

ADM271 Strain Gauge Signal Transmitter / Splitter/ Isolator

- Suitable for SIL 1 & SIL 2 rated (EN 61508-2) safety instrumented system (SIS) loop applications, as 1oo1 architecture (HFT:0)
- Non-Smart / Non-uProcessor based, Type A instrument
- Supply voltage options:
 - 115Vac $\pm 20\%$
 - 240Vac $\pm 20\%$
 - 24Vdc $\pm 10\%$
 - 48Vdc $\pm 10\%$
- RFI Protection to EN 61000-4-3:2006/A2:2010 available ('K' option)
- Front fascia Digital Display in % or 'other' units available ('DI' option)
- AMELEC Standard 10 year warranty

Technical Specifications

Function

Provides a DC output signal proportional to a bridge type strain gauge utilised in load cells, pins and pressure transducers.

Input

Any mV signal range (Minimum span: 4mV)
Excitation: 10Vdc at up to 30mA as std. (5V or 24Vdc options available)

Outputs

Any standard process current or voltage in the range of;
Current source up to 22mA max, each with drive voltage 12Vdc (Current Sink option available, 30Vdc max external drive)
Voltage source up to 10Vdc max each output
Typical Outputs: 4-20mA (max loads 550 Ω) or 0-10Vdc (min loads 500 Ω)

Performance

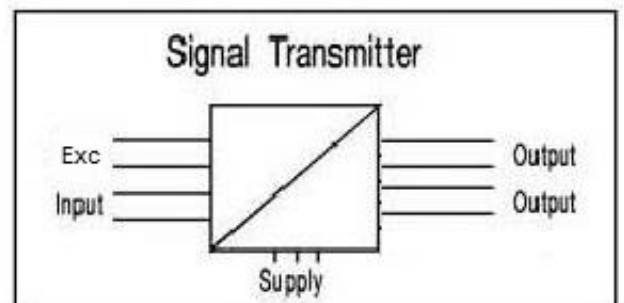
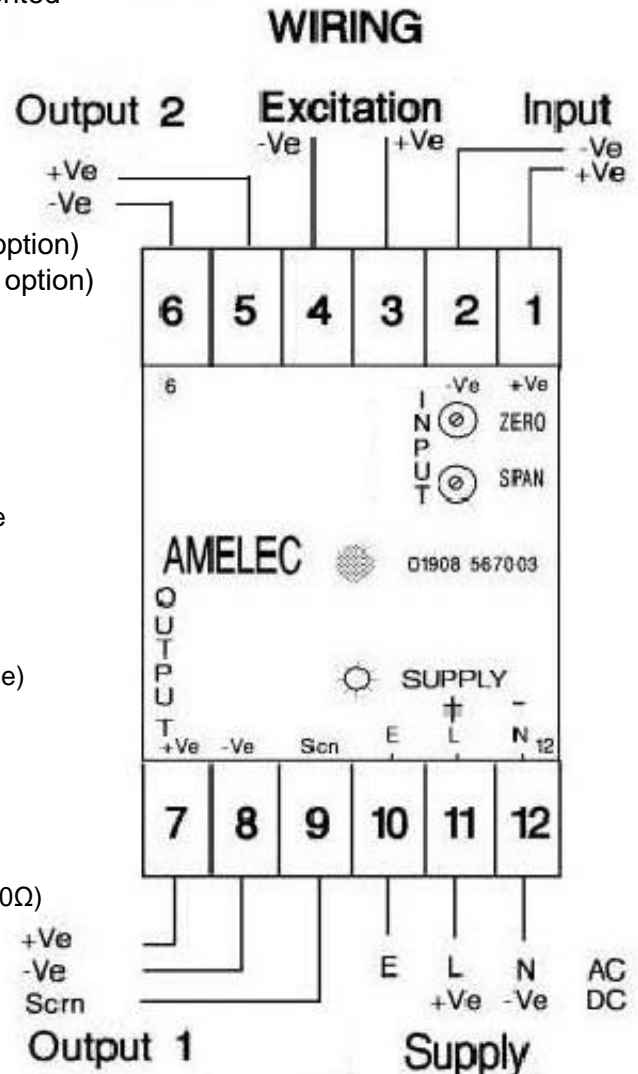
Accuracy/Linearity: $< \pm 0.1\%$ Span
Response Time: typically $< 100\text{ms}$ (0-100% input step change)
Supply consumption: $< 3\text{VA}$

Protection

Isolation: 1000V RMS* Input/Excitation/Output/Output/Supply/Earth
*(500Vdc when 'K' option RFI protection is specified)
Internal Fuse
Input over range: up to typically 300%
Input Open Circuit response: Up or Downscale drive option available (O/C response requirement to be specified at time of orders)

Environmental Conditions

Storage Temperature: -40 to +70°C
Operating Ambient: -15 to +55°C
Relative Humidity: 5 – 95% RH (Non-condensing)
EMC: 2014/30/EU, EN 61326-1:2013 (controlled EM)
(*'K' option: EMC/EMI/RFI protection to the highest Generic Industrial Standards Test levels)
IP Rating: IP20



Mounting: Either Din Rail (TS35) **or** Surface by corner fixing holes as standard

Dimensions: 50w x 75h x 110d mm

(DI option=145d mm, K option= 182d mm)

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