


Manual

AS2i

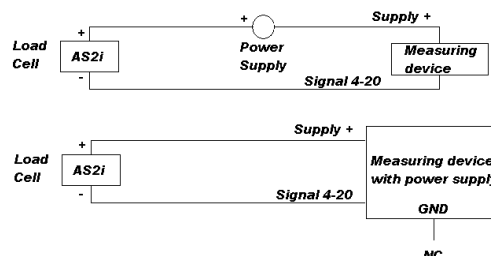
	<p>Description:</p> <p>The AS2i is a signal conditioner of 4-20 mA for load cell with a Wheatstone bridge from 1000 to 2000 ohms. It has 2 potentiometer for adjusting in situ (Zero and span).</p>
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Electric features.

Power Supply: $24 \pm 10V$.
 Linearity: 0.15 % FE.
 Minimum Output: 4 mA.
 Maximum Output impedance: 200 Ω (14V), 700 Ω (24V), 1200 Ω (34V)

Connection

1. Load cell connection.
 1. +EXC, Positive excitation (RED).
 2. -EXC, Negative excitation (BLACK) (and Shield if it exist).
 3. +IN, Positive signal.
 4. -IN, Negative signal.
2. Output.
 1. +, Positive power supply.
 2. -, Signal 4-20.



Adjusting

You can adjust the zero value (4 mA) without load and afterwards adjust the span with a known weight, but the zero value is affected by the span potentiometer and you have to repeat the process several times. For this reason we recommend to follow the next steps:

1. Adjust the output signal with the Zero potentiometer to obtain 4 mA.
2. Adjust the output signal with the Span potentiometer to obtain the minimum value in the output.
3. Adjust the output signal to 4 mA with the Zero potentiometer.
4. To load a known weight (the weight that you think for a Wished Output "WO").
5. Measure the Minimum Output value with the known weight loaded("MO").
6. Compute the New Span value $NS = (WO-4) / (MO-4) * MO$.
7. Adjust the output signal with the Span Potentiometer to obtain the New Span value NS (with the known weight loaded).
8. Adjust the output signal to 4 mA with the Zero potentiometer.
9. If you want improve the adjusting, you must repeat from steep 4.

Example:

1. Adjust the Zero to 5 mA with the Zero potentiometer (clock wise to positive).
2. Adjust the span potentiometer to the minimum value (clock wise). Is important turn the potentiometer until the end.
3. Adjust the Zero potentiometer to 4 mA output.
4. Load a weight of 4 tons (WO = 20 mA).
5. Measure the real Minimum Output (MO =12 mA.)
6. $New Span NS = (20-4) / (12-4) * 12 = 24$.
7. Adjust the output with the span potentiometer to obtain 24 mA.
8. Adjust the output signal to obtain 4 mA with the Zero potentiometer.

