

# ST98B-AN FlexMASter®

**FCI** FLUID COMPONENTS  
INTERNATIONAL LLC

Air or Nitrogen Mass Flow Measurement

## Air or Nitrogen Mass Flow Measurement



### Features

- › True mass flow output
- › No moving parts, 316L stainless steel -- all welded
- › Air or nitrogen 10 to 50 psia [0.7 to 3.4 bar(a)]
- › Factory calibrated 1.25 to 125 SFPS [0.4 to 38 NMPS]
- › RS-232 communication
- › Field scalable 4-20 mA output
- › 3/4 inch male NPT compression fitting
- › Provides adjustable insertion lengths for 2 to 18 inch pipe sizes
- › Available with flow rate indicator/totalizer
- › Calibrated and certified to NIST standards

### Specifications

**Flow Range:** 1.25 to 125 SFPS [0.4 to 38 NMPS] air or nitrogen

**Temperature:** 40° to 100°F [4° to 38°C]

**Pressure Range:** 10 to 50 psia [0.7 to 3.4 bar(a)]

**Accuracy:** ±1% reading + 0.5% full scale

**Repeatability:** ±0.5% reading

**Temperature Coefficient:** 0.05%/°F [0.1%/°C]

**Agency Approvals:** FM, CSA, CENELEC, ATEX and CE Mark

### Flow Element

**Construction:** Insertion design; all-welded 316L stainless steel.

**Process Connection:** 3/4 inch male NPT compression fitting with Teflon ferrule.

**Insertion Length (Field adjustable):**

1 to 6 inches [25 to 152 mm]

1 to 12 inches [25 to 305 mm]

**Maximum Operating Temperature/Pressure:**

200°F [93°C] and 150 psig [10 bar(g)]

### Flow Transmitter

**Input Power (field selectable)<sup>1</sup>:**

85 to 260 Vac, or 22 to 30 Vdc; 16 watts maximum.

**Output Signal (field selectable)<sup>1</sup>:**

› **Current:** 4-20 mA source; 800 ohms maximum load (with field selectable low [3.6 mA] or high [21 mA] instrument fault indication; per NAMUR guideline NE 431).

› **Voltage:** 0 to 5, 1 to 5, 0 to 10 Vdc; 100,000 ohms minimum load.

**Digital Communication Port:** RS-232

**Display (optional):** 2 line, 16 character per line (indicates flow rate and process temperature or totalized flow; field selectable).

**Operating Temperature:** 0 to 140°F [-18 to +60°C]

### Enclosure Configurations

**Integral Assembly:** Powder coated carbon steel rated for NEMA and CSA Type 4, water and dust tight.

**Remote Assembly:**

› **Flow Element:** Powder coated aluminum rated for NEMA Type 4X and hazardous locations Groups B, C, D, E, F and G, EEx d IIC (meets IP66).

› **Transmitter:** Powder coated carbon steel rated for NEMA and CSA Type 4, water and dust tight.

**Interconnecting Cable:** 25 ft. [7.6 m] PVC cable.

Note 1: Use AC input power if input power to output signal isolation is desired.

### Ordering Information ST98B-AN- 1 2

**Ordering Procedure:** To order a complete Model ST98B-AN, please fill in each numbered box above with the appropriate code from the categories below. Consult FCI on the cost of special data and documentation. Final acceptance of the part number is subject to FCI's approval.

1. Configuration	Code	2. Insertion Length & Flow Direction	Code
Integral	<b>A</b>	1 to 12 inch length with Right to left or vertical up Left to right or vertical down	<b>1</b> <b>2</b>
Integral with Display	<b>B</b>		
Remote*	<b>C</b>	1 to 6 inch length with Right to left or vertical up Left to right or vertical down	<b>3</b> <b>4</b>
Remote with Display*	<b>D</b>		

#### Option at extra cost (check box):

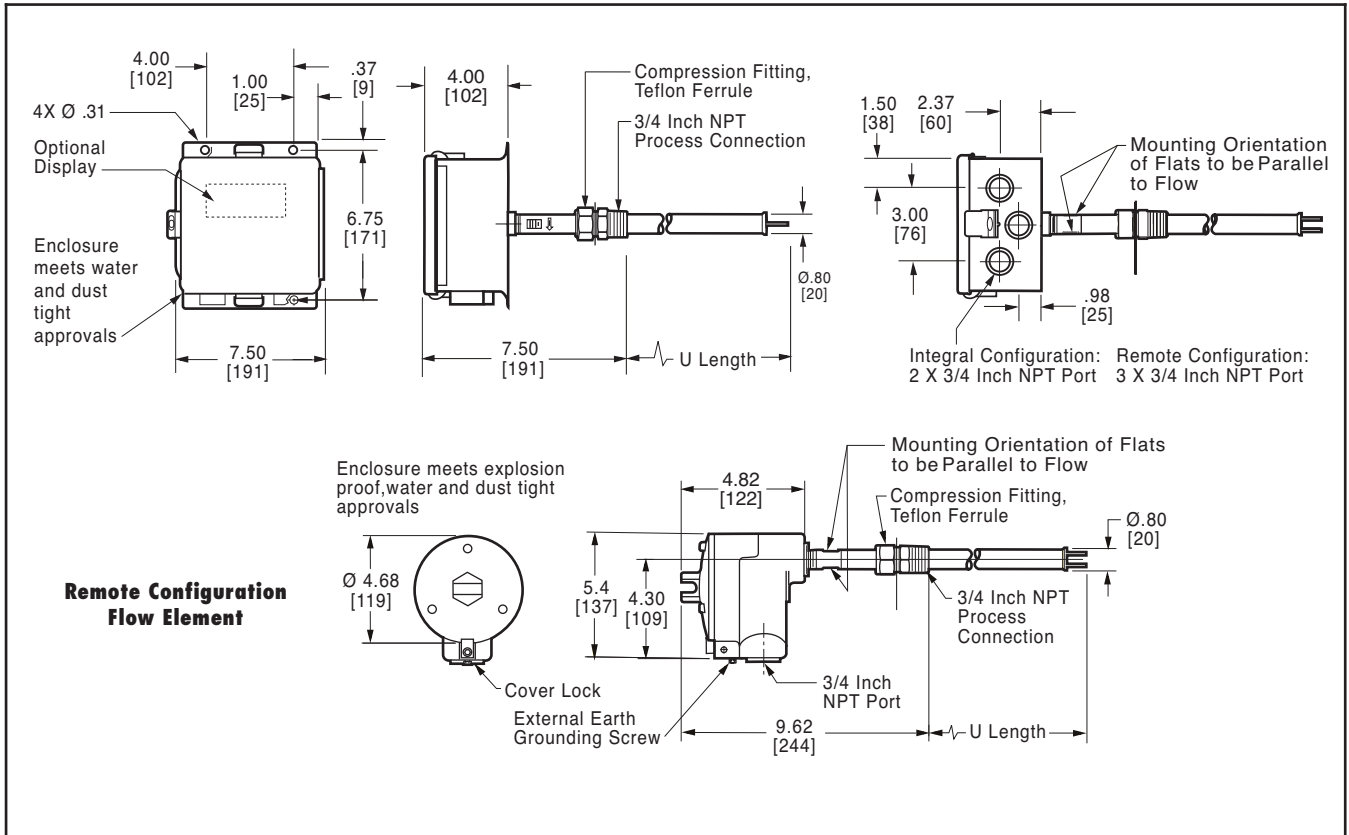
**Handheld FC88 Programmer**  
Part No. 013135-01

**Computer Interface Software Kit**  
Part No. 014108-02

\* Remote unit supplied with 25 feet of cable.

Other configurations possible. Contact your local representative or the FCI factory.

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*FCI is a continuous improvement company. Specifications subject to change without notice.*



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*\*Please note: FCI area code changes from "760" to "442" effective 01/01/09*

**FCI is ISO 9001:2000 and AS9100 certified**

Locally represented by: