Yokogawa CMZ-700 Gyro Compass - Technical Datasheet

Product Overview:

The Yokogawa CMZ-700 is a marine gyrocompass providing precise heading information for navigation, autopilot, radar, and AIS integration. It includes advanced vibration damping and high-speed follow-up capabilities.

Key Features:

- High-speed follow-up for accurate heading in dynamic conditions
- IEC 61162-2 output for integration with navigation systems
- Anti-vibration system with high-viscosity oil damping
- Compact and lightweight design for faster follow-up
- Automatic speed error correction using speed log and GPS latitude
- External heading signal input for backup and redundancy
- Deviation detection between master compass and external sensors
- Restart time configurable from 1 to 99 hours

Gyrosphere (KT005):

- Critical component providing stable rotation
- Typical service life: ~5 years
- Annual inspection recommended (replace supporting fluid and gaskets)

Mercury (V8109PN):

- Supports the gyrosphere for low-friction floating
- Provides damping and stability
- Correct type and quantity essential for maintenance
- Handle with care due to toxicity

Physical & Environmental Specifications:

- Dimensions: approx. 350 x 300 x 250 mm (13.78 x 11.81 x 9.84 in)
- Weight: approx. 20 kg (44 lbs)
- Operating temperature: -15°C to +55°C (5°F to 131°F)

- Storage temperature: -20°C to +70°C (-4°F to 158°F)
- Humidity: 0-95% RH, non-condensing

Installation & Integration:

- Connects to autopilot, radar, AIS, ECDIS systems
- Wiring diagrams and connections as per installation manual
- Annual maintenance of gyrosphere and mercury recommended