

SPECIFICATIONS

Test Conditions: $V_{in}=5\pm0.01VDC$, $T_a=22^{\circ}C$.					
SPECIFICATIONS	MIN	TYP	MAX	UNIT	CONDITIONS
PMF82010		10		SLM	
Output Count (Digital)	6553 to 58981			count	
Null Count (Digital)	5898		7208	count	
Output (Analog)	0.5 to 4.5			VDC	
Null Output (Analog)	0.45		0.55	VDC	
Flow Repeatability		0.5		% F.S.	
Accuracy		1%		F.S.	0 to 25% F.S.
		4%		Reading	25% to 100% F.S.
Flow Response Time ²		9		ms	
Warm Up Time			5	sec	
Over Pressure	30			psi	
Operating Temperature	-25		65	°C	
Supply Voltage		5		VDC	We recommend using 1% voltage regulator
Supply Current		20		mA	at 5 VDC supply
Wetted Materials	Nylon, Parylene, and Silicone for Sealing				

Notes:

1. SLM: standard liter per minute. Standard conditions: 0 °C and 1 atmosphere. Also known as NLPM (nominal liter per minute).
2. 10% to 90% rise time of the flow sensor to electrically respond to any mass flow change. May be affected by the pneumatic interface.

OUTPUT DESCRIPTION

For **PMF82000 Analog Output**

Flow Rate = $[(V_{out} - 0.5 \text{ V}) / 4 \text{ V}] \times \text{Full Scale Flow Rate}$

For example, for PMF82010 full scale flow rate is 10 SLM. When Vout reads 3.5 V, the Flow Rate is: $[(3.5 \text{ V} - 0.5 \text{ V}) / 4 \text{ V} \times 10 \text{ SLM}] = 7.5 \text{ SLM}$

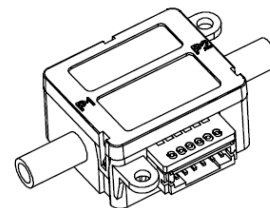
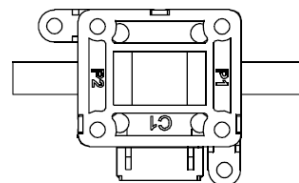
For **PMF82000 Digital Output**

Flow Rate = $[(\text{Count} - 6553) / 52428] \times \text{Full Scale Flow Rate}$

For example, for PMF83010 full scale rate is 10 SLM. When digital output reads 30000, the Flow Rate is:

$[(10000 - 6553) / 52428 \times 10 \text{ SLM}] = 4.472 \text{ SLM}$

*Contact Posifa for I²C Communication app note.



Pin#	Description
1	Vdd
2	GND
3	Out
4	SDA
5	SCL
6	N/C

2. Mating connector is JST S6B-PH-SM4-TB or equivalent.

ORDERING INFORMATION

PART NUMBER	SPECIFICATIONS
PMF82010	10 SLM, voltge and digital I2C output, Linear