FULL VERSION MANUAL

100BC

Art.no 37177-0151 (MN), 37177-0153 (ME), 37177-0155 (MS)



SILVA MARINE COMPASS 100BC

SILVA TYPE 70/100 fits most types of motor-boats. Due to the effective dampening of the compass card they are also suitable for speedboats. Unlimited tilting fore and aft, 30° when heeling. Type 70 as well as type 100 is supplied with a front and back yellow main lubber line. Type 100 has two yellow lubber lines 45° on each side of the main lubber lines.

The models with the designation "C" have adjustable compensation magnets for the B- and C-coefficients.

PRODUCT OVERVIEW

The packaging includes:

- Compass unit
- Mounting bracket
- Illumination
- Compensator adjuster
- Mounting kit

ILLUMINATION

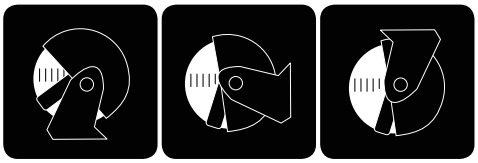
The illumination is supplied for 12V as standard.
Adaptation to 24V: 70NB(C), 70FB(C), 100NB(C), 100FB(C) - A 24V bulb, optional extra, art. no 3529. 70B(C), 100B(C)- the illumination is connected by a resistor in series art. no 478, (270 ohm, 0,5 W).
On the models 70NB(C), 70FB(C), 100 NB(C), 100FB(C) the bulb is mounted within the visor.
On the models 70B(C) and 100B(C) the light emitting diodes should be changed as follows:

1. Loosen both side screws and take out the compass from the bracket.
2. Remove the capsule and front ring free from the base.
3. Loosen the six screws and take away the ring from the back of the capsule.
   The emitting diodes are now uncovered and can be exchanged.
   NB! The emitting diodes have a lifetime of 100.000 hours so there should be no need to change them.

POSITIONING

SILVA TYPE 70/100 have many different possibilities of positioning - vertically, horizontally, sloping or hanging from the cabin roof (Not FB(C)-models).

BRACKET MOUNT



The compass should be positioned where it can be easily read from all angles, even in darkness when illuminated. Position the compass as far as possible away from iron objects or other disturbing magnetic sources as loud speakers, windscreen wipers, instruments etc.
NB! SILVAs electronic instruments do not disturb the compass.
When checking for magnetic disturbance, use an ordinary SILVA handheld compass, held in the fore-and-aft direction around the intended mounting site. In most cases 0.5 to 1 metre between the compass and the source of disturbance will be sufficient. Do not forget to switch on all electrical equipment near the compass when making this check.

MOUNTING

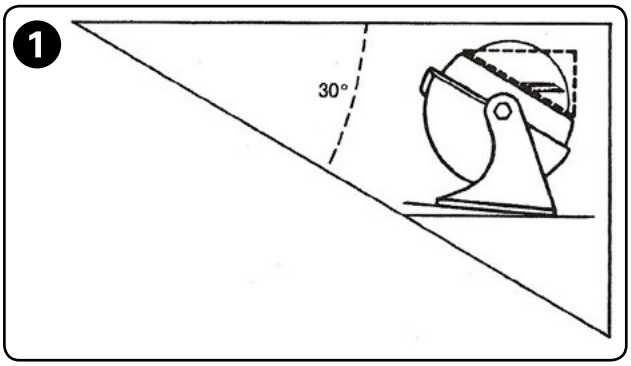
The compass should be mounted exactly in the boat's longitudinal direction. The compass should be mounted on a firm base (especially important for speedboats) to prevent oscillation of the card. To avoid engine vibrations, a rubber sheet can be placed beneath the compass.

70NB(C), 70B(C), 100NB(C), 100B(C)
The bracket is mounted either directly on the base or with the two mounted mouldings, making it detachable. Mounting screws of brass are supplied. Always use screws of non-magnetic material.
NB! The mounted mouldings are supplied with stop lugs. These should be turned for instance forward or down depending on the mounting angle and position.

70FB(C), 100FB(C)
Cut a hole according to the enclosed template. Check that the mounting depth Is sufficient!

COMPASSES SUPPLIED WITH COMPENSATOR

NB! The compass is supplied with the front of the capsule correctly positioned for mounting on a horizontal base. At any other mounting angle, the capsule must be adjusted to 30° front inclination. This is achieved when the lower edge on the front is in level with the black mark on the front main lubber line. Loosen the side screws slightly, adjust to the correct front position and tighten the screws again.❶
After final mounting it is of utmost importance that the compass cannot be turned within its bracket as this affects the compensation.



COMPENSATION AND DEVIATION

Compensation is recommended, if the deviation is more than 5 degrees, when the compass is in its normal mounting position.
If the error is less than 5 degrees, it is sufficient to produce a deviation table.
Compensation is made with the two compensation adjuster screws "E/W" and "N/S" in order to reduce the errors caused by iron objects or other sources of magnetic disturbance. The compensation adjuster screws are situated at the compass lower front edge.
When compensating, the boat should be in an area that is not affected by permanent- or electromagnetic disturbances.

1. Aim the boat due North and turn the "N/S" screw until the compass reading is 0°.
2. Aim the boat due East and turn the "E/W" screw until the compass reading is 90°.
3. Aim the boat due South. If the compass does not show 180°, turn the "N/S" screw until the error is halved. (E.g. If the error is 6° - turn the screw until the error is 3 °.)
4. Aim the boat due West. If the compass does not show 270°, turn the screw until the error is halved.
5. Go through the procedure again and check the adjusted values.
6. Check the compass every 20 degrees and produce a deviation table and deviation curve.

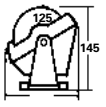
As the magnetic conditions in a boat are liable to change, we recommend checking of the compass once a year and always after installation of equipment which might affect the compass.
NB! Do not regard the compass as an accurate navigational instrument until the compensation is carried out and the deviation table is produced. Whenever in doubt, please seek the advice of a compass adjuster!

MAINTENANCE

To clean the compass, use a mild soap solution or detergent. Do not use strong solvents, such as spirit, acetone or petroleum.
The compass tolerates temperatures down to -30°C. It is advisable not to subject it to severe cold for long periods.

TECHNICAL SPECIFICATIONS

Type of compass: Power boat compass
Illumination: Yes, 12V. Colour: red
Lubber lines: Yes, centre (front, back) and side view at 45°
Gimballed cradle: Yes
Accuracy: ±0.5°
Apparent card diameter: 100 mm.
Compensator: Yes
Card type: Cone
Card graduation: Edge: every 5° Top: every 5°
Heeling angle: Roll: 30° Pitch: 30°
Heeling angle scale: No
Mounting: Bracket
Mounting angle: -30° to +110°
Temp operating range: -10°C to +70°C
Storage temp: -30°C to +70°C
Adjustable cover: No
Material: Acrylic/ABS
Weight: 910g
Dimensions:



PROTECT THE ENVIRONMENT.

The Compasses should be recycled and must not be thrown in the regular trash.
Dispose these items in accordance with applicable local regulations.

For more information please visit **www.silva.se**

Visit: **www.silva.se** for more information about the Waste Electrical and Electronic Equipment (WEEE) Directive.