

GYROCOMPASS CMZ900 series



CMZ900 GYROCOMPASS

is highly reliable and long life.

A gyrocompass detects the true north by means of a fast-spinning rotor, which is suspended with no friction and is influenced by gravity and rotation of the Earth. A gyrocompass consequently indicates a ship's heading.

CMZ900 series has been type approved in accordance with International Maritime Organization (IMO) standards, resolution A.424(XI).



FEATURES

- A modular design saves the space. MASTER COMPASS can be integrated in the autopilot steering stand.
- Manual and automatic speed error correction
- External heading sensor can back up the heading outputs.
- Serial data output IEC61162-2 (high-speed transmission)
- A unique anti-vibration mechanism enhanced by the velocity damping effect of high viscous oil, provides superior damping of vibration and decoupling of shock at sea.
- A small and lightweight container enhances the follow up speed. The gyrocompass reading changes smoothly and does not lag when a small ship rapidly changes course.
- Easy maintenance and long maintenance periods

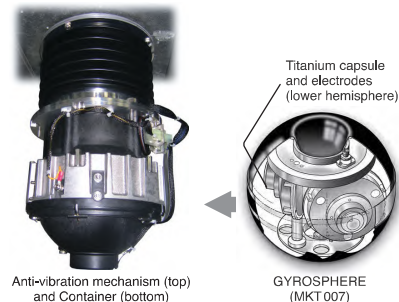
Titanium capsule and electrodes are employed for GYROSPHERE. Purity is maintained inside of the container, and maintenance interval is then longer-dated.

The container is divided into two pieces at bottom when overhauled. Ship's crew can replace GYROSPHERE in case of emergency.



PERFORMANCE SPECIFICATIONS

- Accuracy:
Static:0.25° sec Lat.
Dynamic:0.7° sec Lat.
- Settling time:Within 5 hours
- Follow up accuracy:0.1 or less
- Max. follow up speed:30/sec
- Permissible roll and pitch angle:40
- Permissible ambient temperature:
Operation:-10C to +55C



SYSTEM CONFIGURATIONS

Three types of system configuration are provided on CMZ900 series as per specification requirements of functionality, the amount of signal outputs and redundancy.

- CMZ900B2:Single-unit model, suitable for small vessels
- CMZ900S:Single-unit model, suitable for all types of merchant vessels
- CMZ900D:Dual-unit model for extra reliability

Basic configuration of each type of CMZ900 series is illustrated below. Viewing enhancement of the system capability, optional instruments are available in order to increase the signal outputs of the gyrocompass. Other navigation equipment such as repeater compasses, course recorder are available as a part of the system.

MASTER COMPASS (MKM026/029) runs on 24 VDC power supply. It is easily adopted to the power supply requirements, and all signal outputs can then be maintained during AC power interruption if 24 VDC is provided.

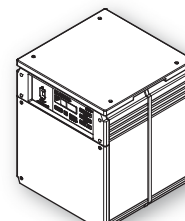
Serial data output IEC61162-1 or -2 (high-speed transmission) is selective, and contains the ship's heading and rate of turn (ROT) information.



GYROSPHERE
(MKT007)
is incorporated in MASTER COMPASS.

CMZ900B2 type

MASTER COMPASS (MKM029)

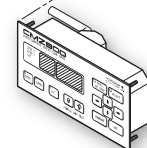


- Buzzer stop
- External heading data

- Repeater compasses
- Steppers
- Serial data (IEC61162-1/2)
- Analog outputs (Rate of turn, Course recorder)
- Alarms

AC ADAPTER
(MKS070)

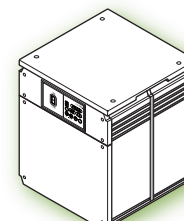
- Power supply
·100/110/115/220 VAC
50/60 Hz single-phase
·24 VDC for back-up



C. OPERATION UNIT
(MKR040)
Note : Built in MKM029

CMZ900S type

MASTER COMPASS (MKM026)



- Serial data (IEC61162-1/2)
- Analog outputs (Rate of turn, Course recorder)

CONTROL BOX
(MKC326)

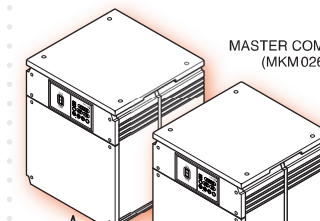
- Buzzer stop
- External heading data (IEC61162-1)
- Ship's speed and Latitude data for the automatic speed error correction (IEC61162-1)

- Repeater compasses
- Steppers (Option)
- Running status and Alarms

- Power supply
·100/110/115/220 VAC
50/60 Hz single-phase
·24 VDC for back-up

CMZ900D type

MASTER COMPASS (MKM026)



MASTER COMPASS
(MKM026)

CONTROL BOX
(MKC327)

- Repeater compasses
- Steppers
- Serial data (IEC61162-1/2)

- Analog outputs (Rate of turn, Course recorder)
- Running status and Alarms

DUAL AC ADAPTER
(MKS071)

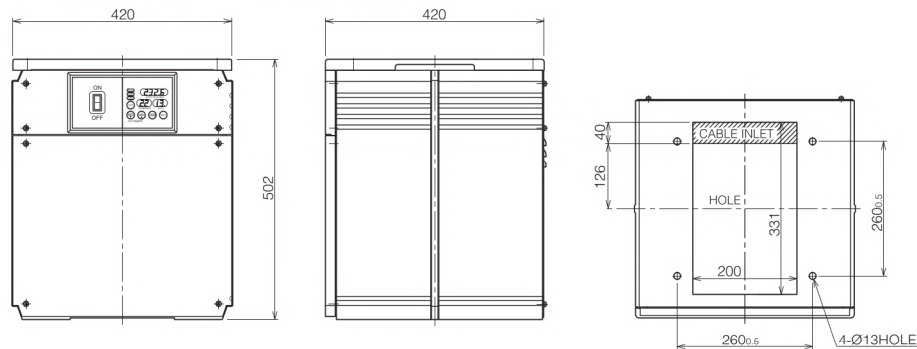
- Power supply
·100/110/115/220 VAC
50/60 Hz single-phase
·24 VDC for back-up

CMZ900B is available when MED certificate is not required.

OUTLINE DIMENSIONS

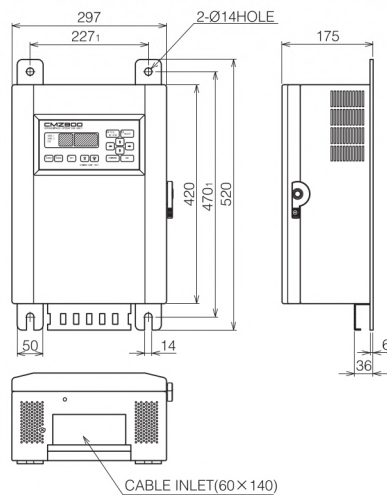
**MASTER COMPASS
(MKM026)**

MASS: 43 kg



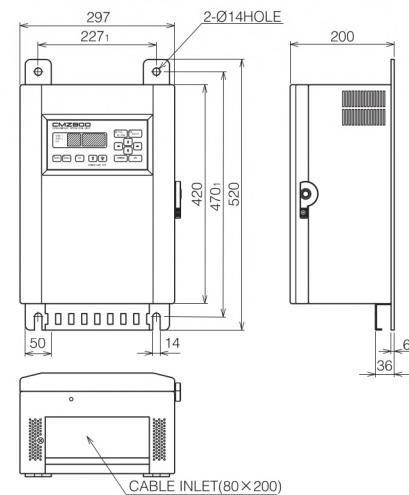
**CONTROL BOX
(MKC 326)**

MASS: 17 kg



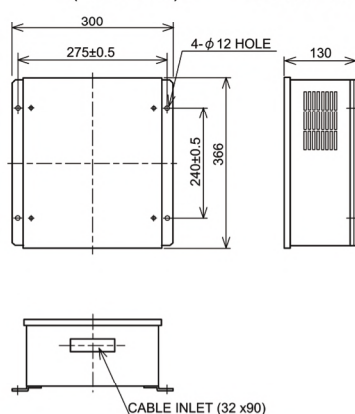
**CONTROL BOX
(MKC 327)**

MASS: 16 kg



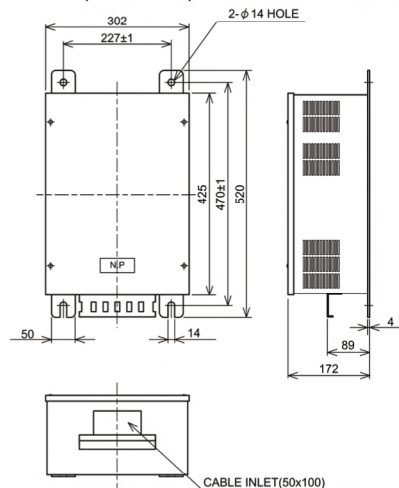
**AC ADAPTER
(MKS070)**

MASS: 10.5 kg



**DUAL AC ADAPTER
(MKS 071)**

MASS: 20 kg



Dimensions in mm

Flush mounting type of CONTROL BOX and DUAL AC ADAPTER are available.

Caution : Please read the manual before using this product.

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Subject to alteration due to technical developments without notice

Represented by :

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