

# DIGITAL INDICATORS

DX-409



## OVERVIEW

The ASHE Series DX-400 Digital Process Indicators are a range of compact, rugged and reliable indicating instruments designed for accurate measurement applications.

The Indicators accept all industrial standard input signals, like 4 to 20 mA DC, AC/DC Voltage, AC/DC Current, Resistance, Strain-gauge, Frequency and all temperature sensors like RTD Pt-100, Thermocouples, etc. The process value is displayed on a 3-1/2 or 4-1/2 digit seven-segment LED or LCD digital display and calibrated to the desired units.

Micro-controller based Digital Indicators are also offered (Series AX and AK). The Indicator is available in several dimensions in panel-mount execution and operates on AC or DC power supply, as required.

Options include Dual display, multiple Relay outputs, analog retransmission signals, DIN rail mount / weather-proof / flame-proof executions, etc.

The Ashe DX-400 range of 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.

All ASHE range of Digital Indicators carry a lifetime warranty.

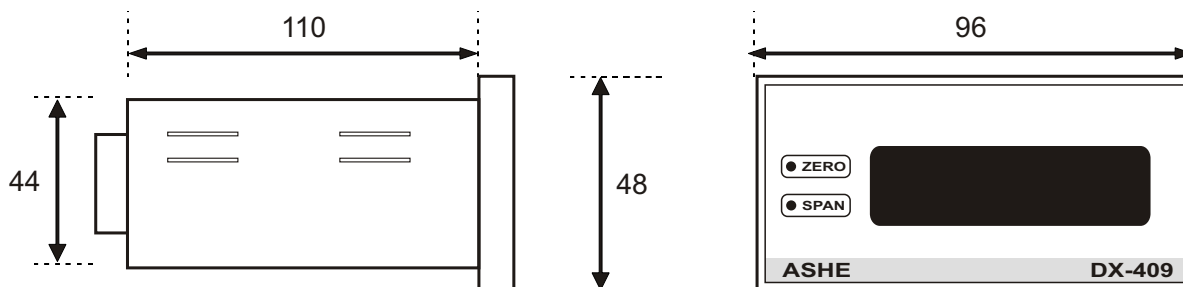
## SPECIFICATIONS

<b>Model</b>	ASHE DX-409
<b>Type</b>	Single channel Analog signal indication on Digital display.
<b>Input Signals / Sensor</b>	4 to 20 mA DC, AC/DC Voltage, AC/DC Current, Resistance, Strain-gauge, Frequency, Proximity Switches and all temperature sensors like RTD Pt-100, Thermocouples type J,K,R,S,T,E,B, etc.
<b>Display</b>	4-½ digit, 0.5" seven-segment LED display for process value.
<b>Scale Range</b>	-19999 to +19999.
<b>Calibration</b>	As required.
<b>Response time</b>	< 100 mS
<b>Linearity</b>	0.1% of span.
<b>Calibration facility</b>	Zero and Span settings [external].
<b>Accuracy</b>	0.1% of FSD.
<b>Retransmission</b>	4 to 20 mA DC [optional].
<b>Load driving capacity</b>	600 Ohms
<b>Polarity</b>	Auto-sensing.
<b>Settings</b>	Settings for Zero, Span, Decimal point.
<b>Dimensions</b>	48 x 96 x 110 mm 96 x 96 x 110 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 analog signals and Sensors.
- Digital LED and LCD displays.
- Low Input impedance – negligible load on loop.
- High accuracy and linearity to input signal
- 4-½ digit seven-segment displays
- Very low power consumption and heat dissipation
- Fully configurable
- Retransmission option.
- External transmitter powering option
- Auto-sensing polarity
- Selectable Decimal point
- Rugged, industrial grade ABS enclosure
- Compact and rugged execution
- High Noise immunity.
- Panel / Field / Hazardous-area installation in IP65 execution
- Available in several DIN standard dimensions
- Proven record of several thousand installations
- Lifetime warranty on design and workmanship

### DIMENSIONAL DIAGRAM



### HOW TO ORDER

DIGITAL INDICATOR  
Input : Any analog signal /Sensor - (pre-specified):  
4 to 20 mA DC · 0 to 1 Ampere AC  
0 to 200 mV DC · 0 to 10 V DC · Frequency  
RTD Pt-100 Sensor · Thermocouple - J,K,R,S,T

4-1/2 digit 0.5" LED display

DX-409

Configuration and Add-on options w

#### 1 INPUT SIGNAL / SENSOR

- ▶ 4 to 20 mA DC
- ▶ 0 to 20 mA DC
- ▶ 4 to 20 mA DC with aux 24 VDC @ 100 mA power for Trans.
- ▶ RTD Pt-100 (three-wire)
- ▶ J type Thermocouple (0 to 750 OC)
- ▶ K type Thermocouple (0 to 1200 OC)
- ▶ R type Thermocouple (0 to 1800 OC)
- ▶ S type Thermocouple (0 to 1800 OC)
- ▶ T type Thermocouple (-200 to +350 OC)
- ▶ DC Voltage (To be specified)
- ▶ Resistance
- ▶ Frequency, Proximity Sensor.
- ▶ AC Voltage (to be specified)
- ▶ AC Current (0 to 1 / 5 Ampere)
- ▶ Other (to be specified).

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#### 2 POWER SUPPLY

- ▶ 230 V AC (±10%), 50 Hz (±10%).
- ▶ 110 V AC (±10%), 60 Hz (±10%).
- ▶ 24 V DC (±10%).
- ▶ Nil (for Loop Powered Indicators only)
- ▶ Other (to be specified).

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#### 3 EXECUTION

- ▶ DIN Rail mounting
- ▶ Panel mounting [48 x 48 mm]
- ▶ Panel mounting [48 x 96 mm]
- ▶ Panel mounting [72 x 72mm]
- ▶ Panel mounting [96 x 96 mm]
- ▶ Field mounting in Weather-proof execution (Polycarbonate enclosure, IP65 protection)
- ▶ Field mounting in Flame/Explosion-proof execution (Cast Aluminum Alloy LM6 enclosure, for Gas groups IIA, IIB)
- ▶ Other (to be specified)

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#### 4 RETRANSMISSION

- ▶ Retransmission of 4 to 20 mA DC
- ▶ Retransmission of 0 to 10 V DC
- ▶ None
- ▶ Other (to be specified)

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### OUR OTHER PRODUCTS



PROCESS CONTROLLER



UNIVERSAL CONTROLLER



FLOW TOTALIZER



TEMP. SCANNER



SIGNAL ISOLATORS & TRANSDUCERS



SMPS POWER SUPPLIES



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