

Description

The NGi Series of inclinometers - **NG2i ($\pm 10^\circ$)**, **NG3i ($\pm 30^\circ$)**, and **NG4i ($\pm 80^\circ$)** - are liquid capacitive gravity based with integrated sensor and excitation electronics. The thermal drift of the primary sensor is further compensated by an electronic equalization of the temperature. An integrated highly stable voltage regulator makes it possible to supply the inclinometer from any unregulated supply or battery as low as +8V and up to +30VDC. The measuring principle assures a linear angle output with 4...20mAs calibrated to equal the measuring range of the sensor. The current loop supplies power to the sensor, which means that the complete unit operates as a 2-wire system.

Installation and Wiring Instructions:

1. On a vertical mounting plane, prepare surface with two tapped holes 2.285" apart for M4 mounting screws.
2. Mount inclinometer to mounting plane using the supplied mounting ring and M4 mounting screws. Ensure the unit is orientated so that the writing on the label appears horizontal and upright when looking at it straight on, with the cable at the bottom of the sensor (see Figure 1).
3. Make electrical connections according to the Table below (see Figure 2). Please note: wires are interchangeable.
4. *Apply power and rotate the inclinometer to its zero position. The zero position output has been calibrated to 12mA.*

FIGURE1: Mounting Position and Dimensions in Inches [mm]

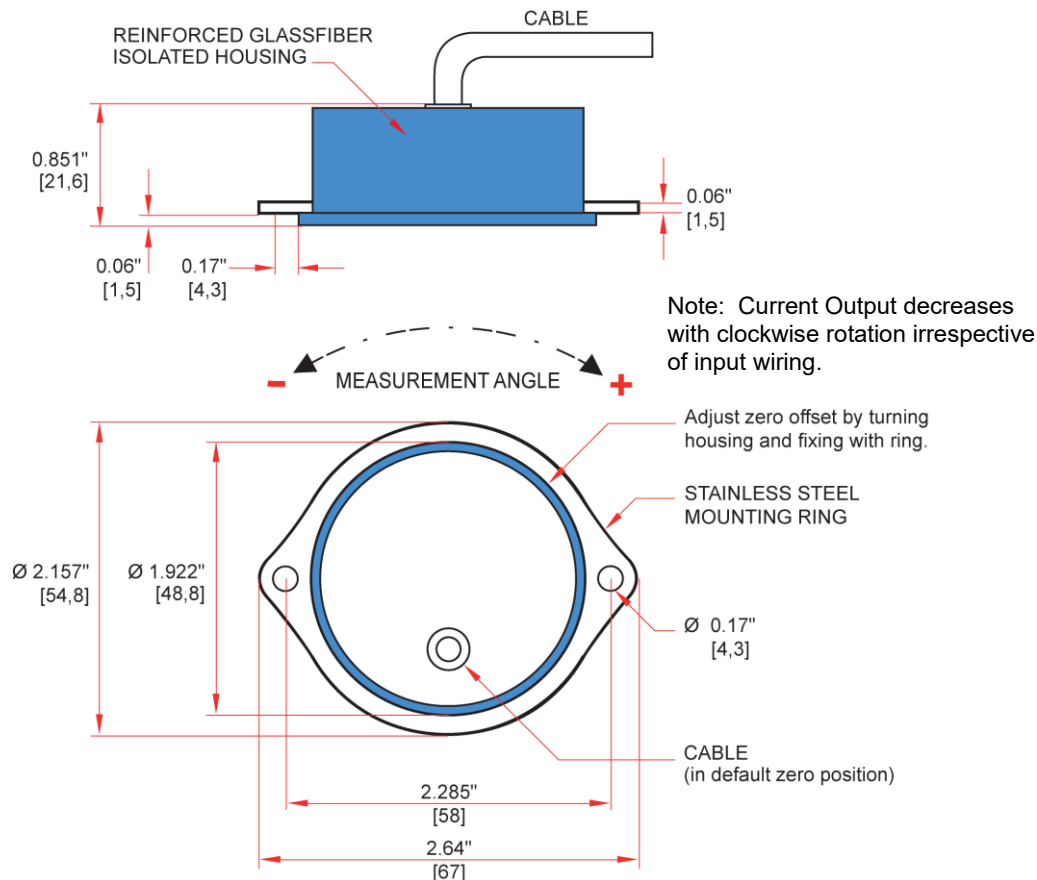
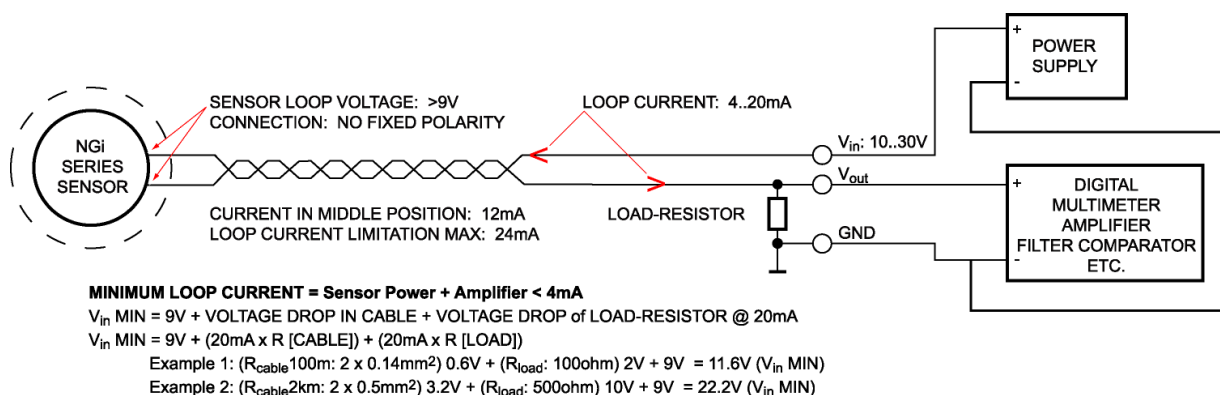
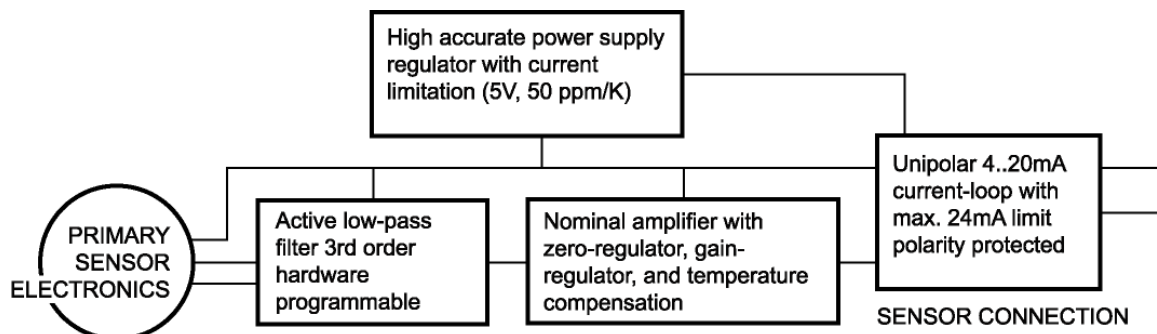


FIGURE 2: Block Diagram and Wiring Connections



STANDARD CABLE WIRING TABLE:

WIRE COLOR	FUNCTION
BROWN	+VDC INPUT OR OUTPUT
WHITE	+VDC INPUT OR OUTPUT

Note: wires are interchangeable.

SPECIAL CABLE WIRING TABLE:

WIRE COLOR	FUNCTION
BROWN AND BLACK PAIR	+VDC INPUT OR OUTPUT
RED AND ORANGE PAIR	+VDC INPUT OR OUTPUT

Note: wire pairs are interchangeable.