

CTC AppNotes

A series of technical documents written by members of the CTC community

Wiring for Dual output Loop Powered Sensors with Temperature

Although most vibration analysts agree that elevated temperature levels lag behind elevated vibration levels, many managers want the added insurance of temperature outputs on critical machinery. To that end CTC has now introduced loop-powered

vibration sensors with an additional voltage output for temperature. LP230 series sensors offer 4-20mA monitoring of vibration in a velocity (IPS or mm/sec) based output with a 10mV/°C temperature output in the range of -40 to 85°C. LP330 series sensors offer 4-20mA monitoring of vibration in an acceleration (g's) based output with a 10mV/°C temperature output, also in the range of -40 to 85°C.



LP232-1R1-1D 4-20 mA velocity with 10mV/°C voltage output.



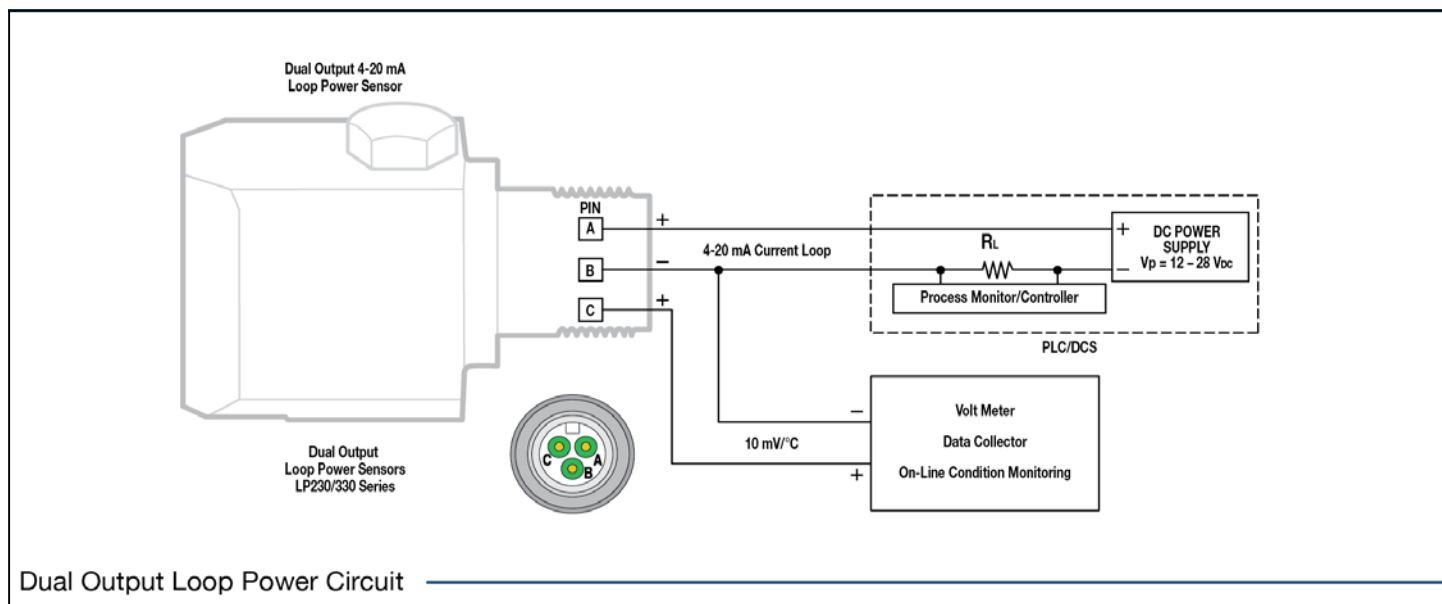
LP334-1R1-1D 4-20 mA acceleration with 10mV/°C voltage output.

the wiring diagram below remembering that the vibration 4-20 current output shares the common with the temperature signal voltage output. Always use 3 (or more) conductor cable with A3A, A3N or D3C connectors. LP230 and LP330 series sensor are PRO series products. We will repair or replace any of our products under warranty so long as the product was not subjected to misuse, neglect, natural disasters, improper installation or modification which caused the defect.

Wiring

With many new sensors the biggest question is always "how is it wired?" Review

If you have any questions or for further information please contact CTC directly via Email at dgripe@ctconline.com or jsmith@ctconline.com or feel free to call 1-800-999-5290 in the US and Canada or +1-585-924-5900 internationally.



Dual Output Loop Power Circuit

If any CTC vibration analysis hardware product should ever fail, we will repair or replace it at no charge.