

# AGS1125X-2-EP Dual Channel Inclinometer

- Suitable for Inclination or Acceleration and Roll
- Externally Powered: 18V to 36Vdc External Supply range
- Amelec 3-year warranty
- Suitable for SIL1 & SIL2 rated (EN 61508-2) Safety instrumented system (SIS) loop applications, as 1001 architecture (HFT:0)

## APPLICATION

The AGS1125X-2-EP is suitable for applications requiring precise inclination, acceleration, roll measurements along two axis under harsh circumstances and returning a 4-20mA output signal for each.

#### Examples of application areas include;

Construction, Machinery, Transportation & Conveyor Systems, Platforms, Cranes & Lifting Equipment, Vehicles, Aircraft & Ships, as well as general mechanical Safety Engineering Operations & Automation Technology.

# **TECHNICAL SPECIFICATION**

#### **FUNCTION**

Provides DC output signals proportional to roll and inclination in the X and Y coordinates of housing.

#### OUTPUTS

Output signal loop current: 4mA ... 20mA (500ohms max load each) (12mA for zero position)

Both output channels are electrically isolated from each other.

#### SUPPLY

Nom. 24Vdc (18-36Vdc) Consumption: <a>250mA</a>

## CONTROLS

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

# PERFORMANCE

Measuring ranges:  $\pm 10^{\circ}$ ,  $\pm 30^{\circ}$  or  $\pm 70^{\circ}$  as std ( $\pm 80^{\circ}$  optional) Resolution:  $< 0.002^{\circ} / 0.005^{\circ} / 0.01^{\circ}$  /  $0.01^{\circ}$ Linearity:  $< \pm 0.2\%$ Accuracy:  $< \pm 0.1\%$ Response time: Typically < 400mS (0-100% step change)

## PROTECTION

IP65 Isolation: 1000V RMS Sensors/Output 1/Output 2/Supply/Housing

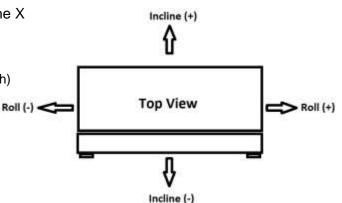
## **ENVIRONMENTAL CONDITIONS**

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)

Tel: 01908-567003 Email: sales@amelec-uk.com



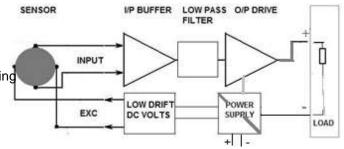
**Front View** 



#### TERMINATION

Output 1: TB1 (+) / TB2 (-) / TB3 (Scn) Output 2: TB4 (+) / TB5 (-) / TB6 (Scn) Supply: TB7 (+) / TB8 (-)

## FUNCTION BLOCK DIAGRAM (each channel)



**MOUNTING / DIMENSION** Enclosure: 122w x 122h x 90d mm Fixing holes: 82w x 106h mm (Ø 7mm) Mounting: Surface Weight < 1.3kg

Visit: www.amelec-uk.com Fax: 01908-566735