

AGS1126 Heading Rate of Change Sensor

- Sensing Rate of Change of Heading
- **3-wire Loop powered** as standard, with *nom* 24Vdc External
- Amelec 3-year warranty
- Suitable for SIL1 & SIL2 rated (EN 61508-2) Safety instrumented system (SIS) loop applications, as 1oo1 architecture (HFT:0)

APPLICATION

The AGS1126 is suitable for applications requiring precise rate of change of heading measurements along a single axis under harsh circumstances and returning a 4-20mA output signal.

Examples of application areas include Aviation, Marine, Automotive & Transportation Systems; Vehicles, Aircraft, Ships & Vessels, as well as any other Special Operations Safety Systems.

TECHNICAL SPECIFICATION

FUNCTION

Provides a DC output signal proportional to the Rate of Change of Heading.

OUTPUT OPTIONS:

Minimum loop currents: 2.5mA ... 3.5mA
Maximum loop currents: 22mA ... 26mA

Output signal loop current: 4mA ... 20mA as standard
12mA output when Heading Straight, 12 - 4mA to the Left/ aPort,
12 - 20mA to the Right/ aStarboard)

Minimum loop voltage: 18V
Maximum loop voltage: 28V

OR

-1V to 0 to +1V / -10V to 0 to +10Vdc
(Separate 12V / 24Vdc supply required for voltage outputs)

CONTROLS

Zero / Span: 15 turn potentiometer (+/- 20%).

PERFORMANCE

Measuring ranges: Any, units are Customised & Calibrated to meet the wide array of different application requirements
Linearity/Accuracy: < ±1%
Response time: *Typically* ≤1Second
Consumption: 30mA + I out

PROTECTION

IP65
Isolation: 1000V RMS. Sensor/(Output+Supply)/Housing.

ENVIRONMENTAL CONDITIONS

Storage temperature: -40°C to +70°C
Operating Ambient: -15°C to +55°C
Relative Humidity: 5 to 95% RH (Non-Condensing)
EMC: 2014/30/EU, EN 61326-1:2013 (Controlled EM)
(Internal heater option 'HTR' available for extreme cold environments)

↑ Straight Heading ↑



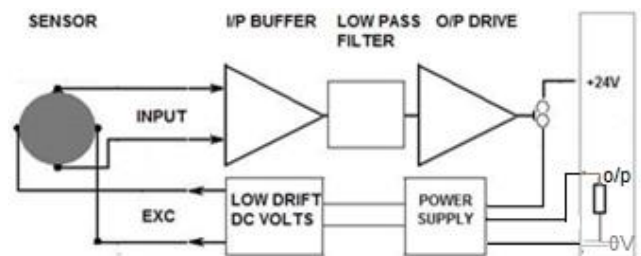
Top View



TERMINATION

TB1 (+24V) / TB2 (com/-) / TB3 (Scn) / TB4 Iout+

FUNCTION BLOCK DIAGRAM



MOUNTING / DIMENSIONS

Enclosure: 122w x 122h x 90d mm
Fixing holes: 82w x 106h mm (Ø 7mm)
Mounting: Surface
(in a fixed location/direction relative to the vessel)
Weight < 1.3kg