

# MASS FLOW METERS

## With or Without LCD Display

### TLF SERIES

- ±1% Accuracy
- Linear Output
- Thermal Technology
- For Using in Non Corrosive gas
- For Flow Rates up to 100 SLM
- Power Supply Included

The NEW-FLOW Thermal Mass Flow Meters 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 TLF Series comes with or without an LCD display, and all models come with linear 0-5 VDC and 4-20 mA output. The TLF Series measures the mass flow rate of gases in 23 ranges from 0-10 SCCM to 0-100 SLM as shown in the range table.

#### Technical Data

- Wetted Material:** Standard flowbody– 316 Stainless Steel, Option– Tapcon (Max. pressure) 10 bars  
Option available. O-ring– Viton.
- Output Signal:** 0-5 VDC Linear min. load 1000Ω or 4-20 mA Linear, loop resistance 500Ω
- Input Power:** 24 VDC Standard, optional power supply 15 VDC 115 VAC, 220 VAC @500mA
- Accuracy:** +/- 1% FS (including Linearity)
- Turn Down Ratio:** 100:1
- Repeatability:** +/- 0.15% FS or better
- Electric Connection:** 9 Pin Sub "D"
- Process Connection:** 1/4" NPT Female
- Range:** 0-10 SCCM to 0-100 SLM
- Minimum Pressure:** 40" H<sub>2</sub>O
- Max Pressure:** SS316–500 PSIG; Tapcon–250 PSIG
- Temperature Range:** 0~50°C
- 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. 1.08 kg with power supply

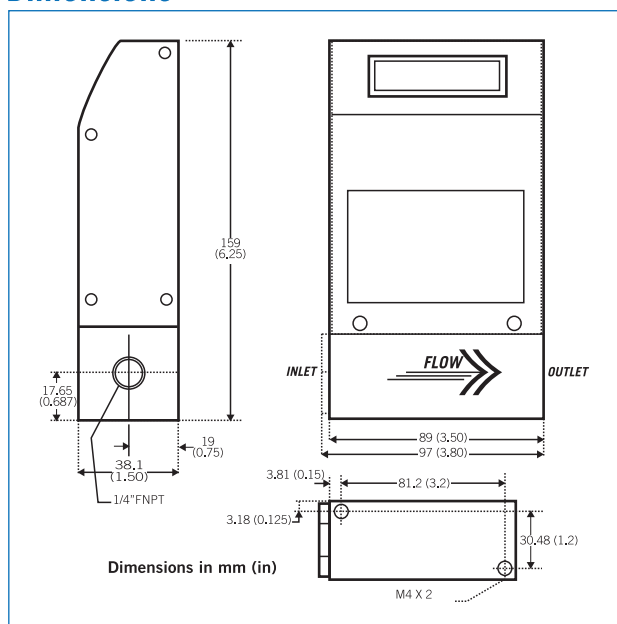
#### Range Table

Code	SCCM	Code	SLM	Code	SLM
00	0-10	06	0-1	14	0~35
01	0-20	07	0-2	15	0~40
02	0-50	08	0-5	16	0~45
03	0-100	09	0-10	17	0-50
04	0-200	10	0-15	18	0~55
05	0~500	11	0-20	19	0-60
		12	0-25	20	0-65
		13	0-30	21	0-70
				22	0-75
				23	0-100
				24	*Custom Flow Rate

Note. \*Please notice that the max. flow rate is 100 SLM.



#### Dimensions



#### Ordering Information

TLF	Code	Flow Range
	00~23	Please refer to the measure range table.
	24	*Custom size (please directly fill in the requested range)
	<b>Code</b>	<b>Wetted Material</b>
	(A)	SS316 (T) Tapcon (O) Option
	<b>Code</b>	<b>Process Connection</b>
	1	1/4" NPT (F)
	<b>Code</b>	<b>Display</b>
	W	With display
	O	Without display
	<b>Code</b>	<b>Output Signal</b>
	(1)	0-5VDC (2) 4-20 mA
	<b>Code</b>	<b>Input Power</b>
	(1)	24VDC (2) 15 VDC
	<b>Code</b>	<b>Power Supply for 24 vdc</b>
	(1)	with
	(2)	without