

Model A2 Heavy Duty Sensor Signal Conditioner

Model A2 is a Sensor Signal Conditioner (SSC) for heavy duty application. This SSC is suitable for any sensor or transducer which is based on Wheatstone bridge circuit.

In application, when connected to power supply (supply voltage can be 12, ..., 24 Vdc), this A2 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 A2 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 A2 SSC is protected to IP65, and can be easily fixed to panel mounting plate with two water-proof holes which are hidden inside the housing.



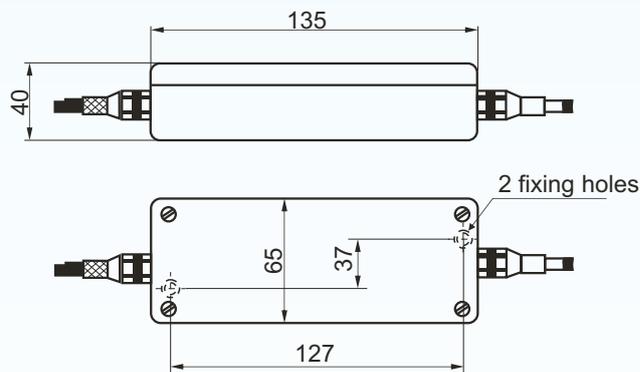
Electrical Features:

- Suitable for any sensor of strain gauge Wheatstone bridge circuit of output sensitivity ranging from 1mV/V, ..., 12mV/V
- Easy to build up electric connection with two 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, and capable for 8 unit parallel-connected sensors of 350Ω bridge resistance
- Gain and Zero adjustable with two built-in potentiometers
- Output configurable to 2-wire, 3-wire, or 4-wire for either current loop 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 two water-proof holes
- Environment protection: IP65
- Net weight: 350g

Dimensions:



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Model A2

Heavy Duty Sensor Signal Conditioner



Specifications:

1. power supply: 12, ..., 24 Vdc
2. excitation voltage for sensors: 5, ..., 10 Vdc adjustable
3. input signal: 1mV/V, ..., 12mV/V
4. output signal: 0~5 Vdc, 0~10 Vdc, or -5 ~ +5 Vdc
4~20 mA, 0~10 mA, or 0~20 mA
5. accuracy: $\leq \pm 0.1\%fs$ (standard), $\leq \pm 0.2\%fs$
6. load resistance: $\geq 1k\Omega$ (voltage output)
 $\leq 1k\Omega$ (current output)
7. electric connections:
 - on the side for sensor connection, 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: IP65

Testing and Calibrating:

Before delivery, model A2 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:

model-sensor output sensitivity-SSC output signal-accuracy-customer specific requests

Ordering code example: A2-1.5mV/V-4~20mA -0.1%fs-no specific requests

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