### FM Series Laboratory Flowmeters



- ➤ Robust metal/plastic construction
- ➤ Sintered inlet filter
- ➤ Serviceable
- > Assembled in Australia

#### Applications:

- For general use in non-corrosive gas applications
- Supply regulator for reticulation systems

Gascon Systems produce a range of laboratory flowmeters which are intended for use with non-corrosive gases. They are constructed of nickel-plated brass and polycarbonate which makes them very robust and able to handle rough treatment. The horizontal inlet and vertically downwards outlet make them idea for connecting to pressure regulators or laboratory wall outlets. These flowmeters are a cost-effective alternative to traditional glass tube models.

There are three flow ranges, low, medium and high flow. The flowmeters are calibrated at atmospheric pressure and thus do not require a specific inlet to be accurate. A range of standard scales are available for commonly used gases (refer separate sheet). Scales for other gases or gases mixtures can be produced on request. The standard outlet is ½" BSP and comes with a plastic hose bard nipple. A range of outlet adaptors are available to suit individual specific needs.

#### Specifications:

Flow Calibrated at: 101.3 kPa abs @ 20°

Max. Inlet Pressure: 800 kPa

Accuracy:  $\pm 7.5\%$  of full scale (FM1)

± 5% of full scale (FM2 & FM3)

Inlet Connection: as per ordering information

Outlet connections: 1/4" BSP with plastic hose barb nipple

(a range of outlet adaptors are available)

Scales Length: 80mm approx.

Weight: 0.3 kg

#### Materials:

**Body:** Nickel plated brass **Shroud:** Polycarbonate **Flowtube:** Polycarbonate

Float: Stainless steel or polypropylene

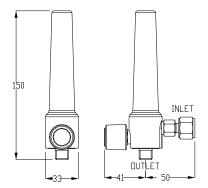
Seals: Nitrile

#### ORDERING INFORMATION FMX - XXX - XXX - XXXX - XXXX

Model		Gas			Inlet Fitting	Outlet Fitting		
FM1	Laboratory Flowmeter	AIR	Air	2F	1/8" NPT female #1	1	1/4"BSP with barbed nipple	
	low flow range	AR	Argon	2M	1/8" NPT male	2S	1/8" tube compression	
FM2	Laboratory Flowmeter	CO2	Carbon Dioxide	4M	1/4" NPT male	4S	1/4"tube compression	
	medium flow range	CO	Carbon Monoxide	4STA	1/4" tube stem	4PF	4mm push fit tube	
FM3	Laboratory Flowmeter	HE	Helium	14BSP	1/4" BSP nut/nipple	6PF	6mm push fit tube	
	high flow range	H2	Hydrogen	58R	5/8"-18UN RH nut/nipple	8PF	8mm push fit tube	
		CH4	Methane	58L	5/8"-18UN LH nut/nipple	Luer	LuerLok fitting	
	N2 Nitrogen			Others	by Description	Others by Description		
		N2O	Nitrous Oxide					
		OXY	Oxygen					
Others by Description								

#### Ordering examples

FM2-CO2-14BSP Flowmeter for carbon dioxide with a scale range of 0.5 – 5 l/min with a 1/4"BSP inlet nut/nipple connection and standard outlet fitting





## **FM1 Low Flow Flowmeter Scales**

<b>—1.5</b> —	<u>—1.25 —</u>	— 1.25 —	<b>—1.5</b> —	<b>-4.0</b> -	-6.0-	-2.0-	<b>—1.5</b> —	<u>—1.25 —</u>	<b>—1.5</b> —
—1.25 —	<b>—1.0</b> —	<b>—1.0</b> —	<del></del> 1.25 <del></del>	— 3.5 —	— 5.5 — — <b>5.0</b> —	— 1.75 —	—1.25 —	<b>—1.0</b> —	—1.25 —
<b>—1.0</b> —	—1.0 <i>—</i>	1.0	-1.0-	<b>—3.0—</b>	— 4.5 —	<b>—1.5</b> —	<b>—1.0</b> —	10	<b>—1.0</b> —
— 0.75 —	— 0.75 —	— 0.75 —	<b>—</b> 0.75 <b>—</b>	— 2.5 —	—4.0— — 3.5 —	— 1.25 —	<b>—</b> 0.75 <b>—</b>	<b>—</b> 0.75 <b>—</b>	<b>—</b> 0.75 <b>—</b>
— 0.7 <b>3</b> —			—0.75 —	<b>—2.0—</b>	<b>-3.0</b> -	-1.0-	0.10		0.70
_0.5_	<b>—0.5</b> —	-0.5-	-0.5-	— 1.5 —	— 2.5 —		-0.5-	-0.5-	-0.5-
0.5			0.5	-1.0-	-2.0-	— 0.75 —	0.0		
— 0.25 —	— 0.25 —	<b>—</b> 0.25 <b>—</b>	— 0.25 —		— 1.5 —	-0.5-	— 0.25 —	<b>—</b> 0.25 <b>—</b>	— 0.25 —
				— 0.5 —	<b>—1.0—</b>	— 0.25 —			
l/min	l/min	l/min	l/min	l/min	l/min	l/min	l/min	l/min	l/min
→●←	<b>→●←</b>	→•←	→•←	→●←	→•←	→●←	<b>→●←</b>	→●←	<b>→●←</b>
AIR	ARGON	GARBON	CARBON MONOXIDE	HELIUM	HYDROGEN	METHANE	NITROGEN	NITROUS OXIDE	OXYGEN

# FM2 Medium Flow Flowmeter Scales

l/min	l/min	l/min	l/min	l/min	I/min	I/min	I/min	l/min	l/min
-6- -5- -4- -3-	_5_ _4_ _3_ _2_	-5- -4- -3- -2-	-6- -5- -4- -3-	-16- -14- -12- -10- -8- -6-	—24— —22— —20— —18— —14— —12— —10— —8—	-8- -7- -6- -5- -4- -3-	-6- -5- -4- -3-	-5- -4- -3- -2-	-6- -5- -4- -3-
_1_	<b>—1—</b>			- 4 - - 2 -	- 6 - - 4 - - 2 -			—1— ——	
→●← AIR	→ <b>O</b> ← ARGON	CARBON DIOXIDE	CARBON MONOXIDE	→ ● ← HELIUM	HYDROGEN	METHANE	NITROGEN	NITROUS OXIDE	OXYGEN

### FM3 High Flow Flowmeter Scales

