Quick Start Function Instructions for GC35 Heavy Duty Digital Pressure Sensor
Version 1.0 6/06/09
(See Complete I&M Manual for Further Detail)

DISPLAY OVERVIEW

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Note: Unit requires M12 mating connector p/n# 611C175-03 (standard 3 foot length) – see below.
1. **Measurement Mode** is entered when applying power to the unit – LED displays applied pressure.

2. Available “**Measurement Mode**” functions:
   
   A. **Zero Adjustment**: Press MODE / keys together \( \geq 3 \) seconds. This initiates automatic zero adjustment; \( RdJ \) briefly appears on LED display and then returns to Measurement Mode.
   
   B. **Peak / Bottom (Min. Max.) Hold Display**: Displayed as \( \circ \) or \( \circ \) keys are held for more than 3 seconds and display shows \( PE+ \). Values are reset when power is restored to the unit, or:
   
   - Reset Peak: Hold \( \circ \) key, then press \( \circ \) key
   - Reset Bottom: Hold \( \circ \) key, then press \( \circ \) key

   C. **Key Lock**: Prevents overwriting values / tampering – can not be reset by restoring power.
   
   - Lock: Press MODE and \( \circ \) keys together; \( LoC \) appears on LED display for 1 second.
   - Unlock: Press MODE and \( \circ \) keys together; \( UnL \) appears on LED display for 1 second.

3. **Function Setting Mode**: Used for product settings, except comparator-switch setting. Accessed by pressing MODE key for more than 3 seconds (complete menu attached).

   A. **Comparator Selection**: Select ‘Hysteresis’ (HY5) or ‘Window Comparator’ (\( \Upsilon \)).
      
      - Hysteresis: Switch remains activated until reset point has been achieved.
      - Window Comparator: Switch activates each time pressure enters a set ‘pressure band’ determined by the A and B settings.
   
   B. **Comparator Operation Selection**: Select \( \Upsilon Pn \) or \( PnP \). Note: LED ring is Blue with \( \Upsilon Pn \) and Green with \( PnP \).

   C. **Filter Dampening Setting**: This is based upon a moving average of pressure data to reduce display “bounce” and smooth analog output due to system pressure fluctuations. User configurable with five selections:
      
      - 25ms, 250ms, 2.5s, 5s and 10s.
      - Filter will not be applied if \( 0 \) is selected.

   D. **Power-Save (Energy-Saving) Setting**: Product is equipped with automatic LED display turn-off feature. User may elect to turn-on display when reading pressure or using as an indicating instrument.

   E. **LED Ring Feature Setting**: Turns Red when comparator-switch is ON and Blue (\( \Upsilon Pn \)) or Green (\( PnP \)) when comparator-switch is OFF.

   F. **Display Unit Setting**: User may alter unit of measure from standard to arbitrary.

   G. **Display Settings**: Allows for decimal point adjustment.

   H. **Analog Output Scaling**: Available with only 1 comparator; function sets analog output for pressures corresponding to Zero (4mA) and Span (20mA) adjustment in percentage figures.
      
      - Analog output under zero point pressure: After \( R-L \) is displayed, select the percentage corresponding with the current analog output value under Zero (4mA) using \( \circ \) or \( \circ \) keys – when pressure range displayed is set to 0.0-100.0% FS.
      
      - Analog output under span point pressure: After \( R-H \) is displayed, select the percentage corresponding with the current analog output value under Span (20mA) using \( \circ \) or \( \circ \) keys – when pressure range displayed is set to 0.0-100.0% FS.
Function Setting Mode Menu

Notes: Values shown are from the example within the complete I&M manual. Changes made in the Setting Mode are saved by returning to Measurement Mode before powering off the unit.
4. Comparator-Switch / Loop Check Mode: Access by pressing MODE for less than 3 seconds.

A. Comparator-Switch Setting: To activate / deactivate comparator-switch, scroll to US1 (4-20mA version only) or US2 and select USE / noU. Enter comparator-switch set point by selecting R- 1 or R-2 and use Ø/Ø keys for pressure setting. Now enter ‘deadband’ value (pressure difference between set and reset values) by selecting b- 1 or b-2 and use Ø/Ø keys for setting. Note: unit automatically configures the reset point. Increasing setpoint is entered as a positive ‘deadband’ value, while decreasing setpoint is entered as a negative ‘deadband’ value.

B. Loop Check: Allows the user to check comparator-switch operation without requiring pressure input. Use Ø or Ø keys to view comparator-switch function in a simulated test of the application.

Comparator-Switch Setting / Loop Check Menu