

SRK-DL Series Thermal mass Flow Meter/Flow Controller



Features

- Thermal principle, fast response, high accuracy
- Tubular shunt, not easy to block
- Suitable for various low pressures and high pressure pipelines
- Short preheating time, small zero drift, and high reliability
- Digital input/output, which can be controlled or displayed using a flow computer

Working Principle

The mass flow controller consists of a mass flow sensor, a laminar flow layering device, a flow controller regulating valve, and an amplification control circuit. It is made by using the heat transfer distribution effect of flowing fluid to change the temperature distribution of the measured capillary wall.

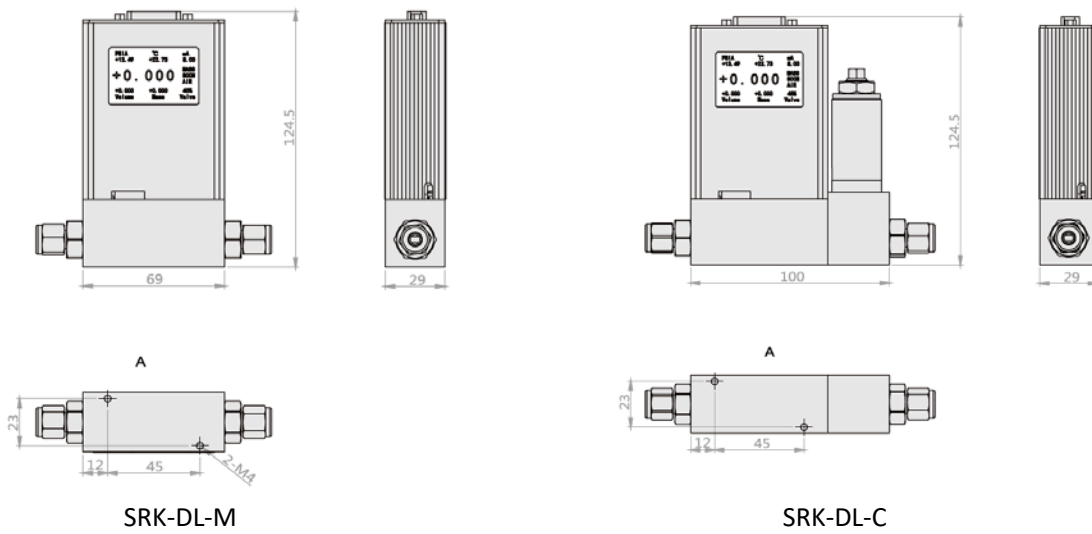
This flow controller uses the principle of differential temperature calorimetry before and after capillary heat transfer to measure the mass flow of gas, independent of temperature and pressure. Amplify the flow signal measured by the sensor, and then compare it with the set voltage. Use the difference to drive the control regulating valve, and closed-loop control the flow through the channel to make it equal to the set flow.

Technical Specification

Specification	Digital Mass flow controller	Digital Mass flow Meter
Range	2 SCCM~ 30 SL/M	
Turn Down Ratio	50:1	100:1
Accuracy	± 1% F.S	
Linearity	± 0.5% F.S	
Repeatability	± 0.2% F.S	
Response Time	< 2s	<0.8s
Communication	RS232/485.MODBUS	
Output	0~5V,4-20mA,1-5V	
Power Supply	±15VDC,24VDC	

Operation Temperature	0~50°C	
Operation Pressure	Operation DP:0.05~0.5Mpa	Operation pressure drop: <0.01Mpa
Max operation pressure	3MPa/10MPa	
Electrical Interface	DB15	
leak rate	1×10 ⁻⁹ SCCSHe	
Temperature coefficient	±0.025%F.S/°C	
Base material	Stainless steel	
Seal Material	Viton, neoprene, nitrile rubber	
Connector	Φ3,Φ6,1/8",1/4"	

Dimensions (mm)



Model Selection

	Code	Description
MARK	SRK-DL	Micro mass flow meter
Type	C	Flow Controller
	M	Flow Meter
Pressure Rating	M	3Mpa
	Z	10Mpa (SFM only)
Display	X	With display
Range	002C	2 SCCM
	200C	200 SCCM
	300C	300 SCCM
	500C	500 SCCM
	001L	1 SL/M
	002L	2 SL/M
	003L	3 SL/M
	005L	5 SL/M
	010L	10 SL/M

	020L 030L	20 SL/M 30 SL/M
Input	A0 A1 A2 A3	None 0~5V DC 4~20mA 1-5V DC
Output	B1 B2 B3	0~5V DC 4~20mA 1-5V DC
Power supply	5 4	± 15 V DC 24V DC
Communication	8 2	RS485 RS232
Sealing Material	V T N Y	Fluororubber NBR neoprene Others
Process Connection	A B F G Y	Φ3 Φ6 1/8" 1/4" Others