

DIGITAL PRESSURE INDICATOR

EV-120

FOR USE WITH KELLER SERIES 30 TRANSMITTERS

The EV-120 is a digital pressure indicator, designed for use in conjunction with a KELLER Series 30 transmitter. Together, these two instruments build a highly precise pressure measuring device. The EV-120 interrogates the Series 30 transmitter and updates the display two times every second. The display shows after turn-on the full-scale pressure range of the transmitter and then the actual pressure reading.

No manual adjustments are required; the EV-120 automatically configures itself to any Series 30 transmitter. Because the pressure is communicated and read in digital format, there are no signal conversion errors.

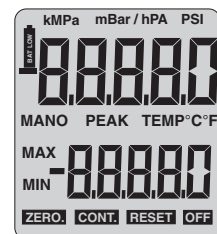
The Series 30 transmitters are based on a microprocessor (μP) circuit. The sensor signals are digitized, numerically compensated in the μP and again converted by the D/A converter into an analog norm signal (0...10V or 4...20 mA). The EV-120 reads out the compensated digital pressure value.

EV-120 as a Manometer: Equipped with an internal 9 V battery for both the supply of the instrument and the transmitter, the EV-120 builds together with the transmitter an autonomous digital pressure measuring device.

EV-120 as a Local Pressure Indicator: The EV-120 can be interposed between a transmitter and the transmitter supply, to use as a local pressure indicator. In this application, the EV-120 is powered from the transmitter supply and does not require the internal 9 V battery. The analog output signal of the transmitter and the serial interface are not influenced by the EV-120.*

With the KELLER Series 39 differential pressure transmitter, the differential pressure is calculated from 2 absolute transmitters. Here, the EV-120 indicates on the upper display the line pressure, on the lower display the differential pressure.

The pressure unit can be switched between different units (see specifications).



Display Segments EV-120

SPECIFICATIONS

Total accuracy of the displayed pressure	See specifications of KELLER's Series 30 transmitters
Resolution of display	Depending on range (max. 0,025 % FS of basic range)
Overpressure	See specifications Series 30
Selectable pressure units	bar / mbar-hPa / Pa / kPa / MPa / PSI (independent of the connected transmitter)
Measuring cycle	2 measurements per second
Storage - / Operating temperature	-20...60 °C / 0...50 °C
Compensated temperature range	See specifications Series 30
Supply of the EV-120 electronics	Block battery 9 V (6LR61)
Battery life	Depending on the connected transmitter; > 16 hrs
Connector	Binder (5 pole)
Protection	IP40
Diameter x Height x Depth	76 x 122 x 42 mm
Total weight	≈ 229 g

* The 4...20 mA output can have an offset of $\approx 0,25\%FS$.

