

MANUAL INDICATOR SERIES "8000"

For use on standard transmitters (non Ex)

1. Introduction

This intelligent 2-wire loop powered LCD digital display for the series 8000 pressure and level transmitters has a 16 Bit ADC MCU inside. You can use the three buttons to program the zero point, span, unit, decimal point, and damping. The indicator cannot be used on Ex-transmitters.

2. Features

- 1) High accuracy and stability.
- 2) 16 Bit ADC MCU inside.
- 3) The range of values which can be displayed on the LCD is -1.9.9.9.9.~ 9.9.9.9.9.
- 4) LCD can work at 3mA. Dropout voltage=3.1V
- 5) 34 optional units. Many kinds of values can be displayed such as pressure, temperature etc.
- 6) Friendly soft interface.

3. Getting access to the indicator



Unscrew the cover to get access to the push buttons of the display. The display can be turned max. 180° to put it in the desired position for reading. The complete display unit can be taken out to be able to adjust the transmitter. Be careful when taking out the display as the length of the wiring is limited. Please ensure that the cover is fastened properly after adjusting the display to ensure the sealing of the housing.

3.1 Setting

- "M" menu item for setting
- "←" to move the cursor
- "↑" to change the value where the cursor points to and move the decimal point

3.2 Power on

After the digital LCD display has been connected to the current circle 4~20mA, the LCD is lightened ,the initial screen displays the default settings:



3.3 Zero-point (value to be displayed for 4mA)

Press button "M" to enter zero-point setting mode: (Factory default setting is 4.0000mA)



- Press "←" to move the cursor.
- Press "↑" to change the value where the cursor points to.
- When the cursor moves to the first number on the left, press "←" again, the decimal point is twinkling, press "↑" to move the decimal point.
- Press "M" to confirm setting and return to the menu item.

3.4 Span (value to be displayed for 20mA)

Press "M" to continue, span setting mode is displayed: (Factory default setting 20.000mA)



- Press "←" to move the cursor.
- Press "↑" to change the value where the cursor points to.
- When the cursor moves to the first number on the left, press "←" again, the decimal point will twinkle, press "↑" to move the decimal point.
- Press "M" to confirm setting and return to the menu item.

3.5 Unit setting

Press button "M" to continue, unit setting mode is displayed:



- Press "←" or "↑" to select the unit, for example "°C" is selected,



Unit is displayed on the LCD.

Optional units:

mA, V, mV, bar, mbar, Pa, kPa, MPa, mH₂O, mmH₂O, cmH₂O, mmHg, PSI, Tor, kg, g, N, kN, °C, °F, °K, RH, VOL, ppm, LEL, pH, m, cm, mm, Inch, m/s, Ohm, kohm, %.

3.6 Decimal digits

Press button "M" to continue, decimal digits setting mode is displayed:



- Press "←" or "↑" to select the number of decimal digits, (Valid numbers: 0,1,2,3)

3.7 Damping

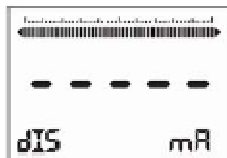
Press button "M" to continue, damping setting model is displayed:



- Press "←" to move the cursor.
- Press "↑" to change the value where the cursor points to. Value is increased and decreased by steps 0.1s. (Min=0s, Max=99.9s, step 0.1s)
- Press "M" to confirm setting and return to the menu item.

3.8 Display Mode

Press button "M" to continue, display mode setting is displayed:



Three display modes can be selected
Pressure, Current or Percentage

3.9 Error codes

- Err 2 - Loop current less than 3.6 mA
- Err 3 - Loop current more than 22.8 mA
- Err 4 - AD low
- Err 5 - AD high

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