

## AGS1125-2 Dual Channel Inclinometer

- Suitable for Inclination or Acceleration and Roll
- Loop powered as standard, 10V 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 AGS1125-2 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.

#### OUTPUT OPTIONS:

Minimum loop currents: 2.5mA ... 3.5mA  
 Maximum loop currents: 22mA ... 26mA  
 Output signal loop current: 4mA ... 20mA  
 (12mA for zero position)  
 Minimum loop voltage: 12V  
 Maximum loop voltage: 28V

#### OR

-1V to 0 to +1V / -10V to 0 to +10Vdc  
 (Separate 12V / 24Vdc supply required)  
 Both output channels are electrically isolated from and independent of each other.

#### CONTROL

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

#### PERFORMANCE

Measuring ranges: +/-10°, +/-30° or +/-70° as std (+/-80° option 'X')  
 Resolution: < 0.002° / 0.005° / 0.01° / (0.01°)  
 Linearity: < ±0.2%  
 Accuracy: < ±0.1%  
 Response time: Typically < 400mS (0-100% step change)

#### PROTECTION

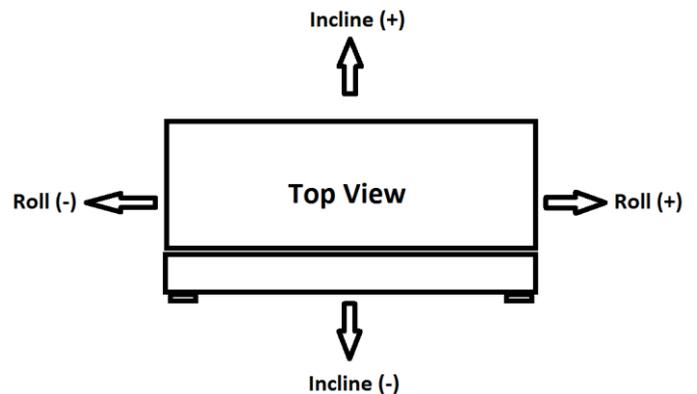
IP65  
 Isolation: 1000V RMS. Sensors/Output 1/Output 2/Housing.

#### 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)



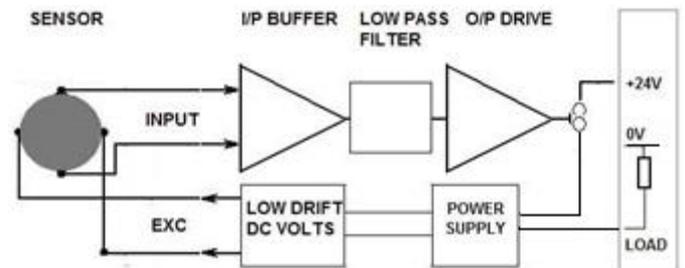
Front View



#### TERMINATION – internal terminals, towards bottom.

(Cable entry hole drilled by customer to suit application)  
 Incline Output: TB1 (+) / TB2 (-)  
 Roll Output: TB1 (+) / TB2 (-)

#### FUNCTION BLOCK DIAGRAM (each channel)



#### MOUNTING / DIMENSIONS

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