

## DPFC/DPFM Series

### Differential Pressure High Flow Controller

The mass flow measurement and the control are achieved by measuring the minute differential pressure caused in the fluid conduit.

#### Feature

1. It is not possible miniaturization with large flow for the current turbulence as the laminar flow thermal type unit in the market. Turbulent flow with different pressure is measured so the passage diameter is small and the flow passage is short.
2. Flow controller is low pressure loss. With minute differential pressure measurement, equality to most piping resistance

#### Objects of flow Controller

- \* Object of gas flow: Pressure
- \* Flow : DPFC-250 100SLM~500SLM,  
DPFC-500 1000SLM~5000SLM、
- \* Pressure : Atmospheric pressure~0.99 MPa
- \* Standard calibration pressure: 0.2MPa、 0.5MPa
- \* Object of gas: N<sub>2</sub>, Air, H<sub>2</sub>, CH<sub>4</sub>, Ar, CO<sub>2</sub> and Hydrogen (Max 1000 SLM)



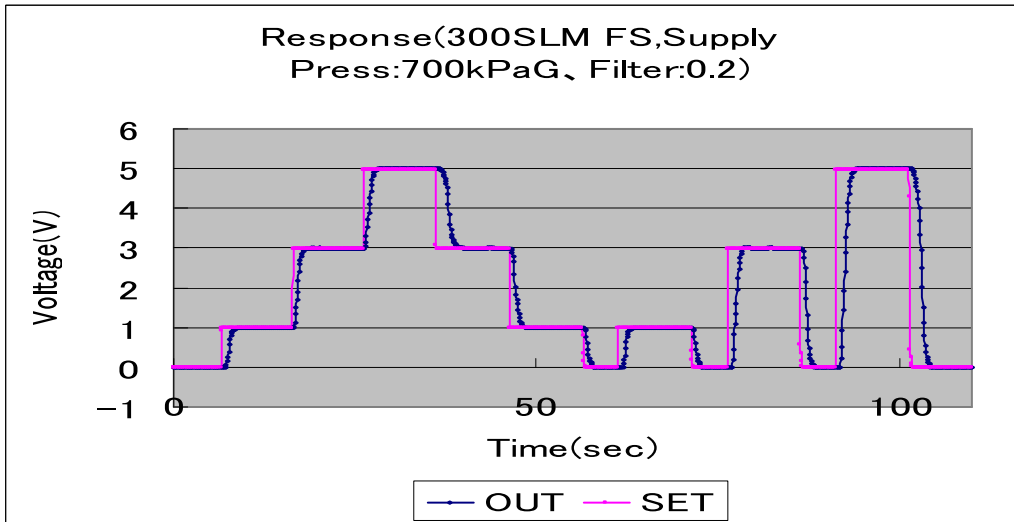
#### Specifications

	DPFC-250	DPFC-500
Object of gas	N <sub>2</sub> , Ar, Air, H <sub>2</sub> (Please consult other issues)	
Flow full scale	100, 200, 300, 500 SLM	1000, 2000, 3000 SLM
Supply (inlet) pressure	0.4 - 0.7 MPaG	
Supply (outlet) pressure	0.2 Mpa based on supplying pressure	0.3 Mpa based on supplying pressure
Downstream (outlet) pressure	10-100% FS	
Flow control accuracy (guarantee range)	Within +/- 3% FS	
Flow rate accuracy	Within +/- 0.5 % FS	
Repeatability		
Cut	Vis-a-vis the setting valve of 2% or less, the control valve closes	
Operation temperature range	0-50 °C (accuracy guarantee range: 10-40°C)	
Response	To setting value 2 seconds (Typical value)	
Connection	1/2 inch SWL	1 inch SWL
Pressure	0.99 MPaG	
Power-supply voltage	DC 24 V=/ $\pm$ 10% 200 mA	
External input		
* C/C	Close: Control, Open: C bse	
* Flow control signal	'0-5V DC 4-20 mA is available	
External output		
* Alarm signal	Connecting signal NC	
* Flow control outlet signal	0-5V DC 4-20 mA is available	
Air supply pressure for valve drive	0.4-0.6 MPaG	
Air supply connection	$\phi$ 4 mm one touch fitting	

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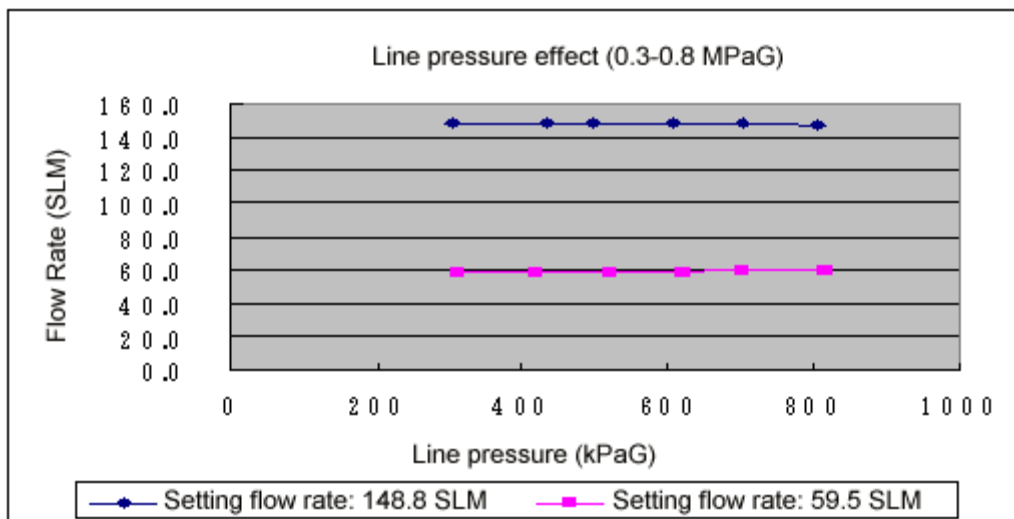
#### Response



**The response speed: A set value is within two seconds.**

**Noise Level: 0.2% FS**

#### Line Pressure effect



**Line effect**  
Within a 0.3% FS variation

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