### ULFC

# MASS FLOW CONTROLLERS

TIFE SERVED - Without LCD Display

- Top Electric Connection Type

±1% Accuracy Linear Output Thermal Technology For Using in Non Corrosive Gas 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 ULFC Series comes without an LCD display, and all models come with linear 0-5 VDC and 4-20 mA output. The ULFC 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 ULFC 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 souce.



Wetted Material: Standard flowbody– SS316; option available. O-ring: Viton or FFKM available 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% FS (including linearity)

Turn Down Ratio: 100:1

Repeatability: ±0.15 FS or better Electric Connection: 9 Pin Sub "D" Process Connection: ½"NPT female Control Signal: Integral or 0-5 VDC

Control Valve: Electromagnetic N/C (Norm. Closed)

Range: 0-10 SCCM to 50 SLM (24 VDC); 0-10 SCCM to 20 SLM (15 VDC)

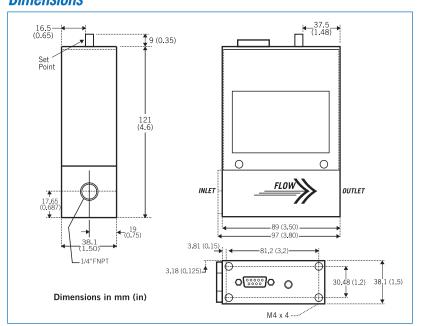
Max. Pressure: 500 psig (SS316); 250 psig (Tapcon-plastic)

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. 1.35 kg with power supply

#### **Dimensions**









#### Operating Differential Pressure

F.S ≤ 5 SLM (0.5 kg/cm²  $\sim$ 3 kg/cm²) Low differential pressure specification depend on types of gas and flow rates to be used. 5 SLM < F.S < 20 SLM (1 kg/cm²  $\sim$ 3 kg/cm²) 20 SLM < F.S < 50 SLM (2 kg/cm²  $\sim$ 3 kg/cm²)

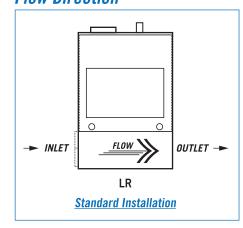
#### Range Table

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 (*Please notice that the max. flow range is 50 SLM.)							

## Ordering Information

UI	LFC	Code	Flow Range										
		00~17	Please refer	refer to the measure range table.									
		18	*Custom ra	Custom range (please directly fill in the requested range)									
			Code	Code Wetted Parts Material									
				(A) SS316									
				Code									
				1									
					Code Display								
					0	<b>0</b> Without display							
						Coc	le	e Output Signal					
								(1) 0-5 VDC	(2) 4	(2) 4-20 mA  Control Signal  Integral (manual operating by set point)  0-5 VDC (from a remote source)			
								Code	Cont				
								A	Integ				
								В	0-5 \				
									Co	de	Input Power		
												(2) 15VDC	
											Code	Power Supply for 24VDC	
												(1) With (2) Without	
												Code D.P.	
												kg/cm <sup>2</sup>	
	•	<b>+</b>			<b>+</b>		,			,		<b>1</b>	
UI	LFC												

#### Flow Direction



- Please follow the direction of arrow "→" on the label to install.

  (As shown on the left is the standard installation.)
- $\lceil$  Do NOTfloor install the controller type by "Vertical lacktriangle or lacktriangle".

