# MASS FLOW METERS

## With or Without LCD Display

## TSF SERIES

*±2% Accuracy*
*Linear Output*
*Thermal Technology*
*For Using in Non Corrosive Gas*
*For Flow Rates up to 1500 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, and all models come with linear 0-5 VDC and 4-20 mA output. The TSF Series measures the mass flow rate of gases in 4 ranges from 0-750 SLM to 0-1500 SLM as range table.

## Technical Data

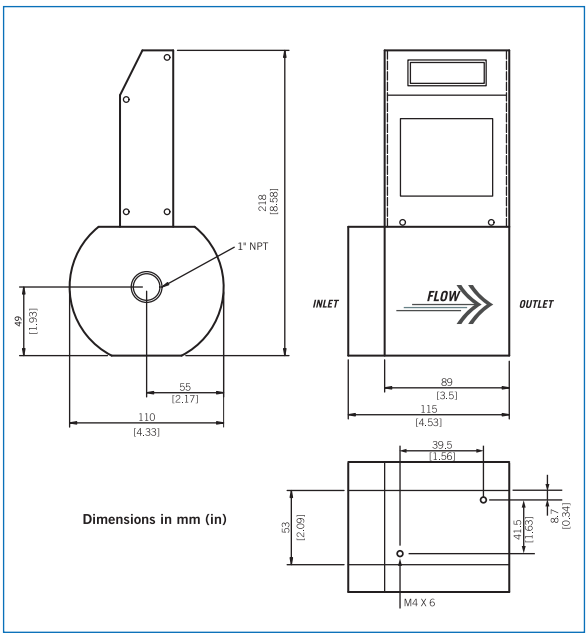
**Wetted Material:**
Standard flowbody– 316 Stainless Steel,
Option available. O-ring– Viton.
**Output Signal:** 0-5 VDC Linear min. load 1000Ω or 4-20 mA Linear, loop resistance 500Ω
**Input Power:** 24 VDC Standard, optional power supply 15 VDC 115 VAC, 220 VAC @500mA
**Accuracy:** +/- 2% F.S (including Linearity)
**Trun 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 1500 SLM
**Minimum Pressure:** 100"$H_2O$
**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
**Weight:** app. to 6.5kg with power supply

## Range Table

| Code | SLM |
|---|---|
| 00 | 0-750 |
| 01 | 0-1000 |
| 02 | 0-1250 |
| 03 | 0~1500 |
| 04 | *Custom Flow Rate |

**Note.** *Please notice that the max. flow range is 1500 SLM.

## Dimensions




## Ordering Information

| TSF | Code | Flow Range | | |
|---|---|---|---|---|
| | 00 | 0-750 SLM | 02 | 0-1250 SLM |
| | 01 | 0-1000 SLM | 03 | 0-1500 SLM |
| | 04 | *Custom size (please directly fill in the requested range.) | | |

| Code | Wetted Material |
|---|---|
| | (A) SS316 (0) Option |

| Code | Process Connection |
|---|---|
| 1 | 1" NPT (F) |

| Code | Display | | |
|---|---|---|---|
| W | With display | 0 | Without display |

| Code | Output Signal |
|---|---|
| | (1) 0-5VDC (2) 4-20 mA |

| Code | Input Power |
|---|---|
| | (1) 24VDC (2) 15VDC |

| Code | Power Supply for 24vdc |
|---|---|
| | (1) with (2) without |

TSF



WWW.NEW-FLOW.DE | Tel: +49 3682 49099 | Fax: +49 3682 49093 | E-Mail: info@mess-regel.de