

# M1-XXX-FG(H) Adjustable Flow Regulator

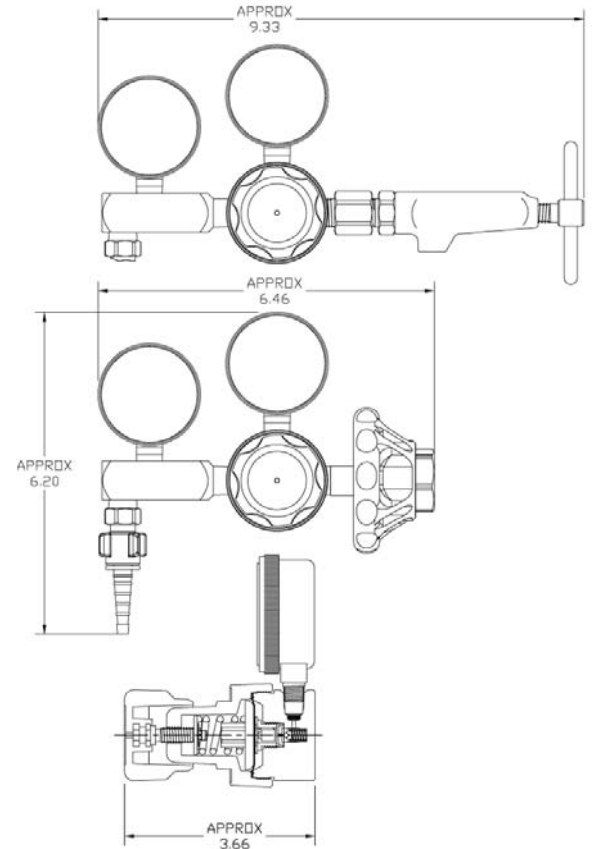
## Single Stage, Pressure Regulator



G A S C O N T R O L T E C H N O L O G Y

### MATERIALS OF CONSTRUCTION

DESCRIPTION	Wetted Component	DESCRIPTION
Body	Y	UNS C36000 Brass – Nickel Plated
Bonnet	N	Chrome Plated Zinc
Diaphragm	Y	Fairprene ND-0012
Safety O-ring	Y	Neoprene – 70 Duro
Safety Components	Y	UNS C36000 Brass
Filters	Y	Sintered Porous Bronze, Grades 53 & 68HP
Gauges	Y	Copper Alloy (Brass)
Seats	Y	PCTFE (Neoflon)
Seat Holders	Y	UNS C36000 Brass
Bushings	Y	UNS C36000 Brass
Plungers	Y	UNS S30200 SST
Anti-vibrator	Y	Brass
Valve Spring	Y	UNS S17700 SST
Valve	Y	UNS C36000 Brass
Valve Ball	Y	UNS S44000 SST
Inlet Nipples	Y	UNS C36000 Brass – Chrome Plated
Hand Tight Tips	Y	PCTFE
Hand Tight Washer	Y	DuPont® Zytel 101P
Lubricant	Y	Krytox GPL-206
Pivots	N	Zinc Plated Steel
Delivery and Safety Springs	N	Zinc Plated Music Wire
Adjusting Knob	N	ABS Plastic
Adjusting Screw	N	UNS C36000 Brass
Diaphragm Back-up Plate	N	Zinc Plated Cold Rolled Steel



### PHYSICAL CHARACTERISTICS

- Dimensions: 7.32" Wide x 6.63" Tall x 3.5" Deep
  - Three ¼ - 18 NPT Ports
    - ¼ - 18 NPT Inlet Port @ 0°
    - ¼ - 18 NPT HP Gauge Port @ 90°
    - ¼ - 18 NPT LP Outlet Port @ 180°
  - 20 – 30 µ Filtration in HP Ports
- Available (Non-Yoke) CGA Inlet / Outlet Connections

Gas	O <sub>2</sub>					
Model	M1-540-5FG(H)	M1-540-8FG(H)	M1-540-15FG(H)	M1-870-5FG	M1-870-8FG	M1-870-15FG
Inlet (CGA)	540			870		
Flow Rates (LPM)	0-5	1-8	2-15	0-5	1-8	2-15
Outlet (DISS)	1240					

- 2" Inlet Pressure Gauge, Range: 0-4000 psig
- 2" Outlet Pressure Gauge, Range: See flow rate table above

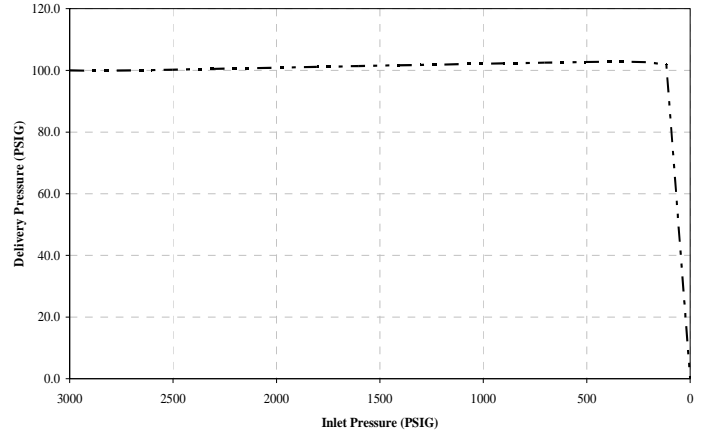
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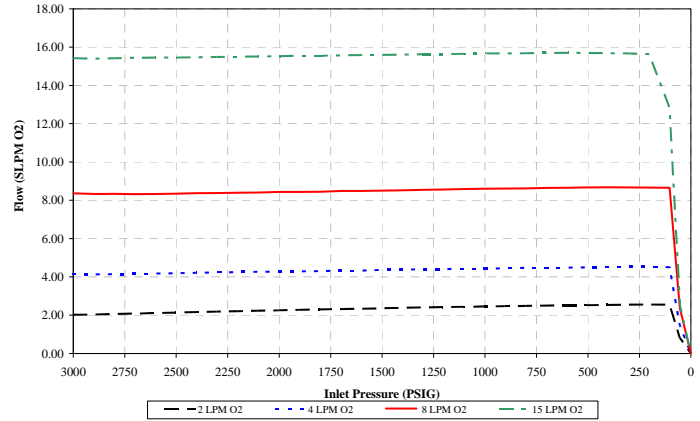
G A S C O N T R O L T E C H N O L O G Y

### Pressure Regulation



### Flow Decay

Western MI-XXX-15FG

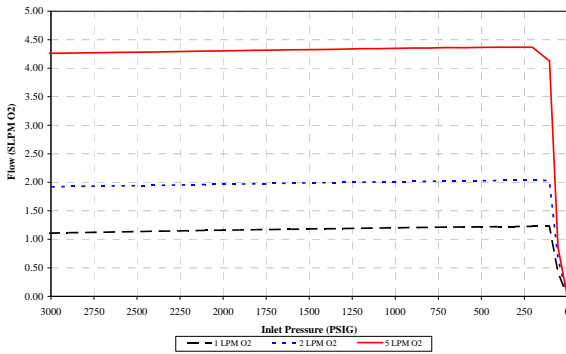


### PERFORMANCE SPECIFICATIONS

- Maximum Rated Inlet Pressure: 3000 psig
- Operating Temperature Range: 0°F to 120°F (-18°C to 49°C)
- Storage Temperature Range: -40°F to 140°F (-40°C – 60°C)
- Overall External Leak Rate: Bubble Tight
- Safety Relief Pressure: 150 – 195 psig  
Relief Valve Cv @ 2Prv (~ 360 psig): 0.22
- Pressure Regulation Coefficient (i): 0.10

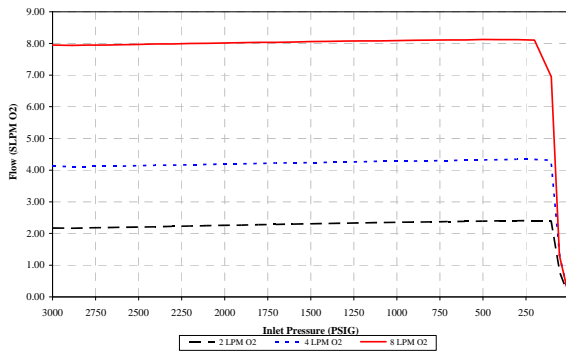
### Flow Decay

Western MI-XXX-5FG



### Flow Decay

Western MI-XXX-8FG



### Flow Accuracy Specifications

Model	M1-XXX-5FG		Model	M1-XXX-8FG		Model	M1-XXX-15FG	
Flow Setting	Allowable Flow (LPM O2)		Flow Setting	Allowable Flow (LPM O2)		Flow Setting	Allowable Flow (LPM O2)	
LPM O2	Min	Max	LPM O2	Min	Max	LPM O2	Min	Max
1	0.7	1.3	2	1.7	2.3	2	0.7	1.3
2	1.7	2.3	4	3.5	4.5	4	3.5	4.5
3	2.7	3.3	6	5.4	6.6	6	5.5	6.5
5	4.5	5.5	8	7.2	8.8	8	7.0	9.0
FLOOD		6.5	FLOOD		9.5	12	10.8	13.2
						15	13.5	16.5
						FLOOD		17.5

**Western reserves the right to make design changes without prior notice.**

For more technical information or assistance in ordering please contact  
Western Customer Service at 1.800.783.7890 or 440.871.2160.