

EtherCAT Mass Flow Controller MC-5000C Series



■ Outlines

- MC-5000C Series: EtherCAT-dedicated mass flow controller

■ Features

- EtherCAT digital interface in accordance with SEMI E54.20-1108
- LINTEC's own 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

Model	MC-5100C	MC-5200C	MC-5250C	MC-5450C	MC-5460C	MC-5470C	MC-5580C
Flow rate in Nitrogen (Full scale)	10 ~ 5,000SCCM	5.1 ~ 10SLM	11 ~ 50SLM	50SLM	100, 150SLM	200SLM	300SLM
Flow rate control range	2 ~ 100% F.S.						
Valve operation mode	Normally open, Normally closed			Normally closed			
Accuracy	100% F.S. ~ 25% F.S. ±1.0% S.P. 25% F.S. ~ 2% F.S. ±0.25% F.S.			100% F.S. ~ 35%FS. ±1.0% S.P. 35% F.S. ~ 2% F.S. ±0.35% F.S.		±1.0% F.S.	±2.0% F.S.
Repeatability	±0.2% F.S.			±0.5% F.S.			
Response time	1 sec						
Operating differential pressure	50 ~ 300kPa	100 ~ 300kPa	150 ~ 300kPa	150 ~ 500kPa	250 ~ 500kPa	350 ~ 500kPa	
Withstand pressure	1MPa(G)						
Temperature coefficient	Zero	±0.02% F.S. / °C			±0.1% F.S. / °C		
	Span	±0.02% F.S. / °C	±0.04% F.S. / °C	±0.08% F.S. / °C	±0.1% F.S. / °C		
Operating temperature	15 ~ 35°C 0 ~ 80% RH			10 ~ 40°C 0 ~ 80% RH			
Leak integrity	1×10 ⁻¹¹ Pa·m ³ /sec He			1×10 ⁻⁸ Pa·m ³ /sec He			
Materials exposed to gas	SUS316L, PCTFE, PTFE			SUS316L, SUS304, Teflon®			
Seal materials	Au			Au, Viton®			
Power supply requirement	24VDC (350mA) ±3%			24VDC (350mA) ±10%			
Mounting position	Free						
Digital interfaces	EtherCAT®						
Control valve actuator	Piezoelectric actuator						
Weight	1.0kg			1.4kg		2.4kg	