

LOAD CELLS WITH AMPLIFIED ANALOG OUTPUT



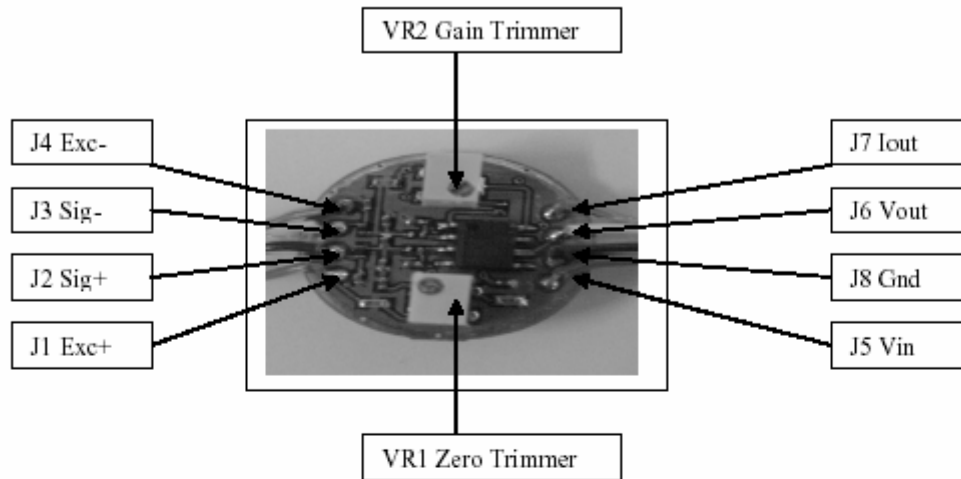
Load Cells with Amplified Analog Output

KEY BENEFITS

- Easy interface to standard PLCs and controller
 - Load cell output fed directly into PLC
 - Good immunity to noise over long cables and in heavy-industry environments
 - Can be used with any Vishay load cell
 - Available embedded into the sensor, or fitted externally on the side of the load cell
 - Supplied with any kind of connector and cable
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Embedded Amplifier Tuning Instructions

The document describes the connections and tuning instructions for VT embedded amplifier AMP-400.

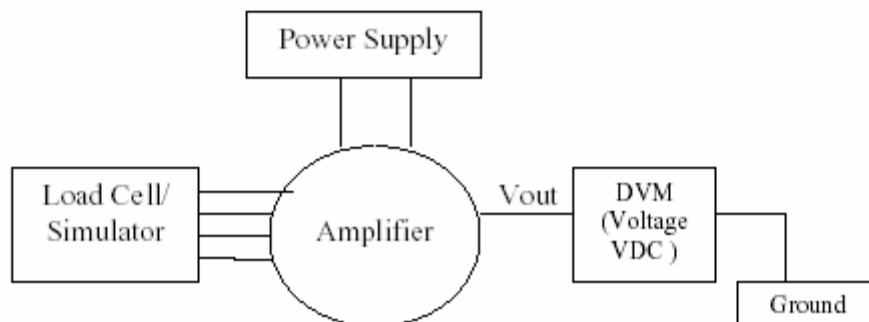


Power supply requirements

AMP-400 can be powered in a range of 18VDC – 28VDC, 45mA.

Adjusting the Voltage output

1. Make sure that the Load Cell / Simulator is at zero point, by the “Zero” trimmer adjust the output voltage to 0.300VDC (± 0.003).
2. Make sure that the Load Cell / Simulator is at full load point, by the “Gain” trimmer adjust the output voltage to 10.000VDC (± 0.003).
3. When adjusting the output voltage at the full load point, the output voltage at zero point might be changed and vice versa, so if needed repeat steps 1 and 2 until getting the required results.
4. Linearity test – Check in points 25%, 50% and 75% of full load, and make sure that the output voltage is accurate $\pm 0.007\%$.

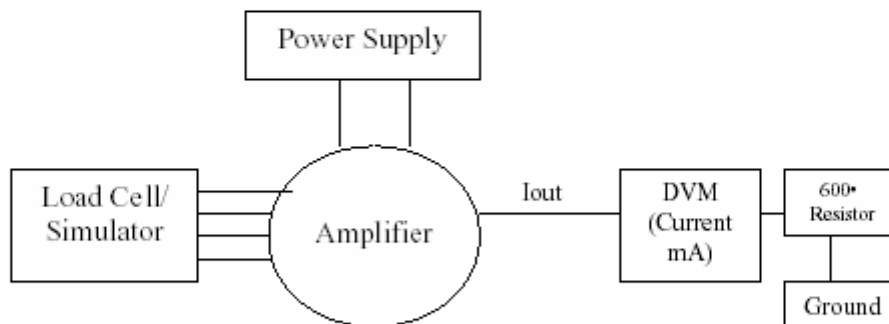




Sensel Measurement

Adjusting the Current output

1. Make sure that the Load Cell / Simulator is at zero point, by the “Zero” trimmer adjust the output current to 4.00mA (± 0.01).
2. Make sure that the Load Cell / Simulator is at full load point, by the “Gain” trimmer adjust the output current to 20.00mA (± 0.01).
3. When adjusting the output current at the full load point, the output current at zero point might be changed and vice versa, so if needed repeat steps 1 and 2 until getting the required results.
4. Linearity test – Check in points 25%, 50% and 75% of full load, and make sure that the output current is accurate (± 0.04)%.



Part Number	Description	Remarks
AM402-9020000140	Analog transmitter; 3 wires; output voltage 0 – 10 Vdc, supply 12 Vdc	Voltage amplifier
AM400-9020000145	Analog transmitter; 3 wires; output voltage 0 – 10 Vdc or 4 – 20 mA; supply 12 Vdc	Voltage and current amplifier