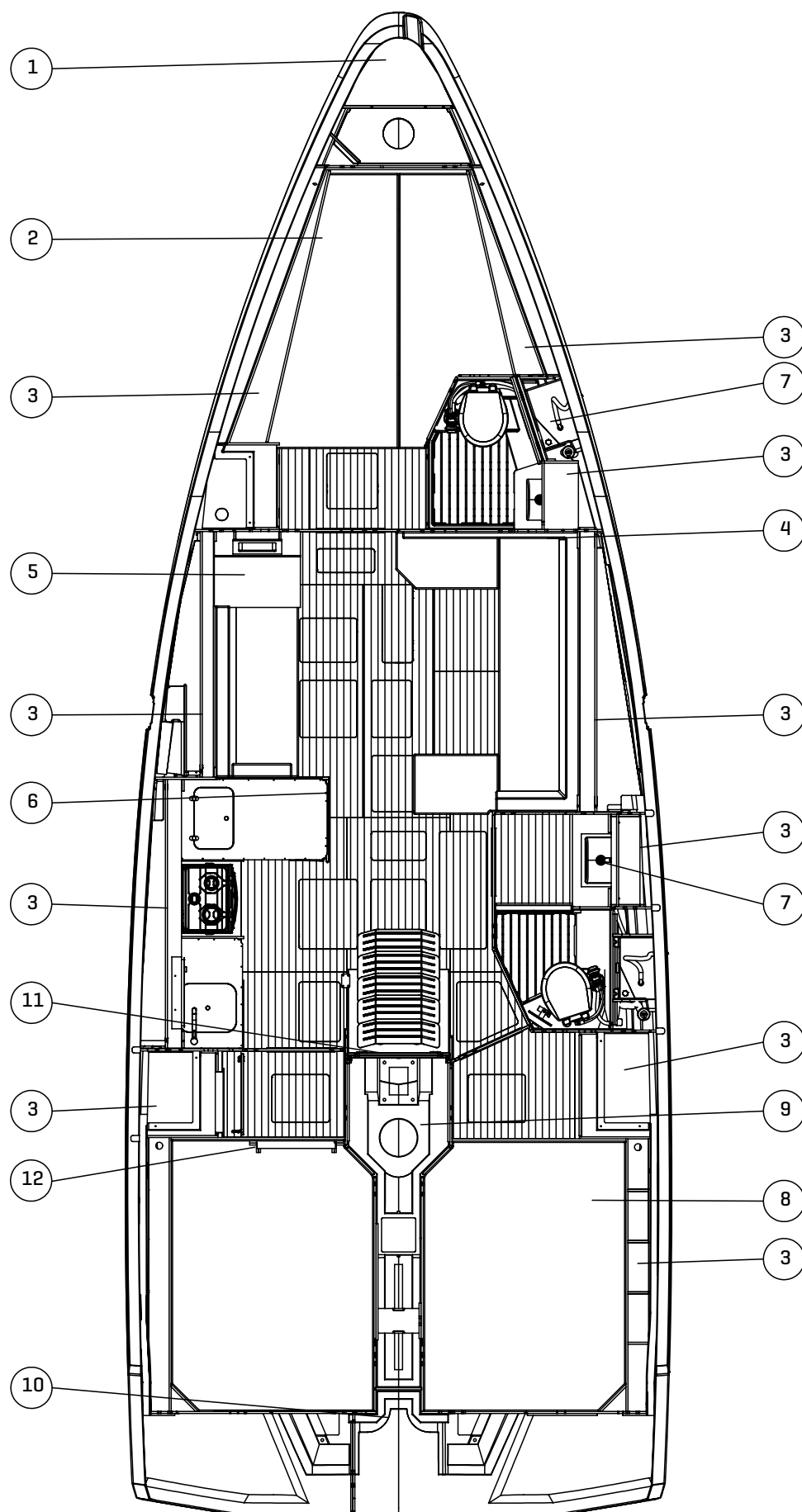




## 5.3.3. Interior of the boat in plan view, layout 3



## 5.3.4. Interior of the boat in plan view, layout 4



## 5.4. Permanently installed tanks



### Warning

Note that the nominal tank contents cannot be used entirely in some circumstances due to the load state and related heel and trim. Make sure that your calculations include a reserve of 20 %.

#### 5.4.1. Fuel tank

Designation	Installation location	Max. capacity [L]	Location of the filler	Drain feature
Starboard diesel fuel tank, for propulsion system, generator and heating	Under the starboard aft berth	Approx. 244	On starboard aft deck, see "6.8. Fuel system" on page 46	Only via inspection hatch on the top of the tank

#### 5.4.2. Waste water tanks

Designation	Installation location	Max. [L]	Fitting for pumping out	Drain feature
Grey water tank	Under the port aft berth	210	On deck, port, directly above the tank on the aft side deck	Overboard via sea cock under the related sink or deck suction point
Black water tank in layout 1	Toilet saloon (starboard), behind wall trim panel	70	On deck, starboard, directly above the tank	Overboard via sea cock under the related sink or deck suction point
Additional black water tank in layout 2, forward starboard	Toilet saloon (starboard), behind wall trim panel	70	On deck, starboard, directly above the tank	Overboard via sea cock under the related sink or deck suction point

#### 5.4.3. Other tanks

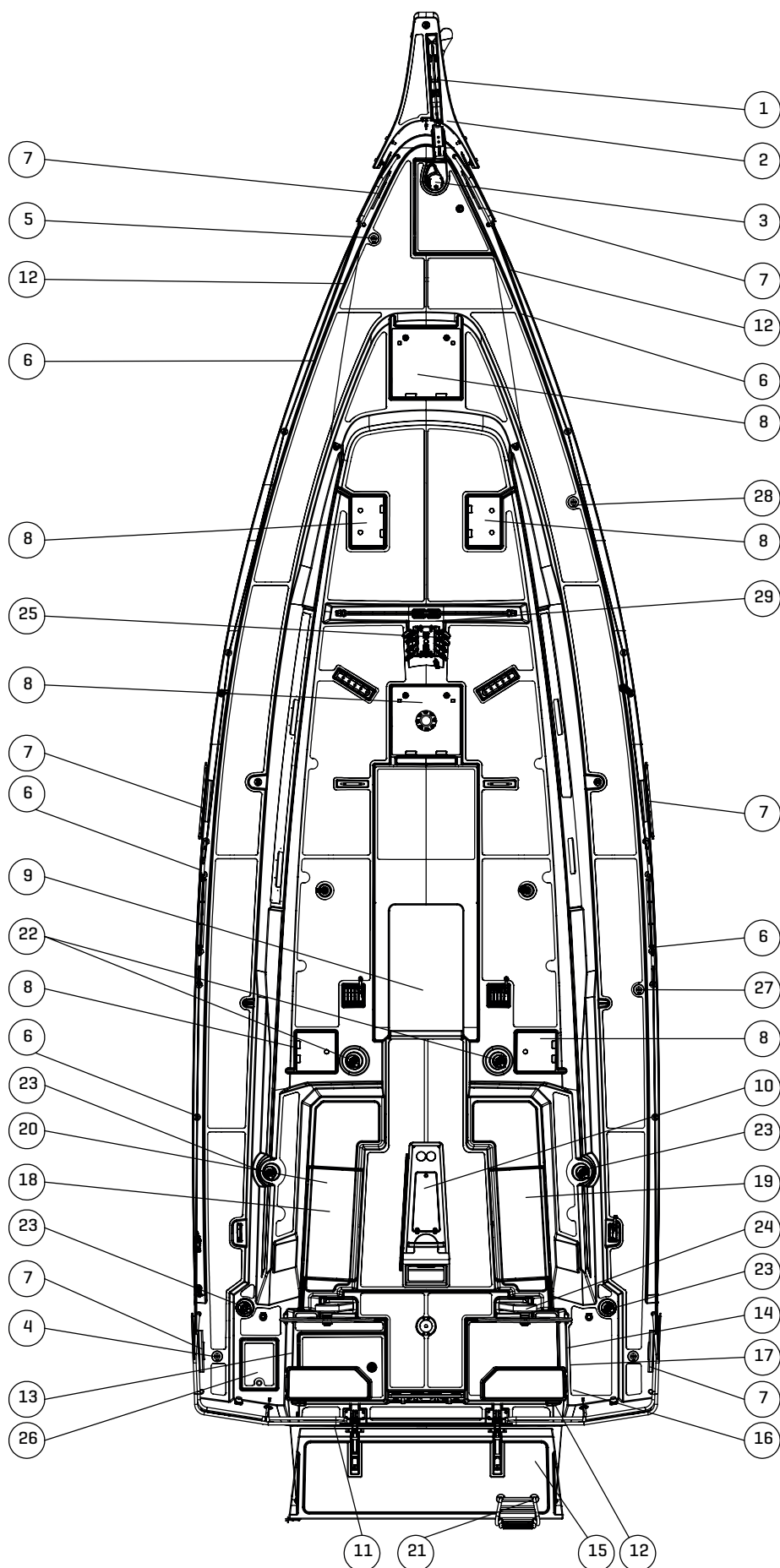
Designation	Installation location	Max. capacity [L]	Location of the filler	Discharge
Fresh water tank	Under the owner's berth, forward	Approx. 250	On port deck forward, beside anchor locker	None
Fresh water tank	Under the port aft berth	Approx. 210	On deck, port side, aft	None

## 5.5. Deck plan

### 5.5.1. Terms for the deck plan

Item	Description
1	Bow fitting with anchor roller
2	Bowsprit with chain deflector [option]
3	Anchor windlass [option]
4	Filler, fresh water tank
5	Filler, fresh water tank [option]
6	Railing
7	Belaying cleat [to some extent option]
8	Deck hatch, also emergency exit
9	Companionway with sliding hatch
10	Cockpit table with seat unit, starboard/port
11	Stern pulpit
12	Navigation lights
13	Shore connection, appliances
14	Shore connection, air conditioning unit [option]
15	Bathing platform, folding [option]
16	Manual bilge pump
17	Cockpit shower [option]
18	Storage compartment port
19	Storage compartment starboard
20	Access to sail storage compartment
21	Bathing ladder
22	Deck winches
23	Deck winches [option]
24	Steering position starboard/port with wheel, navigation equipment, control, radio, rudder bearing under cover
25	Mast foot
26	Connection for gas cylinder
27	Deck suction point, faecal tank
28	Deck suction point, faecal tank [option]
29	Rail, self-tacking jib [option]

## 5.5.2. Deck plan of the boat



## 6. Systems

### 6.1. Bilge pumps

#### 6.1.1. Terms for the bilge pumps

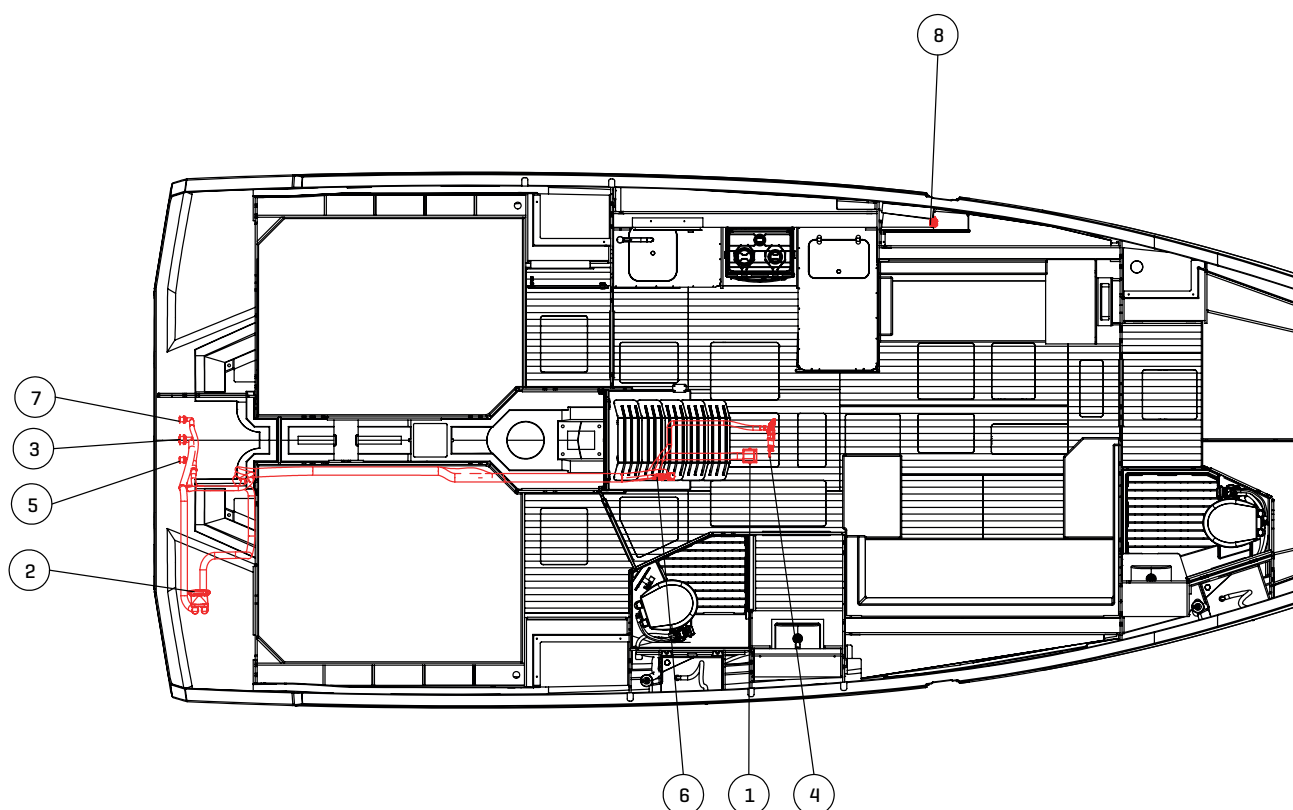
Item	
1	Strainer, manual bilge pump
2	Manual bilge pump [deck]
3	Discharge, manual bilge pump
4	El. bilge pump, saloon
5	Discharge, bilge pump, saloon
6	El. bilge pump, engine
7	Discharge, bilge pump, engine
8	High bilge alarm panel



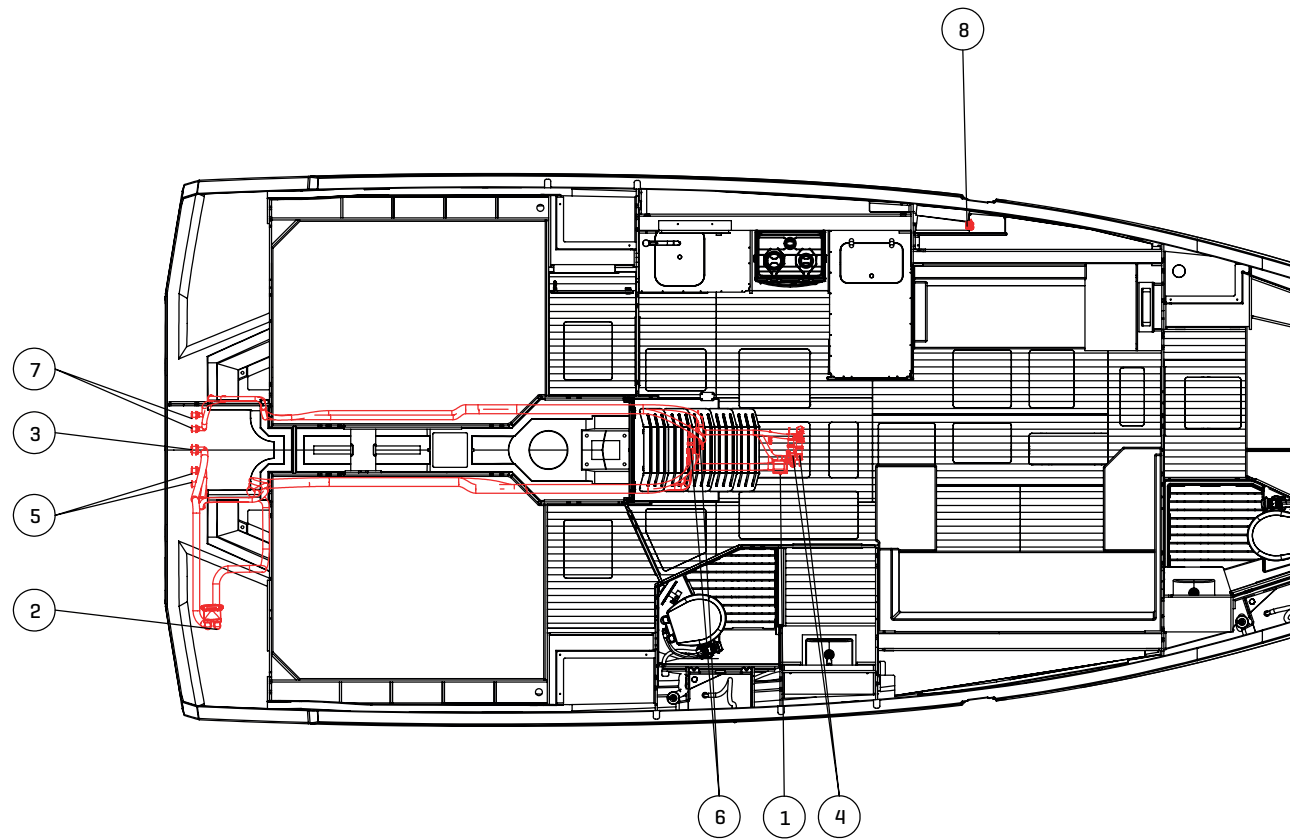
#### **Danger**

Never use flammable liquids [e.g. petrol] to clean the bilges, irrespective of how much oil there is in the bilges. There is an explosion hazard!

#### 6.1.2. Bilge pumps, EU region, overview



6.1.3. Bilge pumps, US, overview



6.1.4. The bilge pumps are installed as follows:

Installation location	Operation	Designation	Capacity [litres/min]	Bilge compartments
Starboard cockpit steering position, intake in the saloon bilge	Manual	Whale Smartbail WHSB 4222	40 with 45 strokes	Middle of saloon, through connectors all bilge compartments
Saloon bilge, access cover saloon floor, forward	Electrical	Whale Supersub 1100	66	Middle of saloon, through connectors all bilge compartments
Bilge engine, access below companionway	Electrical	Whale Supersub 1100	66	Engine compartment



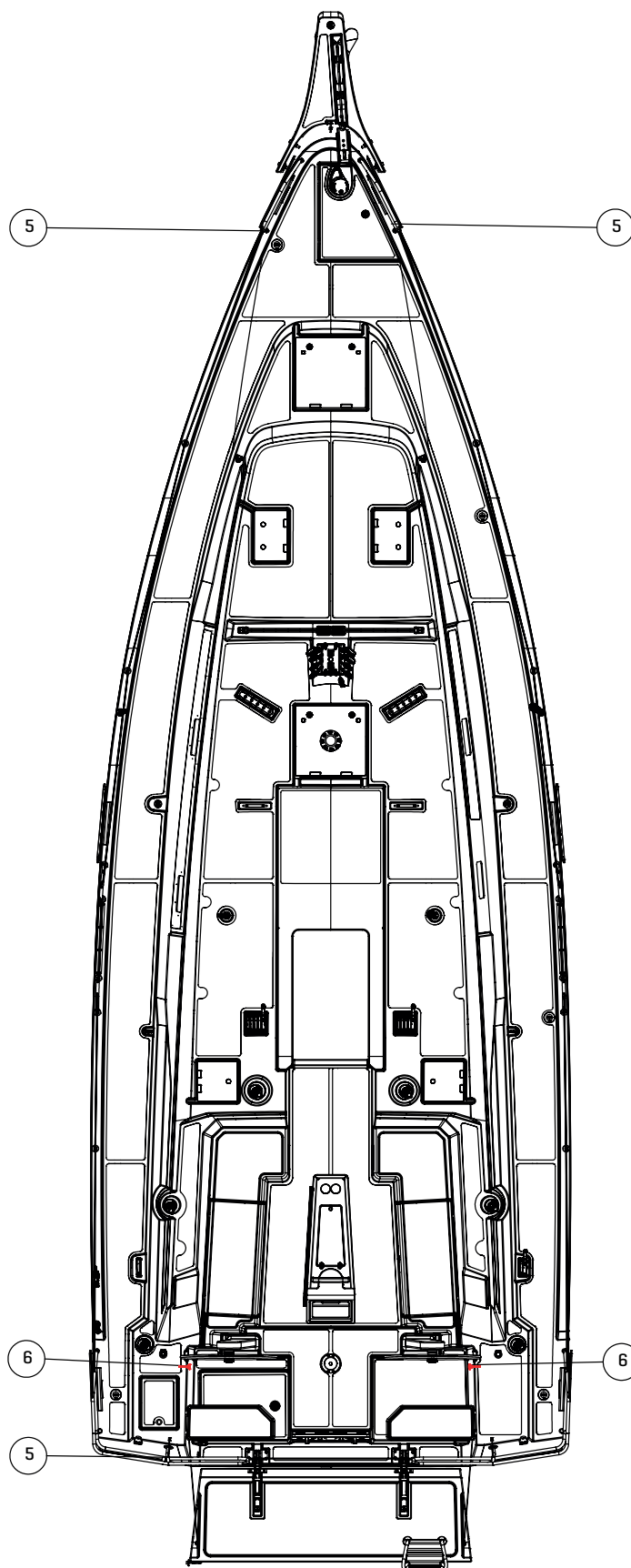
**Information - bilge pumps**

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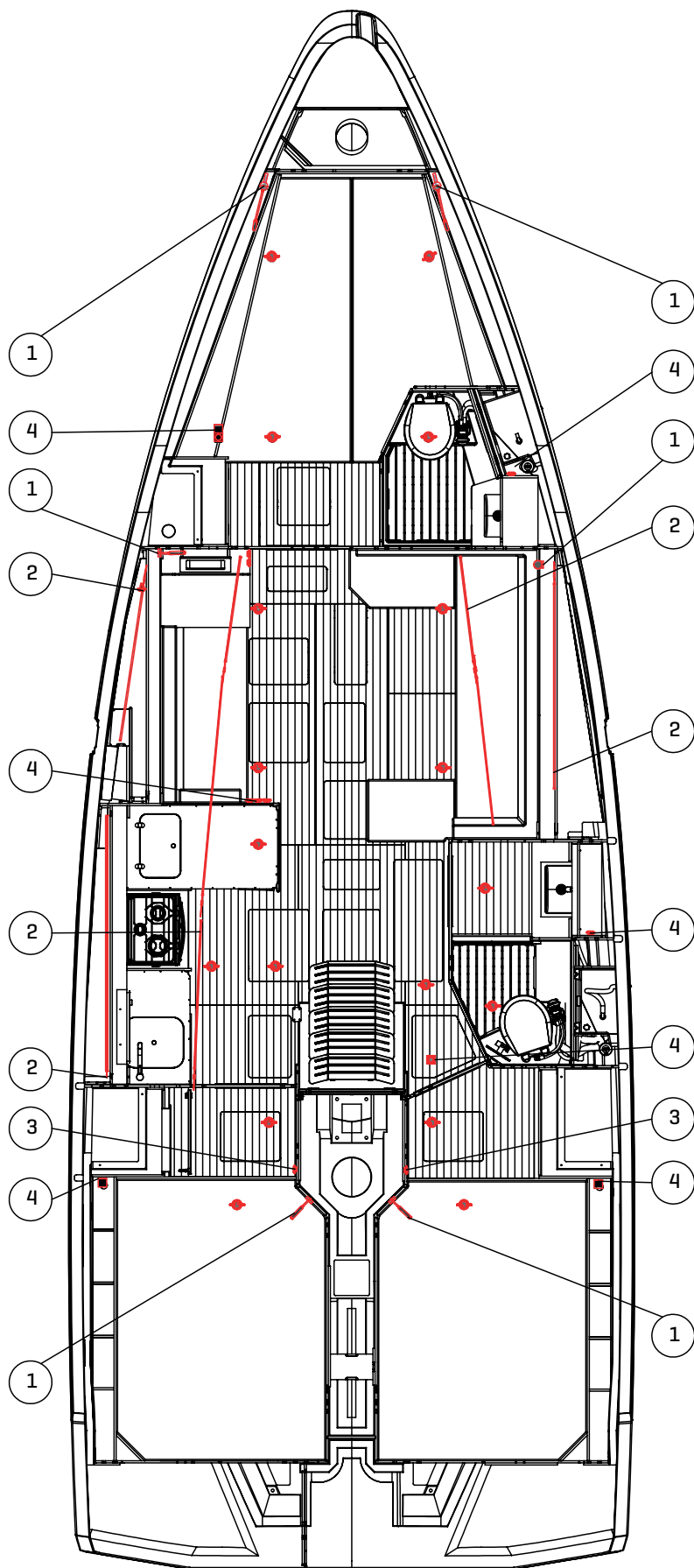
- » The electrical bilge pumps operate only at the push of a button, however they can be set to automatic.
- » The bilges should be checked every time the boat is launched. A small amount of water is normal. Larger quantities of liquid or signs of fuel or oil require an immediate investigation as to the possible causes. Fuel or oil is never allowed to be pumped overboard as long as the boat is in the water.
- » Check the function of the pumps and regularly clean the inlet area of foreign bodies.
- » It is always recommended to carry on board a bailer or a bucket for bailing in an emergency. Make sure these are secured against loss and are easily accessible.

## 6.2. Lighting

### 6.2.1. Lighting, main deck



## 6.2.2. Lighting below deck



Key for the lighting plan

Item	Description
None	Ceiling LED, integrated LED
1	LED wall light, LED reading light
2	LED strips [option]
3	Engine compartment lighting
4	Light switch
5	Navigation lights [deck]
6	Cockpit, step lights [deck]

### 6.3. Electrical system on board

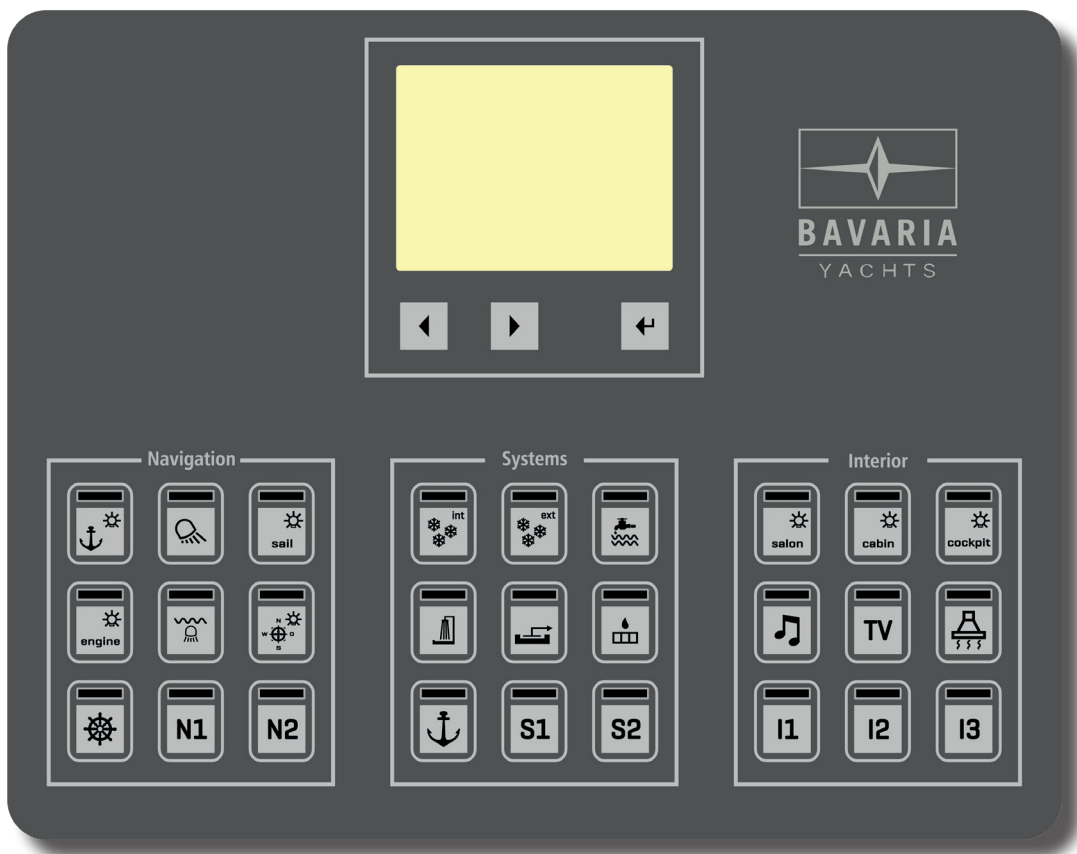


#### Attention - observe the following instructions:

- » Disconnect the connections from the batteries and remove the batteries if you lay up the yacht in winter [in cold regions] or do not use it for an extended period. Make sure you always disconnect the negative pole first and only then the positive pole. While fitting, connect the positive pole first and then the negative pole.
- » Never work on the electrical system if it is still electrically live.
- » Never disconnect the shore connection if it is still carrying electrical power.
- » Never modify the electrical installation or its documentation/drawings; modifications and servicing must be undertaken and documented properly by a marine electrician.
- » Never change or modify the stated current ratings [A] for the fuses in relation to the appliances protected.
- » Never replace or install electrical appliances that exceed the current rating for the circuit.
- » Never leave the vessel unattended with electrical systems switched on; the fire protection and any alarm system installed are excluded from this instruction.

### 6.4. General

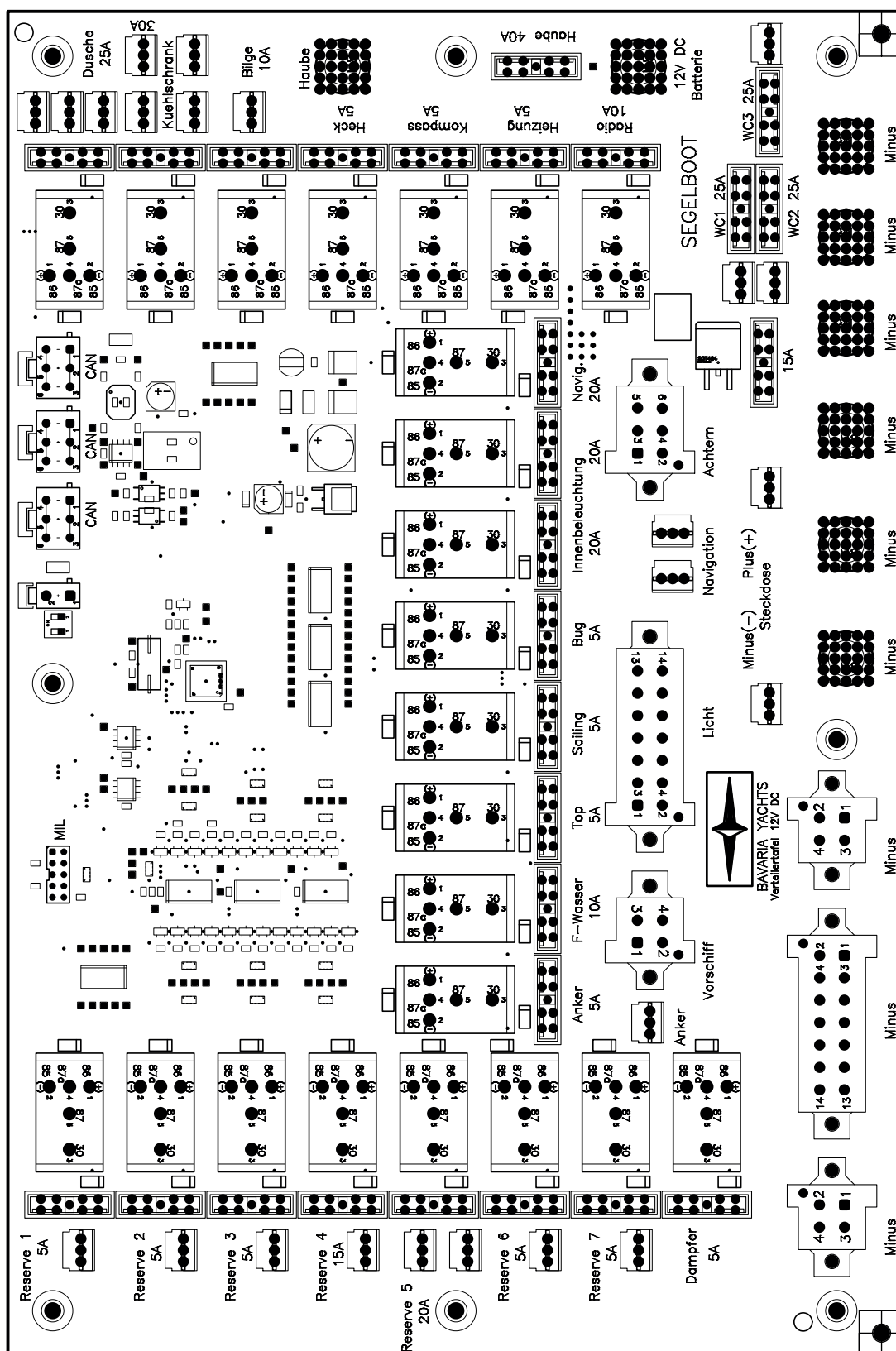
The electrical components are mainly operated via the control panels; the 12-volt panel shown here is on the port side over the shelf directly in front of the galley.



This 12 V system panel controls circuits protected by different power sections that are behind the backrests and under the seating directly below and in front of the switch panel.

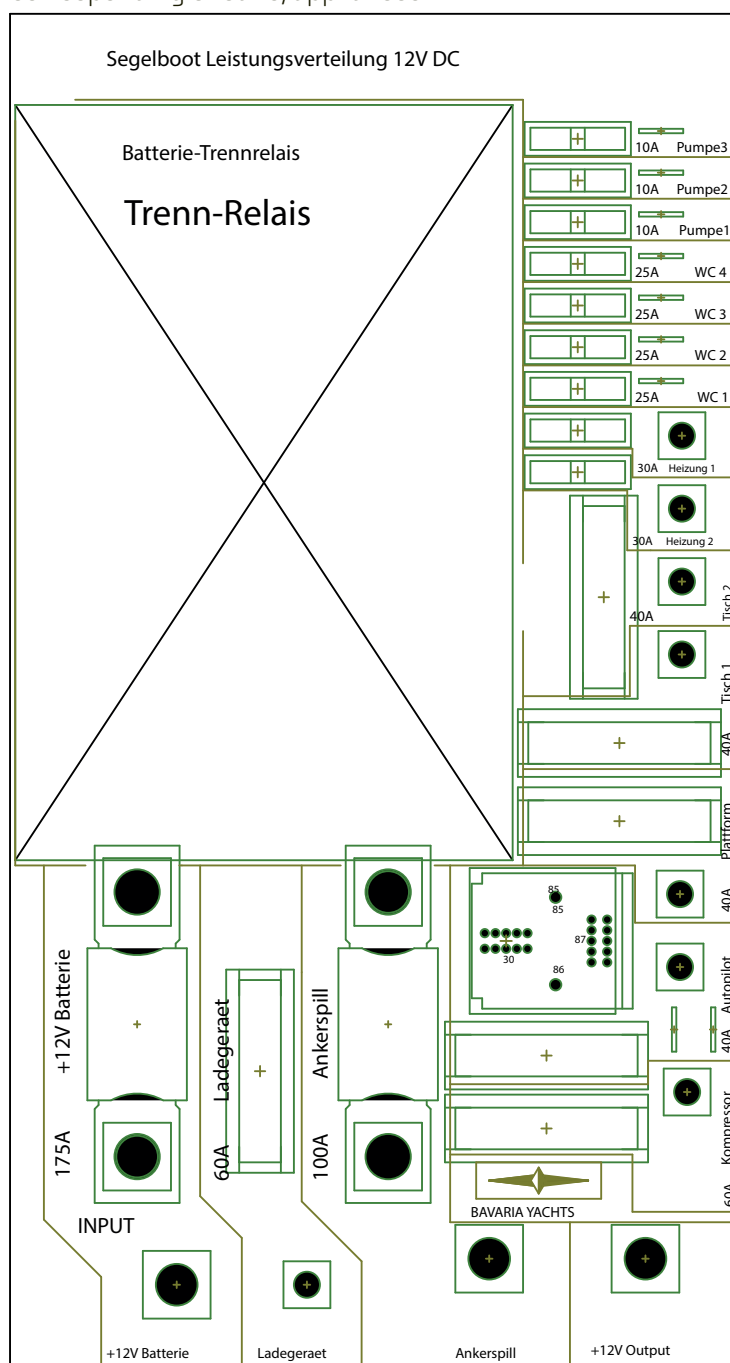
## 6.4.1. Power section

The circuit board is labelled with the rating and purpose of the related fuses.



### 6.4.2. Fuse assignment, power section with battery isolating relay

The circuit board is labelled with the rating and purpose of the related fuses. This makes it possible to associate the fuses with the corresponding circuits/appliances.



#### Attention - pay attention to the ratings of the fuses

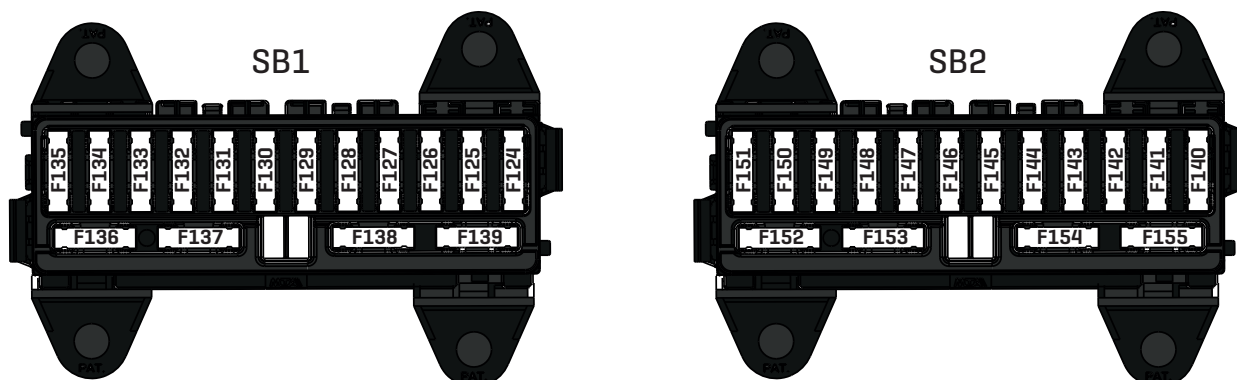
Pay attention to the correct ratings of the fuses.



### 6.4.3. Other fuses

There are further slots for blade fuses on board, these can be found in the illustrations below. The fuse boxes each have an identifier based on the scheme SB X, where X is a number.

### 6.4.4. Fuse boxes SB1 and SB2



### 6.4.5. Key for fuse box SB1

Slot	Fuse in [A]	Description
F124	5	Galley lights
F125	5	Radio permanent power
F126	5	Battery switch
F127	1	Main service battery sensor
F128	10	VHF
F129	25	Heating
F130	5	Radar
F131	5	High bilge alarm
F132	15	Bilge pump, saloon, automatic
F133	15	Bilge pump, saloon, manual
F134	15	Bilge pump, engine compartment, automatic
F135	15	Bilge pump, engine compartment, manual
F136	5	Faecal tank sensor, bow
F137	5	Faecal tank sensor, aft
F138	20	Navigation relay
F139	20	Autopilot

### 6.4.6. Key for fuse box SB

Slot	Fuse in [A]	Description
F140	5	Step lights
F141	5	Reading lights
F142	5	Philippi monitor VTM
F143	5	Quick dimmer-WiFi
F144	5	Defroster
F145	2	Fridge, wet bar
F146	15	Not used
F147	30	Heating tank indication
F148	30	Faecal tank sensor

Slot	Fuse in [A]	Description
F149	10	Nav plotter 1
F150	10	Nav plotter 2
F151	na	Not used
F152	na	Not used
F153	na	Not used
F154	na	Not used
F155	na	Not used



### Attention - pay attention to the ratings of the fuses

Pay attention to the correct ratings of the fuses.



If fuses with an excessively high current rating are used, the panel or the cable ducts may be damaged due to overheating. Always keep at hand a suitable number of replacement fuses for emergencies. During replacement, pay attention to the correct rating of the blade fuses.

## 6.5. DC system

The DC electrical system is supplied by a series of batteries as specified in the following list. The batteries supply the appliances with the stated overcurrent protection by means of circuit breakers or fuses. Supply via the shore connection is also available [via an inverter].

### 6.5.1. List of the batteries fitted on board

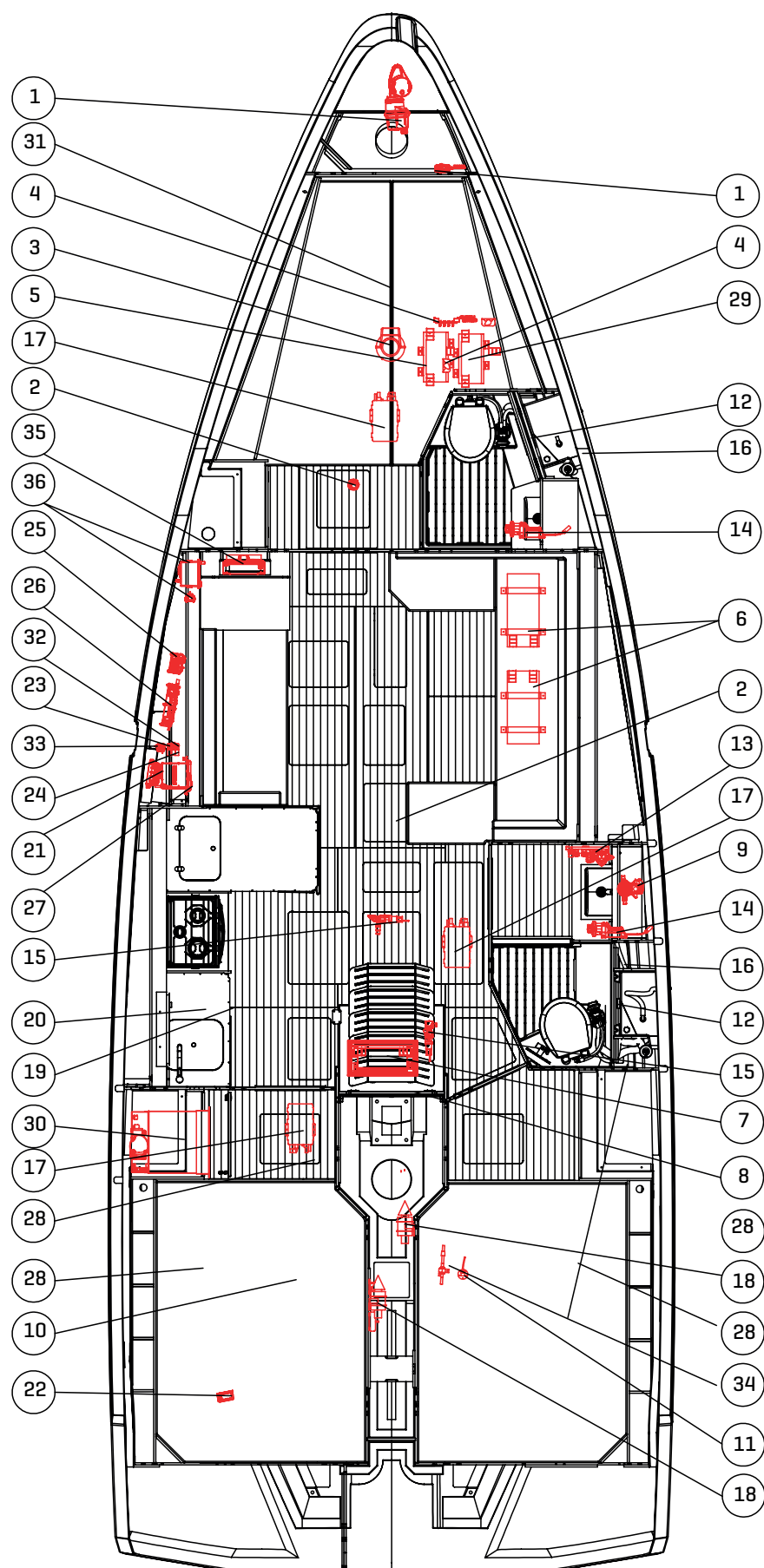
See the plan for the 12-volt system "6.5.3. 12-volt system plan" on page 38

Quantity	Description	Installation position
1	Starter battery, engine	In the engine compartment, under the pivoting steps in the companionway
2	Service batteries AGM [to some extent option]	Under the U-sofa, starboard
1	Service battery AGM [BSR], for the operation of the anchor windlass	Under the lying area, owner's berth, forward starboard side
1	Service battery AGM [BSR], for the operation of the bow thruster	Under the lying area, owner's berth forward, starboard side

## 6.5.2. The DC system consists of the following components

Item	Description
1	Anchor windlass with remote control [option]
2	Sumlog/echo sounder
3	Bow thruster [option]
4	Main switch, fuses, relays: bow thruster, anchor windlass [option]
5	Battery, anchor windlass [option]
6	Service batteries [to some extent as option]
7	Starter battery, engine
8	Main switch, engine
9	Grey water pump [option]
10	Sensor, fresh water tank
11	Sensor, fuel tank
12	Sensor, faecal tank
13	Fresh water pump
14	Shower pump
15	El. bilge pump
16	El. toilet [option]
17	Sump tray, air conditioning unit
18	Fan, engine compartment
19	Fridge [option]
20	Combination fridge/freezer
21	Radio [option]
22	Remote control, deck [option]
23	Button, main switch, el. bilge pumps [manual /automatic]
24	Button, high bilge alarm
25	Power distribution - switching system
26	On-board electrical system - switching system DC 12 V
27	Service panel, on-board electrical system - switching system DC 12 V
28	Elec. deck winches [option]
29	Battery, bow thruster motor [option]
30	Refrigerated drawer /freezer drawer [option]
31	Sensor, additional fresh water tank [option]
32	Button, main switch, engine
33	Button, main switch, appliances
34	Fuel pump - heating
35	Plotter
36	VHF radio

## 6.5.3. 12-volt system plan



## 6.6. Work on the batteries

Access to the batteries must always be prevented by suitable means. On board the C38, the poles are carefully insulated and do not need to be touched under normal conditions.



### Attention - removal or replacement of the batteries

To disconnect the battery cables from the poles:

1. Switch off all battery-powered appliances.
2. Set the battery switch/switches to "OFF".

Always disconnect the negative pole cable [blue/black] first, then the positive pole cable [red]. While re-connecting the cables, connect positive pole [+red] first and then negative pole [-black].



### Attention - batteries

- » Ensure the battery compartment is sufficiently ventilated at all times.
- » During charging or while disconnecting/re-connecting the battery, no water and/or no metal objects should come into contact with the connections.
- » Never disconnect the batteries while the engines are running. The alternator and the wiring may be destroyed or damaged.



### Information - disconnecting batteries

The batteries should be disconnected while the boat is not in use and especially if the boat is left unattended. Important appliances are connected directly to the batteries and operate 24 hours a day even if the rest of the electrical system is switched off.

### 6.6.1. Battery servicing

The batteries supplied by BAVARIA from the works are normally AGM batteries. These are maintenance-free. The batteries are always to be replaced with equivalent AGM batteries.

- » Protect the terminals on the batteries using silicone grease or Vaseline.
- » Keep the batteries clean and dry.
- » The life expectancy of the batteries is dependent on how many times the batteries are fully discharged. Accordingly, the batteries should not be discharged more than 50 %. If the batteries are discharged further, you should start recharging without delay.
- » Charging the batteries with the engines at idle is not particularly effective; the alternator requires higher speeds to generate the necessary charging current. Running the engine at idle even for an extended period will not produce enough charging current to charge the batteries fully.
- » If you charge the batteries separately using a charger, make sure you use a charger with a sufficient rating and that is also suitable for operation in a maritime environment. Only connect the charger once the batteries have been disconnected from the electrical circuit in the boat. Follow exactly the instructions from the manufacturer of the charger. If you do not use your boat for an extended period, and this applies from a duration of a few weeks, remove the battery and connect it to a charger.

## 6.7. AC system

Two electrical service panels are provided for the operation and the supply of power for the 230-volt system. The corresponding panel is used to supply the 230/110-volt appliances if a shore connection is available and if operated via the inverter. The system is polarised.

The panels are in a cupboard directly underneath the monitor on the port side in the saloon.

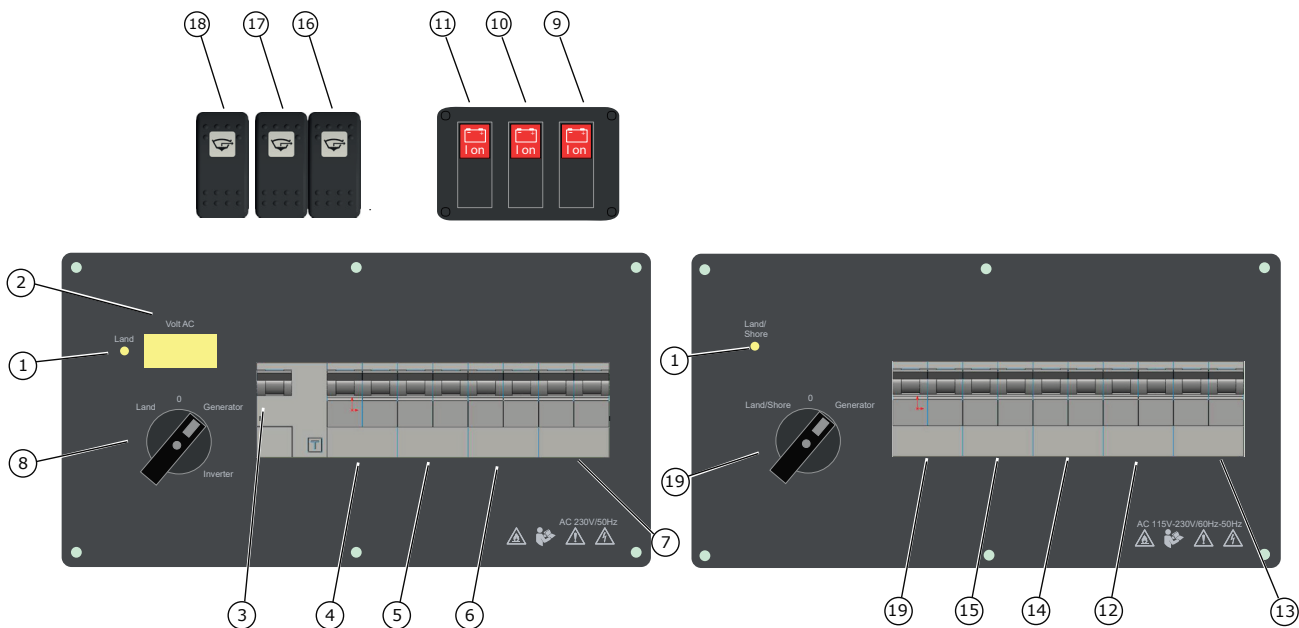


### Danger




- » The 230 V panel is supplied with  $230/110 \pm 5\%$ , 50/60 Hz mains voltage.
- » Parts on the rear of this panel (input B16/RCD) therefore carry life-threatening voltages - even with the RCD switched off.
- » Only qualified personnel are allowed to make measurements and undertake repairs on the 230/110-volt panel.
- » Improper use of the panel can therefore result in fatality or severe injury, as well as considerable damage.
- » You must follow the safety instructions and information on hazards in these operating instructions while using the 230/110-volt panel.
- » Pay attention to the applicable health and safety and DIN regulations (in particular DIN EN 60 204, part 1) or the regulations in your country.
- » Before repair work, switch off the RCD and disconnect the 230/110-volt panel from the power supply system.
- » Secure the power supply against switching on again. If this instruction is not followed, physical contact with electrically live parts may result in fatality or severe injuries.

### 6.7.1. 230-volt panel



## 6.7.2. Key for the panel shown above

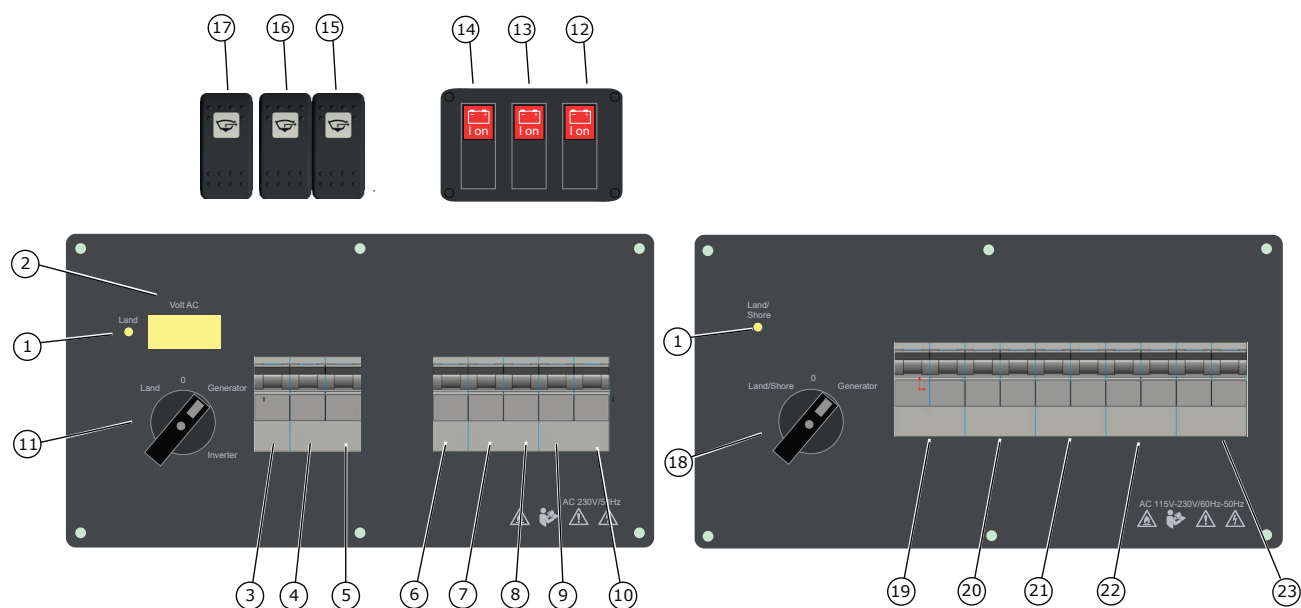
Item	Designation	Explanation
1	Power present in the system [green]	Indicator illuminated means: there is power at the panel
2	Voltmeter	The digital display indicates the voltage present, either from the shore or from the inverter
3	Residual current circuit breaker	The test button at the bottom right allows you to test the residual current circuit breaker, the residual current circuit breaker must trigger immediately if this button is pressed, otherwise the circuit breaker is faulty and must be replaced
4	Boiler	Boiler overcurrent protection - also used as the switch
5	Toilets	Sockets in the toilets
6	Sockets	 During operation using an inverter, it must be ensured the permissible total power rating of the inverter is not exceeded; please consult the manual for the inverter on this aspect
7	Microwave, washing machine, charger, dish-washer, wine cooler	Some of these components are only available as options and may not be fitted to your yacht
8	Selector switch	Select here between supply from the shore [Land], supply via the inverter [Generator] or [0/OFF]
9	Main switch	Appliances
10	Main switch	Bow
11	Main switch	Engine
12	Air conditioning unit	Air conditioning unit in the aft berth
13	Sea water pump	Sea water pump for the air conditioning unit
14	Air conditioning unit	Air conditioning unit in the saloon
15	Air conditioning unit	Air conditioning unit in the saloon
16	Bilge pump switch	Three-way switch: middle position off, bottom position continuously illuminated automatic mode, top position illuminated during actuation, manual mode.
17	Bilge pump switch	Three-way switch: middle position off, bottom position continuously illuminated automatic mode, top position illuminated during actuation, manual mode.
18	Bilge pump switch	Three-way switch: middle position off, bottom position continuously illuminated automatic mode, top position illuminated during actuation, manual mode
19	Main switch, shore supply and generator	Before you can draw power from the shore, you must set this switch to the related position.

## 6.7.3. 230-volt panel

Boats that are equipped with an AC system with 110 volts have a panel for the 110-volt power supply instead of the 230-volt panel [see "6.7.1. 230-volt panel" on page 40].



## 6.7.4. 110-volt panel (alternative to the 230-volt panel)



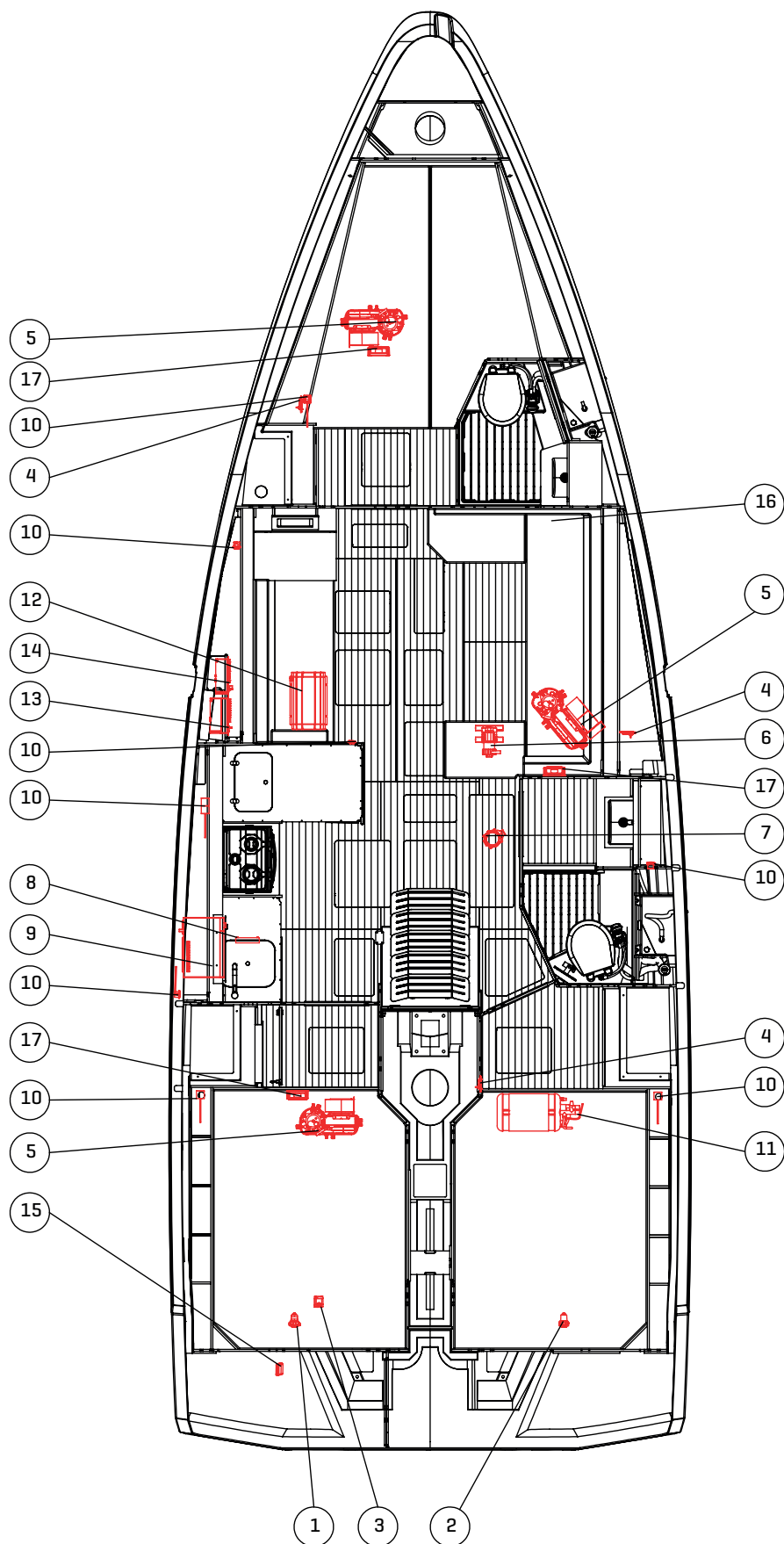
## 6.7.5. Key for the panel shown above

Item	Designation	Explanation
1	Power present in the system [green]	Indicator illuminated means: there is power at the panel
2	Voltmeter	The digital display indicates the voltage present, either from the shore or from the inverter
3	Sockets	Sockets in the toilets
4	Sockets	
5	Sockets	
6	Boiler	Boiler overcurrent protection - also used as the switch
7	Microwave, charger	During operation using an inverter, it must be ensured the permissible total power rating of the inverter is not exceeded; please consult the manual for the inverter on this aspect. Some of these components are only available as options and may not be fitted to your yacht
8	Ceramic hob, ice cube maker	
9	Washing machine, dishwasher	
10	Electrical grille	
11	Selector switch	Select here between supply from the shore [Land], supply via the inverter [Generator] or [0/OFF]
12	Main switch	Appliances
13	Main switch	Bow
14	Main switch	Engine
15	Bilge pump switch	Three-way switch: middle position off, bottom position continuously illuminated automatic mode, top position illuminated during actuation, manual mode.
16	Bilge pump switch	Three-way switch: middle position off, bottom position continuously illuminated automatic mode, top position illuminated during actuation, manual mode.
17	Bilge pump switch	Three-way switch: middle position off, bottom position continuously illuminated automatic mode, top position illuminated during actuation, manual mode
18	Main switch, shore supply and generator	Before you can draw power from the shore, you must set this switch to the related position.
19	Air conditioning unit	Air conditioning unit in the forebody
20	Air conditioning unit	Air conditioning unit, saloon
21	Air conditioning unit	Air conditioning unit, saloon
22	Air conditioning unit	Air conditioning unit, stern
23	Air conditioning unit	Sea water pump for the air conditioning unit

## 6.7.6. Volt panel

## 6.7.7. 230/110-volt loads on board

The AC system consists of the following components/loads, see also the following plan:



## 6.7.8. Key for the 230/110-volt plan

Item	Description
1	Shore connection: appliances 230 V
2	Shore connection, air conditioning unit, deck 230 V [option]
3	Residual current circuit breaker, shore connection 230 V [below deck]
4	Service panel, air conditioning unit [option]
5	Air conditioning unit [option]
6	Air conditioning pump [option]
7	Air conditioning water filter [option]
8	Air conditioning control system box [option]
9	Microwave [option]
10	On-board connection to the power supply [socket]
11	Boiler
12	Inverter [option]
13	AC distributor, appliances
14	AC distributor, air conditioning unit
15	Shore connection: Appliances, air conditioning unit [option] 110 V
16	TV preparation
17	El. box for air conditioning unit [option]

## 6.7.9. The following sources are available to the 230/110-volt system as the power source

Power source	Quantity	Installation location
Shore connection, appliances	1 for general on-board electrical system	Side of storage locker, beside port steering position
Shore connection, air conditioning unit	1 for air conditioning unit	Side of storage locker, beside starboard steering position, oriented to the stern
Battery bank via inverter	1	Inverter, see "6.7.7. 230/110-volt loads on board" on page 44

**Attention**

- » Replace the fuses only with fuses that match the fuse installed originally in relation to the current rating [A].
- » Metal housings or covers on electrical appliances must be connected to an earth wire [green wire or green wire with yellow stripe]. Only use double-insulated or earthed electrical appliances.

**Danger**

The cable for the shore connection must not hang in the water under any circumstances, because it can generate an electrical field and result in injuries or fatality for persons swimming close by.



### Warning - short circuit and fire hazards

- » Switch off the shore connection before connecting or disconnecting the cable for the shore connection.
- » Connect the cable for the shore connection to the boat first, then to the shore electrical system.
- » Disconnect the cable for the shore connection from the shore electrical system first.
- » Close the shore connection locker securely.
- » Under no circumstances modify the connections for the shore connection and only use equivalent connections.



### Information - disconnecting batteries

The information on the current rating [A] is given on each fuse.

Prevent short circuits by setting the main switch to the "OFF" position before connecting the connector for the shore connection.

Connect the power connection in the boat to the shore connection using an integrated safety switch. In this way it is ensured that the main switch switches off automatically if there is a fault in the connection. The connection must be protected for an interruption-free shore supply.

#### 6.7.10. Electrical circuit diagrams

The circuit diagram drawings for your BAVARIA C38 are integrated into the manual here according to the directive and related standard, if you have specific questions, or if your QR code ceases to function at some point, we recommend you contact your local dealer.



## 6.8. Fuel system

The BAVARIA C38 has a permanently installed diesel fuel system. The fuel system supplies the following components:

Component	Quantity	Location
Propulsion system	1	Engine compartment, see "7.2. Engine and its peripherals" on page 67
Hot air heating, 4 kW, outlets in saloon, cabins and wet cells	1	Aft, between the aft cabins, see "6.5.3. 12-volt system plan" on page 38



### Attention - read

Always follow the information from the manufacturer on the systems stated above. For detailed information on the tanks, refer to the chapter "5.4. Permanently installed tanks" on page 23

The most important fuel control systems and components have the following names. There is no manual shut-off valve.

Component	Location
Solenoid valve, shuts off and opens the fuel supply	Switched on at the steering position by actuating the ignition
Indications on the service panel for the engine	Switched on in the navigation area at the main switch - engine
Start button	On the engine service panel on the starboard side, press "Start"
Stop button	Same button as "Start", stops the engine
Main switch, engine	In the navigation area



### **Danger**

Never use a naked flame as a light while checking for leaks; it is best to use an explosion-protected lamp.



### **Warning**

- » While filling with fuel do not smoke and do not use naked flames in the engine compartment!
- » At least once a year, check the fuel lines for faults. Replace them if there are signs of ageing or fracture.
- » If leaks occur, close the fuel shut-off valve and repair the system before using again.
- » Repairs are only to be undertaken by experienced persons!



### **Attention**

- » All fuel-burning appliances require a sufficient supply of oxygen. Before switching on a fuel-burning appliance, make sure the air inlets for this appliance are functional and clear.
- » Trouble-free operation of the engine is only possible if the fuel is clean. It is therefore imperative you regularly inspect the filter and the water separator and clean them if necessary.
- » Once a year the fuel tank should be completely drained and cleaned.



### **Attention - read**

The documentation on board also includes the manuals from the engine supplier - it is imperative you read these manuals carefully before use:

## 6.9. Gas system

### 6.9.1. Description of the system

The gas system (LPG) supplies the hob/oven in the galley. You will find the main components of the system and their installation positions in the chapter "6.9.2. Gas system on the C38" on page 49. The storage compartment for the gas cylinder is behind the port steering position under the deck hatch. The gas system has been installed as per the European standard EN ISO 10239. However, pay attention to regulations in the country in which your boat is registered, these may differ!



#### **Danger**

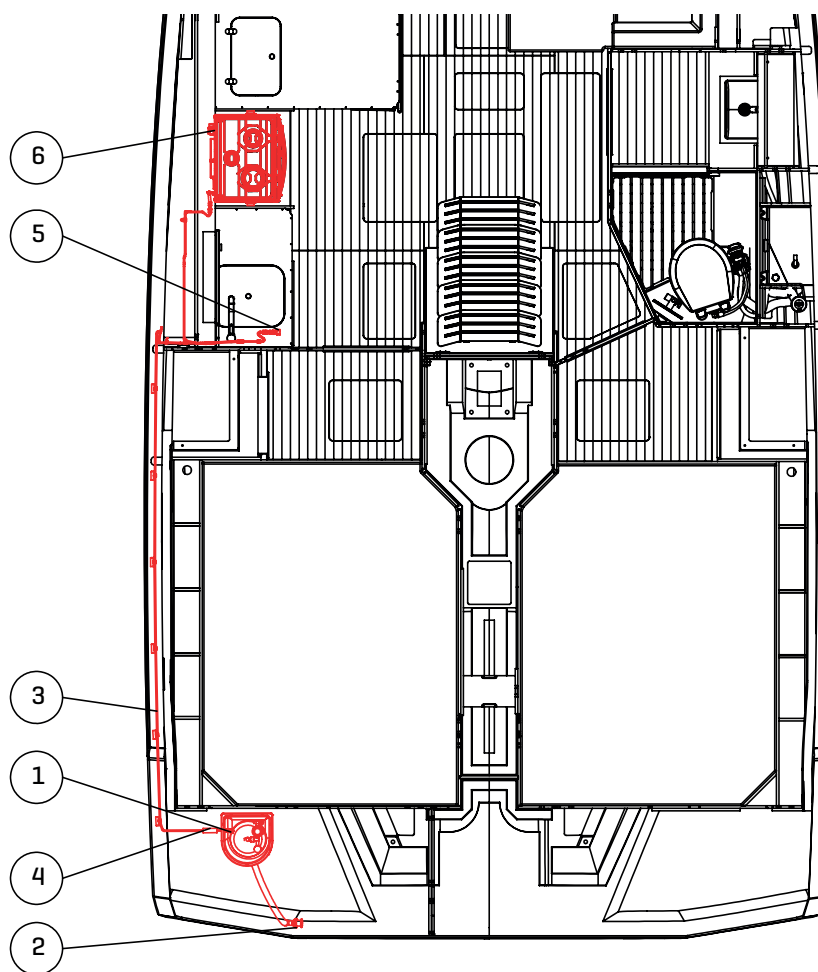
Modifications to the liquid gas system are only allowed to be made by approved engineers. Take into account that after making modifications, the documentation in this manual must also be amended correspondingly. The cylinder locker is ventilated directly to the exterior. Any water that has entered is also drained via this opening.

The controls and the individual components are given separately in the following list.

Controls	Installation position
Valve	Directly on top of the cylinder
GOK low pressure regulator on the cylinder with pressure gauge	Permanently installed via the gas hose in the gas locker
Shut-off valve	In the cabinet before each appliance [marked with pictograms]
Manual shut-off valve	On each of the gas-powered appliances

### 6.9.2. Gas system on the C38

The forward part of the boat does not contain any components of the gas system and is therefore not shown here.



### 6.9.3. Terms for the components of the gas system in the galley

Item	Description
1	Gas locker for gas cylinder [under port hatch]
2	Gas locker drain
3	Copper pipe 8 mm
4	Trim panel with conduit
5	Gas ball valve [in the cabinet under hob]
6	Gas cooker with oven, 3 rings



#### 6.9.4. Ventilation

The following ventilation openings must be opened for sufficient ventilation during the operation of the gas system in the saloon.

Item	Nature of the opening	Installation location
1	Portlights	In the window area in the area of the galley at the height of the super-structure, also the window opposite
2	Companionway	Companionway to the saloon/galley
3	Deck hatches	In the area of the galley/saloon

#### 6.9.5. The safe operation of the gas system



##### **Danger**

- » While changing the gas cylinder, do not smoke or use naked flames!
- » Fuels with naked flames consume the oxygen in the room and leave combustion residue in the vessel. If the appliances are in use, ensure there is sufficient ventilation.
- » Open the ventilation openings provided during usage. Never use the hob or oven as room heating. Never block the ventilation openings!



##### **Warning**

Do not block access to the components of the gas system. Unrestricted access to these components is imperative and must be ensured at all times.



##### **Attention**

- » Close the gas supply valves and the valve on the gas cylinder if the appliances are not in use. Always close the valves before connecting a new cylinder and immediately in emergency situations. Make sure all valves on the appliances are closed before you open the gas cylinders.
- » Under no circumstances use a cleaning agent that contains ammonia.
- » If cylinders are empty, close the valves on the gas cylinders and disconnect. Then fit protective caps. Store the empty gas cylinders in a well-ventilated place on the open deck or in a gas cabinet that is also ventilated to the outside and that is provided for this purpose. The cylinders must be secured against falling over and rolling.
- » Never use the gas cylinder locker or cabinet for storing other equipment and parts!
- » Never leave your yacht unattended if the gas system is in use!
- » In conjunction with the gas option, a camper cover must not be additionally sealed beyond its condition as delivered from the works.
- » Never make modifications to the cylinder locker. Also never make openings into the interior of the boat from the cylinder locker.
- » Never install electrical equipment or wires in the cylinder locker!



##### **Attention - read**

Read the manufacturer's operating instructions supplied before using the appliances of the gas system.

### 6.9.6. Procedure for the replacement of gas cylinders



#### **Danger**

Before you release the valve from the cylinder, the gas from the line must always have been burnt first. Wait until the flame goes out on its own. Only then is the line de-pressurised. A gas escape with the cylinder valve closed and pressure reducer removed is indicative of a damaged cylinder valve. In this situation you must re-fit the pressure reducer immediately and task an appropriately qualified person with the repair. You are never allowed to remove the pressure reducer if the flame does not go out.



#### **Attention**

- » Never drop gas cylinders. During transport the valves on the gas cylinders must be protected with protective caps.
- » Use a specially designed vehicle to transport gas cylinders. Gas cylinders stored must always be secured against sliding.
- » The companionway must be closed while changing the gas cylinder in the cockpit. Ensure there is good ventilation while changing the gas cylinder.

The procedure step-by-step:

- » Switch off all gas appliances and the engine.
- » Turn the switch or the valve on the cylinder
- » Unscrew the pressure reducer from the cylinder valve on the gas cylinder. Only use tools that are suitable for this task so that the connection and fitting are not damaged.
- » It is imperative you re-connect the valve protection cap to the empty cylinder without delay.
- » Remove the valve protection cap from the new gas cylinder.
- » Release the empty cylinder from the holder and remove the cylinder from the cylinder locker
- » Place the new cylinder in the holder and secure the cylinder.
- » Check the connection thread on the cylinder for any damage
- » Carefully fit union nut and hand-tighten. Pay attention to the direction of the thread.
- » Using a suitable tool, tighten the union nut and check for leaks.
- » Inspect the connections again and only if these are connected correctly, open the valve on the pressure regulator.
- » Check the system for leaks using the pressure gauge. This gauge must not indicate any pressure loss.

### 6.9.7. Inspection of the gas system:

Regularly check the LPG system for leaks. Check all connections for leaks as follows:

Regular check using a leak tester

- » Monitor the gas pressure for a loss of pressure with appliances shut-off. Open valve on the gas cylinder and then close again (if a pressure gauge is installed in the supply line)
- » Manual leak test: test using soapy water or a detergent solution (appliance burner valves closed and gas cylinder and system valves open)



#### **Danger**

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- » Never use a naked flame as a light while checking for leaks.
- » While changing the cylinders, do not smoke under any circumstances and avoid naked flames.
- » Cylinders with a damaged thread are not allowed to be used. There is a danger that gas may escape.
- » Do not use sealant or grease on the cylinder connection or valves.



#### **Attention**

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- » LPG lines and connections should be inspected regularly, at least once a year, and replaced if damaged.
- » If a leak occurs, immediately close the valve on the gas cylinder and have the malfunction rectified before using the system again. An appropriately qualified person must undertake the repairs.
- » To check the gas connections on the gas oven, it is necessary to remove the front panel.

### 6.9.8. Leak test on the gas system

With appliance valves closed!

1. Open cylinder valve; close cylinder valve.
2. Wait until the pressure indicated on the pressure gauge has stabilised.
3. Monitor pressure on the pressure gauge for 3 minutes.
4. If the pressure remains constant, there is no leak; if the pressure drops, there is a leak.



#### **Danger**

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Do not use the LPG system anymore until the leak has been repaired!

6.10. Thruster

Item	Thruster	Power source
1	Optional bow thruster permanently fitted in tunnel	One additional battery under front berth at the side beside the water tank, batteries also supply the anchor windlass



Attention

Switching the thruster can accelerate the boat such that persons may fall over or be thrown overboard. This statement applies in particular to persons on the foredeck and who are not holding on sufficiently well.  
The thrusters must first be activated on the plotter, there is no separate main switch installed,



Attention - read

The optional thrusters are operated at the starboard steering position using the related service panel. See the documentation included with the boat, separate operating instructions from the thruster manufacturer.

6.10.1.Black water system [toilet flushing]

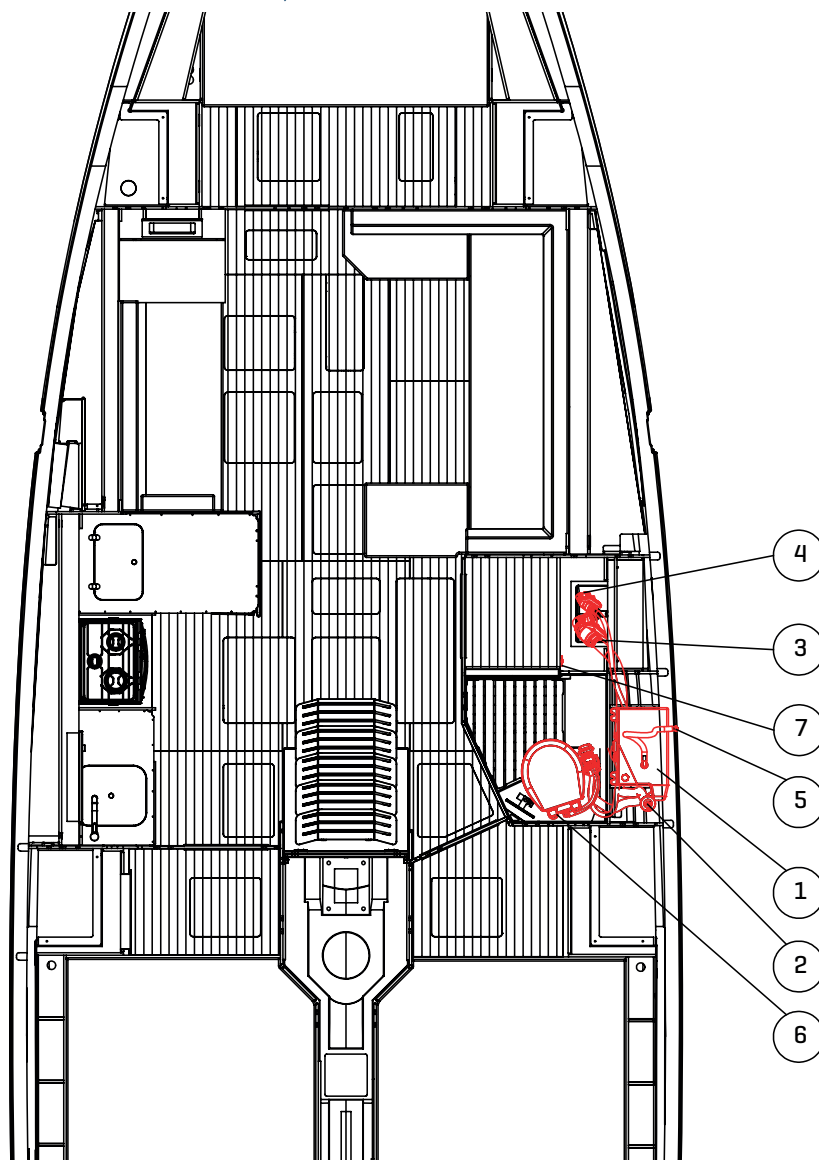
In some areas of the Earth, it is not allowed to discharge black water and to some extent also not grey water. The boat therefore has fittings to comply with these restrictions and to prevent discharge. The films and documentation you can access on the page [https://www.bavariaplus.de/en/s/bavis\\_start](https://www.bavariaplus.de/en/s/bavis_start) on the Internet will help you to understand and operate the on board systems. The following list and the attached drawing explain the system and the position of the fittings, please have these systems explained in more detail during handover. All toilets pump out directly into faecal tanks, pumping out directly overboard is not possible; this configuration complies with the requirements of the Recreational Craft Directive.  
Emptying the tanks: first open connection on deck and then fasten the shore-side suction connection.



Attention

Before emptying, check the breather pipe on the faecal tank; the suction openings are directly above the tanks on the side deck. See here in particular the related plans.  
Regularly clean and flush the black water tank, do not leave it filled for an extensive period, otherwise there may be an unpleasant odour

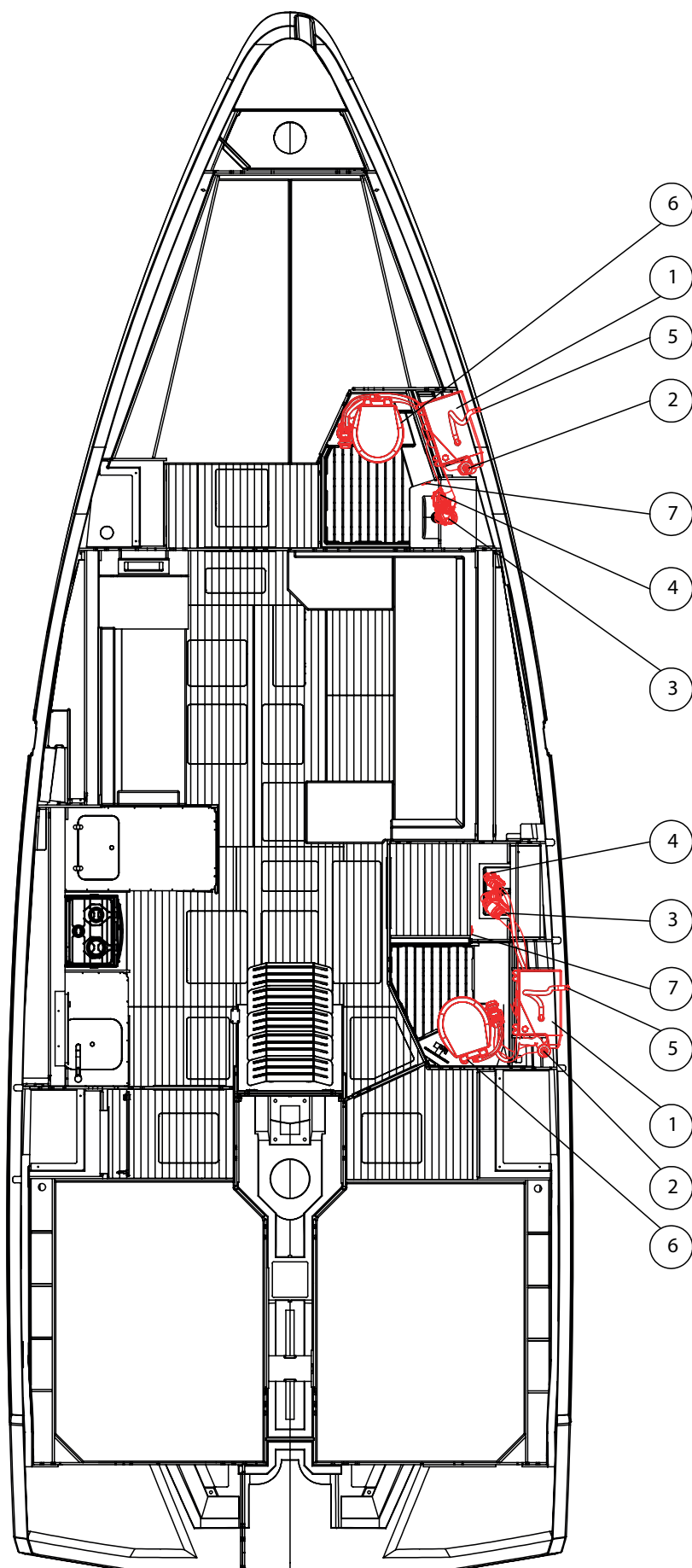
## 6.10.2. Black water on board the C38 - layout 1



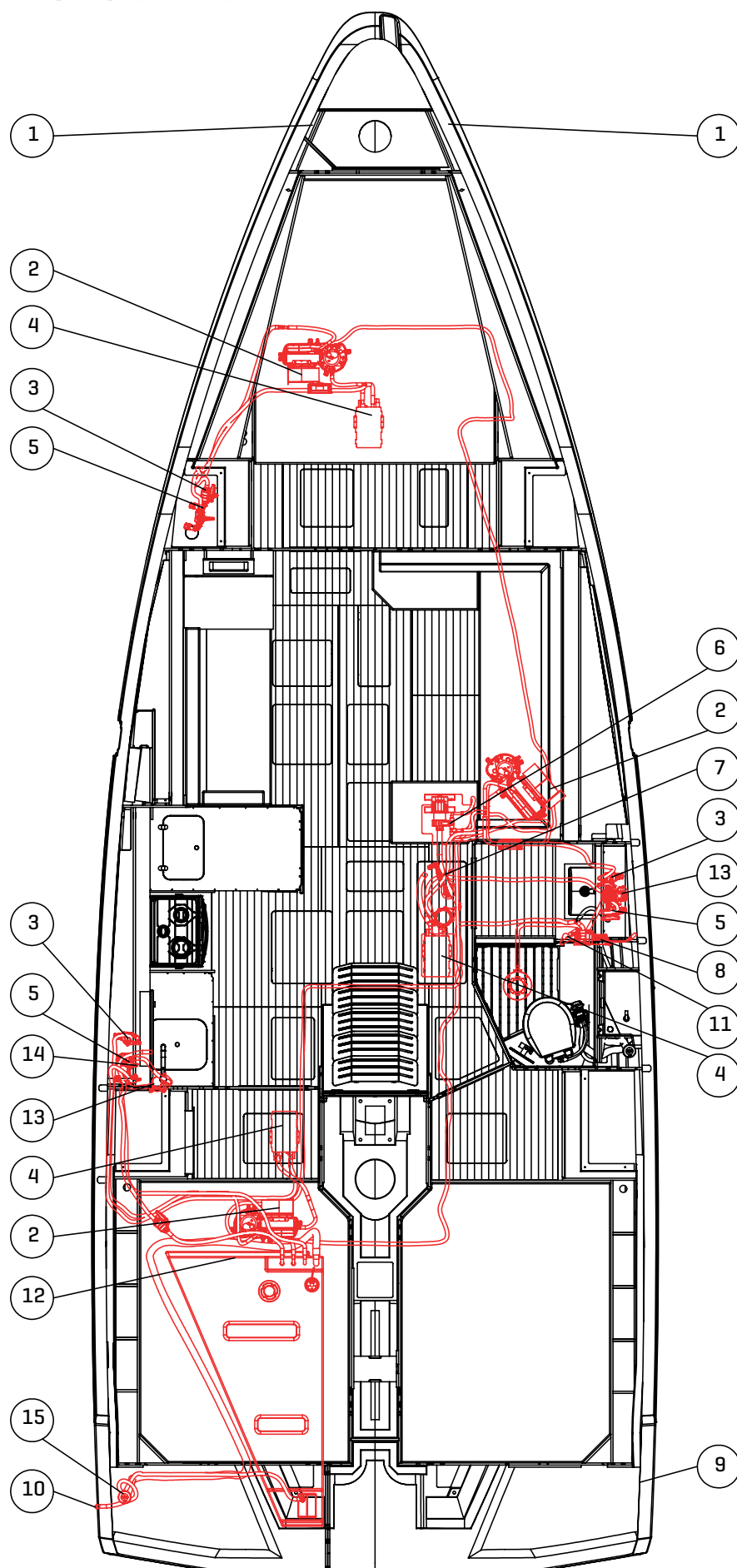
## 6.10.3. Black water system, black water on board the C38

Item	Description
1	Faecal tank, approx. 70 L
2	Deck suction point, faecal tank
3	"Discharge, faecal tank/discharge, sea water toilet"
4	Intake, toilet flushing
5	Breather, faecal tank
6	Manual sea water toilet
7	Tank level gauge

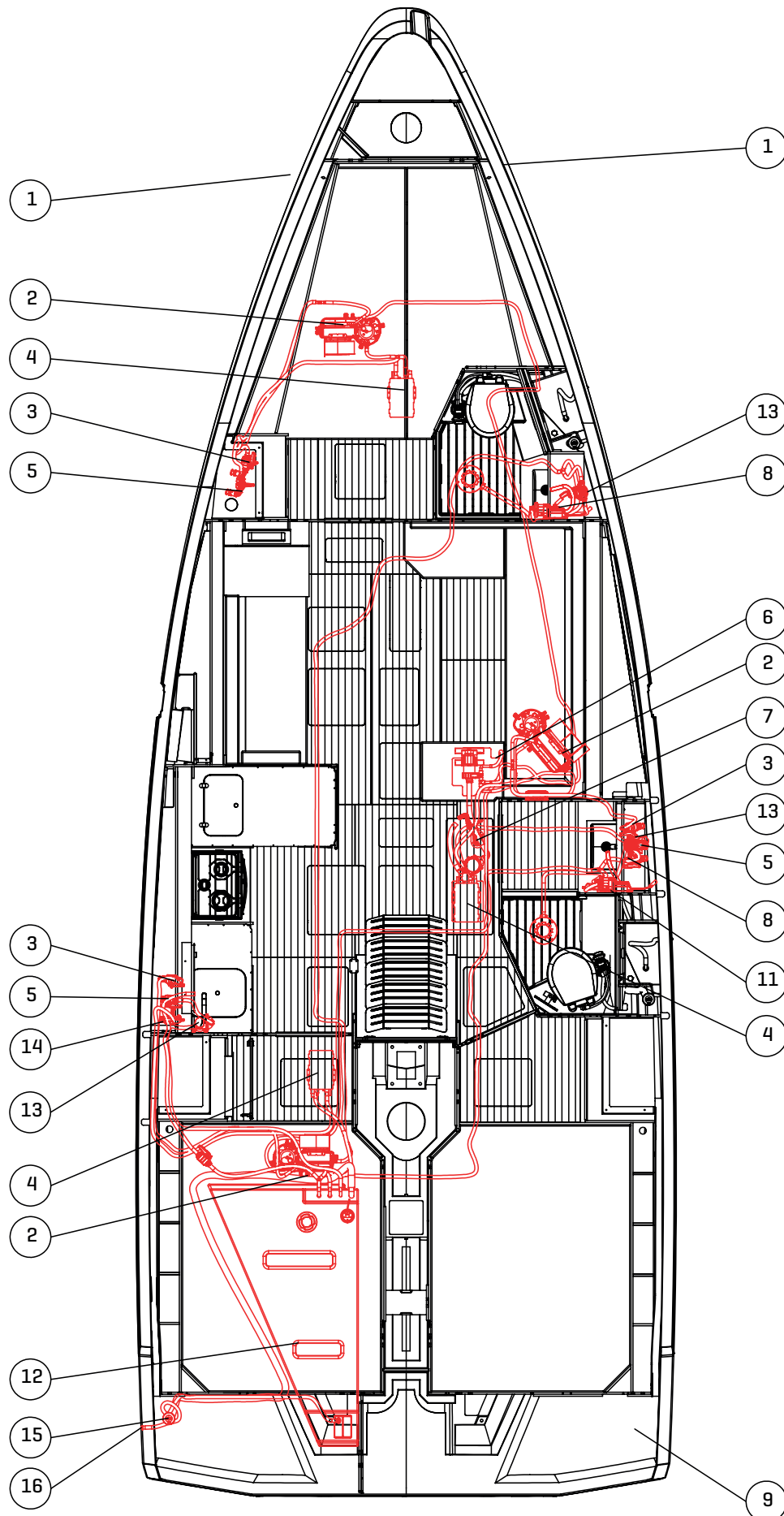
## 6.10.4. Black water on board the C38 - layout 2



## 6.10.5. System drawing for grey water system with tank, layout 1



6.10.6. System drawing for grey water system with tank, layout 2





## 6.10.7. Grey water system, components

Item	Description
1	Drain, anchor locker
2	Air conditioning unit
3	Discharge, air conditioning unit
4	Sump tray, air conditioning unit
5	Discharge, sump tray
6	Air conditioning pump
7	Intake, air conditioning pump
8	Shower pump
9	Discharge, engine
10	Breather, grey water tank
11	Sump tray, grey water system
12	Grey water tank, approx. 210 L
13	Pump, grey water tank
14	Discharge, grey water tank
15	Deck suction point, grey water tank (deck)

## 6.11. Toilets and waste water

The toilets on Bavaria yachts always pump out directly to the related faecal tank, only after that is it possible to empty from the tank via the deck suction point or to discharge into the water.

Toilets	Discharge options	Location of the valves
Toilet/shower (starboard), tank behind the wall trim panel	Directly into the related tank, only then overboard via sea cock	The valve for discharging overboard is under the wash basin in the toilet, emptying always on deck directly above the tank

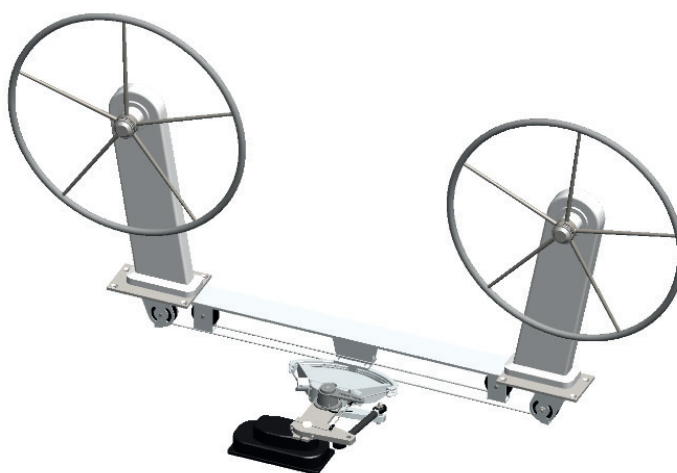


### Attention

- » If you are in waters where it is not allowed to discharge faeces, the end valve may be closed and sealed by the authorities such that discharge overboard is no longer possible.
- » Waste water tanks must not be overfilled under any circumstances, because there is a danger of flow back into the vessel.
- » Avoid subjecting the waste water tanks to winter frost because the expansion could burst the tanks and the pipes in the system. Anti-freeze in the tanks during the winter will prevent the contents freezing.
- » Empty the waste water tanks carefully if you will not be using the vessel for some time.

## 6.12. Steering system

Your BAVARIA C38 is steered via the double steering system using two wheels and one rudder blade, during docking manoeuvres also using the thrusters. The two wheels act on the central quadrant via a rope system. The quadrant can be accessed between the wheels under the cockpit floor. The optional autopilot can also be accessed there.



### Warning

Faults in the steering system can lead to the loss of control of the boat. Any change in the steering, such as loosening, stiffness, play, etc. must be checked and repaired as quickly as possible by an appropriately qualified person.

The steering system is designed for wheels with a maximum diameter of 800 mm, wheels with a larger diameter will overload the mechanism or collide with the neighbouring areas. Only wheels without an offset forward or to the stern are to be installed.

**Attention - read**

Obtain information on the function of the steering using the information from the manufacturer [system information]; the manual from the manufacturer will be helpful here.

All components of the steering system must be subjected to regular inspection and servicing to ensure reliable function. Please refer to the manufacturer's manual for detailed instructions on the engine and steering system [e.g. servicing intervals].

**Information**

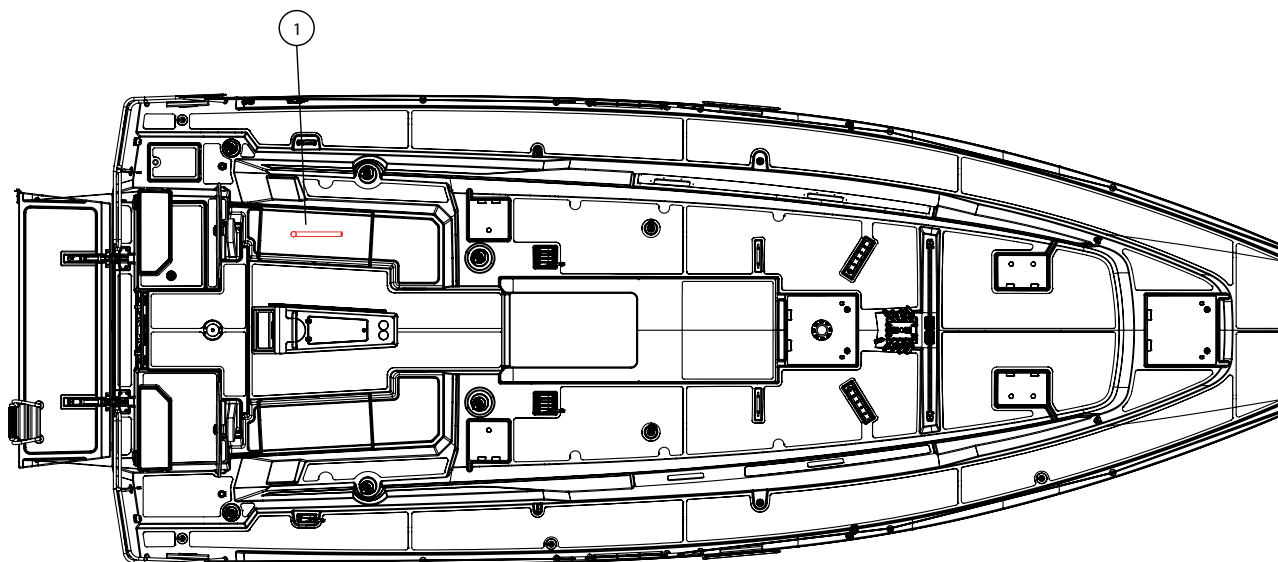
The two wheels at the steering positions act as controls.

The C38 has two steering positions, one control column on the port side, and a further one on the starboard side. The C38 can also be operated using a remote control [optional autopilot] that acts directly on the steering system; this equipment is optional and is fitted under the cockpit floor in the aft area. For information on its usage and its limitations, please read the related technical information.

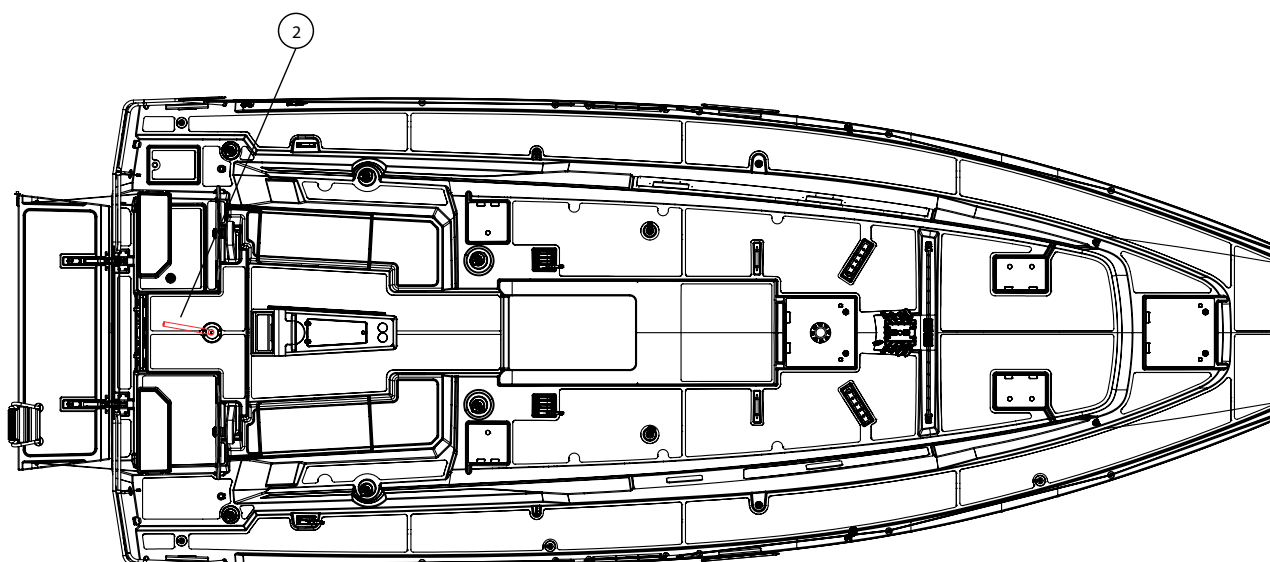
## 6.13. Emergency steering system

Item	Stowage space/place of use
1	Stowed in port locker
2	Middle of the cockpit floor between the controls

### 6.13.1. Stowage space for the emergency tiller



### 6.13.2. Steering position with the emergency tiller



The optimal steering position on this boat is kneeling, or sitting on the cockpit floor, with the back against the locker and with the feet spread, the tiller if possible in both hands; looking forward, a further person is positioned further up above deck to obtain a clear view. This person communicates with the helmsperson and gives the helmsperson instructions. It is advisable to take turns on the rudder.

**Attention**

Note that the visibility of the helmsperson is limited during the usage of the emergency tiller. Make sure that a lookout is always posted and can communicate with the helmsperson.

The tiller must be fitted with the arm facing aft due to the geometry. Usage is therefore unfamiliar and must be practised.

The emergency tiller should be inserted with the arm facing forward; this is also necessary due to the geometry of the steering and due to the wheels. The steering will initially be unfamiliar and require concentration; steering is easiest from a seated position.

**Information**

Should the transfer of the steering commands from the wheel to the rudder fail, the boat can be steered, at reduced speed, using an emergency steering system provided for this purpose via an emergency tiller. It is recommended to reduce the sail area in this situation and to distribute the sail areas by means of specific reefing so that there is as little rudder pressure as possible. The emergency tiller engages directly in the rudder shaft at the top and there is no reduction gearing.

The emergency tiller is in the storage compartment on the port side.

For this purpose, open the rudder bearing cover, then insert the emergency tiller in the end of the rudder shaft; also always press down the tiller during operation and secure against loss.

It is recommended to try inserting the emergency tiller and practice steering during an emergency.

## 6.14. Anchor windlass/capstan

An anchor windlass is fitted to the foredeck. The related chain runs under the deck into the chain locker. See the deck plan "5.5.2. Deck plan of the boat" on page 25.

**Attention**

Winches and anchor windlasses generate enormous forces. Therefore you should always pay attention to the following:

Keep hands and feet away from the anchor windlass.

Only have the anchor windlass operated by experienced members of the crew.

Avoid unintentional actuation of the switch/button.

**Information**

The vessel is equipped with an electrical anchor windlass on the foredeck. The anchor windlass must be enabled on the electrical panel.

The anchor windlass can be actuated from forward using the related control unit; this control unit is stowed in the anchor locker and can be reached from deck via the deck hatch. The tension of the anchor chain or the anchor rope must be applied to the bow fitting to relieve the load on the windlass. Obtain instruction on operation during the handover of your yacht.

## 6.15. Fresh water system

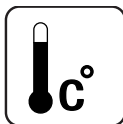
The yacht has an optional water tank with a capacity of 250 litres in the bow area and a tank with a capacity of 210 litres under the port after berth. The fresh water inlet is from the port side on the forward and aft deck. The filler is equipped with a cap; the edge of the filler is marked with "WATER". The water is drawn from the tank via a hose that leads to the pressurised water pump. This system is always pressurised when switched on. If the pump continues to operate despite securely shutting off all taps, the water pipe should be checked for leaks. The pump is protected by a filter. This filter must be checked regularly and, if necessary, also cleaned.

Item	Description
1	Fresh water tank, forebody approx. 250 L [optional]
2	Filler, fresh water tank [deck]
3	Breather, fresh water tank
4	Level sensor, fresh water tank
5	Wash basin
6	Sink, galley
7	Shower
8	Cockpit shower [deck]
9	Boiler 40 L, mixing valve boiler
10	Fresh water supply
11	"Installation panel with fresh water pump, pump filter, shut-off valves"
12	Pressurised water connection [deck]
13	Engine connection
14	Fresh water tank, aft, approx. 210 L

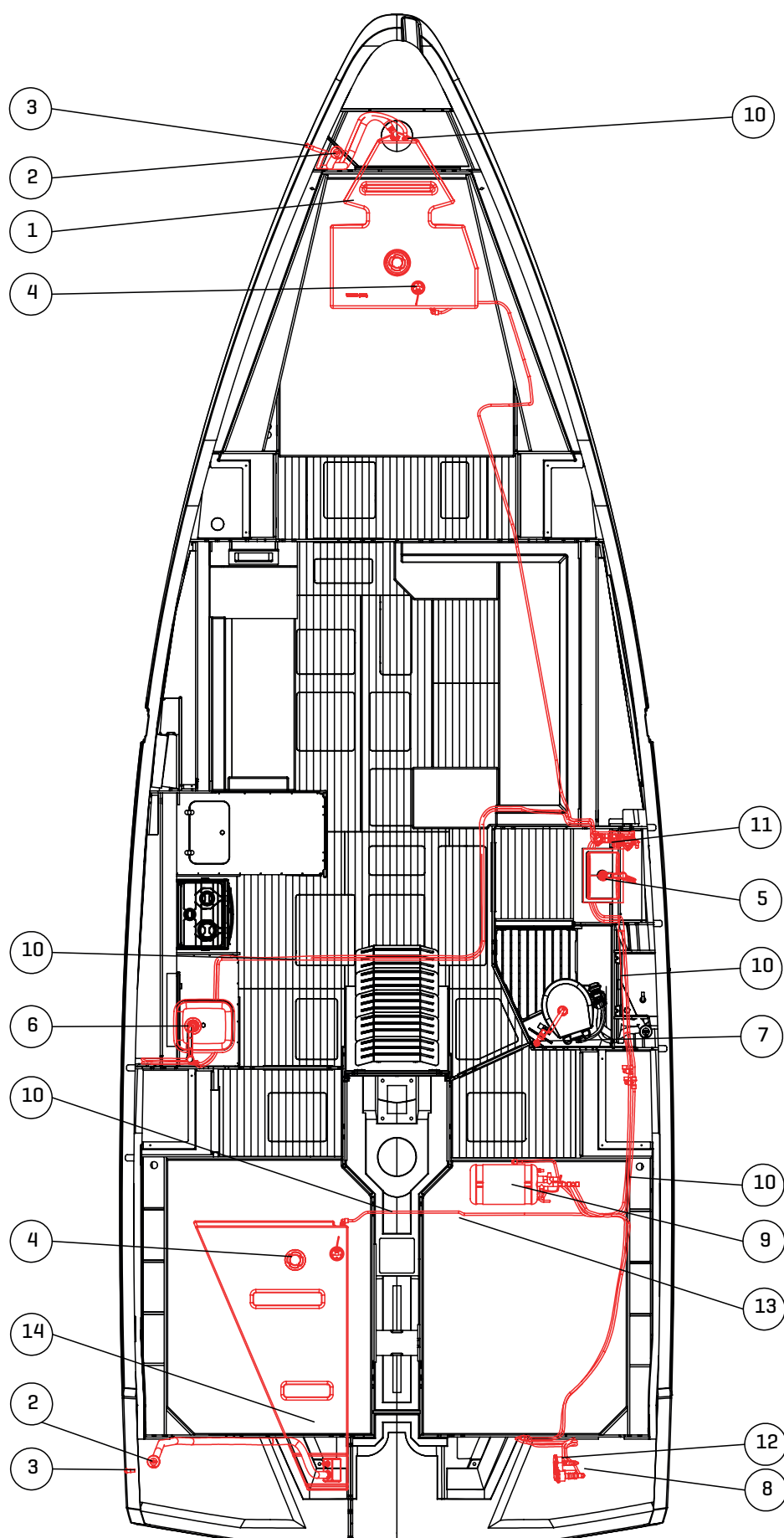


### Attention

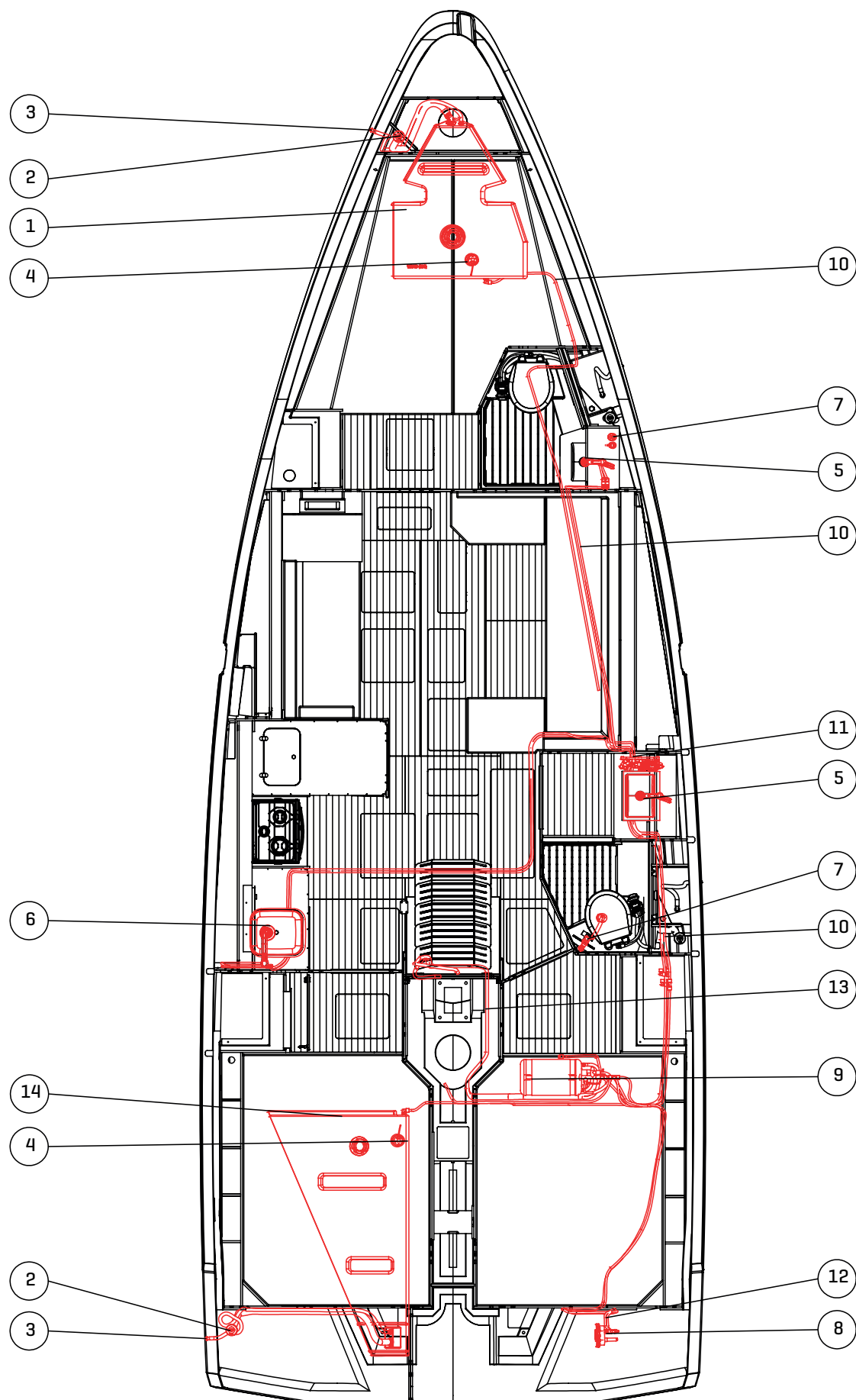
- » The hot water from the fresh water system can be very hot - please take care - first set the water a little cooler, then slowly turn to hotter.
- » If the fresh water tank is empty, the pressurised water pump must be switched off!



## 6.15.1. Position plan for the components of the fresh water system, layout 1



## 6.15.2. Position plan for the components of the fresh water system, layout 2





## 7. Navigation and handling

### 7.1. Operation of the engine

The engine installed in the boat is a diesel engine with a Saildrive.

The propulsion system is a technically complex system. Therefore follow exactly the instructions and information provided by the manufacturer, above all the safety-related details as well as the servicing intervals are of the utmost importance here.

Have its functions explained in detail during handover. If there are any uncertainties, it is imperative you ask for clarification.

Your local dealer or Yanmar experts will be pleased to be of assistance, also by telephone. Should you want to download the specific instructions for your propulsion system in your language, please visit the website of the manufacturer.

The instructions for the propulsion system in English are provided with the boat. Make sure you do not damage any fuel lines and regularly check their condition. Never place flammable materials on or in the vicinity of hot items!



#### Warning

Never allow clothing to come into contact with the moving parts of the engine during operation. If a part of the body or part of your clothing comes into contact with the forward drive shaft, the V-belt, the propeller shaft, etc., you may suffer severe injuries. Check that there are no tools, pieces of cloth, etc. on the engine or in its immediate vicinity.

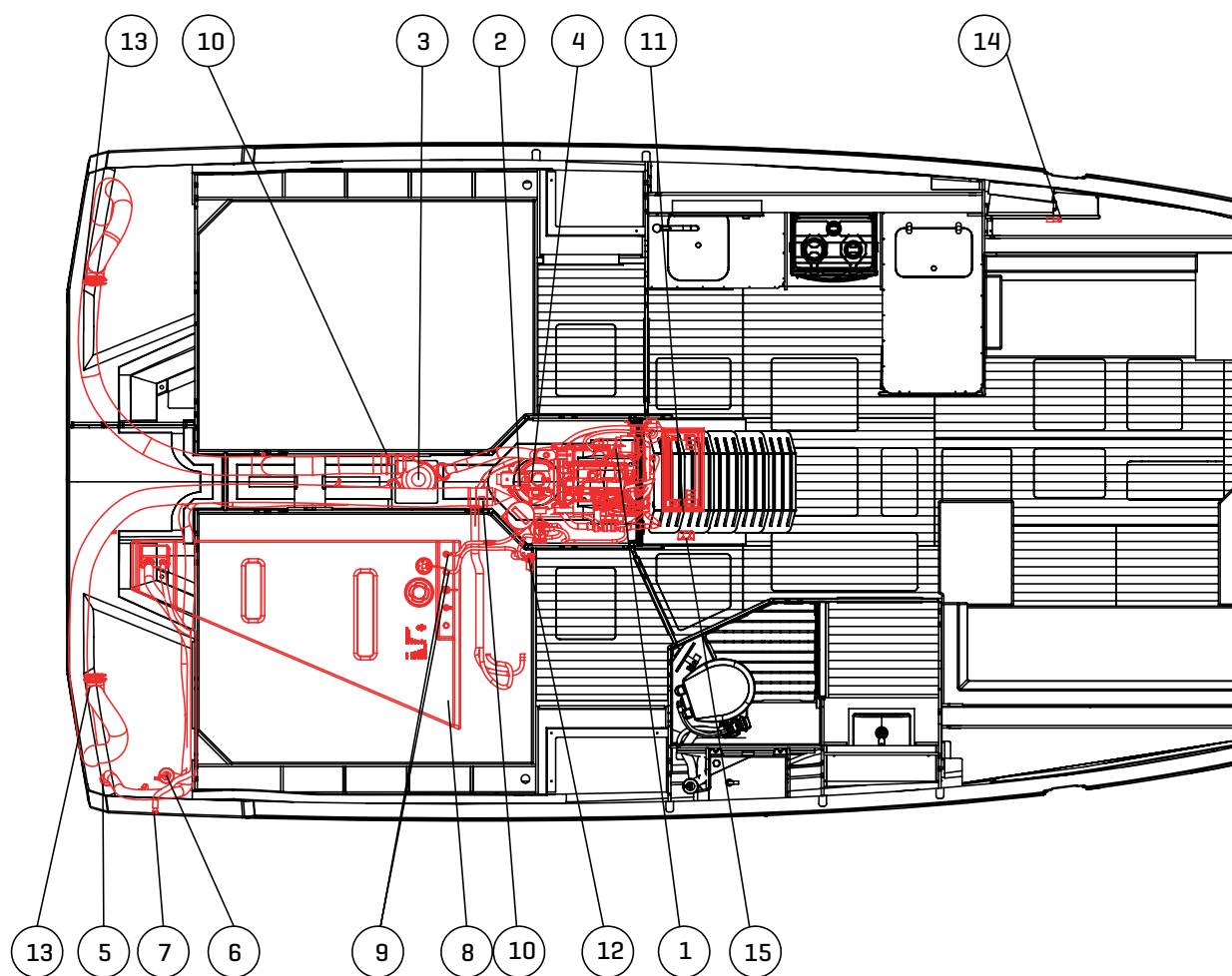


#### Information - before starting the engine

- » Check the engine compartment for a smell of burning and the fuel lines for damage and leaks.
  - » Check the bilge water for residue.
  - » Make sure the ventilation openings are clear to prevent overheating. Also check whether there is sufficient inlet air and the air extraction is sufficient.
  - » Make sure you are carrying enough fuel for the planned voyage - include a margin for contingencies.
1. Open the sea cock (if fitted).
  2. Open fuel tank valve.
  3. Set the remote control lever to the NEUTRAL position.

## 7.2. Engine and its peripherals

Item	Description
1	Engine
2	Gearbox, Sail Drive, cooling water intake for engine
3	Exhaust water collector, engine
4	Sea water filter
5	Discharge, engine
6	Fuel filler
7	Breather, fuel tank
8	Fuel tank approx. 244 L
9	Fuel feed/return
10	Fan, engine compartment
11	Starter battery, engine
12	Fuel valve, engine
13	Ventilation, engine compartment
14	Button, engine
15	Main switch, engine



### 7.2.1. Exhaust system

The yacht is equipped with a wet exhaust system, i.e. sea water is injected into the exhaust manifold for cooling and to bind the exhaust gases. The mixture is fed downward to a silencer/water collector, then runs to the aft in the engine compartment and is discharged aft above the water line.

The exhaust hose is made of synthetic rubber with an integrated steel spiral. The hose is heat-resistant, however only to a limited extent. For this reason the flow of sea water must not be interrupted. It is therefore necessary to pay attention to an unhindered flow. The hose is secured at all connections using two clips.

If the supply of sea water should be interrupted, a visual and an acoustic signal are triggered by the temperature sensor in the exhaust hose. In this situation, the engine must be shut down immediately until the malfunction in the water flow has been rectified [see manual from the engine manufacturer].



#### **Danger**

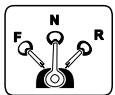
Under no circumstances start the engine if you detect fuel leaks or smell gas. Make sure the entire crew leaves the boat and an appropriately qualified person repairs the damage as soon as possible.



#### **Attention**

- » Never leave the engine running without the cover to prevent contact with fast moving parts of the engine!
- » Never remove safety guards from moving parts on engines.
- » This boat is not allowed to be operated with an engine power greater than stated by the manufacturer.
- » Reduce your speed if there is a large amount of traffic or bad weather conditions, as well as in poor visibility, high waves and strong wind. Pay attention to your wake and please respect other boaters as well as prohibitions and restrictions.
- » Do not remain on the aft platform once your boat is moving.
- » There should not be anybody in the bow area at higher speeds.
- » Regularly check whether the exhaust is also discharging sea water.

### 7.3. Propeller



#### **Information**

If a folding propeller is used, the gearbox must be in reverse gear while sailing. With a fixed propeller, the gearbox must be in neutral or reverse gear. A fixed propeller in reverse acts as a brake, but results in quieter sailing.

### 7.4. View from the controls

The Convention on the International Regulations for Preventing Collisions at Sea [COLREG], as well as the German laws on waterway regulations [SeeSchStrO] state that an appropriate lookout is to be maintained at all times and the rights of way must be observed. Make sure no other vessels are crossing your path.



#### **Attention**

The field of view of the skipper can be degraded by high trim and heel angles and by other factors caused by one or more of the operating conditions stated below:

- » Trim angle due to load and load distribution
- » Speed
- » Swell
- » Rain and spray
- » Darkness and fog
- » Interior lighting in the vessel
- » Attachment of tops and side tarpaulins
- » Persons and moveable gear in the field of view of the skipper

## 7.5. Handling characteristics



### Attention

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- » The conditions with a swell vary widely and vessels can always end up in situations that take boats and skippers to the limit of their ability. Always expect mistakes and problems, always ensure you have a safety margin. Avoid sudden turns at high speed, particularly in tight waterways.
- » Comprehensive training for the skipper is absolutely essential before the first trip
- » Take into account that factors such as height above sea level, outside temperatures, load and bottom growth can degrade the handling of the yacht.



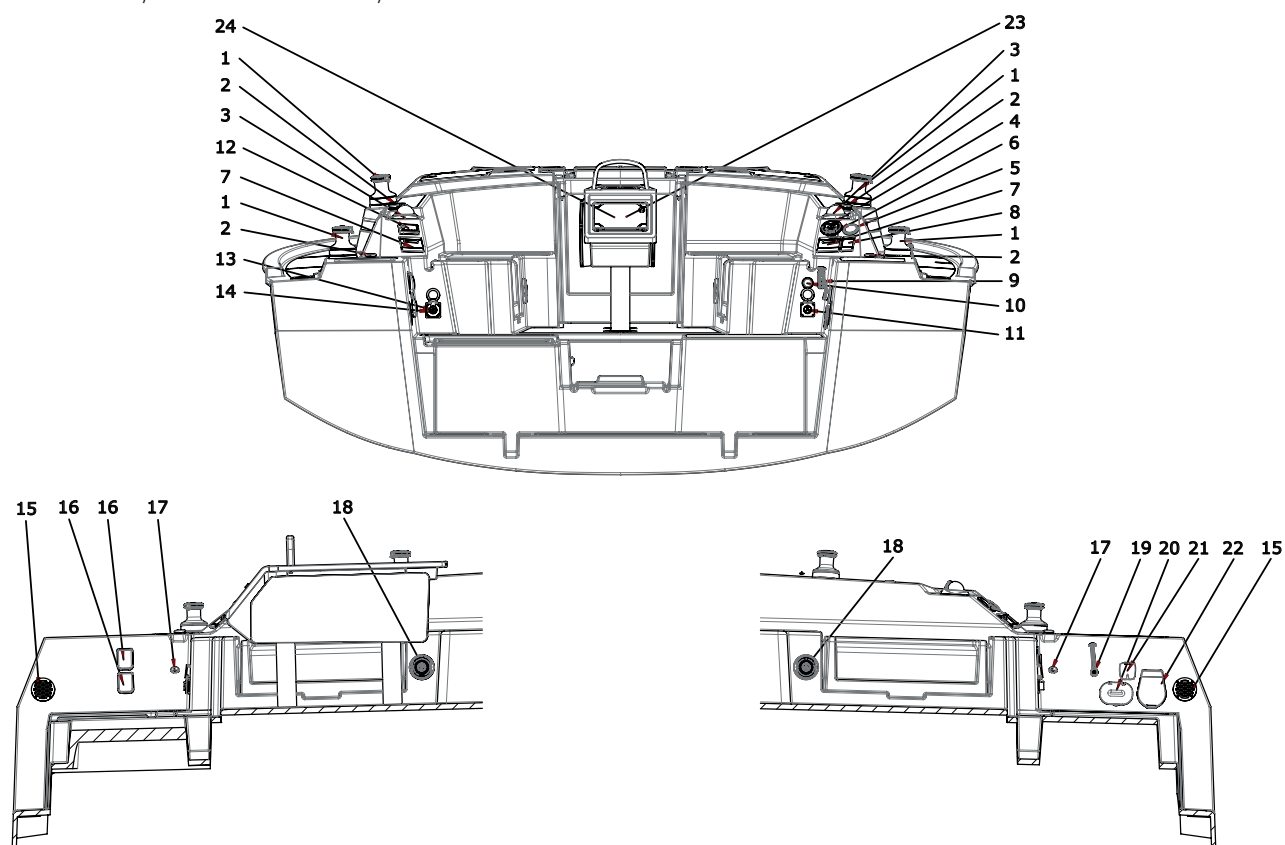
### Information on the handling characteristics

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- » The vessel is supported by a combination of static buoyancy due to displacement and to some extent also by dynamic buoyancy.
- » Regular checks are recommended to detect wear on the propeller system at an early stage and to prevent damage. In this way maximum performance is retained and the service life of the engine extended.
- » Make sure the crew is informed about the handling and dynamic characteristics of this boat before starting a voyage.
- » Passengers must be informed before undertaking fast manoeuvres involving high acceleration; they must sit down and hold on tight.
- » The skipper should avoid sudden, unannounced manoeuvres. Passengers should therefore always sit and hold on tight while the boat is underway.
- » While actuating the electrical saloon table and the bathing platform, ensure parts of the body are not trapped.

### 7.5.1. Illustration of the instrument panel

The illustration below shows the instrument panel with the full configuration, all the options shown may not be fitted to your boat on delivery.



## 7.5.2. Key for engine and its peripherals [incl. generator]

Item	Description
1	Nmea backbone service point option
2	Fusion Msav-750 option
3	12 V socket
4	AC socket
5	VHF radio V60 option
6	Reading light
7	USB socket option, audio
8	Wireless handset H60 option
9	Chart plotter Zeus3s 9" option
10	Light switch forebody cabin
11	Light switch, saloon
12	Negative rail
13	Power distribution, basic system
14	Control unit Sailboat DC-12 V
15	Inverter option
16	AC distributor, air conditioning unit option
17	AC distributor, 230 V option
18	AC distributor, 120 V option
19	Ais antenna splitter option
20	Ais transponder option
21	Forward facing sonar black box option
22	Network router option
23	Switch, bilge pump, manual/off/automatic, saloon bilge
24	Switch, bilge pump, manual/off/automatic, engine compartment bilge
25	Anchor/bow thruster battery main switch option
26	Engine, battery main switch
27	Service battery, battery main switch
28	Control panel Sailboat DC-12 V
29	Multicontrol panel Webasto heating option
30	Remote control, inverter option
31	Switch, inverter
32	High bilge alarm
33	Fuse Box 1 + 2 + relay box

## 7.6. Navigation lights

The boat is equipped with navigation lights that correspond to the Convention on the International Regulations for Preventing Collisions at Sea [COLREG].



### Attention

- » Check the function of the navigation lights before the voyage and carry spare bulbs/LEDs for all navigation lights.
- » Only replace the lamps with corresponding spare parts of the same power rating [watt/type]!



### Information

You will need the navigation lights while sailing at night. The running lights/navigation lights are to be operated from the switch panel. Your BAVARIA yacht is equipped with the following navigation lights:

- » Port light on the bow pulpit
- » Starboard light also on the bow pulpit
- » Top light at the top of the mast
- » Stern light on the stern pulpit, starboard

## 7.7. Anchoring, mooring and towing – safety instructions

The bow anchor is attached to the bow roller ready to drop. The chain falls into a chain locker directly under the winch; this locker can be reached via the first bulkhead in the sail locker. The end of the chain is fastened here. Cleats are arranged on the bow and stern, as well as on the side deck, for mooring the boat. These are appropriately dimensioned and mounted to satisfy the requirements of the directive and to absorb the forces in a protected harbour. If the boat is unattended for an extended time, protect the mooring lines against chafing and unintentional loosening. The anchor windlass with rope drum on top for warping the yacht is available as an option. It is operated using a control unit that is connected via a cable to a socket on the port side in the skipper's berth. Please also pay attention to the information and instructions from the manufacturer.



### Attention – anchoring – towing – mooring

Should your BAVARIA C38 be towed, the towing line should be attached to the two forward cleats to distribute the load. The same method should also be used for mooring. While using an aft mooring line, one of the aft cleats is sufficient.



### Information

It is the obligation of the boat owner or skipper to ensure the mooring lines, towing lines, anchor chains and the anchor gear are appropriately sized for the boat.

It is also their obligation to ensure the anchors and the related chains and lines are always clear and the necessary mooring lines and towing lines on board are in a serviceable state. The owner/skipper should also give consideration, in good time, to the measures that must be taken while fastening a towing line or towing lines.

The values given in the following table are calculated according to a harmonised standard. Here three load cases are considered. While selecting the lines, pay attention to these loads, the load corresponds to a horizontally acting force.

If you load the anchor windlass with the full weight of the boat, the windlass may be damaged. It is therefore necessary to attach the chain to a separate mooring line and in this way to relieve the load on the winch.

Loads on the cleats and towing and mooring lines according to ISO 15084

Loads according to ISO 15084:2003	Load in newtons	Load weight force
Forward mooring line during anchoring and towing	41.90 kN	4272 kg
Forward mooring line attached to the jetty	34.2 kN	3486 kg
Aft mooring line during mooring	29.2 kN	2977 kg



### Attention

- » Note that in poor anchorages and/or weather conditions, swell and strong wind, the anchor can slip in some circumstances. You must then take special measures to increase the hold-ing force or leave the anchorage.
- » An anchor line can also be used for towing. However, a special towing line that is at least as thick and that is reeved in the form of a bridle on the two front cleats is more suitable. For an extended tow it is advisable to lay the towing line as a loop around the hull and to distribute the forces evenly over the boat. Railings, anchor windlass or bow pulpit are not suitable for attaching the towing line.
- » A towing line is only allowed to be attached such that it can be slipped or cast off also under load.
- » Chafing is to be avoided! Protect the mooring lines against chafing and unintentional loos-ening if the boat is unattended for an extended time.
- » The breaking load of the lines/anchor chains should not be more than 80 % of the breaking strength of the fittings to which the line or chain is fastened.
- » Only tow or be towed at low speed. Never exceed the hull speed of the vessel while towing.

## 7.8. Preventing collisions

The Convention on the International Regulations for Preventing Collisions at Sea (COLREG) and the waterway regulations require a constant lookout as well as monitoring of the waterway. Before continuing, make sure there are no other vessels on your course.

## 7.9. Dangers of carbon monoxide



### Danger

- » If carbon-based fuels such as gas, liquid gas, coal, wood, paraffin, oil, petrol or diesel do not burn completely, carbon monoxide is produced.

Carbon monoxide can be formed in the cabin due to one of the following factors or a combination of these factors:

- » Faulty, poorly maintained or incorrectly used appliances
- » Exhaust gases from a boat's engine and/ or generator
- » Exhaust gases escaping from solid fuel ovens
- » Blocked ventilation or lack of air - fuel requires oxygen for safe combustion

Be aware of the danger signs on your boat:

A routine check as to whether the combustion appliances and the engines in your boat are functioning cor-rectly and are in good condition will contribute to safety.

Any of the following signs could be indicative of the escape of carbon monoxide in the boat:

- » Spots, sooty spots or discolouration on surfaces on and around a combustion appliance or its exhaust flue
- » Combustion appliances that are difficult to light or burn weakly
- » Burners with yellow, orange or flickering flames that threaten to extinguish
- » An unusual odour or a smell of burning if an LPG or oil-burning appliance is switched on
- » If you see or smell smoke that regularly escapes into the cabin during the operation of your wood or coal-burning stove.
- » If the cockpit and/ or the cabin regularly smell of engine exhaust gases



**Warning**

- » Do not install or repair a portable generator in a living space.

**Attention**

- » During the installation of a portable generator for permanent usage, you must use the kits provided by the manufacturer of the generator.

**Danger**

- » If the engine is operating inefficiently, or if the engine is running below its intended operating temperature, or if contaminated or stale fuel is used, the carbon monoxide concentration in the exhaust gases may increase.
- » In certain sailing and / or wind conditions, carbon monoxide can be deflected or drawn out of engine exhausts in dangerous quantities; and that independent of whether the boat is moving or moored

**Information**

- » Be a good neighbour and avoid leaving the engine running unnecessarily when you are in port, particularly if there is no wind.

## 7.10. Ventilation of the cabins

To prevent the accumulation of odours in new boats, or the formation of mould in badly ventilated compartments, attention should always be given to sufficient ventilation. This also applies to winter layup.

## 7.11. Refuelling



### Attention

Fuel is chemical waste. While filling the tank, keep cloths at hand and dispose of them appropriately after use



### Information - pay attention to the following instructions while filling the tank

The filler is on the aft side deck on the starboard side, see the deck plan "5.5.2. Deck plan of the boat" on page 25 and also the plan "6.8. Fuel system" on page 46

- » Open the filler and start to refuel.
- » Continuously check the level in the tank via a suitable fuel gauge.
- » Do not fill the tank and the supply line to the maximum. Take into account the possible expansion of the fuel.
- » Securely close the deck fittings, but not more than hand-tight, because the seal may be damaged.
- » If necessary, make an entry in the log book.

## 8. Basic considerations

### 8.1. Recommended safety equipment



BAVARIA boats are in principle supplied from the yard without safety equipment. It is the obligation of the skipper to ensure approved, serviceable safety equipment is always on board. Of course, the safety equipment must be checked at regular intervals, above all before a trip, for completeness and serviceability. Tips and information about which safety equipment is recommended or stipulated for your boat and the area in which you sail are available from the water sports associations or the responsible authorities.

The sea can be unpredictable. Therefore close all hatches, doors and the companionway opening.

### 8.2. Basic equipment

Always carry on the boat as a minimum the following equipment so you are well prepared for all circumstances:

- » Life vests or buoyancy aids for every person, of an appropriate size and rating
- » Suitable warm, weather-proof clothing
- » Life lines and jacklines/jackropes
- » Compass
- » Nautical charts for the related maritime area
- » Anchors and lines with appropriate holding force
- » Towing lines of appropriate length and working load
- » At least 2 warps
- » First-aid kit with dressings and thermal blanket
- » Bailer or bucket
- » Distress signal flares
- » Radios
- » Binoculars
- » Knife in sheath
- » Sufficient drinking water and provisions
- » Fire extinguisher

### 8.3. Measures in bad weather

- » In bad weather there should not be anybody on the open deck - it is imperative all persons are secured using lifelines.
- » All hatches and other openings through which water could enter the hull, the superstructure or the deck should be closed and secured appropriately. The related necessary aids and parts must therefore always be on board in a maintained and serviceable state.
- » Water-tight, spray-tight and weather-tight catches, doors and hatches should remain closed underway, except if these must be opened for the operation of the boat. Immediate closing of these openings should be possible at any time without problems.
- » You should avoid relying on autopilots or automatic steering systems in bad weather, because rapid intervention or abrupt course changes could be necessary as a reaction to bad weather conditions.
- » The load should not degrade the seaworthiness and especially the freeboard and the stability.
- » Skippers must always be aware that in some maritime areas particularly steep, breaking waves can occur and also specific local current and wind conditions can occur, above all in river estuaries, shallow water areas and small bays. These waves are particularly dangerous for small vessels.
- » In heavy weather the boat speed must be reduced, in particular if increased, heavy rolling motion as well as heavy pitching occur or water comes over the deck.

## 8.4. Securing loose equipment

As soon as the mooring is left, loose equipment should be lashed securely, pay attention above all to the galley, the engine compartment and the bathrooms. Things are often placed there unsecured and need to be secured. In particular heavy, sharp-edged objects can injure persons or animals, or damage other objects or equipment.

## 8.5. Stability – risk of the loss of stability

The stability and buoyancy of this boat have been checked based on the weight data specified in chapter "5. Data on the boat" on page 14.



### Warning

- » Items of equipment can cause damage to the boat due to uncontrolled movements and affect the stability. Before starting the trip, make sure all items of equipment are appropriately secured.
- » The stability of this boat will be significantly reduced if the boat is at the transition to planing or is already planing; this statement applies in particular if there is a swell and during course changes.
- » The stability can be reduced while towing the boat or while lifting heavy weights using the boom.
- » Breaking waves always represent a hazard for the stability that should be taken seriously, sail with appropriate caution
- » Any change to the distribution of weights can significantly affect the stability, the trim and the handling of the boat.



### Attention

- » The boat should never be loaded more than recommended by the manufacturer. The masses/weights should be evenly distributed because the stability is reduced significantly by additional weights high up, or by weights that move, or by liquids in the boat.
- » The stability can also be degraded by liquids slopping back and forward in the boat (bilge or cockpit) or in tanks. The level of the water in the bilge should therefore always be checked. The bilge is always to be kept dry.
- » During fast or abrupt manoeuvres, the boat's motion can be extreme!



### Information - reefing

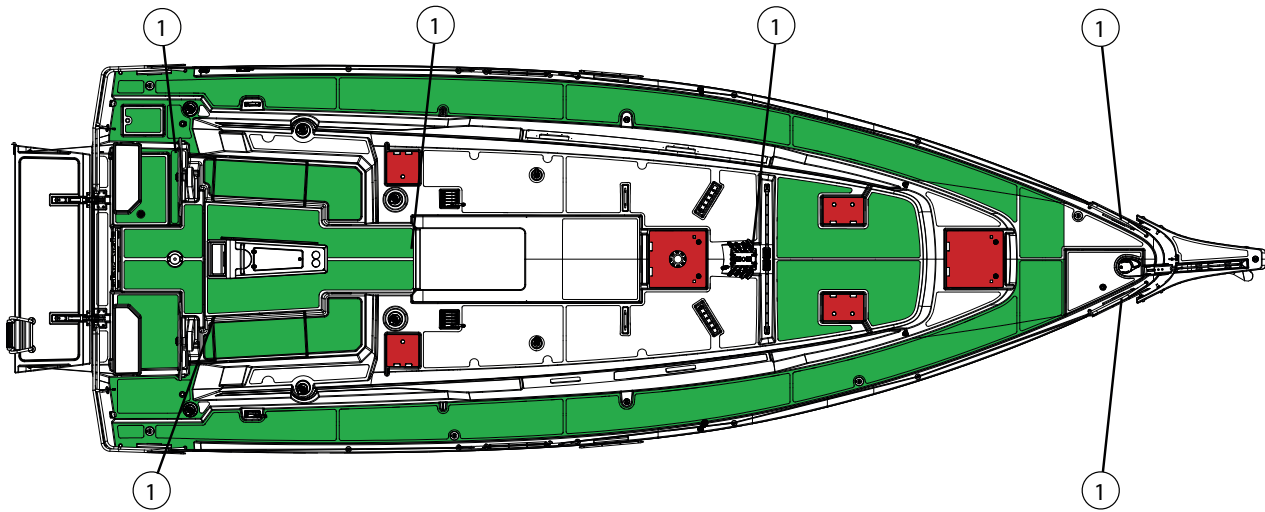
The sail area must be reduced if the wind force exceeds BFT 4. Special measures should be taken in heavy weather conditions. The sail area and the sheeting angle as well as the course in relation to the wind must always be adapted to suit the conditions – the principles of good seamanship also apply here.

The STIX and null stability values are calculated as follows as per EN ISO 12217-2:2015:

Cat.	Values	$m_{M0}$ Deep/Shallow	$m_{LA}$ Deep/Shallow
<b>A</b>	STIX values category	37.58 / 37.55	34.82 / 34.98
	Null stability cat	117.04° / 116.71°	111.84° / 111.64°
<b>B</b>	STIX values category	37.58 / 37.55	33.63 / 33.83
	Null stability cat	117.04° / 113.71°	109.85° / 109.78°
<b>C</b>	STIX values category	37.58 / 37.55	33.06 / 33.23
	Null stability cat	117.04°/116.71°	108.90°/108.81

## 8.6. Man overboard – risk of falling overboard

The working deck is always a safe working area on the boat. Areas outside the stated working deck should only be used for mooring while the boat is arriving and leaving port and in the harbour. The working deck on this boat is shown in green.



The working deck is restricted to the side deck, the foredeck and the cockpit not including the bathing platform. The bathing platform and the cabin roof are expressly not included in the area of the working deck; the areas shown in green are excluded.

Most accidents involving a person falling overboard are due to the increased risk of slipping on board and while leaving the boat. Wet decks can be slippery. Therefore always wear anti-slip shoes.

The limited space on board, the dynamic behaviour on the water and the unusual environment place particular demands on the behaviour of the persons on board. In principle all persons on board have the obligation to follow the skipper's orders in full. Every person on board should always heed the following:



### **"One hand for you and one for the boat"**

Always hold onto suitable handrails etc. using one hand. Also every person on board should wear suitable clothing and sturdy, anti-slip footwear for safety reasons. For protection against hypothermia, an appropriate amount of dry spare clothing should also always be carried on board.

### 8.6.1. Attachment points

For protection against falling overboard out of the cockpit in the related weather conditions, your yacht is equipped with attachment points [item 1 in the illustration above]. These are fastened to the deck superstructure in front of the companionway, as well as starboard and port at the steering position. The mast foot and the front mooring line cleats are also designed for fastening your safety line.



### **Warning**

Please only fasten your safety line to the attachment points provided for this purpose. These points are specially designed such that they meet the harmonised standards for the Recreational Craft Directive and the related requirements on attachment points.

### 8.6.2. Procedure during man overboard or other emergencies



Should you nevertheless find yourself in an emergency situation, level-headed, considered action is required. First calm the other crew members and give them clear, understandable instructions as to who is to undertake which task. Above all else, request assistance by radio or telephone in good time even if you and your crew are trying to control the emergency situation with the equipment available on board. For emergency and distress calls, always use the usual international procedures and methods. Hand out rescue equipment in good time and make sure it is put on, or keep it ready at hand. Only leave the boat if there is a dire emergency.

## 8.7. Reboarding aids

The man overboard manoeuvre, MOB for short [or also: person overboard manoeuvre] covers all measures to rescue a person who has fallen overboard from a vessel. The man overboard manoeuvre is to be initiated immediately and has priority over all else. It is a central element of seamanship that must be practised time and again and that must be practised with every new boat or crew.

As a rescue aid for man overboard accidents, first and foremost the Bavaria C38 has a bathing ladder that is to be inserted in the platform. The bathing ladder is marked with the number 3 and shown fitted in the following illustration. The platform can be lowered using the integrated electrical winch [button in the area of the passage] such that getting back on board again is straightforward, persons helping should wear a life vest and be secured to the boat using a safety rope.

While actuating the bathing platform: trapping hazard! Maximum load-bearing capacity [350 kg]!

Bavaria C38	
Maximale Zuladung der Badeplattform Maximum Weight on Bathing Platform	
max.	 +  = 150 kg

**The illustration in the following is generic and the details may be different to your boat, however, in principle the illustration is suitable for explaining the function**

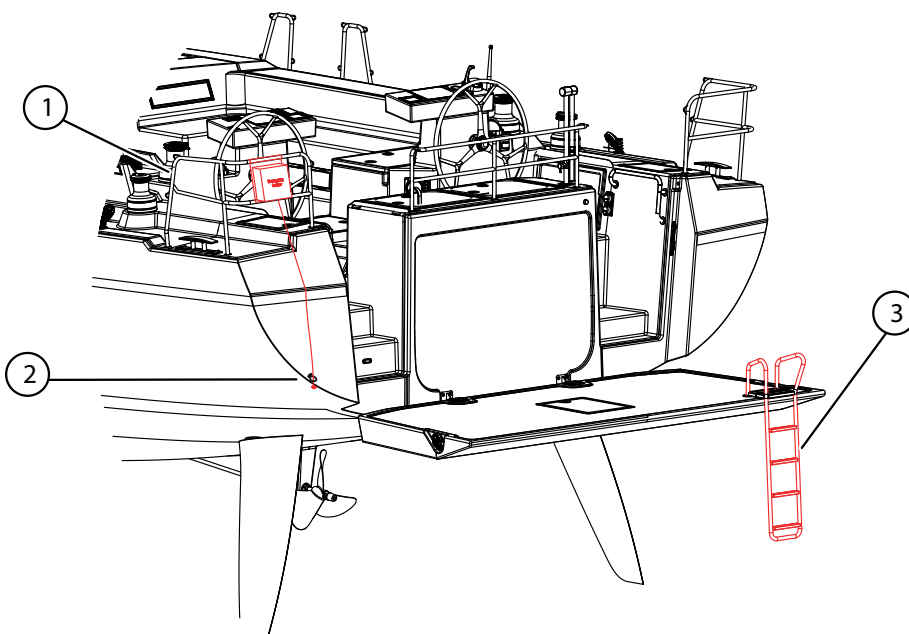
As supplied from the yard, the bathing ladder is stowed in one of the lockers and must be inserted in the fittings provided on the bathing platform before use. This bathing ladder will then ensure it is possible to get back on board again. In all cases the emergency ladder/rope ladder [item 1] fastened to the stern pulpit can be used to get back on board, even if the platform is not lowered and the bathing ladder [item 3] is not fitted.

The deployment rope is routed through a fitting on the stern near the water line; please also read the operating instructions from the manufacturer of this ladder provided with the documentation. The fitting is marked with [item 2].

The ladder is deployed by pulling the rope; the ladder then drops and can be used. The

skipper is responsible for ensuring that all crew members and guests have received instruction on use.

The Reboard ladder is straightforward to install and straightforward to operate; the ladder has been designed to be able to get back on board again without assistance in agreement with the standard EN/ISO 15085 and the EU directive 2013/53 / EU.



This item is included with the equipment and is supplied by the yard and must be serviced by the skipper.



The illustration on the left shows such a package. The loop on the top must be routed through the stern pulpit as per the instructions; it is recommended to try using the ladder.

A further, additional way for persons who have fallen overboard to get back on board is lifting using a halyard with the aid of a winch. The halyard is tied to form a sling or a special rescue harness is tied/shackled to the halyard. The person who has fallen overboard grasps the sling or rescue harness and either gets into the sling or places it over the upper body similar to an air rescue, the rope is placed in front.

The rescuer preferably then attaches the halyard to a winch to heave on board the person to be rescued.

During this process, if possible a third person should hold the halyard and the person attached to the halyard to prevent injuries to this person due to movements of the boat.



#### Attention

- » The engine is to be shut down before using the bathing ladder! A running engine can be a problem under certain circumstances during a rescue, because the suction action is dangerous.
- » While rescuing persons it is to be ensured they do not end up under the platform or the stern and are injured by the pitching movements. It is recommended to use a dingy for the rescue in this situation.
- » After turning away the stern and uncoupling the propeller, the boat must be brought back to the victim as quickly as possible. The boat is easiest to control if the person who has fallen overboard is approached from the upwind side and upstream. Also suitable are the manoeuvres used in commercial shipping: single turn, Williamson turn or Scharnow turn that always bring the boat back to the boat's own wake.

#### 8.7.1. Approach on the leeward side

Approach the victim such that the person is on the leeward side of the boat. The boat is stopped such that the victim can be picked up midships or in the aft third. During all manoeuvres a floating line with life ring attached is deployed that the victim can hold onto. In this way a line connection can be established if the boat is not positioned exactly.

#### 8.7.2. Establishing a line connection

It is crucial a line connection is established immediately so that the victim can be held against the side of the boat even if the boat should drift

Emergency plugs

For the situation in which a sea cock or a hull fitting is damaged, we recommend carrying on the yacht emergency plugs made of softwood, rubber or special foam; the diameters of the plugs should be matched to the varying sizes of the hull fittings so that every opening can be reliably sealed.

#### 8.7.3. General

The BAVARIA C38 is a high-performance, agile boat that can release significant energy while underway. It is therefore only allowed to be operated by appropriately trained and experienced persons. Do not leave any unreliable persons or children unattended in the boat. Always remove the ignition key and stow securely! Familiarise all members of the crew with the special characteristics of the propulsion system and above all with its hazards.



#### Attention

- » The bathing platform and the cabin roof area are not to be entered while underway!
- » You are subjected to greater acceleration on the foredeck than in the cockpit. Always ensure you are standing securely and hold on firmly.
- » There must not be any obstacle in the pivoting area of the stern platform. There is a trapping hazard!
- » There are moving parts on the engine and propulsion system! Avoid physical contact. Injury hazard!

## 8.8. Waterlogging/sinking – risk of flooding



### Attention

- » Close the sea cocks if you are leaving the boat for an extended period!
- » The bilge pumps are not designed to combat a larger inrush of water, e.g. due to a leak.
- » Bilge pumps are to be serviced and cleaned regularly. The bilge water level should always be reduced to a minimum.
- » In a rough sea, hatches, lockers and door openings should be closed to reduce the risk of flooding and the inrush of water.
- » In stormy weather, all hatches, cabinets, companionways/doors should remain closed to prevent the inrush of water.
- » Make sure all limber holes in the floor timbers are clear.
- » Regularly check all bilge pumps and free the inlets of foreign bodies.



### Attention

The following openings must always be closed while underway and can be opened for as short a time as possible for the operation of the vessel.

The hatches are marked correspondingly.

Item	Description
1	All hatches in the deck
2	Portlights, side
3	Side windows in the saloon
4	Companionway
5	Other openings

The boat has a quickly self-draining cockpit. Nevertheless, the inrush of water into the cockpit should be avoided as far as possible and it must be ensured water can always drain.

### 8.8.1. Strainers



### Information

The inlets on the bilge pumps in the boat and the water inlets on the exterior of the boat are equipped with strainers for protection against blockages due to seaweed, leaves and foreign bodies. Always keep the strainers clear of foreign bodies.



## 8.9. Fire hazard/fire protection

Already during the design and construction of the yacht, we have paid special attention to avoiding fire hazards. These measures include the selection of the materials, the distance of the flames on the hob from the surrounding items and a free-standing engine; the engine compartment has been lined with fire-resistant insulating material.

As the owner/skipper or operator of the yacht, you should maintain this situation and pay attention to the following information



### **Danger**

---

Always keep the bilges free and clean, regularly check the bilges for fuel residue and an odour of gas.



### **Attention - never**

- 
- » Obstruct/hinder the access to portable fire extinguishers or safety equipment (shut-off valves, switches) in cabinets or cupboards
  - » Leave the vessel unattended while cooking appliances/heaters are in use
  - » Stow flammable material in engine compartments. Other items in the engine compartment must be secured against sliding and must not impede the air circulation.
  - » Modify the vessel's systems, especially the fuel and gas system
  - » Fill the fuel tanks while the engine is running
  - » Change the gas cylinders while the gas system is in use
  - » Smoke if you are handling gas or fuel
  - » Fit net curtains or curtains over cooking appliances
  - » Use gas lamps in the vessel

### 8.9.1. Fire extinguishing equipment



#### **Attention - it is the responsibility of the boat owner/skipper,**

- » To check the equipment regularly as stated by the manufacturer.
- » To replace expended fire extinguishers after use with equivalent equipment of the same capacity.
- » To inform the crew and guests about the location and how to use all items of fire extinguishing equipment.
- » Pay attention to the national regulations on fire extinguishing equipment

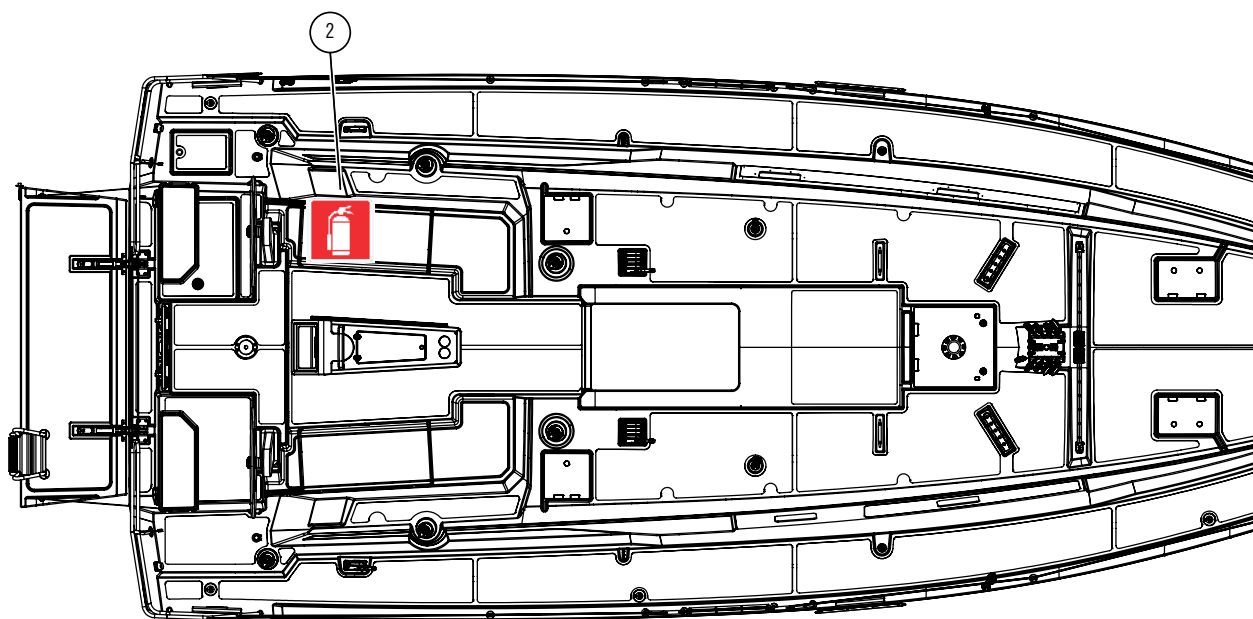
The greatest sources of danger on board include the hob in the galley and the engine compartment. If, despite all precautionary measures, a fire should break out on board, there are fire extinguishers mounted in the locations stated below. The locations and the capacities of the fire extinguishers are stated below.

### 8.9.2. List of the fire extinguishers

Please note the following drawing. It is advisable to make copies of these plans and to hang them or place them in the cabins. Please pay attention to the specific manuals and product descriptions for the individual extinguishers and systems.

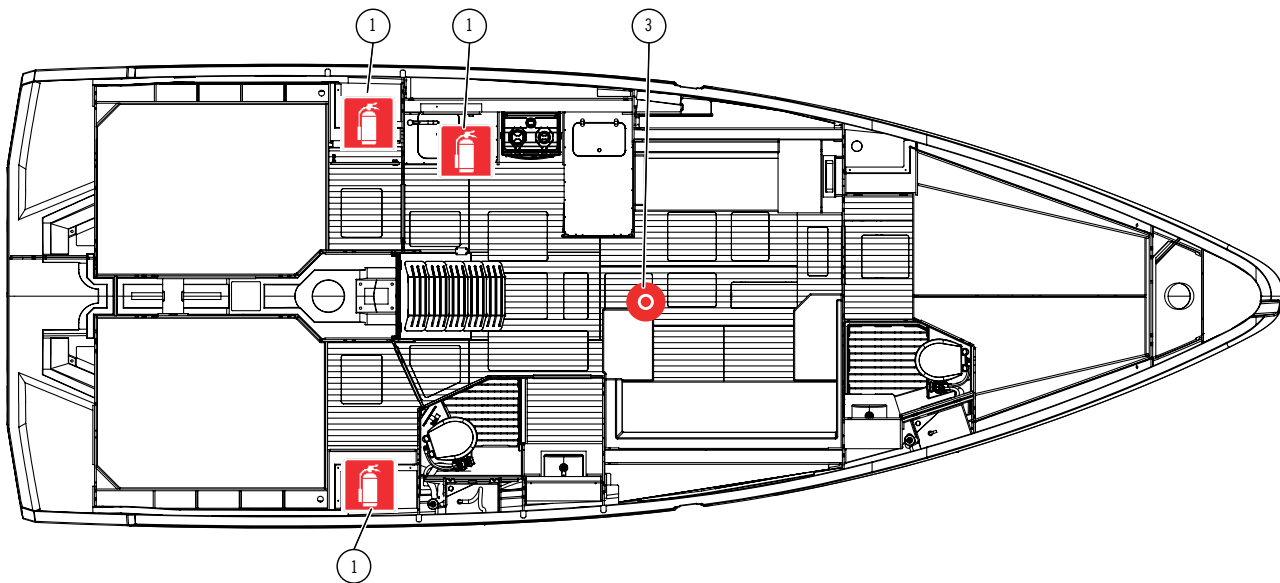
### 8.9.3. Position of the fire extinguisher on deck [1-off]

For key see "8.9.5. Key for fire extinguishers" on page 84



#### 8.9.4. Position of the fire extinguishers below deck

The installation locations of the fire extinguishers are each marked with a sticker on the furniture.



#### 8.9.5. Key for fire extinguishers

Item	Quantity	Description of the item	Type of extinguisher
1	3	"Fire extinguishers below deck: in the galley under the sink, in the cabinet in the aft berth starboard/port, in forebody cabin under the bed starboard"	Gloria 2 kg ABC powder 89B extinguishing agent SP 152/07 - nitrogen
2	1	Fire extinguisher on deck, locker port	- "-
3	1	Smoke detector Cavius [10-year battery]	- "-

### 8.10. Escape routes

There are the following escape hatches/emergency exits on your yacht, pay attention also to the following overview plans:

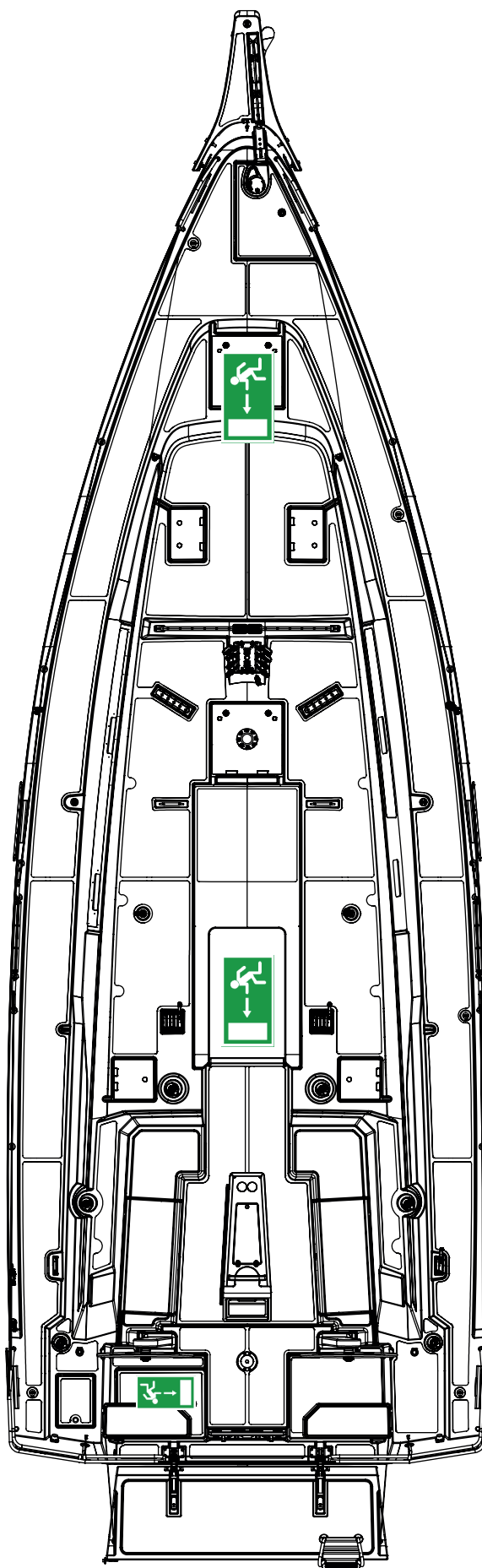
Nature of the opening	Position and comments
Escape hatch, forward	Exit via the forward owner's berth, step on front berth [attention, this step is under the mattress and must be opened for use]
Companionway	Companionway from the cockpit to the cabins or from the saloon to the outside
Deck hatch	Exit from the storage compartment under the cockpit - deck hatch in the cockpit floor

### 8.11. Smoke detector

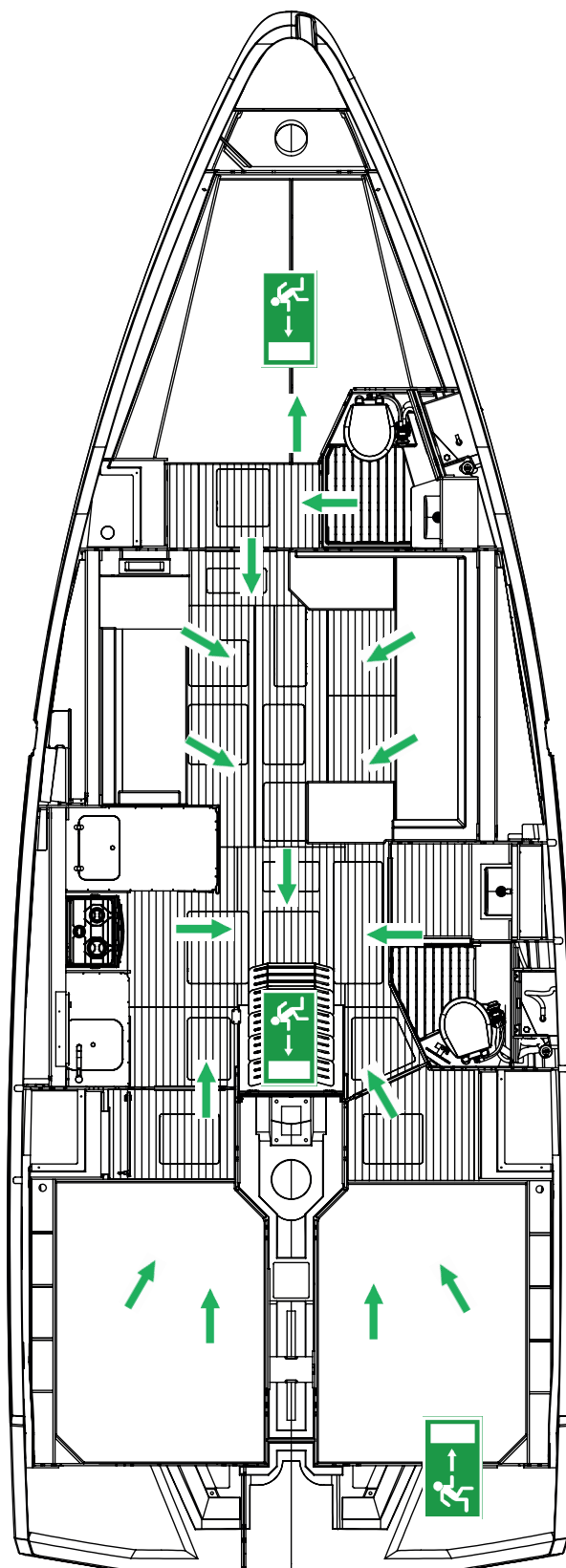
The detectors are triggered by smoke. They should be tested every time you come on board and at weekly intervals if you are on board for an extended period. If it is found that the alarm is faulty while testing a smoke detector, replace the device with an equivalent functional device

The detectors are operated with dedicated batteries. There is an irregular peeping sound if the battery must be replaced. The battery should be replaced with a battery of the same type. You will find instructions about the replacement of the battery in the user manual for the fire detector.

## 8.11.1. Escape route plan on deck



## 8.11.2. Escape route plan below deck

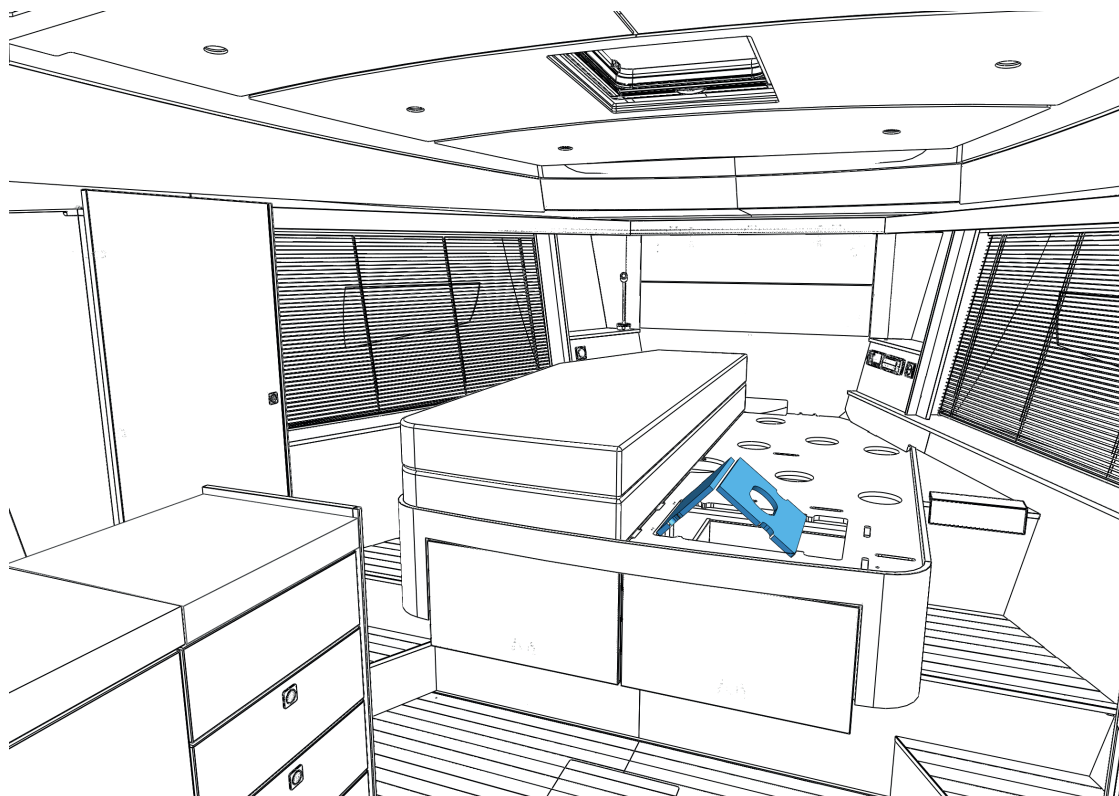


## 8.11.3. Emergency exit forward/folding step in the bed structure



To improve the access to the escape hatch in the forward part of the bow, a folding step is provided. Lift up the mattresses and place on one side; then clamp the two-piece hinged element in the position shown below. The top edge between the two elements can now be used as a step to improve the access to the escape hatch. Make sure all crew members are instructed on the usage of this feature.

**The illustration in the following is generic and the details may be different to your boat, however, in principle the illustration is suitable for explaining the function of the pivoting step.**

**Warning**

- » Never block escape routes or exits, even briefly!
- » Presence in the aft storage compartment is only allowed if the deck hatch remains open.

**Attention****It is the responsibility of the boat owner/skipper,**

- » To inform the crew about the escape routes and the exits.
- » To check regularly the marking of the escape routes and special aids such as steps and ladders.

**Information**

All exits except the main exits normally used as well as hatches with steps are specially marked! It is advisable to make copies of these plans and to hang them or place them in the cabins.

## 8.12. Life raft

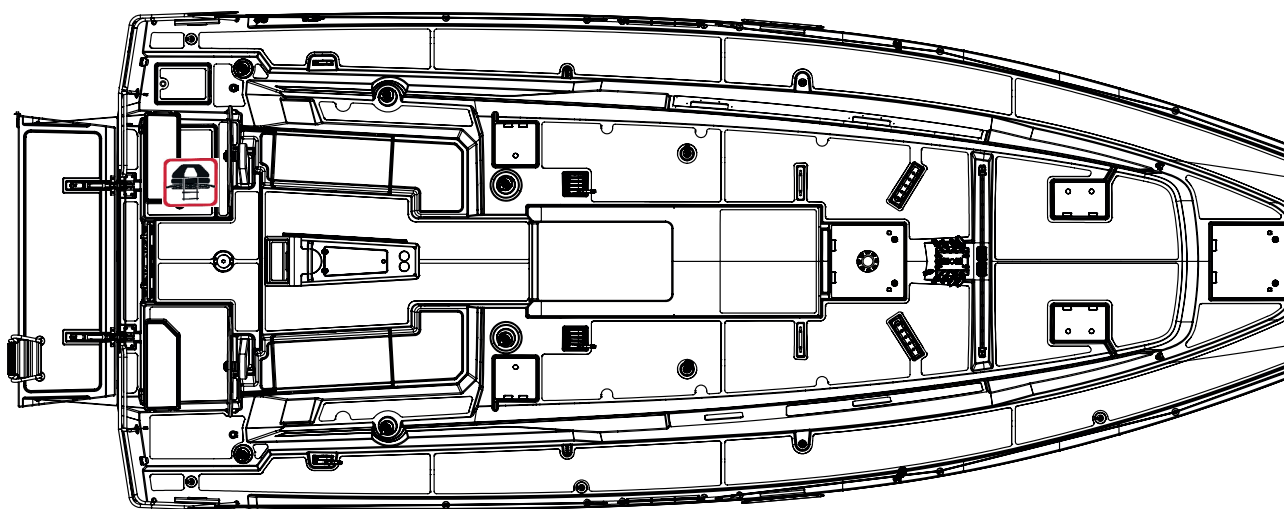
BAVARIA boats are in principle supplied from the yard without safety equipment. It is the obligation of the skipper to ensure approved, serviceable safety equipment is always on board. Life rafts can be stowed in the area of the steps aft on the starboard side behind the control column, please make sure this space is correspondingly marked with a sign and the crew and your guests are informed about the rescue equipment and its usage before starting the voyage. Instruction on the removal of the life rafts from the storage compartment is recommended.

The life rafts can be stowed in the following place:



In the storage compartment under the cockpit floor - can be reached via the deck hatch

### 8.12.1. Cockpit layout with storage places for the life rafts



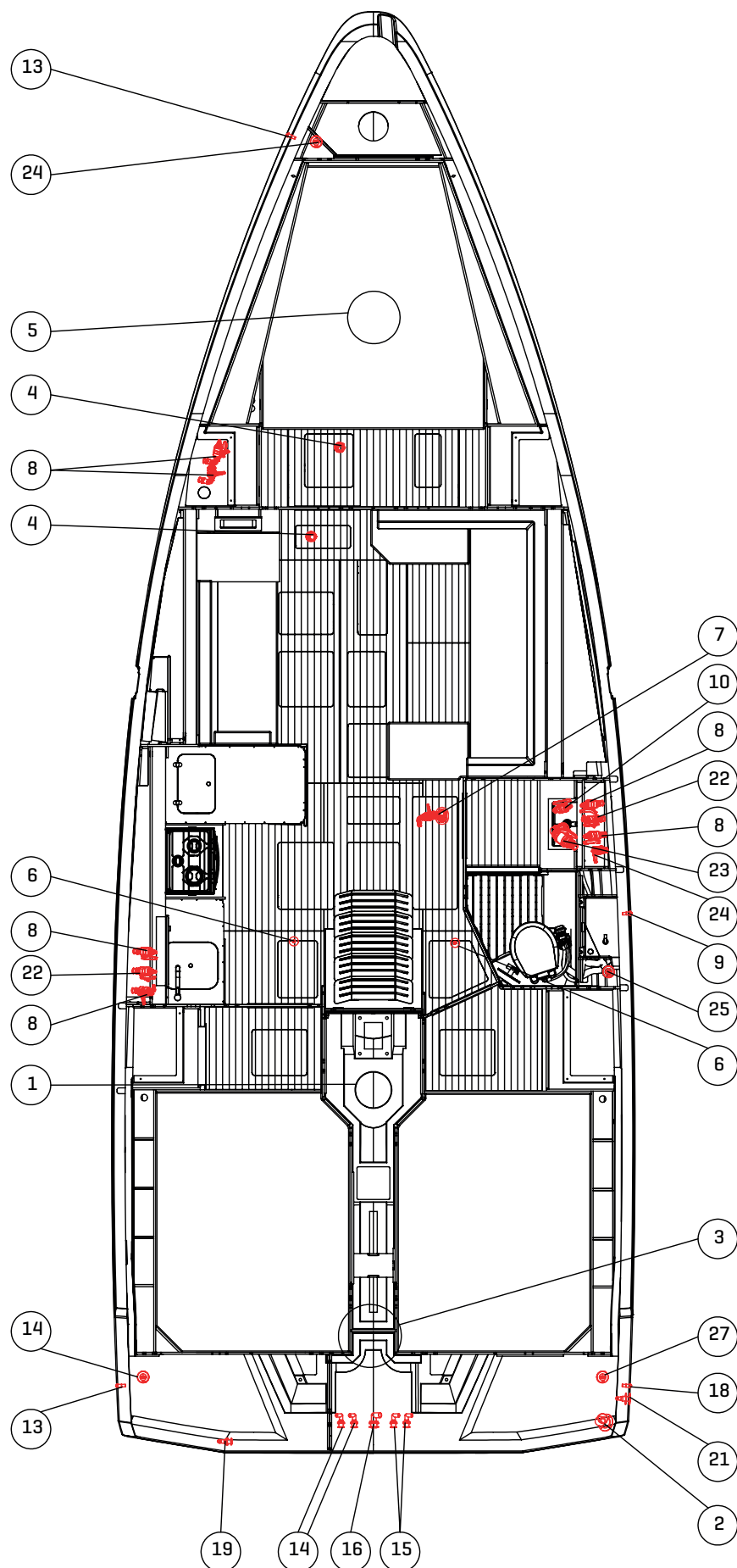
### 8.13. Hull fittings

The following hull openings may be installed in this vessel depending on the options installed.

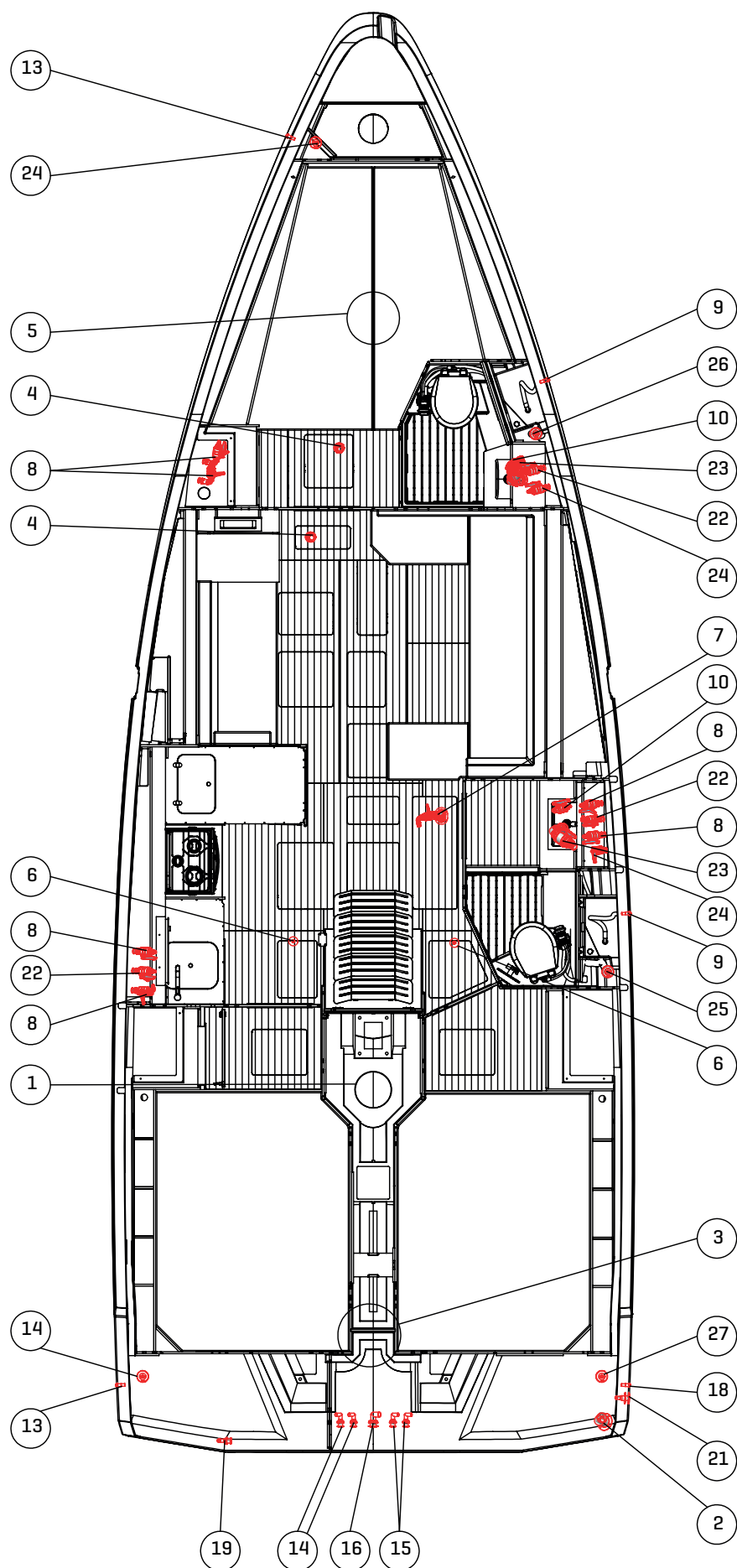
Item	Description
1	Sail Drive
2	Discharge, engine
3	Rudder bearing
4	Echo sounder
5	Bow thruster [option]
6	Anode
7	Intake, air conditioning unit [option]
8	Discharge, air conditioning unit [option]
9	Breather, faecal tank
10	Intake, toilet
11	Breather, grey water tank [option]
12	Discharge, grey water tank [option] [deck]
13	Breather, fresh water tank [to some extent option]
14	Filler, fresh water, or discharge el. bilge pump, saloon [deck]
15	Discharge, el. bilge pump, engine compartment [deck]
16	Discharge, manual bilge pump [deck]
17	Drain, anchor locker
18	Breather, fuel tank
19	Gas locker drain [deck]
20	Breather, fuel tank
21	Exhaust heating
22	Discharge, wash basin
23	Discharge, toilet
24	Filler, fresh water [deck]
25	Deck suction point, faecal tank [deck]
26	Deck suction point, faecal tank [option] [deck]
27	Filler, fuel [deck]



## 8.13.1. Position of the hull fittings in layout 1



## 8.13.2. Position of the hull fittings in layout 2



The hull openings are particularly vulnerable areas; the inrush of water is particularly likely in these areas, for this reason the condition of these areas should be regularly checked. Valves should also be operated regularly to ensure they rotate freely and smoothly. It is also recommended that all hull fittings remain closed while the vessel is unattended; this recommendation does not apply to drains from recesses and bilge outlets, or cooling water openings that are necessary for the operation of the boat.



#### Information - servicing

It is very easy to see whether ball valves are closed or open:

1. CLOSED: lever is perpendicular to the hose or pipe
2. OPEN: lever is in line with the hose or pipe

Hull fittings must be checked for leaks at regular intervals. Valves are to be re-tightened and checked for freedom of movement

Hose clamps are to be checked for correct seating and corrosion damage

Hoses can become brittle and must be checked frequently

## 8.14. Grounding



#### Attention - if grounding occurs:

- » Never block the escape routes or exits!
- » Immediately check the water tightness of the entire hull, first in the area of the bilge, then in the area of the keel and above all the keel bolts, the rudder shafts and the drive shaft system, here in particular at the points where the propulsion system passes through the hull.
- » Check the structure and hull attachments again after you return to port.
- » In any event, return to port with reduced speed, take down the sails and, by sailing with particular care, make sure the boat is subjected to as little dynamic loading as possible.
- » After every grounding, undertake a visual inboard inspection and take the boat out of the water as soon as possible to check it externally for damage.

Make sure that every grounding is discussed with a specialist to determine whether a damage inspection of the affected area and possibly repair measures are necessary.

Make sure all repairs to the inner hull matrix, the keel and the outer hull are undertaken by a professional shipyard after consultation with the boat manufacturer or designer. A repair specification should be prepared by either an assessor, a shipbuilding engineer or the original shipyard.

Make sure that the keel bolts, the interface between the keel and hull, the inner hull matrix and the keel itself are checked at least once a year and before any usage of the yacht for long journeys.

This inspection should include a visual assessment of the condition of the keel bolts and can be undertaken by the boat owner. However, all concerns and questions should be directed to an experienced boat expert.

An experienced boat expert can check the torque of the keel bolt nuts to assess the condition of the bolts. However, this action should only be undertaken using the correct tools and with a real understanding of the stipulated torque.

Make sure you are familiar with the history of the boat as soon as you take over the responsibility for the boat so that you are aware of any specific limitations.

## 8.15. The rigging

Correctly adjusted rigging can improve sailing performance and distribute loads more evenly, as a result the service life of the spars is increased.



### Information - servicing

- » Rigging should be checked regularly; even a new boat will profit from the correct adjustment of the rigging.
- » The instructions from the rigging supplier should be followed primarily. If these instructions are not available, the following procedure should be used.

#### Adjustment of the rigging athwartships

- » First sail both tacks into the wind and compare the play at the upper shrouds on the related leeward side. There should always be at least a little tension. If they are loose, they should be tightened as soon as possible.
- » Next stand on the midship line close to the mast foot in front of the mast and sight in the direction of the top of the mast. Make sure the mast is straight and not inclined to port or starboard. If the mast is not straight, the tension on the lower shrouds should be adjusted correspondingly.

#### Adjustment of the shrouds

- » The tension on the shrouds can be adjusted using the shroud tensioners. This adjustment can be made on the leeward side while sailing.
- » There should be the same number of threads visible on the shroud tensioners on both sides, however, if the standing rigging is old, there may be differences between port and starboard. If you detect a large difference, then it is time to replace the shrouds.

#### Adjustment of the rigging forward and aft - mast rake and mast bend

- » How much a mast can be bent depends on the type of rigging and its adjustment. The mast bend can be clearly seen by sighting from the side
- » The forestay and backstay align the mast in the fore and aft direction. The middle and lower shrouds pulling aft affect the mast bend. The baby stay and running backstays have the greatest effect on mast bending



### Attention

Be careful while adjusting the load if you change the mast bend. A sudden loss of tension can cause damage.

## 8.16. Transport, cranes, slipways and storage

Your C38 is designed and built for use in water. However, it can also be transported overland. Due to its dimensions, here the only option is special transport by an experienced organisation using a suitable vehicle. These days boats are moved using a crane or using other special hoists, for example a travellift. If possible a crossbeam should be used to reduce the lateral thrust forces on the boat.



### **Danger**

Standing under suspended loads is of course forbidden!



### **Attention**

During lifting, the boat is to be secured using forward and aft lines. The straps on cranes are to be secured against slipping.

#### 8.16.1. Cranes:

In many harbours, yachts are placed on land using a crane and lifting gear. During this process the straps must be positioned to suit the strength of the hull and the weight distribution. The boat should hang level on the crane as far as possible, corresponding to its normal trim in the water. Pay particular attention to the rudder blades and the drive shaft with propeller and shaft support.

If you often use the same crane, we recommend you to mark the positions of the straps below the edge of the deck using adhesive markings.

It is imperative to note that options and other additional weights as well as weights that have been removed can change the position of the straps, you must then also change the markings for the strap positions. BAVARIA does not accept any responsibility if a crane is used.



### **Danger - attention**

- » There must not be any persons on board during lifting using the crane.
- » Any change in the weights, for instance liquids in the tanks, persons on board, etc. will change the position of the centre of gravity.
- » The width of the attachment points perpendicular to the boat must always be wider than the largest width of the boat.
- » Have lifting using a crane undertaken by qualified, insured personnel.

### 8.16.2. Slipway

If the yacht is drawn on land using a conventional slipway, it can sit on the keel during this process. Here the yacht is in an unstable state and must therefore be secured at the sides and also at the bow and stern against falling over.

In the best case, the yacht is placed in a custom-made frame that applies pressure to the hull at the correct points.

The usage of a suitable transport and storage frame is strongly recommended for extended storage of the yacht. Your dealer and service partner will be pleased to assist.



#### Attention

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- » There must not be any persons on board while using a slipway.
- » The boat must be secured against tipping and tilting
- » "Always" leave the usage of a slipway to a specialist organisation with corresponding specialist knowledge

### 8.16.3. Storage

The yacht is in principle only to be stored for an extended time using a suitable transport and storage frame. Three-point storage is not allowed. The outer skin is to be treated with caution. Support should always be provided over an area. The support areas should be as large as possible and not upholstered too softly. All supports should be evenly loaded while supporting the hull. In relation to other measures for longer periods without use, above all during cold periods, please also note the measures that are described in the point "Winter storage".

The optimal areas for supporting and blocking are always in the area of an internal, load-bearing bulkhead. Make sure the supports are always in such a sufficiently supported area.

## 9. Servicing/care/working on the boat



### Attention

- » Changes that affect the safety of the vessel should be assessed before they are implemented and should be documented by competent persons. [For example the installation of an additional water tank, changes to the electrics, etc.!]
- » Any change to the distribution of weights can significantly affect the stability, the trim and the handling of the boat.

### 9.16.1. Servicing electrical systems



### Warning

- » Work on electrical systems can trigger dangerous electric shocks and sparks.
- » Before checking electrical cables and connections, always switch off all power sources and batteries at the switches and switchgear and remove the fuses from the related holders.



### Attention

- » To prevent sparks and damage to the alternator, always disconnect the battery cables before working on the electrical system for the engine.
- » Appliances are not allowed to be connected to voltmeter connections



### Information - servicing

- » Make sure all cables are securely fastened.
- » Check all cable insulation for signs of faults and chafing.
- » Check all connections for corrosion - corroded connections and connectors should be replaced or at least carefully cleaned.
- » Tighten all connections and spray them with a suitable preservative oil.

## 9.1. Servicing

### 9.1.1. Cleaning

As far as possible, always clean your yacht immediately when it is taken out of the water. High-pressure cleaners may remove any growth efficiently. Various products are available commercially for the care of the surfaces. For boats used in salt water, the following applies: salt residue binds the water and causes accelerated corrosion. Wherever it is possible, you should therefore rinse off the yacht with fresh water.

Only special, biodegradable boat cleaning agents are allowed to be used. Under no circumstances use scouring agents. These will scratch and bleach the surface. Heavy soiling should be rubbed off using freshwater and care products. To remove limescale [dried water droplets], it is best to use wine vinegar.

To clean and care for the upholstery, it is best to use commercially available upholstery cleaner. Before use, you should check the compatibility of the cleaning agent with your upholstery fabric in a small area that is not normally seen.

The underwater paint should be renewed periodically. This action prevents the growth of algae and barnacles. The parts of the boat in the water should also be washed down using a high-pressure cleaner from time to time.

### 9.1.2. Care of the deck and deck coverings

Wood takes on a natural grey colour due to the action of the weather without seriously degrading the properties of the wood. Despite its weather-resistant properties, to some extent it is necessary to use a protective coating.

#### Care products:

Protective wood oils are penetrating products that penetrate deep into the wood and that, under the influence of heat and moisture, can degrade the adhesion of caulking materials at joints. This aspect can cause joint edges to become detached and therefore leaks in the deck joint.

Lacquers are coatings that are also present on the joints after curing. Depending on the type of product, there may be tacky surfaces in the areas of the joints. Over time most lacquers flake off the joints. The result is a visual degradation of the wooden deck, as well as cracked joints to some extent.

Teak cleaners – should only be used if they contain natural soap and nothing else. Additives such as phosphoric acid or oxalic acid, which are often used as brightening additives, are caustic substances that attack the joint sealant and cause the joint sealant to age quickly.

We therefore recommend cleaning the wooden deck using clear water, or with the addition of a small amount of neutral soap, and a mop. A hard sponge can be used for heavier soiling.

The usage of a high-pressure cleaner will result in the release of soft pieces of wood and detachment at the edges of the joints and is therefore not recommended under any circumstances.

During extended hot or dry periods, the deck should be watered regularly to prevent excessive drying out of the wood. An excessive loss of moisture will cause the wood to shrink and therefore place stress on the joints. In some circumstances this situation can result in premature ageing and/or leaks in the joints.

If you follow these simple rules, the durability of the deck can be significantly increased.

### 9.1.3. Care for stainless steel

The corrosion resistance of stainless steel is due to the formation of a thin skin with atmospheric oxygen; this skin has a positive electrical potential. Specialists call this Cr-passivated. Chromium is however negative in the electrochemical series and a little “less noble” than iron. If this thin protective skin is damaged, the stainless steel becomes Cr-reactive and is therefore “less noble” than pure chromium. Corrosion can start.

Who has not been annoyed by those brown marks? They are caused by the rust or iron scale that flies about in plentiful quantities in all harbours near cities. As soon as the rust settles on the stainless steel's protective skin, it destroys the Cr-passivation and it does that aggressively and quickly.

Stainless steel only remains bright for a long time if it is cared for regularly. When you wash down the boat with fresh water, make a habit of also thoroughly washing off stanchions, bow and stern pulpit as well as all stainless steel fittings. Fresh water sweeps away the salts, rust and freshly deposited rust film, the protective coating is “ventilated” and can continue to provide its function.

If the stainless steel fittings on your boat already have brown discolouration, almost all commercially available metal cleaning agents are suitable for caring for the stainless steel fittings in the boat, e.g. entirely normal polish as you use for the hull.

### 9.1.4. Sails

The sails are made of Dacron. This material is very robust and resilient. Sails of this type retain their shape for a very long time. The film laminated cloth must be protected in particular against contact with sharp-edged fittings. Therefore, before setting your sails for the first time, please check carefully the standing and running rigging, e.g.: spreader horns, fore locks not masked, sharp-edged blocks on the backstays, etc. Those parts of the cloth that could chafe on the cross-trees or shrouds are to be protected using self-adhesive material [insignia cloth] on both sides. The same applies to the foot if it can chafe against the railing wire.



**Information - note**

- » Please take into consideration that damage to the cloth is almost always due to incorrect handling of the sail. Above all if you allow the sail to bang, subject it continuously to UV radiation or store it incorrectly.
- » If you have questions about the sail cloth, please do not hesitate to contact your sail maker or the manufacturer directly.
- » Never remove the ball-bearing mounted sheet wagon carelessly from the rails, the balls may easily fall out of the bearings;
- » Use a piece of rail with closed ends so that the balls are not strewn all over the deck.

#### 9.1.5. Paints

Talk to your storage facility operator or your service yard if you have questions about paints. As far as possible you should use a matched system from one manufacturer.

##### Wearing and replacement parts

If you need replacement parts and original parts are not available, orientate yourself on the strength of the original parts to keep the yacht up to the high standard it had at handover.

#### 9.1.6. Repairs

Repairs on the hull (polyester solid laminate and polyester sandwich laminate) can be undertaken by any specialist organisation taking into account the general rules on the processing of polyester resin. The interior has been designed such that almost all areas are accessible non-destructively. Also contact a suitable specialist organisation for repairs to the technical equipment. Your dealer would be pleased to assist you also here.

#### 9.1.7. Winter storage

Your boat and its systems, as well as the various items of equipment on board may be damaged if you do not take appropriate precautions for the winter. Specific instructions about the measures for winter storage have already been given at various points. In general the following should apply:

- » Winter storage facilities must also be state-of-the-art. This applies both to the ambient conditions in the facility, as well as the support blocks, the protection against fires and the accessibility to your yacht.
- » Fixed rules must also be defined for work undertaken by owners so that other boat owners do not suffer as a result.

If possible the following items should be removed and stored separately over the winter in a dry place that is not too cold:

- » The paperwork for the boat and other documents (this manual for example)
- » Nautical charts, books, instruments
- » Mattresses, upholstery, blankets and sleeping bags
- » Food
- » Safety equipment
- » Dingy and life raft
- » Sails and Bimini tops
- » Gas cylinders
- » Lines and sheet ropes

#### 9.1.8. Follow the instructions in the operating instructions for the engine.

- » Store the batteries in a charged state in a well-ventilated, frost-free place.
- » Grease all moving control cables and control components in the steering system.
- » Disconnect the line to the gas cylinders and store the cylinders in a safe, suitable place.
- » Replace components that appear to be in doubtful condition or that may not function correctly.

### Tips

Before overwintering, you should pay particular attention to the following parts and protect them correspondingly:

- » Clean the log and depth transducers.
- » You should clean and regularly care for the electrical systems using suitable material.
- » Water lines can be cleaned successfully using weak acid, e.g. white vinegar.
- » The water valves should be dismantled and greased.
- » Completely empty all tanks that do not contain fuel.
- » Empty the toilets.
- » Remove any water from the boat and protect the boat against the ingress of rain water.
- » The WC system and the entire fresh water system must be drained if there is a risk of frost.
- » If there is a risk of frost, the sea water circuit for the engine system must be drained or appropriately protected with a suitable anti-freeze.
- » The rudder should be fastened such that no rudder movements are possible. [This can be achieved by locking the wheel].

In principle you should task a specialist organisation with servicing and the preparation for winter storage and "wintering" the engine, under all circumstances the following is to be undertaken:

- » Completely fill fuel tanks to keep the water condensation as low as possible
- » Replace sacrificial anode on the propeller [if necessary]
- » Drain cooling water from the engine and follow the instructions from the manufacturer. Make sure the engine cooling water contains the appropriate concentration of anti-freeze.
- » Relieve the tension on all belts [generator-alternator, other engine-powered units].

### 9.1.9. Mast and rigging:

It will definitely not always be possible to meet all the following requirements, however it is recommended to undertake the following work for preparing for winter:

- Lower mast.
- Remove the standing and running rigging.
- Check the cables and other wires.
- Check the bolts, tensioners and other anchorings for possible signs of fatigue or cracks.
- Wash all aluminium parts using fresh water.
- Wash all lines using fresh water, then store dry.
- Wash all pulleys in the mast and boom. [Lubricate with grease after drying].

## 10. Protection of the environment

Even during development, BAVARIA was very careful not to endanger the environment unnecessarily. There is a series of stipulations and tips relating to the protection of the environment. We would request you to take these into account while using the boat. In the following we list a few special instructions about the environmentally responsible usage of your boat.

By using your boat responsibly, you will contribute to ensuring nature is not harmed more than is unavoidable. Please pay attention to the following sections!

### 10.1.1. Fuels and oils

Fuels and oils pollute the environment to a particular degree, because they take a long time to break down. They can harm nature and cause damage.

Handle these substances carefully on board so that during refuelling, filling or draining nothing goes overboard. You should take particular care while refuelling your yacht. A cloth around the filler can prevent fuel from the pump nozzle entering the water. You will find further instructions on the maximum level in section Refuelling. In your engine manual you will also find a diagram with the graph for the specific fuel consumption. This will provide you with a good indication of the most economical engine speed.

While pumping out the boat, pay particular attention to ensuring there is no oil in the bilge water. In this situation use special oil absorbing material to clean the bilge water or pump the bilge water into a special canister that you can then send for correct disposal on land.

### 10.1.2. Waste

Waste does not belong in the water - this is a matter of course for water sport enthusiasts. This statement also applies to biologically degradable waste and glass as well as metal. You should have a fixed place for waste on board in one of the lockers. Waste should be disposed of separated on land.

### 10.1.3. Noise

Noise is today one of the most important forms of pollution. A wet exhaust on a diesel engine with a silencer reduces the engine noise significantly. Rubber mounts, an elastic coupling and the engine compartment insulation further reduce the noise emissions. Nevertheless, avoid revving the engine excessively quickly and reduce the engine speed in waterways with heavy traffic.

### 10.1.4. Wash

Natural shore zones react sensitively to the wash from the boat. Maintain an appropriate distance from such shores. The wake of your yacht will give you a good idea of where you should regulate the speed to avoid unnecessary wash. Pay attention to related signs in narrow waterways.

### 10.1.5. Exhaust gases

Regularly check the exhaust gases emitted. The exhaust gas should not form black smoke or form blue clouds. In such cases it is necessary either to clean the engine's air filter - which you can do yourself - or a specialist workshop must re-adjust the engine settings. In port the shore connection is always to be preferred over the running engine as the source of power.

### 10.1.6. Antifouling, paints

The underwater hull on every yacht must be painted with antifouling paint; growth signifies more resistance. The range of protective paints is now large and their action varied. Therefore the paint can and should be specifically matched to the water type. Follow the advice of a specialist. Paints that are effective for several years without sanding down are desirable.

If it is, nevertheless, necessary to sand down the antifouling paint, discuss the work with your storage facility operator. During sanding work, the area under the yacht must always be covered with a tarpaulin or sheet of plastic so that the sanding dust can be disposed of as hazardous waste.

We recommend the usage of non-toxic antifouling.

#### 10.1.7. Paint remover

Most paint removers contain aggressive media and should not be used if possible. Mechanical removal of the layers of paint is to be preferred. Please dispose of this waste in an environmentally responsible manner

#### 10.1.8. Effluent

The yacht is equipped with a tank for collecting toilet waste water. Waste water can be emptied at special pumping out stations in harbours. In waters where pumping out is forbidden, it is imperative you ensure the connection for directly pumping overboard through a sea cock is closed and if necessary, sealed.

The capacity of the tank is limited. As far as possible, you should use the toilets in yacht harbours or other places on land.

It is imperative to note that there are conventions, e.g. for the Baltic (MARPOL), that forbid the discharge of faeces from tanks. Some countries have issued special regulations that stipulate the sealing of hull fittings.

#### 10.1.9. Conservation

- » By using your boat responsibly, you will contribute to ensuring nature is not harmed more than is unavoidable. Please pay attention to the information on nature reserves, national parks and other protected areas.
- » Follow the written and unwritten rules on practical conservation.
- » It is imperative you follow the applicable regulations in nature reserves, provided sailing in these waters is allowed.
- » Observe and photograph animals from a distance as far as possible. Do not approach seal colonies in the area of tidal flats so that animals are not disturbed or driven off. Keep at least 300 m away (more if possible) from places where seals haul out and from flocks of birds, and in all circumstances remain close to the marked waterway. Only sail in these areas at low speed.
- » Also follow the international conventions on keeping the seas clean.

## 11. Closing remarks and notes

This manual meets the requirements of the harmonised European standard EN 10240. Much of it will appear self-evident to you. However, we hope that reading the individual chapters will help you to understand the technical systems and their principles. The purpose of the manual is to familiarise you with CE-related topics, above all those related to safety.

The issues that are not covered include, e.g. personal safety equipment. These are solely the responsibility of the skipper. It is self-evident that personal life-saving equipment must be available for all persons on board. However, this issue also relates to the procurement and servicing of a life raft, as well as distress signals, a first-aid box, tools for repairs among other items.

Because the European Recreational Craft Directive specifically addresses fire protection, it should also be mentioned that the fire extinguishers must be serviced at regular intervals and that it is the task of the skipper to instruct the crew on their use.



### Attention

**If you are equipped for an emergency, in most cases it will not occur. If an emergency nevertheless occurs, the yacht should be equipped with the correct equipment also for these situations.**

Note:

We are continuously further developing our yachts. Please understand that we must reserve the right to make changes to the form, equipment and technology. For these reasons, no claims can be derived from any of the data, illustrations or descriptions in this manual.

Should your sailing yacht be equipped with details that are not described in this manual and there is no description provided in a dedicated folder, your dealer will provide you with information about correct operation and care.

Because yachts built by BAVARIA Yachtbau GmbH are always sold via the specialist trade, there is no direct contractual relationship between the yard and end customers.

Contractual details are therefore not known to BAVARIA Yachtbau GmbH and your dealer may not adopt our warranty conditions in full.

It is therefore imperative you contact your dealer if you have a claim under the warranty.

### 11.1.1. List of documents supplied

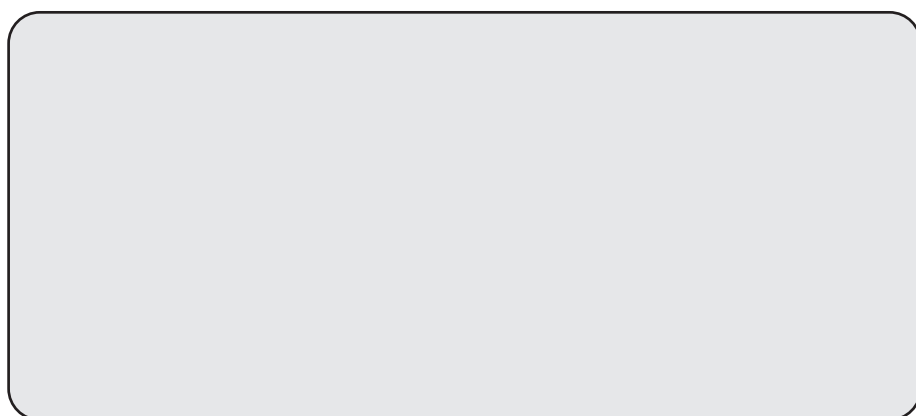
BAVARIA C38 manual with declaration of conformity

Instructions and manuals for optional parts and standard components

## 12. Identification certificate

[to be completed by the dealer]

Dealer	:	
First put into the water	:	
Date [delivery]	:	
Boat type and version [keel]	:	BAVARIA C38
WIN	:	DE-BAV V38
Commission number	:	
Name of the yacht:	:	
Engine [make and type]:	:	
Engine number	:	
Gearbox [make, type, ratio]	:	
Propeller [make, type, dimensions]	:	
Dealer	:	
Signature	:	.....



Dealer's stamp

Is a representative of our company who will provide you with the necessary assistance if problems should occur. As soon as you have become the owner, please complete and sign the following confirmation of receipt and give [or send] it back to the dealer so that you can qualify for warranty services from the dealer.

## 13. Confirmation of receipt

Here a card should be affixed over the placeholder. If not, please contact your dealer, the dealer will be pleased to copy this page of the manual and have it completed.

Confirmation of receipt for the Owner's Manual:

The owner of the new boat has the obligation to sign the confirmation of the receipt of the Owner's Manual.

I, the undersigned, confirm the receipt of the Owner's Manual and the related documentation for the equipment supplied with this boat.

WIN: DE-BAV V38

Name: \_\_\_\_\_

Address: \_\_\_\_\_

Signature: \_\_\_\_\_

## 14. Space for your notes







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