



FLSC-AMP-A

Preamplifier and Signal Conditioner for Magnetic Pick-ups

INSTRUCTION
SHEET

M1945/0116

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General Description

The FLSC-AMP-A Signal Conditioner will amplify low level signals from magnetic pick-up sensors, such as a turbine meter or paddlewheel sensor, to an amplified high level square wave pulse output proportional in amplitude to the power supply powering the module. This output will drive any OMEGA[®] flow ratemeter, counter, controller or pulse input data acquisition board.

Unpacking

Remove the Packing List and verify that you have received all equipment. If you have any questions about the shipment, please call the Customer Service Department.

When you receive the shipment, inspect the container and equipment for any signs of damage. Note any evidence of rough handling in transit. Immediately report any damage to the shipping agent.

NOTE

The carrier will not honor any claims unless all shipping material is saved for their examination. After examining and removing contents, save packing material in the event reshipment is necessary.

The following items are supplied in the box:

- FLSC-AMP-A Signal Conditioner
- Operator's Manual

Hookup (Refer to Figure 1)

For electrical connections, the terminal strip will accommodate up to a 14 gauge wire. 18-20 gauge is recommended.

Note: The signal lines from the magnetic pick-up should be shielded and kept less than ten feet and away from relays, solenoids, or other sources of electrical noise. If the input is too sensitive, lower the 10K input impedance by adding a 1 to 2 K Ω resistor across input terminals 4 & 5, to increase noise immunity. The signal shield should be connected to power/common. The module output is recommended to make long distance runs.

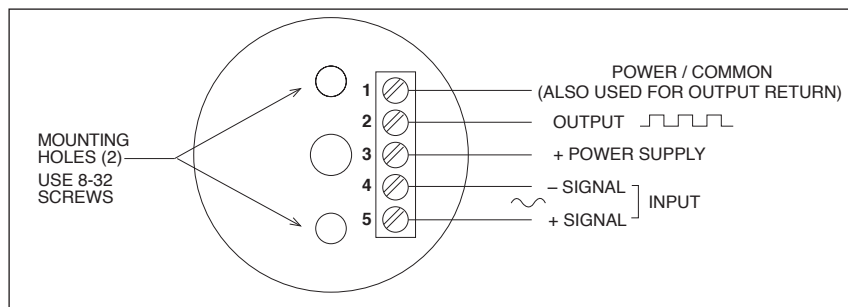


Figure 1. Terminal Connections

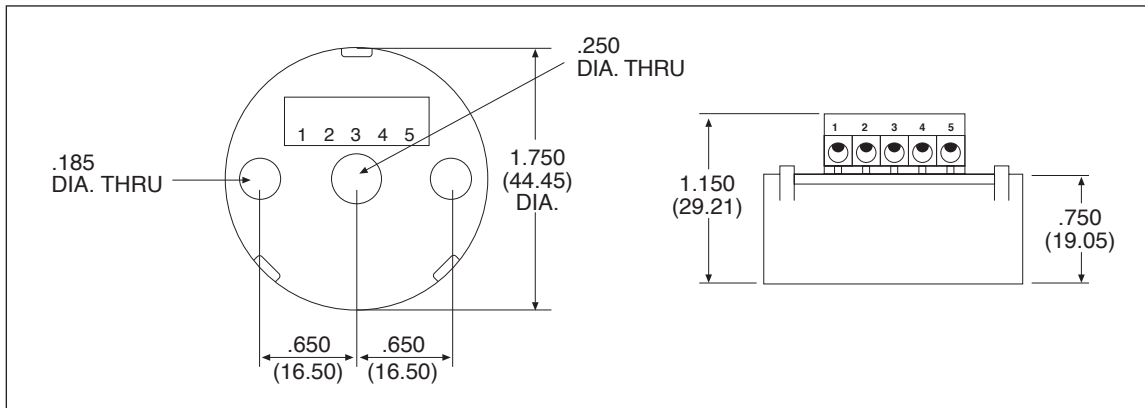
Mounting

The FLSC-AMP-A module may be mounted using the screw holes provided in the molded housing. Double-sided tape, Velcro, or glue may also be used to secure the module in place. The FLSC-AMP-A module can also be snap track mounted using an adapter plate.

Specifications

Power:	8 to 24 Vdc
Input Frequency:	10 Hz to 10 KHz
Input Voltage:	Sinusoidal (60mV p-p at 20Hz, 150mV p-p at 20 kHz) to 50V p-p
Input Impedance:	10 K ohms
Output:	100 mA sink max. with 4.7K internal pull-up resistor
Temperature Range:	-10 to 60°C
Weight:	1 oz.

Dimensions



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WARRANTY/DISCLAIMER

OMEGA ENGINEERING, INC., warrants this unit to be free of defects in materials and workmanship for a period of **13 months** from date of purchase. OMEGA's WARRANTY adds an additional one (1) month grace period to the normal **one (1) year product warranty** to cover handling and shipping time. This ensures that OMEGA's customers receive maximum coverage on each product. If the unit malfunctions, it must be returned to the factory for evaluation. OMEGA's Customer Service Department will issue an Authorized Return (AR) number immediately upon phone or written request. Upon examination by OMEGA, if the unit is found to be defective, it will be repaired or replaced at no charge. OMEGA's WARRANTY does not apply to defects resulting from any action of the purchaser, including but not limited to mishandling, improper interfacing, operation outside of design limits, improper repair, or unauthorized modification. This WARRANTY is VOID if the unit shows evidence of having been tampered with or shows evidence of having been damaged as a result of excessive corrosion; or current, heat, moisture or vibration; improper specification; misapplication; misuse or other operating conditions outside of OMEGA's control. Components in which wear is not warranted, include but are not limited to contact points, fuses, and triacs.

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RETURN REQUESTS/INQUIRIES

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The purchaser is responsible for shipping charges, freight, insurance and proper packaging to prevent breakage in transit.

FOR **WARRANTY RETURNS**, please have the following information available BEFORE contacting OMEGA.

1. Purchase order number which the product was PURCHASED,
2. Model and serial number of the product under warranty, and
3. Repair instructions and/or specific problems relative to the product.

FOR **NON-WARRANTY RETURNS**, consult OMEGA for current repair charges. Have the following information available BEFORE contacting OMEGA.

1. Purchase Order number to cover the COST of the repair,
2. Model and serial number of the product and
3. Repair instructions and/or specific problems relative to the product.

OMEGA's policy is to make running changes, not model changes, whenever an improvement is possible. This affords customers the latest technology and engineering.

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