

GAS | Products For Gas Applications

Variable Range (VR) Mass Flow Controller

MC-700 Series



■ Outlines

- MC-700 Series: Mass flow controller equipped with 3 variable rotary switches for gas type selection and full scale adjustment

■ Features

- Equipped with Variable Range (VR) function:
VR function allows gas type and full scale range selection using "N2 default flow rate ÷ setting flow rate × conversion factor" formula, which is input by adjusting 3 rotary switches
- VR function can offer solutions to various gas type and flow rate operations and thus eliminate the need to use multiple MFCs
- Widely-used RS-485 interface equipped (Daisy-chain networks support up to 32 MFC connections)
- LINTEC's unique ambient temperature-compensated sensor incorporated
- Highly functional upon installation of microprocessor
- Diaphragm valve with small dead volume
- High-speed and high efficiency piezoelectric actuator
- Long-term leak tightness ensured using metal seal
- By using metal case and various filters, stable operation can be achieved through reduction of radio frequency noises and electromagnetic field interferences

CE RoHS

Products For
Gas Applications

MASS FLOW CONTROLLER

VR Corresponding Chart

Model		Applicable gas type	Flow rate in Nitrogen	VR value (variable)	Standard flow rate
MC-710	02	All gas types except LG	10 ~ 30SCCM	0.50 ~ 1.50	15SCCM
	03		25 ~ 100SCCM	0.50 ~ 2.00	50SCCM
	04		75 ~ 300SCCM	0.50 ~ 2.00	150SCCM
	05		0.25 ~ 1SLM	0.50 ~ 2.00	500SCCM
	06		0.75 ~ 3SLM	0.50 ~ 2.00	1.5SLM
MC-720	07		2.5 ~ 10SLM	0.50 ~ 2.00	5SLM
MC-730	08		10 ~ 30SLM	0.50 ~ 1.50	15SLM
	09		30 ~ 50SLM	0.60 ~ 1.00	30SLM

Model	MC-710	MC-720	MC-730
Flow rate in Nitrogen (Full scale)	10 ~ 3,000SCCM	~ 10SLM	~ 50SLM
Flow rate control range	2 ~ 100% F.S.		
Valve operation mode	Normally open, Normally closed		
Accuracy	±1.0% F.S.		
Repeatability	±0.2% F.S.		
Response time	1 sec		
Analog flow rate setting signal	0.1 ~ 5VDC		
Analog flow rate output signal	0.05 ~ 5VDC		
Operating differential pressure	50 ~ 300kPa	100 ~ 300kPa	150 ~ 300kPa
Withstand pressure	1MPa(G)		
Operating temperature	15 ~ 35°C 0 ~ 80% RH		
Leak integrity	1×10 ⁻¹¹ Pa · m ³ / sec He		
Materials exposed to gas	SUS316L, PCTFE, PTFE		
Seal materials	SUS316L		
Power supply requirement	+15VDC±3% 100mA, -15VDC±3% 50mA		
Mounting position	Free		
Analog connector	Dsub 9pin		
Digital interface	RJ45/RS-485		
Control valve actuator	Piezoelectric actuator		
Weight	1.0kg		