

XAM-IC



- In-Line Current Amplifier
- Small dimensions
- Cable Gland or Connector Output

DESCRIPTION

In conjunction with its sensors, Measurement Specialties, Inc. offers a wide range of conditioning electronics. The XAM-IC In-line amplifier provides the user with a compact module translating the output from any Wheatstone bridge transducer into a 4 to 20 mA output on 2 wires.

The zero for a 4 mA output can be adjusted by a potentiometer, externally accessible. The gain is usually factory set, but a gain set potentiometer allows individual fine tuning.

The XAM-IC requires 10 Vdc to 36 Vdc power supply and is protected against reverse polarity.

For easy installation, the standard version is supplied with a miniature connector on the sensor's side, but it can also be delivered with cable glands and 1 m cable on each side, or with a second connector.

With its rugged and compact metallic housing the XAM-IC is suited for on-board applications.

FEATURES

- Current Output 4...20 mA (current loop)
- Power Supply 10 to 36 V
- Suited for Wheatstone Bridge Sensors
- Zero and Gain adjustments by trimmers
- Connector and / or Sealed Cable Output

APPLICATIONS

- Suited for Wheatstone Bridge Sensors
- For on board sensor installation
- Laboratory and Research

XAM-IC

PERFORMANCE SPECIFICATIONS

Ambient Temperature: 20±1°C (unless otherwise specified)

General Characteristics

Case Material	Aluminum Alloy
Connections	Cable gland and/or miniature connector
Wiring	Shielded cable to power supply (version CP) or sensor (version PC), standard length 2m [6.5ft]
Operating Temperature	-10°C to 80°C [14 to 176°F]
Storage Temperature	-20°C to 100°C [-4 to 212°F]
Weight w/o cable	< 30 g [.066 lb]

Electrical Characteristics

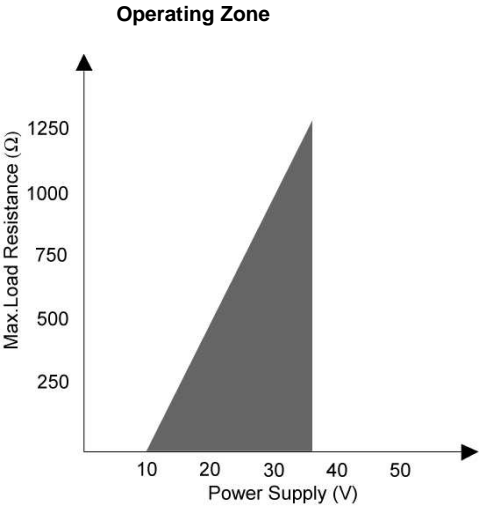
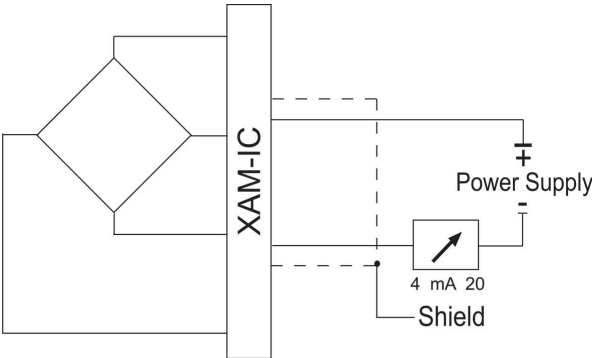
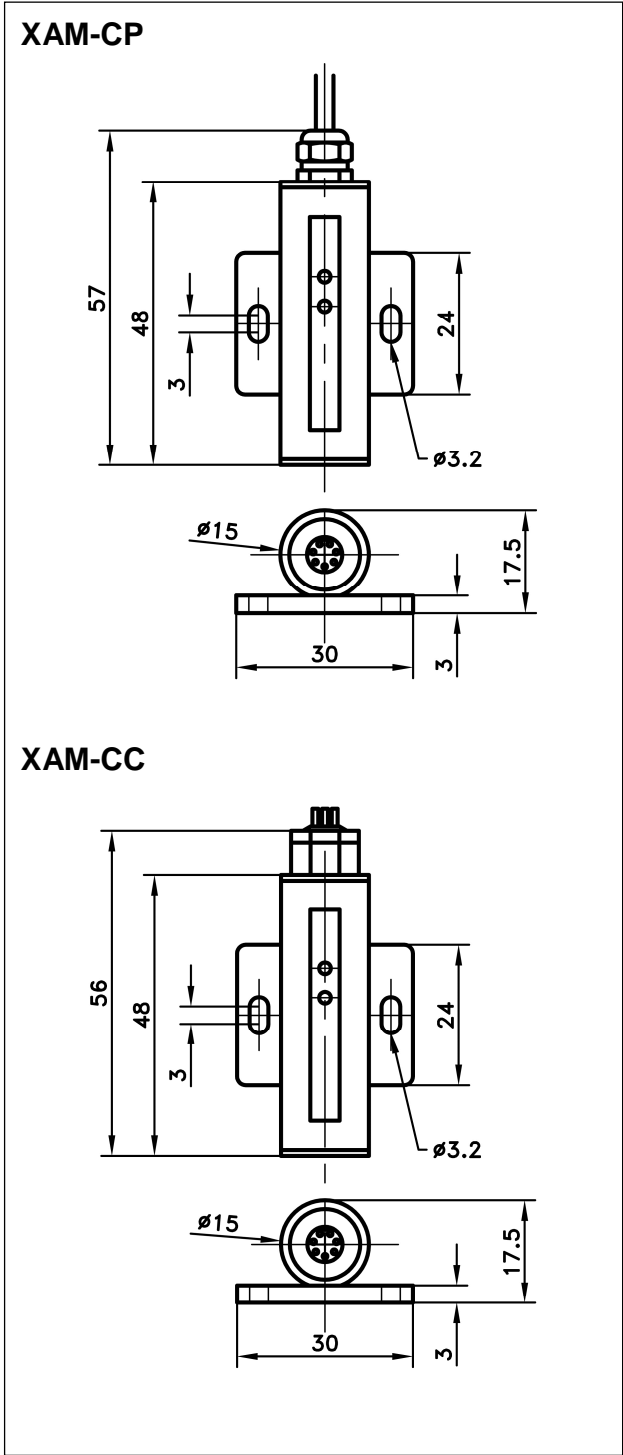
Power Required	10 to 36 Vdc
Output Signal	4 to 20 mA (2 wires)
Sensor Supply Voltage	2.5 Vdc ± 5 %
Sensor output	4 to 400 mV F.S.
Output Drift	0.035 % F.S./°C typical
Input Impedance	1 GΩ
Output Current	25 mA max
Current Consumption	25 mA max
Common Mode Ratio Rejection	>95 dB min
Input Protection	Reverse Polarity Protected and Surge Suppressor

Amplifier Performance

Gain G	0.4 mA/mV to 4 mA/mV
Gain Adjust Potentiometer	± 10 %
Frequency Response (-3dB)	400 to 4000 Hz

XAM-IC

DIMENSIONS & WIRING SCHEMATIC (IN METRIC)



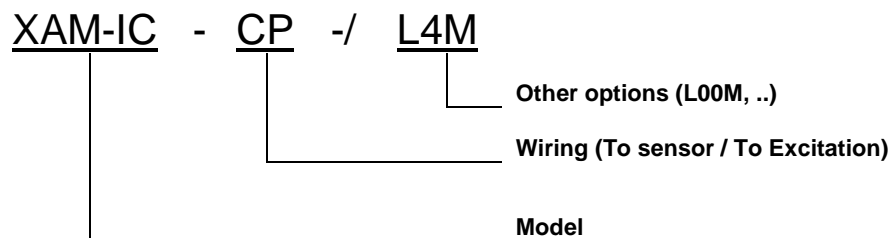
Note :
Cable and interconnection resistances
have to be added to the load resistance

XAM-IC

OPTIONS

CP	: Connector (to sensor) / Cable gland (to power supply)
CC	: Connector / Connector
PP	: Cable gland / Cable gland
PC	: Cable gland (to sensor) / Connector (to power supply)
L00M	: Special cable length, replace "00" with total length in meters

ORDERING INFO



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