



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 for Medical/Aerospace •
- Industrial metallic enclosure •
- Integrated DIN rail mount •
- Supports, VDC, mA, MV and TTL type input •

SPECIFICATIONS	
GENERAL	
Sampling Rate	Up to 4800 SPS
Bandwidth (Hz)	Sampling Rate (SPS) / 4
Internal Resolution	24 bits
Resolution (Noise Free)	See Chart
Non Linearity	± 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	0.75 lb (340 g)
On Chip Sensor Profiles	Up to 7
ENCODER INPUT	
Encoder Input	Quadrature Leading and Lagging Pulse (TTL)
Speed Measurement	Up to 150k Pulses Per Second ¹
Angle Measurement (a)	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	± 3.4 mV/V (factory default)
Optional Input Range	Up to ± 400 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	Туре В

¹ Speed = $\Delta a \times 60$ / PPR







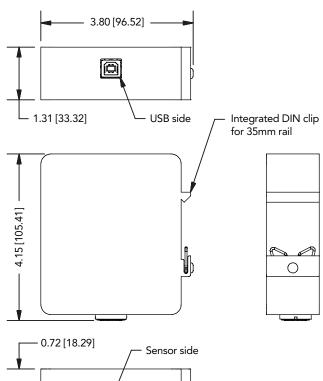


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Model USB520

DIMENSIONS inches [mm]



1.75 [44.45]

00 30

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)

EN¹ Opt

Model USB520

SAMPLING RATE

SAMPLES PER SECOND (SPS)	RESOLUTION (NOISE FREE BITS)
5	19
100	17
300	16.5
1200	15.5
2400	14.5
4800	13.5

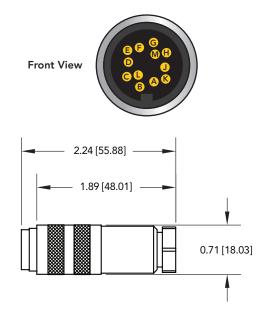
ACCESSORIES

• 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)

12-PIN BINDER MATING CONNECTOR (99 5129 00 12)	
PIN	SIGNAL
А	+ EXCITATION / + SENSE
В	+ SIGNAL
С	– EXCITATION / – SENSE / SHIELD
D	– SIGNAL
F	SUPPLY OUTPUT
G	GROUND / SHIELD
н	4.75V OUTPUT
J	– V / 0 mA
К	+ V / 20 mA
L	LEADING PULSE
М	LAGGING PULSE



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CE ROHS









3

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