



FEATURES

- USB 2.0 Communication Link
- USB Bus-Powered
- Input/Output Short Circuit Protection
- Streaming ASCII Output
- Offered with DLL/Mac Dynamic Library
- CE Approved Class A (required for Medical and Aerospace applications)
- Industrial metallic enclosure
- Integrated DIN rail mount
- Supports, VDC, mA, mV/V and TTL (Encoder) type as input

SPECIFICATIONS

GENERAL

| | |
|---------------------------|--------------------------------|
| Sampling Rate | Up to 15,000 SPS |
| Bandwidth (Hz) | Sampling Rate (SPS) / 3 |
| Internal Resolution | 24 bits |
| Resolution (Noise Free) | See Chart on Page 3 |
| Non Linearity (max) | ± 0.005% of FSR |
| Output | Digital Packetized Data |
| Integrated Digital Filter | 50 Hz/60 Hz Rejection (100 dB) |
| On Chip Memory | 1 Kilobyte |
| Stored Calibration | Up to 16 Points |
| Weight | 0.43 lb. [195 g] |
| On Chip Sensor Profiles | Up to 7 |
| IP Rating | IP50 |

ENCODER INPUT

| | |
|---------------------------------------|--|
| Encoder Input | Quadrature Leading and Lagging Pulse (TTL) |
| Speed Measurement | Up to 150k Pulses Per Second ¹ |
| Angle Measurement (α) | Up to 10k Pulses Per Rotation (PPR) ¹ |
| Angle/Speed Measurement (Update Rate) | 100 ms |

STRAIN GAUGE mV/V INPUT

| | |
|------------------------|------------------------------|
| Bridge Excitation | 4.6 VDC |
| Standard Input Range | ± 6.8 mV/V (factory default) |
| Optional Input Range | Up to ± 500 mV/V |
| Min. Bridge Resistance | 50 Ohm |
| Max. Bridge Resistance | 5000 Ohm |

VOLTAGE INPUT

| | |
|----------------------|---|
| Supply Voltage | Selectable 5,9,10,12,15,18,20,24 VDC/1W |
| Standard Input Range | ± 10 VDC (Factory Default) |

CURRENT INPUT

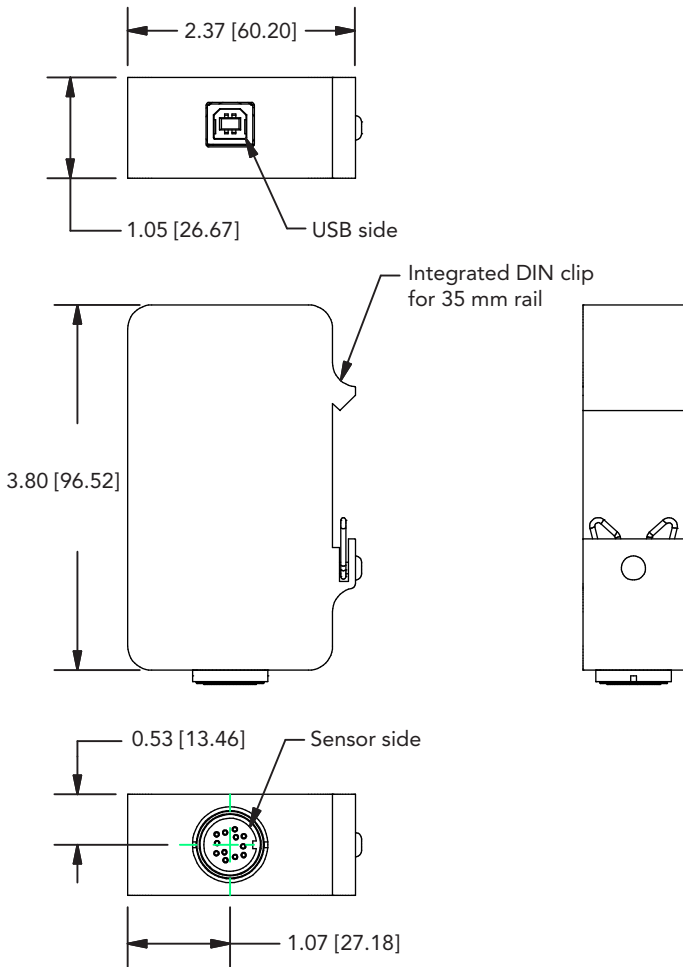
| | |
|----------------------|---|
| Supply Voltage | Selectable 5,9,10,12,15,18,20,24 VDC/1W |
| Standard Input Range | 0-20 mA (Factory Default) |

CONNECTORS

| | |
|-------------------|----------------------|
| Sensor Connector | Binder 09 0132 90 12 |
| Mating Connector | Binder 99 5129 00 12 |
| USB 2.0 Connector | Type B |

¹ Speed = Δ α × 60 / PPR

DIMENSIONS inches [mm]



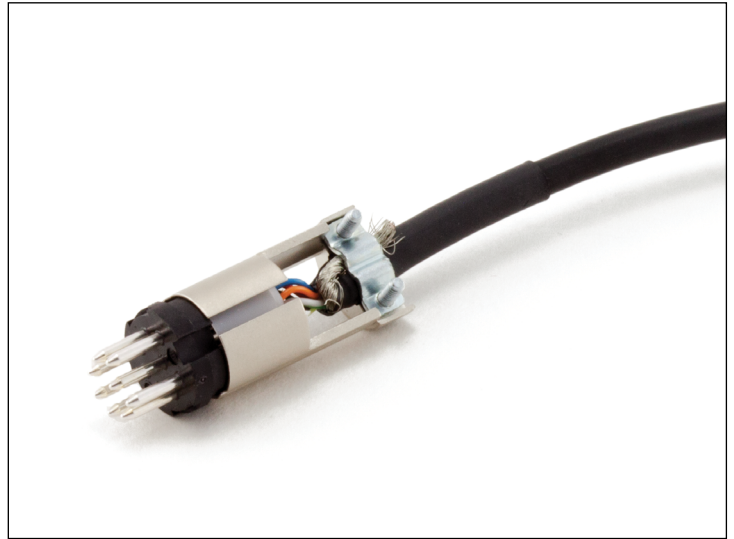
SPECIFICATIONS (continued)

ENVIRONMENT

| | |
|-----------------------|---------------------------------|
| Operating Temperature | -13°F to 185°F [-25°C to 85°C] |
| Storage Temperature | -40°F to 257°F [-40°C to 125°C] |

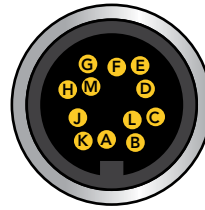
CONFORMITY

| | |
|------|--|
| RoHS | 2011/65/EU |
| CE | EN61326-1:2013; EN55011:2009 (Amended by A1:2010) |



Note: Shield should be connected to cable clamp of binder cable assembly when connecting on instrument side. Sensor cable shield connections should be grounded on one end, either the sensor side or the instrument side, to avoid potential ground loops.

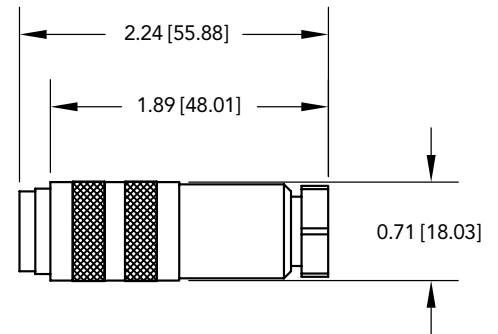
| RESOLUTION | | | |
|--------------------------|------|-------------------|-------------------|
| SAMPLES PER SECOND (SPS) | mV/V | AMPLIFIED VOLTAGE | AMPLIFIED CURRENT |
| 10 | 16 | 21 | 17.3 |
| 100 | 14.5 | 15.3 | 15.2 |
| 1000 | 12.7 | 15.2 | 7.4 |
| 2000 | 12.4 | 15.1 | 7.4 |
| 7500 | 11.6 | 15 | 7.4 |
| 15000 | 11.2 | 15 | 7.4 |



| 12-PIN BINDER MATING CONNECTOR (99 5129 00 12) | | |
|---|----------|---------------------------------|
| PIN | SYMBOL | DESCRIPTION |
| A | +E | + Excitation / + Sense |
| B | +S | + Signal |
| C | -E | - Excitation / - Sense / Shield |
| D | -S | - Signal |
| F | +Vcc | Supply Output |
| G | Gnd | Ground / Shield |
| H | 4.75 Out | 4.75 VDC Output |
| J | -V | - Amplified Input |
| K | +V | + Amplified Input |
| L | PLEAD | Leading Pulse |
| M | PLAG | Lagging Pulse |

ACCESSORIES

- SENSIT Software** (FSH03189)
 14 Day Trial - Available to download on FUTEK website. A license is required, per seat, after 14 days to benefit the features such as data logging, graphing, etc. Trial version turns into basic read-out ONLY after 14 days and a product key is required to enable the features.
- USB 2.0 Hi-Speed A/B Cable** (GOD04123, included)
- 12-PIN Binder Male Plug**, 99 5129 00 12 (GOD02975 , included)



Drawing Number: FI1383-E

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RoHS



U.S. Manufacturer