SIERRA INSTRUMENTS, INC.
THE MASS FLOW COMPANY

Quick-Installation Instructions For 830/840 L, M and H Meters And Controllers

1. **NEVER TEST FOR LEAKS WITH LIQUID LEAK DETECTOR**. If liquid seeps into the electronics or the sensor compartment below, the instrument may be damaged. Use a pressure-decay test instead.
2. **Install an appropriate in-line filter upstream** if the gas contains any particulate matter or condensed moisture. (A 15-micron particulate filter for full-scale flows up to 30 liters/minute is recommended, 30 micron for flows above 30).
3. **Mount with a horizontal gas-flow**. This orientation is preferable unless the factory calibration was specifically performed for a vertical flow. Consult your calibration certificate. (Horizontal flow is assumed unless vertical flow upward or downward is specified).
4. **DO NOT APPLY POWER TO THE OUTPUT LOOP** on units equipped and calibrated for a 4-20 mA output signal. This is **NOT** a loop-powered device. Damage will occur.
5. **Wire the instrument** per the diagrams on the back of this card or the Operator's Manual, Chapter 2. Controllers require a separate ground wire for the Valve Return signal as well as a Setpoint signal (no wire connected to the setpoint may cause the valve to float open).
6. **Apply the gas** listed on the label to the inlet at the recommended inlet pressure as listed on the calibration certificate. On a meter, obtain this pressure by blocking off the flow downstream. On a controller, confirm that there is no gas flowing through it with a zero setpoint. (If there is a flow, consult the Valve Adjustment Procedure in the manual).
7. **Apply power and verify or adjust the zero setting** after allowing a 15-minute warm-up period. The zero adjustment potentiometer is accessed through the upper hole in the side of the electronics cover. (See the Operator's Manual, Chapter 3).
8. **DO NOT LEAVE A SETPOINT APPLIED TO A CONTROLLER WHEN NO GAS IS AVAILABLE TO THE INLET FITTING**. The control circuit will apply the maximum voltage to the valve coil resulting in eventual overheating. Damage may occur. (Instead, consult the Operator's Manual for use of the "Valve Off" feature).
9. An **ANNUAL factory evaluation and calibration** is recommended.

Email Technical Support: Service@sierrainstruments.com

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SIERRA FACTORY: 800-866-0200 OR 831-373-0200
SIERRA EUROPE: + 31 72 5071 400

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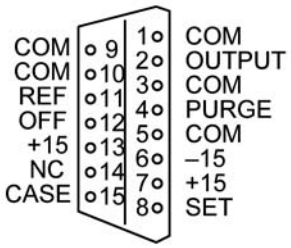

PIN NO.	DESCRIPTION	WIRECOLOR **830/840**
1	Signal common	Green
2	Output signal	White
3	Power common (valve return)	Violet
4	Purge	Gray
5	Power common	—
6	–15 VDC supply	Orange
7	+15 VDC supply (optional connection)	—
8	Command set point input	Brown
9	Power common	Blue
10	Signal common	Black
11	+5 volt reference	—
12	Valve off	Yellow
13	+15 VDC supply	Red
14	NC	—
15	Chassis ground (shield)	Shield

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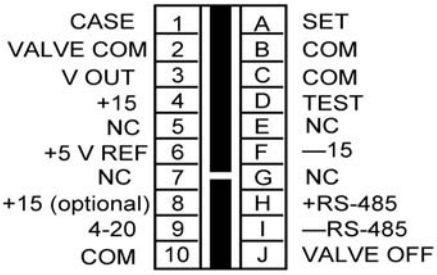

PIN NO.	DESCRIPTION	WIRECOLOR **830/840**	**860M/860C**
1	Chassis ground	Shield	Shield
2	Common, valve return	Violet	Violet
3	Output high	White	White
4	+15 VDC supply	Red	Red
5	No connection	——	——
6	+5 VDC for local set point	——	——
7	Not avail. - connector key	——	——
8	+15 VDC	——	——
9	4-20 mA (for 4-20 mA meters only)	(White)	(White)
10	Common, input low	Gray	——
A	0-5 VDC/4-20 mA set point input	Brown	Brown
B	Common, output low	Black	Black
C	Common, power supply	Blue	——
D	Vavle test point (electromagnetic valve)	Green	Green
E	No connection	——	——
F	—15 VDC supply	Orange	Orange
G	Not avail. - connector key	——	——
H	+RS-485	——	Gray
I	—RS-485	——	Blue
J	Valve off	Yellow	Yellow