

AGS1126 Heading Rate of Change Sensor

- Sensing Rate of Change of Heading
- Loop powered as standard, 12V to 28Vdc max 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 when Heading Straight, 12-4mA to the Left, 12-20mA to the Right)

Minimum loop voltage: 12V

Maximum loop voltage: 28V

OR

-1V to 0 to +1V / -10V to 0 to +10Vdc

(Separate 12V / 24Vdc supply required)

CONTROLS

Zero / Span: 15 turn potentiometer (+/- 25%).

PERFORMANCE

Measuring ranges: Any, units are Customised & Calibrated to meet the wide array of different application requirements

Linearity/Accuracy: < $\pm 1\%$

Response time: Typically $\leq 100\text{ms}$

PROTECTION

IP65

Isolation: 1000V RMS. Sensor/Output/Housing.

ENVIRONMENTAL CONDITIONS

Storage temperature: -40°C to $+70^{\circ}\text{C}$

Operating Ambient: -15°C to $+55^{\circ}\text{C}$

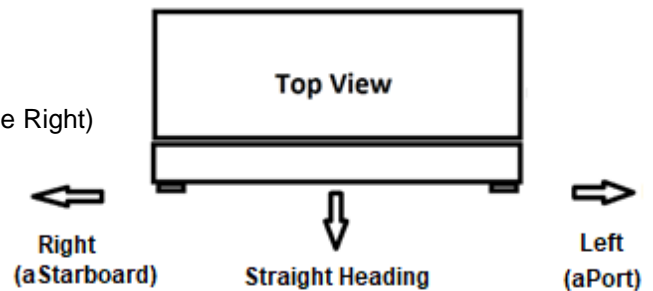
Relative Humidity: 5 to 95% RH (Non-Condensing)

EMC: 2014/30/EU, EN 61326-1:2013 (Controlled EM)

(Internal heater option 'HTR' available for extreme cold environments)



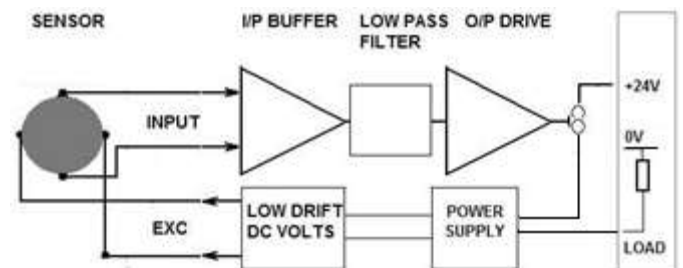
Front View



TERMINATION

Output 1: TB1 (+) / TB2 (-) / TB3 (Scn)

FUNCTION BLOCK DIAGRAM



MOUNTING / DIMENSIONS

Enclosure: 122w x 122h x 90d mm

Fixing holes: 82w x 106h mm ($\varnothing 7\text{mm}$)

Mounting: Surface

(in a fixed location/direction relative to the vessel)

Weight < 1.3kg