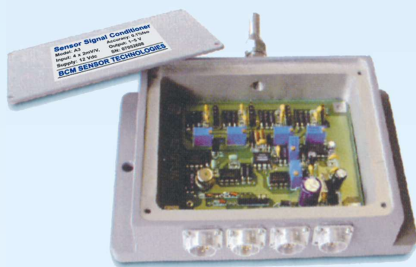


Model A3 Heavy Duty Sensor Signal Conditioner

Model A3 is a Sensor Signal Conditioner (SSC) for heavy duty application. This SSC is suitable for 2~4 sensors or transducers which consist of strain gauge Wheatstone bridge circuit of sensing function.

In application, when connected to power supply (supply voltage in range of 12, ... ,30 Vdc), this A3 SSC provides a constant excitation voltage to Wheatstone bridge circuit of the sensor, and amplifies the output signal of the sensor to standard signals (for instance, 0~5 Vdc or 4~20 mA) for further transmission to PLC in distance.

The A3 SSC has a heavy-duty aluminum housing of anodized surface treatment. Thanks to both the rubber-seals between housing cover and container and the water-proof cable gland, model A3 SSC is protected to IP 66, and can be easily fixed to panel mounting plate with four water-proof holes which are hidden inside the housing.



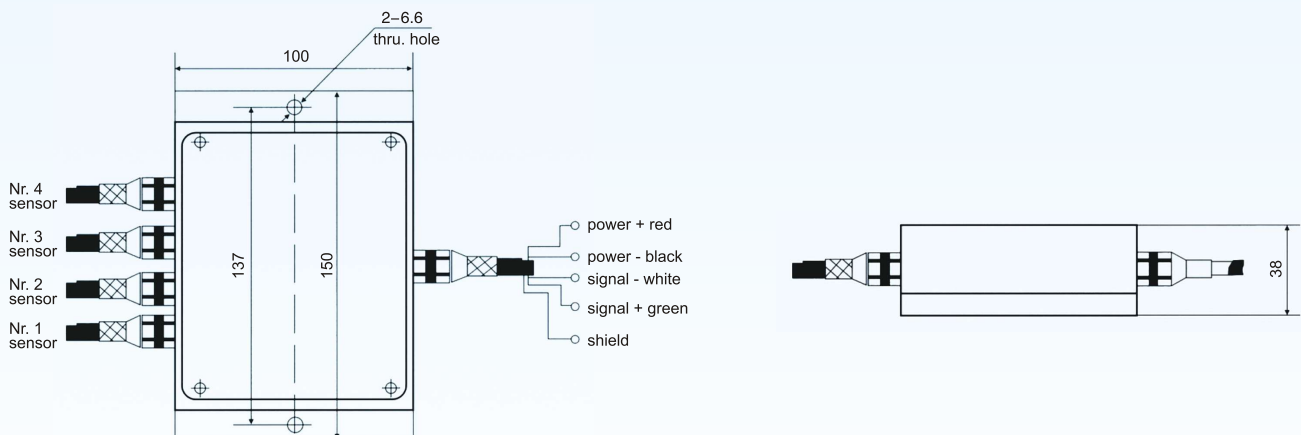
Electrical Features:

- Suitable for 2~4 sensors of strain gauge Wheatstone bridge circuit of output sensitivity ranging from 1mV/V, ..., 3mV/V
- Easy to build up electric connection with water-proof cable glands
- Easy-connecting-terminals for electric connection
- Inverse-polarity protection for sensor circuit when power supply is connected reversely
- Excitation voltage adjustable with a built-in potentiometer, Gain and Zero adjustable with two built-in potentiometers.
- Output configurable to 2-wire, 3-wire, or 4-wire for either current or voltage O/P signal
- Fully calibrated to standard output signal for rated sensor sensitivity before delivery

Mechanical Features:

- Aluminium housing of anodized surface treatment
- Rubber-seals between housing cap and container
- Easy-fitting to panel by means of four water-proof holes
- Environment protection: IP 66
- Net weight: 550 g

Dimensions:



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Model A3 Heavy Duty Sensor Signal Conditioner



Specifications:

1. power supply: 12, ..., 30 Vdc
2. excitation voltage for sensors: 5~10 Vdc adjustable
3. input signal: 5mV, ..., 30mV each sensor (or: sensor output sensitivity: 1mV/V, ..., 3mV/V)
4. output signal: 0~5 Vdc, 0~10 Vdc, or -5 ~ +5 Vdc for voltage output
4~20 mA, 0~10 mA, or -10 ~ +10 mA for current output
5. accuracy: 0.1%FSO (standard), 0.2%FSO
6. load resistance: $\geq 1 \text{ k}\Omega$ (voltage output)
 $\leq 1 \text{ k}\Omega$ (current output)
7. electric connections:
 - on the side for sensor connection, 4 x 5-pole connector (plus mating connector)
 - on the side for power supply and output signal, 7-pole connector for 2-wire,
3-wire or 4-wire configurations (plus mating connector)
8. operating temperature range: -20 ~ + 85 °C
9. environment protection: IP 66

Testing and Calibrating:

Before delivery, model A3 SSC is 100% tested for the rated sensor output sensitivity as stated on the purchasing order (for example, 1.5mV/V), and calibrated to the inquired output signal (for example, 0~10 Vdc).

How to order:

When placing a purchasing order, specify an ordering code containing all the necessary technical specifications of your interest.

Ordering code (o/c) system:

Model - sensor No. & output sensitivity - SSC output signal - accuracy - IP rating - customer specific requests

Ordering code example: o/c = A3 - 4pcs, 1.5mV/V - 4~20 mA - 0.1%fso - IP 66 - no specific requests

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