

FURUNO®

Introducing an innovative breakthrough in electromagnetic compass technology

INTEGRATED HEADING SENSOR

Model PG-1000

- Electromagnetic compass providing a highly accurate and stable readout of ship's compass heading
- Maintenance free operation
- Automatic compensation for deviation and heeling error
- Auto correction of magnetic variation error with a GPS receiver input providing variation data with respect to the area
- Compact waterproof case for a simple installation
- Heading data output in NMEA 0183 and AD-10 formats



The FURUNO PG-1000 is a new, inexpensive electromagnetic compass. It provides a highly accurate and stable readout of the ship's heading thanks to the sophisticated structure by three-axis magnetometer, inclinometer and integral vibrating gyrosensor.

The PG-1000 detects terrestrial magnetism and produces compass data. The data can be utilized in serial formats such as NMEA 0183 and FURUNO AD-10. It is sent to various equipment that need accurate and stable heading data. Typical applications include Radar Echo Trail and True Motion, Video Plotters, Scanning Sonars, etc.

When connected with a GPS navigator, magnetic variation correction can be made automatically. A True Heading readout is possible as modern GPS receivers output compass variation data in memory with respect to the vessels geographic areas. Because of its high accuracy, the PG-1000 can be used as a backup system for the vessel's gyro compass .

The PG-1000 also has an automatic re-calibration capability. Once compensated at the time of installation, the PG-1000 will continue to detect the magnetic deviation error and carry out automatic re-calibration while it is in use.



The future today with FURUNO's electronics technology.

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Catalogue No. M-374a

TRADE MARK REGISTERED
MARCA REGISTRADA

SPECIFICATIONS OF PG-1000

- 1. **Accuracy** ±1.5° rms
- 2. **Compensation** Automatic compensation
for deviation and heeling error
- 3. **Freedom of tilt** ±45°
- 4. **Angular velocity** 60°/s max.
- 5. **Output rate** 40 Hz (25 ms)

6. Interface

Output

- NMEA0 183 format
\$- - HDG, \$- - HDT, \$- - HDM
- AD-10 format

Input

- NMEA 0183 format
\$- - RMC, \$- -VTG

ENVIRONMENT (IEC 60945 testing)

Temperature: -15° to +55°C
 Waterproofing: IPX5 (IEC 60529),
 CFR-46 (USCG standard)

POWER SUPPLY

10 to 35 VDC, less than 3 W

EQUIPMENT LIST

Standard

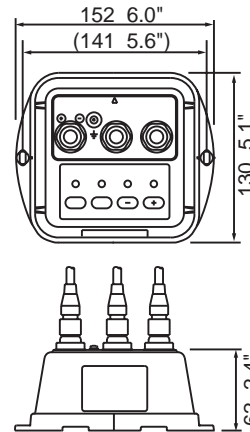
- | | |
|---|--------|
| 1. Heading Sensor PG-1000 | 1 unit |
| 2. Interface Cable (with 2 x 6p connectors)
MJ-A6SPF0007-100 | 10 m |
| 3. Installation Materials | |

Optional

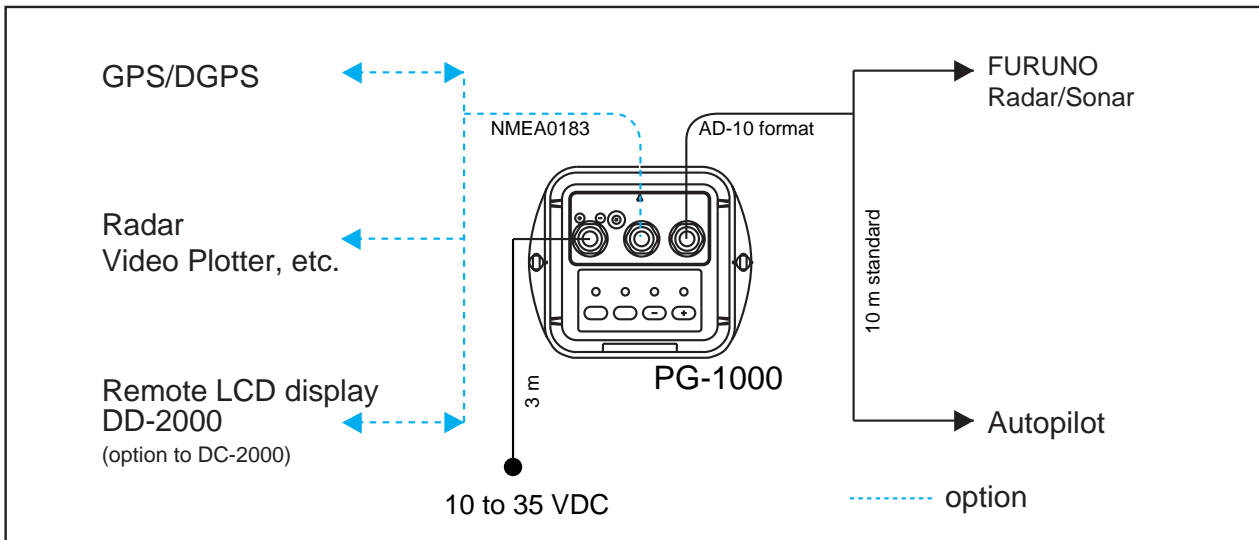
- 1. Interface Cable
 - For NMEA0183
MJ-A6SPF0012-100 (with 2 x 6p connectors), 10 m
 - For AD-10
MJ-A6SPF0003-050 (with 1 x 6p connector), 5 m
MJ-A6SPF0007-100 (with 2 x 6p connectors), 10 m

Dimensions and weight

0.3 kg 0.7 lb



Note: This is heading sensor utilizes the earth's magnetism. Therefore steel-boat installations should be carefully done.



SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

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