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 flow rate adjustments

■ Feature

- Rotary switch and VR function-installed units offer one to multiple device support, eliminating the need for spare parts
- Widely-used RS-485 interface equipped (Daisy-chain networks support up to 32 MFC connections)
- LINTEC's original 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 acheived through reduction of radio frequency noises and electromagnetic field interferences

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	VR Corresponding Chart				
Model	VR No.	Applicable gas type	Flow rate in Nitrogen	VR value (variable)	Standard flow rate
MC-710	02	All gas types in general	10~30SCCM	0.50 ~ 1.50	15SCCM
	03	All gas types in general	25 ~ 100SCCM	$0.50 \sim 2.00$	50SCCM
	04	All gas types in general	75 ~ 300SCCM	$0.50 \sim 2.00$	150SCCM
	05	All gas types in general	0.25 ~ 1SLM	0.50 ~ 2.00	500SCCM
	06	All gas types in general	0.75 ~ 3SLM	0.50 ~ 2.00	1.5SLM
MC-720	07	All gas types in general	2.5 ~ 10SLM	$0.50 \sim 2.00$	5SLM
MC-730	08	All gas types in general	10 ~ 30SLM	0.50 ~ 1.50	15SLM
	09	All gas types in general	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⋅m³/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 interfaces	RJ45/RS-485				
Control valve actuator	Piezoelectric actuator				
Weight	1.0kg				

