

# BAR GRAPH + INDICATORS

## BMX-21 & BMX-22



### Overview

The ASHE Model BMX-21 and BMX-22 are a range of compact, rugged and reliable indicating instruments which are specifically designed for accurate process measurement and control applications.

The Indicators accept an industrial standard current input signal of 4 to 20 mA DC and display the actual process value calibrated in the desired units, on a linear scale. The process value is displayed on two separate displays: one, a LED strip Bar-Graph display, and two, a 4-Digit seven-segment LED digital display module.

The instrument operates on a universal power supply format of 90 to 270 V AC, 50 hz and can be calibrated on any scale range from 9999 to +9999 units. Two Relays are provided for each channel, which may be set for control action at any point in the scale range.

The Ashe BMX-21 and BMX-22 Indicators are therefore an ideal single unit substitute to conventional analog indicators because of their inherent accuracy in process control, besides other superior characteristics like total immunity to Shocks, Dust, Ambient temperatures, Humidity and Corrosive atmospheres.

Further, the instrument is manufactured using selected high-grade components which guarantee its reliability and long operational life.

### Specifications

<b>Model</b>	ASHE BMX-21 (single channel) ASHE BMX-22 (dual channel).
<b>Type</b>	Single and Dual channel Analog signal indication on Bar-graph display and digital indication with control action.
<b>Input Signal</b>	One/Two signals of 4 to 20 mA DC.
<b>Displays</b>	a. One/Two nos. of 100-segment LED Bar graph for % PV display of each input channel b. 4-digit, 0.3" seven-segment LED display for PV of each channel.
<b>Bar-graph display type</b>	100-bal back-lit LED bar-graph display.
<b>Calibration</b>	Bar-graph : 0 to 100%
<b>Response time</b>	< 100 ms
<b>Range</b>	a. 0 to 100% linear for Bar-graph b. -9999 to +9999 for digital display.
<b>Linearity</b>	0.1% of span.
<b>Calibration facility</b>	Zero and Span settings [external].
<b>Accuracy</b>	0.1% of FSD.
<b>Polarity</b>	Auto-sensing.
<b>Control output</b>	Two relay changeover contacts per channel (configurable).
<b>Contact Rating</b>	10 Ampere @ 230 V AC (resistive loads).
<b>Control Logic</b>	High-Low (Configurable).
<b>Alarm indication</b>	By LEDs on front panel.
<b>Memory</b>	Non-volatile.
<b>Settings</b>	Settings for Zero, Span, Relay set-points, Hysterisis, Control Logic, Decimal point.
<b>Dimensions</b>	72 x 144 x 150 mm. [W x H x D].
<b>Execution</b>	Panel mounting.
<b>Enclosure</b>	Industrial grade ABS.
<b>Weight</b>	Approximately 0.5 Kgs.
<b>Operating Temperature</b>	0 to 50 °C.

### Features

- Standard 4 to 20 mA DC current loop operation
- Dual process display – Bar graph and Digital seven-segment LED.
- Dual units : process units and percentage.
- Low Input impedance – negligible load on loop.
- High accuracy and linearity to input signal
- 0 to 100% display on 100-segment LED bar-graph
- 4-digit LED seven-segment displays
- Very low power consumption and heat dissipation
- Dual control action per channel.
- Auto-sensing polarity
- Selectable Decimal point
- Membrane keypad settings for calibration, set-points
- Rugged, industrial grade ABS enclosure
- Compact and rugged execution
- Panel / Field / Hazardous-area installation in IP65 execution
- Available in several dimensions
- Proven record of several thousand installations
- Lifetime warranty on design and workmanship

### ASHE CONTROLS PRIVATE LIMITED