

Approval Date: 20 May 1998

Reviewed on : 23 October 2007

Version: 1

Purpose

The compass is an optional supplement to the ADCP to reference the ADCP readings to East-West and North-South direction. It is to be installed externally, e.g. in a mast, away from ferromagnetic material.

Conditions & Requirements

- The flux-gate compass shall be of such a design that it operates reliably and accurately under the prevailing flow and environmental conditions.
- The compass shall be easy to operate and maintain.
- The compass shall be supplied with the accessories as needed for effective use.
- All external materials of the compass shall be non-corrosive.
- An operator's manual, related to the type and model of the compass, shall be part of the delivery.
- The electrical connections shall be of a reliable and sturdy construction.
- The compass and accessories shall be supplied in a sturdy transport case.
- The North -direction of the compass sensor shall be parallel with the longitudinal axis of the boat.
- The installation of the sensor at the bow shall be such that the sensor can easily be removed and re-installed with the same alignment.
- The compass shall have calibration functions. The calibration shall compensate for local magnetic conditions and for the magnetic effects of the boat, including engine, generator on the compass reading.
- The data shall be delivered by serial (RS232) connection either directly to the data acquisition PC or to a 'deck-box' (depending on ADCP type and make).
- The compass data format shall comply with NMEA-0183 specification.

Specifications

The purchaser may execute his judicious discretion in the choice of configuration and options.

type	flux-gate compass
accuracy	0.5°
repeatability	0.2°
resolution	0.1°
tilt angle	15°
power supply	12 VDC or 24 VDC
output data format	NMEA-0183 compliant
serial port	RS 232
output update frequency	1 Hz
enclosure	compliant to IP65
operating temperature	0 to 60°C
operating humidity	100 %

Accessories

- manual

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