

**SPECIFICATIONS****GENERAL**

Item Number	FSH04939
Material	Aluminum Body/Stainless Steel Cover
Weight	0.23lb [105g]
IP Rating	IP40

INPUT

Input Type	Strain Gauge (Differential Input from ± 0.2 up to ± 18 mV/V) ³
Internal Shunt Value	30, 43.7, 60.4, 87.6, 100, 150, 300, 432 k Ω ($\pm 0.1\%$)
Non-Linearity	$\pm 0.01\%$ of FSR ¹
Bridge Excitation	5 or 10 VDC (DIP Switch)
Min/Max Bridge Resistance	87.5 to 5000 Ω

OUTPUT

Gain Range	110 to 6575 ²
Output Range (single ended)	± 5 , ± 10 VDC
Load Impedance	> 4000 Ω
Bandwidth (Hz)	See Chart ⁴
Noise	See Chart ⁴
Calibration Span/Offset range	$\pm 10\%$ of FSR ¹

POWER

Supply	16 to 26 VDC
Inrush Current	0.8 A (Max)
Power Consumption	0.75 W (Max) (instrument only)
Power Indicator	Green LED

ENVIRONMENT

Operating Temperature	-13° to 158°F [-25° to 70°C]
Storage Temperature	-40° to 185°F [-40° to 85°C]
Temperature Stability/Drift	± 15 ppm of FSR ¹ /°C

CONFORMITY

RoHS	2011/65/EU Compliant
CE	FCC 15.107:2022; FCC 15.109:2022; FCC 15.109(g):2022; ICES-003 issue 7:2020; VCCI-CISPR 32:2016; EN IEC 61326-1:2021

FEATURES

- Bipolar output, differential input
- 256 selectable shunt and gain combinations (DIP Switch)
- Digitally controlled remote shunt with externally accessible activation button
- Sensor polarity reversal DIP switch
- Zero shift DIP switch (Selectable 0 and 5 VDC)
- Reliable spring loaded DIN clip design
- Removable magnetic cover for instrument setting access and protection
- External chassis connection ([Refer to Guide](#))
- Hot swappable with on-board ESD and over voltage/ current protection

MATERIAL & MANUFACTURING

- High-reliability PCB/assembly (IPC CLASS III)
- High-temperature rated material/BOM items
- Strictly controlled inspection, test, and calibration process
- Fully controlled handling/packaging process
- Extensive test and validation for 100% of production units
- Individual calibration report/certification for instruments and systems

APPLICATIONS

- Medical
- Aerospace
- Precision Industrial Automation
- Lab & Field Instrumentation
- Precision Manufacturing

Sensor Solution Source

Load · Torque · Pressure · Multi-Axis · Calibration · Instruments · Software



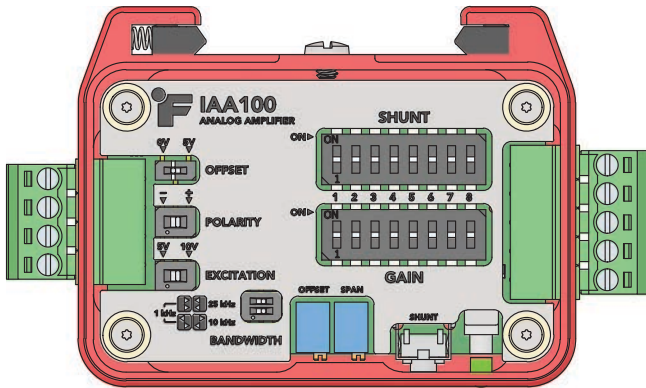
RoHS



U.S. Manufacturer

Model IAA100

DIP SWITCHES CONFIGURATION

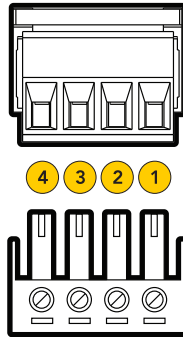


NOISE

Bandwidth kHz	Noise at Default Gain mVp-p	Noise at Max Gain mVp-p
1	8	15
10	10	40
25	14	80

SENSOR SIDE (item #GOD04252)

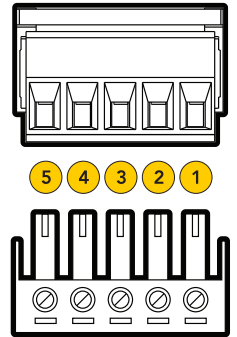
PIN	WIRING CODE	PIN FUNCTIONALITY
1	+ E	+ Excitation
2	+ S	+ Signal
3	- S	- Signal
4	-E/GND	- Excitation



For 6 wire sensors, connect +SENSE to +EXCITATION and -SENSE to -EXCITATION.

POWER/OUTPUT (item #GOD04253)

PIN	WIRING CODE	PIN FUNCTIONALITY	COLOR
1	+VIN	Power Supply	Red
2	-E/GND	Power Ground	Black
3	SHUNT	Remote Connection	Orange
4	-E/GND	Output Ground	Blue
5	VOUT	Output Signal	Green



General Notes:

¹ FSR = Full Scale Range (2 mV/V and 1 kHz bandwidth)

² Gain = 1 If all switches are in OFF position

³ The minimum differential input is determined based on a 10 V excitation and maximum gain to attain the maximum output range

⁴ See "Noise" chart located in page 2 for detailed information

All Grounds are internally connected

Use Chassis for systems with cable Shield

All parameters specified on this drawing have been validated for default settings (0-2 mV/V input with 10 VDC excitation and 1 kHz bandwidth for a 0-10 VDC output) unless otherwise specified.

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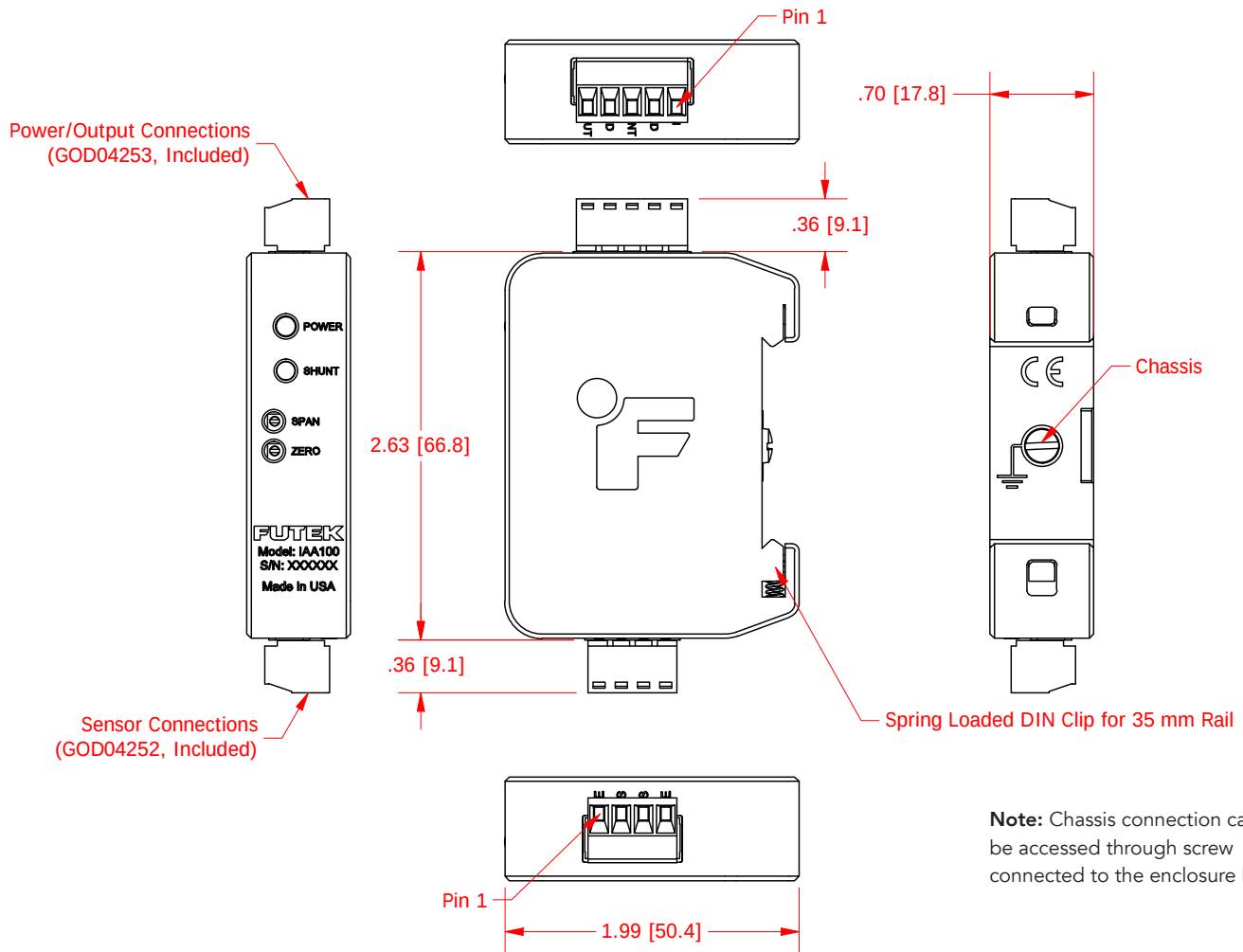


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Model IAA100

DIMENSIONS inches [mm]



Drawing Number: FI1573-C

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