

Low Cost Analog Mass Flow Controller

MC-1000L Series



■ Outlines

- MC-1000L Series: Low cost of MFC ownership possible with elastomer seal attached

■ Features

- Elastomer seal
- Fast-acting solenoid actuator incorporated
- By using metal case and various filters, stable operation can be achieved through reduction of radio frequency noises and electromagnetic field interferences

CE RoHS

Low Differential Pressure Mass Flow Controller

MC-3000S Series



■ Outlines

- MC-3000S Series: Mass flow controller equipped with LINTEC's original low pressure differential device to operate at low differential pressure environmental

■ Features

- Low pressure differential device
- RS-485 digital interface
- LINTEC's original ambient temperature-compensated sensor incorporated
- Highly functional upon installation of microprocessor
- Diaphragm valve with small dead volume
- High-speed and high performance 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

CE RoHS

High Temperature Mass Flow Controller

MC-3000L-TC Series



■ Outlines

- MC-3000L-TC Series: Mass flow controller with maximum operating temperature up to 120°C

■ Features

- Maximum operating temperature of 120°C
- RS-485 digital interface
- LINTEC's original ambient temperature-compensated sensor incorporated
- Highly functional upon installation of microprocessor
- Diaphragm valve with small dead volume
- High-speed and high performance 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

RoHS

Model		MC-1102L-RC	MC-1202L-RC	MC-1252L-RC
Flow rate in Nitrogen (Full scale)		10 ~ 5,000SCCM	6 ~ 30SLM	31 ~ 50SLM
Flow rate control range		2 ~ 100% F.S.		
Valve operation mode		Normally closed		
Accuracy		±1.0% F.S.		±2.0% F.S.
Repeatability		±0.2% F.S.		
Response time		1 sec		
Analog flow rate setting signal		0 ~ 5VDC		
Analog flow rate output signal		0 ~ 5VDC		
Operating differential pressure		50 ~ 300kPa	100 ~ 300kPa	200 ~ 300kPa
Withstand pressure		1MPa(G)		
Temperature	Zero	±0.1% F.S. / °C		
coefficient	Span	±0.1% F.S. / °C		
Operating temperature		5 ~ 50°C 40 ~ 70% RH		
Leak integrity		1×10 ⁻⁷ Pa・m ³ / sec He		
Materials exposed to gas		SUS316L, Magnetic stainless steel, PTFE		
Seal materials		Fluororubber or Polychloroprene		
Power supply requirement		+15VDC±3% 25mA, -15VDC±3% 180mA		
Mounting position		Free		
Analog connector		Dsub 9pin		
Control valve actuator		Solenoid actuator		
Weight		1.2kg		

Model	MC-3102S		
Flow rate in Nitrogen (Full scale)	2 ~ 10SCCM	20SCCM	30SCCM
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	2 sec		
Analog flow rate setting signal	0 ~ 5VDC		
Analog flow rate output signal	0 ~ 5VDC		
Operating differential pressure	8×10 ² Pa ~ 1.33×10 ⁵ Pa	1.07×10 ³ Pa ~ 1.33×10 ⁵ Pa	1.33×10 ³ Pa ~ 1.33×10 ⁵ Pa
Withstand pressure	1MPa(G)		
Temperature	Zero	±0.02% F.S. / °C	
coefficient	Span	±0.02% F.S. / °C	±0.04% F.S. / °C
Operating temperature	5 ~ 50°C 0 ~ 80% RH		
Leak integrity	1×10 ⁻¹¹ Pa · m ³ / sec He		
Materials exposed to gas	SUS316L, SUS304, PCTFE		
Seal materials	Au		
Power supply requirement	+15VDC±3% 100mA, -15VDC±3% 50mA		
Mounting position	Specified upon placement of order		
Analog connector	Dsub 9pin		
Digital interfaces	RJ45/RS-485		
Control valve actuator	Piezoelectric actuator		
Weight	1.0kg		

Model	MC-3102L-TC-L	MC-3102L-TC-H
Flow rate in Nitrogen (Full scale)	10 ~ 5,000SCCM	
Flow rate control range	2 ~ 100% F.S.	
Valve operation mode	Normally closed	
Accuracy	±1.0% F.S.	
Repeatability	±0.2% F.S.	
Response time	1 sec	
Analog flow rate setting signal	0 ~ 5VDC	
Analog flow rate output signal	0 ~ 5VDC	
Operating differential pressure	50 ~ 300kPa	
Withstand pressure	1MPa(G)	
Operating temperature	80 ~ 100°C 0 ~ 80% RH	100 ~ 120°C 0 ~ 80% RH
Bake temperature	150°C	
Leak integrity	1×10 ⁻¹¹ Pa · m ³ / sec He	
Materials exposed to gas	SUS316L, PCTFE	
Seal materials	Au	
Power supply requirement	+15VDC±3% 100mA, -15VDC±3% 200mA	
Mounting position	Free	
Analog connector	Dsub 9pin	
Digital interface	RJ45/RS-485	
Control valve actuator	Solenoid actuator	
Weight	1.2kg	