



Installation & Operation Manual

Desk(Table)Compass/180.../160

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Range of Delivery

- Steering compass type 11 (card Ø 180 mm) or type 21 (card Ø 160 mm) with illumination element from below
- Mounting brackets, one pair

Place of Installation

Magnetic fields caused by the steel hull of the vessel deflect the compass indication from north direction. Therefore the following rules have to be watched when choosing the compass location:

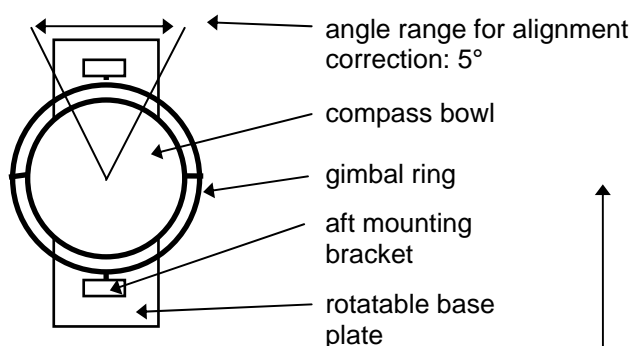
- The distance between any magnetic material and the compass has to be between 2 m and 6 m depending on the ship's length for worldwide operation. For coastal operation a reduction is possible.
- The compass cannot work satisfactory when installed inside the steel hull or superstructure.
- Different bridge instruments are sources of magnetic fields. Therefore all these instruments are individually measured and marked with the magnetic compass safe distance.

Detailed informations for compass location and safe distance can be found in IMO Resolution A.382(X) and other publication of the national maritime authority.

Installation of Compass

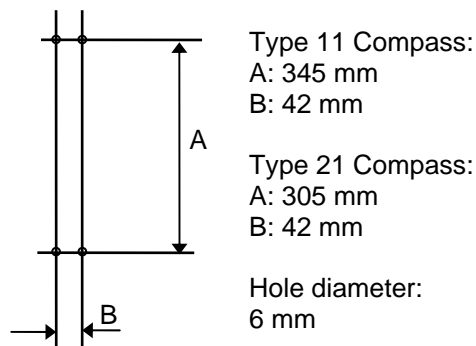
Usually the compass is longitudinal gimbaled (on extra demand this also can be cross gimbaled). Therefore the ahead marking of the compass appears near to one of the external axles in the gimbal ring. In case of longitudinal compass one of the mounting brackets is orientated to ship's ahead and the other to ship's aft. The brackets must be fixed on a base plate according to the dimensions as below mentioned. Now this base plate can be fixed on the desk in such a way that an alignment correction is still possible (the compass and base plate can be turned around it's vertical axle). The base plate must be horizontally levelled.

Compass as to be seen from above



Drillings

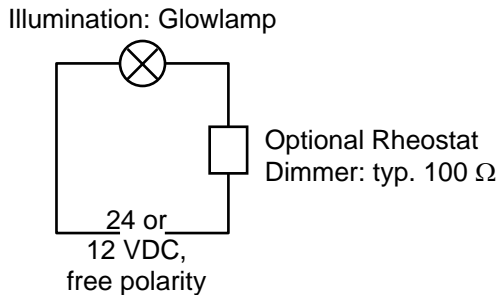
for the mounting brackets



Ship's Ahead

Illumination

The illumination element is fixed by a bracket from below the compass. For removal of the element lift the bracket. Connection can be made independent of polarity of the battery. Use 24 or 12 VDC supply voltage. The 24 VDC element can be identified by a red marking at the cap.



Compass Adjustment

It is necessary and obligatory to carry out compass adjustment after installation on basis of the above mentioned safe distances. Compensation eliminates residual interfering magnetic fields. It will be done by especially trained persons. Ask your national maritime authority for addresses. Furthermore there are periodical re-adjustments necessary. A usual time periode is two years. In the event of lightning struck, melting works or similar a re-adjustment is necessary, too. The deviation should be watched continuously to grant safe operation!

A description how to install and how to use is attached to the adjustment means. For professional applications the following correctors are necessary:

- B+C-Correctors (C&P order No. 18100),
- D-Corrector (C&P order No. 12200) and
- Heeling corrector (C&P order No. 12800).

Operation

The course reading is done at the ahead lubber mark of the compass. Note that this heading is not the true as required for navigation. To convert one has to consider the residual deviation and the local variation!

Maintenance

According to international regulations compasses require periodically service. The national maritime authority will give further informations. In addition in case the compass seems to be damaged a service is necessary.

From time to time the compass bearings should be lubricated to allow free swinging.