

# MASS FLOW CONTROLLERS

With or Without LCD Display

## F-TLFC Series

- ±1% Accuracy
- Linear Output
- Thermal Technology
- For Using In Non Corrosive Gas
- For Flow Rates up to 50 SLM
- Power Supply Included

The Thermal Mass Flow Controllers provide high performance. Thermal Technology offers advantages in accuracy, sensitivity and turn quality components and the latest technology are combined to provide reliable, compact meters and controllers. The F-TLFC Series comes with or without an LCD display, and all models come with linear 0-5 VDC and 4-20 mA output. The F-TLFC Series measures the mass flow rate of gases in 18 ranges from 0-10 SCCM to 0-50 SLM as shown in the range table. The F-TLFC Series combines a mass flow transducer with an electromagnetic proportional valve. Valves are not recommended as shut off valves. Controllers use a 0-5 VDC linear set-point signal supplied from the local set-point pot or from a remote source.

### Technical Data

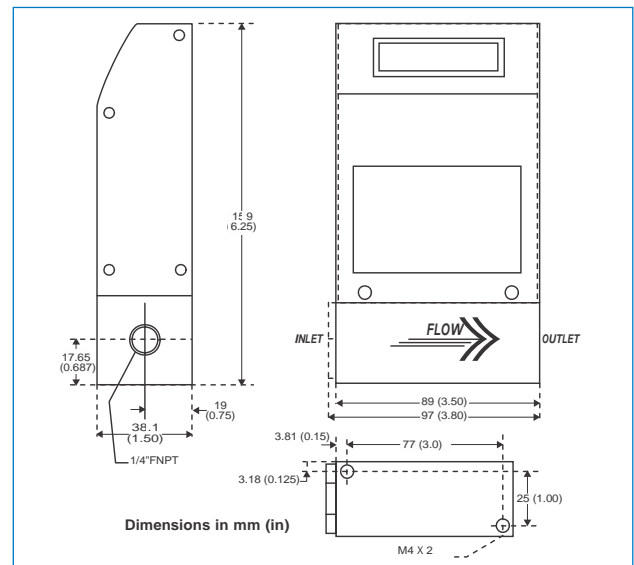
- Wetted Material:** Standard flowbody- 316 Stainless Steel, Option available. O-ring- Viton.
- Output Signal:** 0-5 VDC Linear min. load 1000 $\Omega$  or 4-20 mA Linear, loop resistance 500 $\Omega$
- Input Power:** 24 VDC Standard, optional power supply 15 VDC 115 VAC, 220 VAC @ 500mA
- Accuracy:** +/- 1% F.S (including Linearity)
- Turn Down Ratio:** 100:1
- Repeatability:** +/- 0.15% F.S or better
- Electric Connection:** 9 Pin Sub "D"
- Process Connection:** 1/4" NPT Female
- Control Signal:** Integral or 0-5 VDC
- Minimum Pressure:** 1" H<sub>2</sub>O **Max Pressure:** 500 PSIG
- Response Time:** 1 Second
- Temp. Coefficient:** 0.05% Full scale per 1°C or better
- Pressure Coefficient:** 0.01% full scale per PSIG or better
- Weight:** app. to 1.35kg with power supply

### Ordering Information

F-TLFC	Code	Flow Range	Code	Control Signal
	00-17	Please refer to the measure range table.		(A) integral (B) 0-5VDC
	18	Custom size (Please directly fill in the requested range.)		<b>Code Input Power</b>
		<b>Code Wetted Material</b>		(1) 24VDC (2) 15VDC
		(A) SS316 (O) Option		<b>Code Power Supply for 24VDC</b>
		<b>Code Process Connection</b>		(1) With (2) Without
		1 1/4" NPT (F)		<b>Code D.P.</b>
		<b>Code Display</b>		_____ kg/cm <sup>2</sup>
		W With display O Without display		
		<b>Code Output Signal</b>		
		(1) 0-5 VDC (2) 4-20 mA		
F-TLFC			+	Complete ordering code



### Dimensions



### Operating Differential Pressure

- F.S ≤ 5 SLM** (0.5 kg/cm<sup>2</sup> ~3 kg/cm<sup>2</sup>)  
Low differential pressure specification depend on types of gas and flow rates to be used.
- 5 SLM < F.S < 20 SLM** (1 kg/cm<sup>2</sup> ~3 kg/cm<sup>2</sup>)
- 20 SLM < F.S < 50 SLM** (2 kg/cm<sup>2</sup> ~3 kg/cm<sup>2</sup>)

### Range Table

Code	SCCM	Code	SLM	Code	SLM
00	0-10	06	0-1	12	0-25
01	0-20	07	0-2	13	0-30
02	0-50	08	0-5	14	0-35
03	0-100	09	0-10	15	0-40
04	0-200	10	0-15	16	0-45
05	0-500	11	0-20	17	0-50
18	Custom Flow Rate				