

FUTEK MODEL USB320 ITEM # SEE CHART BELOW

EXTERNAL USB KIT (AMPLIFIED INPUT)



Drawing Number: FI1336-B

SPS= Samples Per Second

INCH [mm]

FEATURES:

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

ENVIRONMENT:

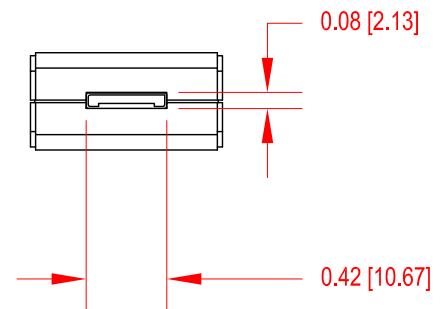
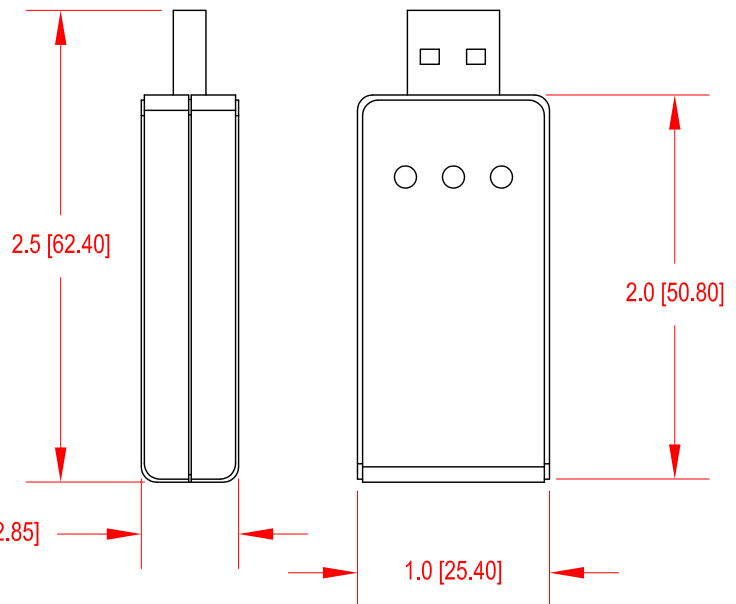
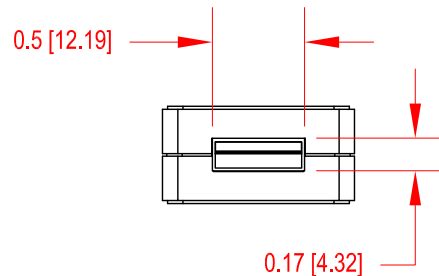
- Operating Temperature: -13°F to 185°F [-25°C to 85°C]
- Storage Temperature: -40°F to 257°F [-40°C to 125°C]

SPECIFICATIONS:

- Power Output: 12 VDC \pm 0.5 / 1 W
- Sampling Rate: up to 4800 SPS
- Internal Resolution: 24 bits
- Standard Input Range: \pm 10 VDC (FSH03631: Voltage)
- Standard Input Range: 0-20 mA (FSH03634: Current)
- Resolution (Noise free): See chart
- Nonlinearity: 0.001% of FSR
- Accuracy: 0.001% of FSR
- Output: Digital Packetized Data
- Integrated Digital Filter: 50 Hz/ 60 Hz rejection (100 dB)
- On Chip Memory: 1 Kilobyte
- Up to 16 Point Stored Calibration
- Weight: 10g

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.



Sampling Rate (SPS)	Resolution (Noise free bits)
10	16
100	15
300	14.5
1200	13.5
2400	12.5
4800	11.5

Versions

Item #	Type	Input Range
FSH03631	Amplified Voltage Input	\pm 10 VDC
FSH03634	Amplified Current Input	0-20 mA



This drawing is submitted solely for the information and exclusive use of the original addressee. It is not to be divulged in whole or in part, by any firm or individual without written permission from FUTEK

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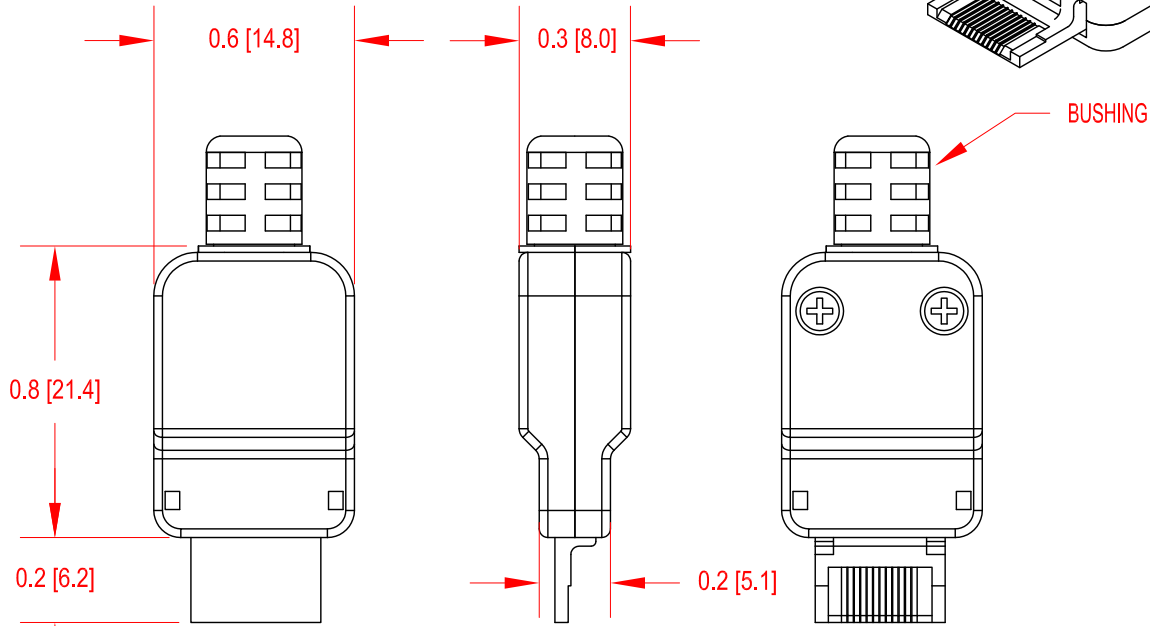
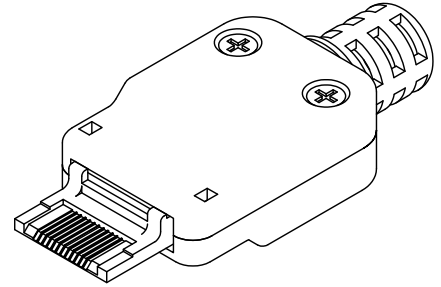
INTERNET:
<http://www.futek.com>

FUTEK MODEL ZCO940
ITEM # FSH03320

CONNECTOR PLUG KIT FOR USB MODULES

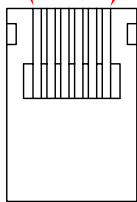
Drawing Number: FI1312-B

INCH [mm]



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

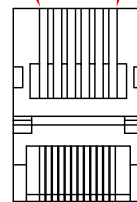
Pin 2 Pin 12



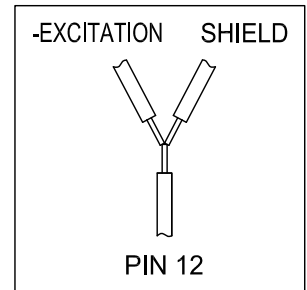
FRONT



Pin 11 Pin 1



Pin 12 BACK Pin 1



HIROSE MALE (SENSOR SIDE)					
PIN #	USB210/220/230 (FSH03631) USB320 4 WIRE VOLTAGE	(FSH03631) USB320 3 WIRE VOLTAGE	(FSH03634) USB320 3 WIRE CURRENT	(FSH03634) USB320 2 WIRE CURRENT	USB410
1	+SIGNAL	+SIGNAL	+SIGNAL	+SIGNAL	+SIGNAL
2	-SIGNAL	N/A	N/A	N/A	-SIGNAL
5	N/A	N/A	N/A	N/A	P1- LEADING PULSE
6	N/A	N/A	N/A	N/A	P2- LAGGING PULSE
11	+EXCITATION	+EXCITATION	+EXCITATION	+EXCITATION	VCC/+EXCITATION
12	-EXCITATION/ SHIELD*	-EXCITATION/ SHIELD*	-EXCITATION/ SHIELD*	N/A	GND/-EXCITATION/SHIELD*

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