

MASS FLOW METERS

TSF SERIES – Flow Rate & Totalizer LCD Display – Flow Rate With or Without LCD Display

- ±2% Accuracy
- Linear Output
- Thermal Technology
- For Using in Non Corrosive Gas
- For Flow Rates up to 2500 SLM
- Power Supply Included

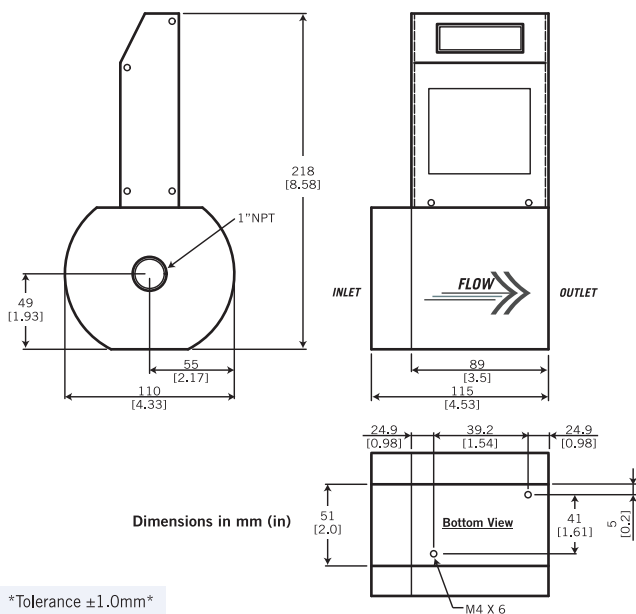
The NEW-FLOW Thermal Mass Flow Meters provide high performance. Thermal Technology offers advantages in accuracy, sensitivity and turn quality components and the latest technology are combined to provide reliable, compact meters and controllers. The TSF Series comes With or Without an LCD Display; or Flow Rate with Totalizer LCD Display. All models come with linear 0-5VDC and 4-20mA output. The TSF Series measures the mass flow rate of gases in 5 ranges from 0-750 SLM to 0-2500 SLM as shown in the range table.

Technical Data

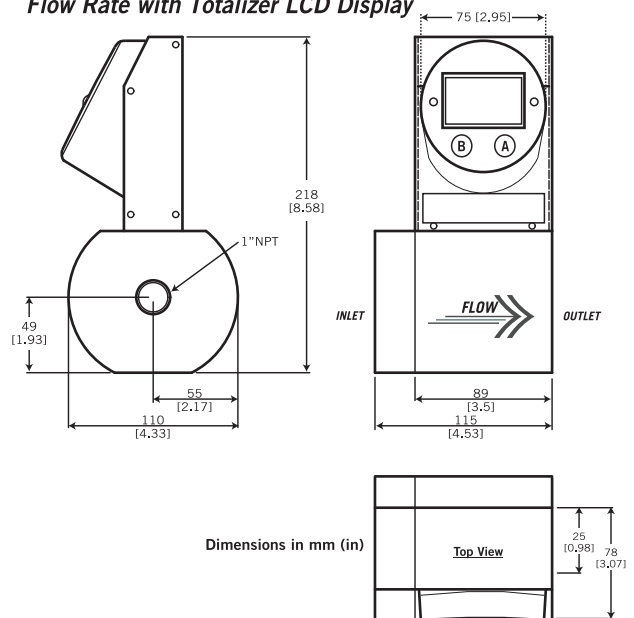
- Type:** Without LCD Display; Flow Rate with LCD Display; Flow Rate with LCD Display & Blue Back Lighted; Flow Rate with Totalizer LCD Display & Blue Back Lighted
- Wetted Parts Material:** Standard flowbody—SS316, option available. O-ring: Viton or FFKM available
- Output Signal:** 0-5 VDC Linear min. load 1000Ω or 4-20 mA Linear, loop resistance 500Ω
- Input Power:** 24VDC standard; optional power supply 15VDC 115VAC, 220VAC @500mA
- Accuracy:** ±2% 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" NPT female
- Range:** 0-750 SLM to 0-2500 SLM
- Minimum Pressure:** 100" H₂O
- Max. Pressure:** 500 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
- Flow Unit:** Kg, GAL, Nℓ, Nm³, cc, ℓ, M³
(Flow rate with LCD display: Label by manufacturer; Flow rate with totalizer LCD display: Unit LCD display)
- Weight:** app. 6.5 kg with power supply
app. 6.64 kg with power supply & totalizer

Dimensions

Flow Rate with LCD Display (without LCD available)



Flow Rate with Totalizer LCD Display

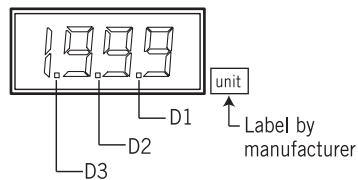


Approvals:



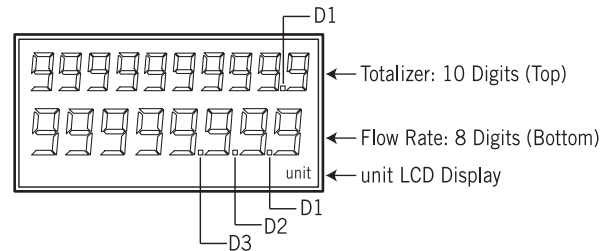
Display Digital Decimal Point Function

Flow Rate with LCD Display:



Range	Decimal Point
0 ~ 1.999	D3
2.0 ~ 19.99	D2
20.0 ~ 199.9	D1
200 ~ 1999	None

Flow Rate with Totalizer LCD Display:



Range Table

Code	SLM	ACCURACY
00	0-750	±2% F.S.
01	0-1000	±2% F.S.
02	0-1250	±2% F.S.
03	0-1500	±2% F.S.
04	0-2500	±3% F.S.
05	*Custom Flow Rate	

NOTE.

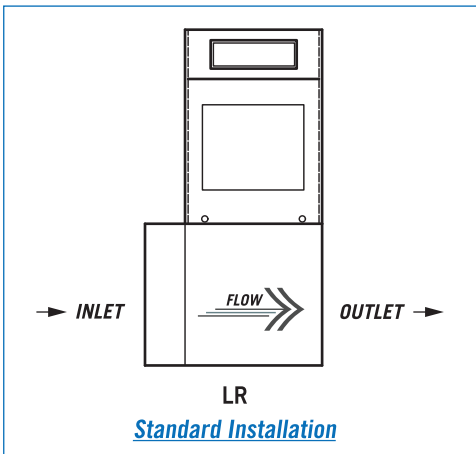
*Please notice that the max. flow rate is 2500 SLM.

Ordering Information

TSF	Code	Flow Range
	00	0~750 SLM
	01	0~1000 SLM
	02	0~1250 SLM
	03	0~1500 SLM
	04	0~2500 SLM
	05	*Custom range (please directly fill in the requested range)
	Code	Wetted Parts Material
	A	SS316 (Viton o-ring)
	B	SS316 (FFKM o-ring)
	O	option
	Code	Process Connection
	1	1"NPT(F)
	Code	Display
	W	Flow Rate with LCD Display
	B	Flow Rate with LCD Display & Blue Back Lighted
	T	Flow Rate with Totalizer LCD Display & Blue Back Lighted
	O	Without LCD Display
	Code	Output Signal
	(1)	0~5 VDC
	(2)	4~20mA
	Code	Input Power
	(1)	24 VDC
	(2)	15 VDC
	Code	Power Supply for 24 VDC
	(1)	With
	(2)	Without

TSF										Complete Ordering Code
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Flow Direction



■ Please follow the direction of arrow "→" on the label to install. (As shown on the left is the standard installation.)

■ If customer requires "Vertical ↑ or ↓" installation, please contact with the manufacturer when place an order.