

Panel-Mount Mass Flow Controller | MPC Series



Panel-mount mass flow controllers in the MPC series combine our proprietary ultra high-speed Micro Flow sensor with a compact proportioning solenoid valve, a new flow channel structure, and advanced actuator control technology. Controllers can be installed on the front of a panel.



Specifications

Model No.	MPC9500	MPC0002	MPC0005	MPC0020
Standard full-scale flow rate*1	0.500 L/min (standard)	2.00 L/min (standard)	5.00 L/min (standard)	20.0 L/min (standard)
Gas type	Air/nitrogen (N ₂), argon (Ar), carbon dioxide (CO ₂)			
Response	1 s max. for setting ±2% FS (typ.)			
Accuracy*2 (at standard temperature and differential pressure, Q: flow rate)	±2% FS			
Standard differential pressure*3	200 kPa		50 to 300 kPa	
Operating differential pressure range	300 kPa or less		50 to 300 kPa	
Allowable inlet pressure	0.5 MPa (gauge)			
Rated power supply voltage	24 Vdc, current consumption: 300 mA max.			
Weight	Approx. 300 g			

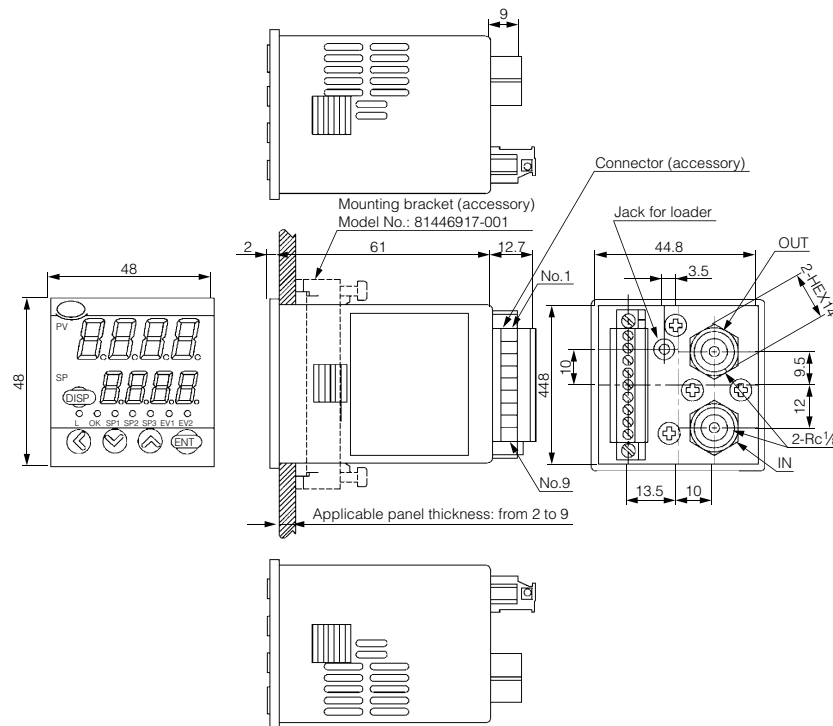
*1. "L/min (standard)" indicates a value converted to volumetric flow per minute at 20 °C and 101.325 kPa (1 atmosphere). Values are for full-scale flow rate of air/nitrogen. Note that the controllable flow rate range varies depending on the gas type.

*2. Accuracy is for air and nitrogen.

*3. This is the differential pressure during calibration.

External dimensions

(Unit: mm)



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Model No. configuration

Ex.: MPC0020BBRN010000

Basic model No.	Range	Model	Channel material	Connection method	Gas type	Spare part	Option 1	Option 2	Option 3	Option 4	Appended No.	Description	
MPC												MPC panel-mount mass flow controller	
	9500											0.020 to 0.500 L/min (standard)* ¹	
	0002											0.08 to 2.00 L/min (standard)* ¹	
	0005											0.10 to 5.00 L/min (standard)* ¹	
	0020											0.4 to 20.0 L/min (standard)* ¹	
		B										Integrated display	
			B									Brass (with nickel plating)	
				R								1/8 Rc	
					N							Air/nitrogen, argon, and carbon dioxide* ²	
						0						None	
							0					Event output	
								1				Analog input/output and event output	
									2			RS-485 (CPL) communications and event output* ³	
										0		None	
											0	None	
											D	Inspection results	
											Y	Traceability certificate	
												0	Product version

*1. "L/min (standard)" indicates a value converted to volumetric air flow rate at 20 °C and 101.325 kPa. The reference temperature can be changed to 0 °C, 25 °C or 35 °C. Also, note that the flow rate range differs depending on the gas type.

*2. Factory-set to air/nitrogen, but gas type setting can be changed to argon or carbon dioxide (CO₂).

*3. The analog input/output function is not available.

Control flow rate range and setting/display resolution

Note: The control flow rate range of this product varies depending on the type of gas used. When selecting a model, refer also to the table below.

Model No.	MPC9500	MPC0002	MPC0005	MPC0020
Gas type	[L/min (standard)]			
Air/nitrogen	0.020 to 0.500	0.08 to 2.00	0.10 to 5.00	0.4 to 20.0
Argon	0.020 to 0.500	0.08 to 2.00	0.10 to 5.00	0.4 to 20.0
Carbon dioxide gas	0.012 to 0.300	0.040 to 1.200	0.06 to 3.00	0.3 to 16.0

Optional parts (sold separately)

Name	Model No.
Case set	81446927-001
Mounting bracket	81446917-001
Loader package (with CD-ROM and dedicated cable)	MLP200A100

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