## **Low-cost Mass Flow Meter with Indicator**

# MODEL 3810DS II SERIES

The Model 3810DS II is a mass flow meter with a built-in display using a time-tested flow sensor. The 3810DS II displays total flow in addition to instantaneous flow, which is an improvement on the previous model 3810DS. Just like the 3810DS, the 3810DS II is also available with flow sensor and precision needle valve built into one piece.

Precision needle valve for controlling and monitoring very low flow rates

☐ Two alarm outputs for flow monitoring

 Analog output for instantaneous flow and pulse output for total flow

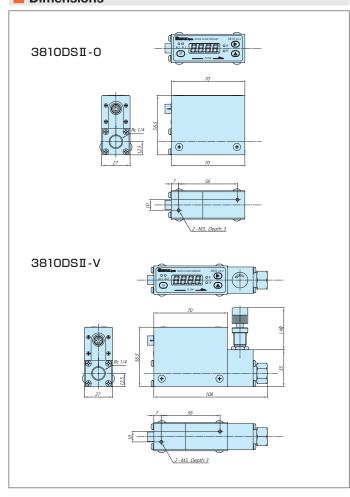
☐ Compact and lightweight

☐ The display is built in and the meter only requires connection to a 24-VDC power supply.

☐ The meter measures mass flow and directly reads the flow.

There is no need for flow correction calculations based on temperature and pressure.

### Dimensions





#### Standard Specifications

Sensor	Thermal sensor	
Flow range (N₂ equivalent, 20°C/1 atm)	10 SCCM-20 SLM	21–100 SLM
Accuracy	Within ±2% F.S. at 25°C	Within ±3% F.S. at 25°C
Operating pressure	0.0-0.5 MPa (G)	
Proof pressure	1.0 MPa (G)	
Allowable ambient temperature	0-50°C	
Allowable ambient humidity	30-80% (No condensation allowed)	
Temperature coefficient	±0.2% F.S./°C (15–35°C)	
Materials of parts in contact with gases	Body: SUS303, PTFE	
	Sealing: FKM	
	Option: Neoprene	
Connection end	RC1/4 (standard), 1/4SWL type, etc.	
Power supply	24 VDC ±5%, 100 mA (option: AC adapter)	
Flow output signal	1-5 V, 4-20 mA (Select when ordering.)	
Event output	2 × NPN open collector output Maximum rating: 30 VDC, 50 mA	

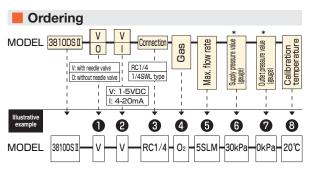
\* Cable connection

Connector: 3810DS II end: HR10A-7R-6P (Hirose Electric) Cable end: HR10A-7P-6S (Hirose Electric)

\* A conversion cable for the previous model 3810DS is available.

#### ⚠Note

Specifications relating to the flow range (e.g., flow range, accuracy and repeatability) are expressed in N₂ or air equivalent. The product will be built with the primary pressure of 300 kPa or less and the secondary side open to the atmosphere. For details on the pressure requirements, ask us.



- \* Please contact us about connection.
- \* In case of the "with precision needle valve", the supply pressure and outlet pressure values are required.
- \* Please see P55 for the cable, CP-38DSIICF and power cable, PSK-38DSII.