Yamatake Corporation changed its name to Azbil Corporation on April 1, 2012.

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Note 1 (Standard): Indicates the volume flowrate (L/min) per minute converted at 20°C, 1 atmosphere (1 atm) and 760 mmHg. The reference temperature can be changed to 0°C, 25°C and 35°C.

Note 2: The air/nitrogen is set as a factory setting. This controller can also be used for argon and carbon dioxide.

Note 3: Analog setting input function is not applied.

■ External dimensions [Units (mm)]

- Body

- MPC dedicated case set (Part No. 81446927-001)

- Example of wiring

Please read the "Terms and Conditions" from the following URL before ordering or use:
http://www.azbil.com/products/bl/order.html

Azbil Corporation
Advanced Automation Company
Semenity Corporation changed its name to Azbil Corporation on April 1, 2012.

1-12-2 Kawanaz, Fujisawa
Kawasaki-ku 214-8522 Japan
URL: http://www.azbil.com

1st Edition: Issued in Mar., 2003-MO
4th Edition: Issued in Nov., 2012-AZ

Panel Mount Mass Flow Controller

Advanced Flow Control Possible with the Panel Mounting Type Controller

Small and Light mass flow controller

Compact (front panel: 48x48mm, depth: 73.7mm) and light (300g) panel mounting body contains a built-in miniature proportioning valve, enabling full-automatized flow control.

Easy operation and easy mounting

Easy operation and easy mounting even for the purgemeter users. Once you set the flowrate set point, all the operations are automatically done by the MPC. External set point change (from PLC or host systems) is easy, using optional analog setting input function or communication function (RS-485).

24V DC drive

The 24V DC drive for the mass flow controller is already common.

Azbil's original µF (Micro Flow) sensor

High speed (1s), high accuracy (2%FS) flow control unaffected by pressure and temperature fluctuations.

Variety of functions available as a standard

Variety of functions responding user demands offers total equipment cost reduction.

The MPC meets such user demands as follows:

- Numerical flowrate control is required.
- The purgometer problem, the measurement error caused by conditional difference between equipment design and field is required to be solved.
- Flowrate control is required, but high cost, complicated instrumentation or difficult operation is unacceptable.
- Purgemeters are required to be replaced with mass flow controllers, but drastic design change such as mounting locations or piping layout is impossible.

Solution for purgometer problems:

Pressure and temperature compensation is inevitable for the purgemeers. Moreover, the scale reading requires being converted using the formula when conditions in use are different from conditions under design, in gas specific gravity or secondary back pressure. The MPC controls mass flowrate, releasing from such onerous process.
### Slow start function

Operation mode switching

Multi set point function

Gas type switching

Operation mode

Slow start function

Flow rate integration

Standard of support for the inhalation flow

Automatic shut-off function

### Channel structure and measurement principle of μF sensor

- **Channel structure**
  - High-speed control
  - Easy pipe connections and electrical wiring

### Variety of functions offering equipment cost reduction

- **Control start and integration reset**
- **Alarm output**
- **Event output**
- **Display resolution**
- **Indication accuracy**
- **Setup resolution**

### Product Specification List

- **Model No.**
  - MPC0000
  - MPC0002
  - MPC0005
  - MPC0020

### Control flowrate range table

- **Model No.**
  - MPC0000
  - MPC0002
  - MPC0005
  - MPC0020

### Relationship between flowrate when valve is fully open and differential pressure (in case of air)

- **Model No.**
  - MPC0000
  - MPC0002
  - MPC0005
  - MPC0020