

**FUTEK MODEL USB230**  
**ITEM # FSH03457**

**EXTERNAL USB KIT**



Drawing Number: FI1320-A

INCH [mm]

**FEATURES:**

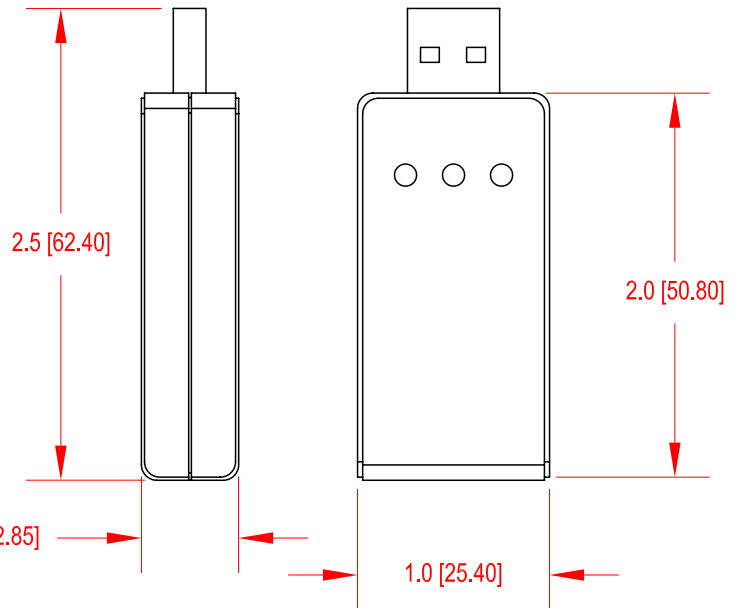
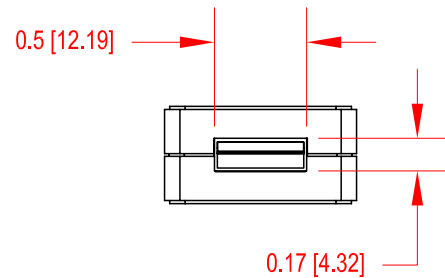
- USB 2.0 Communication Link
- USB Bus- Powered (5V)
- Integrated Shunt Cal
- Input/Output Short Circuit Protection
- Blinking Blue LED Indicator (10 Hz): Module Auto-Calibration
- Blinking Blue LED Indicator (1 Hz): Module Normal Operation
- Green LED Indicator: USB Power
- Red LED Indicator: USB Data Link

**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]

**SPECIFICATIONS:**

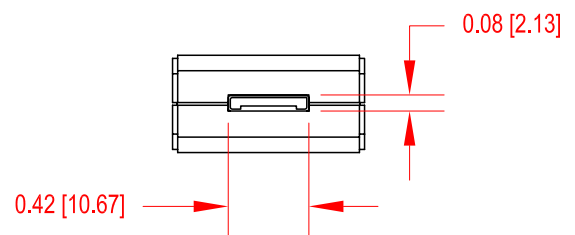
- Bridge Excitation: 4.6 VDC
- Sampling Rate:\* up to 15000 SPS
- Internal Resolution: 24 bits
- Standard Input Range: +/- 8 mV/V
- Optional Input Range: +/- 500 mV/V
- For use with semiconductor sensors
- Resolution (ENOB): See chart below
- Nonlinearity: 0.001% of FSR
- Input: Non-amplified (mV/V) Analog Voltage
- Output: Digital Packetized Data
- Min. Bridge Resistance: 50 Ohm
- Max. Bridge Resistance: 5000 Ohm
- Integrated Digital Filter: 50 Hz/ 60 Hz rejection (100 dB)
- On Chip Memory: 1 Kilobyte
- Up to 16 Point Stored Calibration
- Weight: 10g



**ACCESSORIES**

- Basic Software: FSH03188 (Included)
- Extended Software: FSH03189
- Connector Plug Kit: FSH03320 (Included)

Sampling Rate (SPS)	Resolution (Noise free bits)
10	17.5
100	16.5
1000	15
2000	14
7500	13.5
15000	12

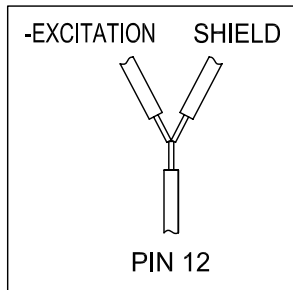
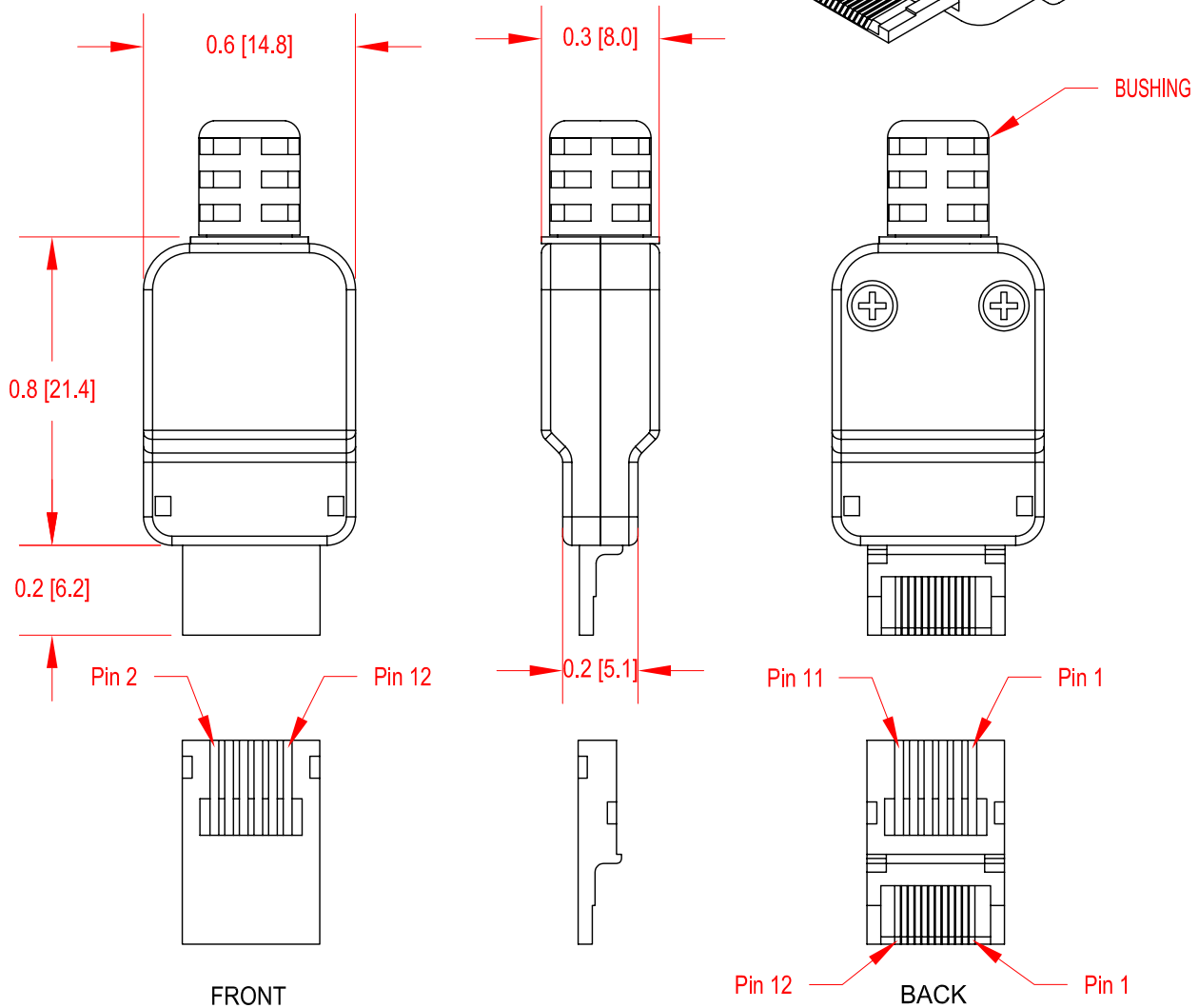
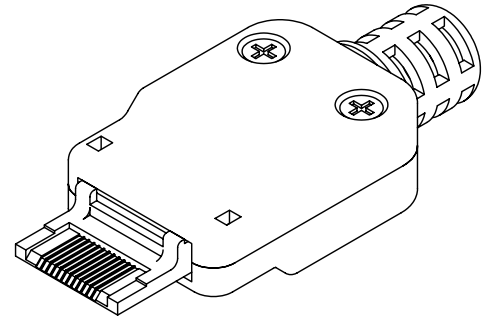


FUTEK MODEL ZCO940  
ITEM # FSH03320

CONNECTOR PLUG KIT FOR USB210

Drawing Number: FI1312-A

INCH [mm]



HIROSE MALE (USB SENSOR SIDE)	
PIN #	WIRE CODE
1	+SIGNAL
2	-SIGNAL
11	+EXCITATION
12	-EXCITATION/ SHIELD*

BUSHING SIZES
0.16 [4.0]
0.18 [4.5]
0.20 [5.0]

\*USE Y CONNECTION ON PIN 12 TO MAKE CONNECTING THE -EXCITATION AND SHIELD EASIER