

Alpha Minicourse Gyrocompass

The Alpha Minicourse gyrocompass is designed to meet the demands of the modern marine market. The highly accurate performance, a small size and a short settling time make it ideal for any type of vessel, including high-speed craft.

Gyrocompass provides the following data:

- Heading against the geographical meridian at the vessel speed up to 90 knots, latitude up to 80 degrees, roll and pitch angles up to 50 degrees;
- Rate of turn;
- Information about operation mode and failures.



Features

- Maintenance free
- Efficient one box design
- Small size and versatility
- Automatic start-up and alignment against the meridian
- Short initial settling time
- Fast settling with the preset heading
- High reliability
- High static and dynamic accuracy (latitude and speed compensation, automatic compensation of temperature drifts)
- Easy installation and adjustment, built-in testing
- No compass fluid, extra cooling and heating are required, no periodic determination and compensation of azimuth drift, simplified methods of horizontal drift determination and compensation
- Adjustment of scale illumination brightness
- Ecological safety
- Operating temperature from -15°C to $+55^{\circ}\text{C}$
- Storage temperature from -60°C to $+80^{\circ}\text{C}$
- Shock exceeding 5G



The Alpha Minicourse gyrocompass complies with requirements (19), MEC 945-96, ISO 8728-1987 of IMO A.424(XI), A.821

Configuration

This gyrocompass has a mono-block design. The casing is made of foamed polyurethane and has a window on the top for the compass card. If necessary the built-in Control Unit may be remotely mounted, within 100 meters of the gyrocompass.

The heart of the gyrocompass is a dynamically tuned gyroscope - a very accurate sensor that ensures a follow-up speed up to 200°/s. This extreme value will not occur even onboard the fastest high-speed vessels. The gyro is able to withstand even extreme shocks exceeding 5G.

Overall dimensions are:
288 mm (H) x 240 mm (L) x 329 mm (W).

Weight is 12.5kg



Optional Bearing Repeater

Technical Data

Settle Point Error	<±0,2° sec (phi)
Dynamic Accuracy	<±0,6° sec (phi)
Settle Point Repeatability	<±0,2° sec (phi)
Follow-up Speed	>=200 °/s
Settling Time	<=45 min within 0.7°
OUTPUTS:	
Step	1x(5V TTL), 6 steps per degree
Resolver	Optional
Serial Data	4 x RS422, NMEA0183, Heading & Rate of Turn selectable 1 x RS232, NMEA0183, Heading & Rate of Turn selectable For special purpose up to 2 decimal places read out is possible 1 x ROT Analogue, 20°/sec ±10V
Status/Alarm	5V TTL power fail/gyro fail 5V TTL system ready
INPUTS:	
Latitude	NMEA 0183 via RS232/RS422 from GPS
Speed	Pulse or contact closure at 100,200, 400 per nm from log NMEA0183 via RS232/RS422 from log
Input Voltage	24(18-36) V DC
Power Consumption	
- start-up	50W
- operation	25W
Estimated service life	45000h

For more information about this product, or for details of the complete range of communication, navigation, radar and safety equipment that we are able to supply please contact us:

SELEX
Communications

a Finmeccanica Company

SELEX Communications Ltd
Marconi House
New Street
Chelmsford
Essex CM1 1PL
United Kingdom

Tel: +44 (0)1245 275588
Fax: +44 (0)1245 275689
Email: marine-sales@selex-comms.com
Web: www.selexmarine.com