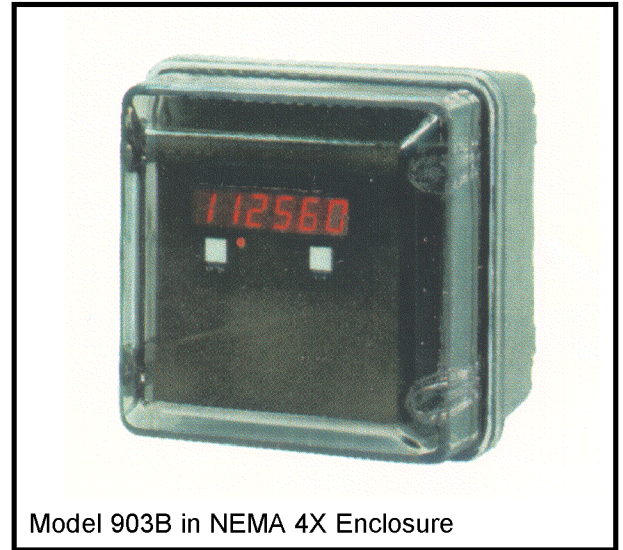




Model 903B Digital Indicator

FEATURES

- * Easy Single Button Scaling with Lockout Feature
- * 4-20 mA, 0-5 V, or 0-10 V Field Selectable Inputs
- * 24 VDC Transmitter Power Supply Standard
- * Stand Alone Scaling
- * Steady, Accurate Display to +/- 199,990
- * 11 Point Linearization
- * Square Root Extraction
- * 4 1/2 Digit Plus Extra Zero
- * NEMA 4X Front Panel
- * 2 or 4 Relay Alarm Points and 4/20 mA Output Options
- * 2 or 4 Relay Alarm Points and 4/20 mA Output Options
- * Green Display Available



Model 903B in NEMA 4X Enclosure

Description

The PROMAG Model 903B is a high performance, easy to use, industrial-grade micro processor digital process meter. It accepts all the standard process signals: 4-20 mA, 1-5 V, 0-5 V and 0-10 V and displays these signals in engineering units on a 4 1/2 digit display. The display includes an extra zero which may be used to handle numbers up to 199,990.

Stand Alone Scaling allows the 903B to be scaled without applying an input signal. Simply select the Internal Calibration (I-Cal) mode and set the desired display for the 4 and 20 mA value. To scale inputs such as 0-5 V, 1-5 V, or 0-10 V without applying a signal it is necessary to first complete an initial calibration.

4 Visual Alarms are Standard. This allows visual indication of Alarms even without optional hard relay contacts. Any combination of high or low alarms may be programmed, with 0-100% deadband adjustments.

Alarm relay outputs are available as an option in 2 point and 4 point increments. Relay contacts are rated at 2 amps @ 250 VAC resistive load. Alarms may be set up to act as automatic or manual reset, and with failsafe contact action

The 903B includes a 24 VDC power supply for the purpose of powering 4-20 mA field transmitters. This eliminates the time and money by simplifying wiring, and avoiding the need for external power supplies and additional housings (Available in AC powered units only).

NEMA 4X front Panels are standard for the Model 903B allowing mounting in dusty or damp applications.

Linearization functions are standard, and have two modes of operation, 11 point user calibration, and square root extraction.

Specifications - Meter

INPUTS	Field Selectable, 4-20 mA, 1-5 V, 0-5 V, 0-10V
DISPLAY	Bright, Large, .56 High high efficiency red or green LED. 4 1/2 digits + extra zero
FRONT PANEL	NEMA 4X, panel gasket provided
CALIBRATION	May be calibrated using internal calibration (I-Cal) or by applying an external calibration signal (E-Cal)
CALIBRATION RANGE	4 mA (1 V) input may be set to display any where in range of the meter. 20 mA (5 V) may be set any where above or below 4 mA.
NON-VOLATILE MEMORY	All programming values are stored in non-volatile memory for 10 years if power is lost.
LOCKOUT	Jumper 3 at rear of instrument restricts modification of calibration values.
LOOP POWER	(AC Powered units only) Isolated 24 VDC at 20 mA regulated. Noise less than 10 mV PP. Max Loop resistance 1200 ohms. Available for either signal input or 4/20 mA output options. (Not both at once.)

Specifications - Meter (continued)

INPUT IMPEDANCE	Voltage range > 300k ohms. Current range 100 ohms
POWER OPTIONS	AC - 115 VAC / 230 VAC DC -18-36 VDC
ISOLATION	AC Power - 1500 VAC, DC Power - 500 VDC
ENVIRONMENTAL	Operating Temperature: 0 to 65 deg C Storage Temperature : -40 to 85 deg C Relative Humidity: 0 to 90% non-condensing.
CONNECTIONS	Removable screw terminal block - provided
ALARM POINTS	4, any combination of high or low alarms
ALARM STATUS INDICATION	Front Panel LED's
ALARM DEADBAND	0-100% User selectable.

Specifications - Relays

RATING	2 or 4 Relays. 2 Amp SPDT form C. The contacts are rated 2 amps @ 30 VDC, or 2 amps @ 250 VAC resistive load; 1/4 HP @ 125 / 250 VAC for NC contacts and 1/10 HP @ 125 / 250 VAC for NO contacts, inductive load.
RESET	User Select.: 1) Automatically when the input passes the reset point. 2) Automatically plus manually (via the user supplied switch or front panel ACK button)
FAILSAFE OPERATION	The relay coils are energized in the non-alarm condition. In the case of power failure, the relays will go to the alarm state. May be disabled with internal jumper.
AUTO INITIALIZATION	When the power is applied to the meter, the relays will always reflect the state of the input to the meter.
DEADBAND	0-100% - User Selectable

Isolated 4-20 mA Transmitter Output

CALIBRATION RANGE	Anywhere in range of the meter, 501 count minimum span.
OUTPUT LOOP RESISTANCE	24 VDC Power Supply: 10 ohm min / 600 ohm max. 36 VDC (external) Power Supply: 600 ohm min / 1000 ohm max.
ISOLATION	500 VDC or peak AC, input to output or input/output to power line.
EXTERNAL LOOP POWER SUPPLY	35 VDC max.

NEMA 4 Enclosure

WEIGHT	4 lbs.
CONDUIT HOLES	User fabricated
MATERIAL	Structural Thermoplastic, cover polycarbonate
DIMENSIONS	9.5" high by 7" wide by 6.6" deep

NEMA 7 & 9 Explosion-proof Enclosure

WEIGHT	16 lbs.
CONDUIT HOLE	3/4 " FNPT provided
MATERIAL	Copper free cast aluminum with glass window.
DIMENSIONS	7.25" high by 9.125" wide by 6.875" deep
AREA CLASS RATINGS	Class I, Groups C & D Class II, Groups E, F, & G Class III