



Technology Solutions



INDICATOR/ CONTROLLER

Explosion-Proof Loop-Powered Flow Rate/Totalizer Indicator

TEK-LCD 7802B

1 FEATURES

- 4-20 mA input loop-powered
- 5-digit, 0.7" (0.05 ft) upper display
- Loop or external DC-powered backlight standard
- Password protection
- 7 alphanumeric character, 0.4" (0.03ft) lower display
- SafeTouch® through-glass button programming
- 3.0 V drop without backlight
- Flanges for wall or pipe mounting
- Operates from -40°F to 158°F (-40°C to 75°C)
- Explosion-Proof, IP68, NEMA 4X enclosure
- Linear, square root, or programmable exponent
- Open collector pulse or alarm output

3 APPLICATIONS

- Batching
- Dosing
- Loading
- Blending

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2 SPECIFICATION

Display	Upper: Five digits (-9,999 to 99,999) 0.70" (0.05 ft) high, 7-segment, automatic lead zero blanking. Lower: Seven characters 0.4" (0.03ft) high, 14 segment alphanumeric.
Display orientation	Mounted at 90° increments up to 270° from default orientation
Noise filter	Programmable low (LO), medium (MED), high (HI), or off (OFF)
Display update rate	Ambient > 77°F: 2 Updates/Second Ambient < 77°F: 1 Update/5 Seconds
Password	Programmable password restricts modification of settings
Programming method	Four SafeTouch through-glass buttons when cover is installed. Four internal push buttons when cover is removed.
Advanced functions	Live input calibration, linearization, square root, or programmable exponent.
Operating temperature range	-40°F to 158°F (-40°C to 75°C)
Storage temperature range	-40°F to 158°F (-40°C to 75°C)
Relative humidity	0 to 90% non-condensing
Connections	Screw terminals accept 12 to 22 AWG wire
Accuracy	±0.03% of calibrated span ±1 count
Temperature drift	122 PPM/°F
Calibration range	An error message will appear if input 1 and input 2 signals are too close together. Input Range: 4-20 mA. Minimum Span Input 1 and Input 2: 0.10 mA
Enclosure	Explosion-proof die-cast aluminum with glass window, corrosion resistant epoxy coating, color: blue. NEMA 4X IP68. Copper-free (0.3%). Two ¾" NPT threaded conduit openings. One ¾" NPT metal conduit plug with 0.03ft hex key fitting installed..
Mounting	Mounted directly to conduit. Two slotted flanges for wall mounting or NPS 1½" to 2½" or DN 0.13 to 0.21ft pipe mounting.
Weight	5.00 lbs (80 oz, 2.27 kg)
Dimensions	5.67" x 5.24" x 4.88" (0.47 ft x 0.43 ft x 0.40 ft) (W x H x D)
Non-volatile memory	All programmed settings are stored in non-volatile memory for a minimum of ten years if power is lost
Input range	4 to 20 mA
Maximum voltage drop	3.0 VDC @ 20 mA without loop-powered backlight. 6.0 VDC @ 20 mA with loop-powered backlight
HART transparency	Analog input will not interfere with existing HART communications on the wired 4-20 mA signal
Input overload	Over current protection to 2 A max.