

**M1(A)-XXX-
P(H)
Preset Regulator**

**Single Stage, Non-
Yoke Preset
Pressure Regulator**

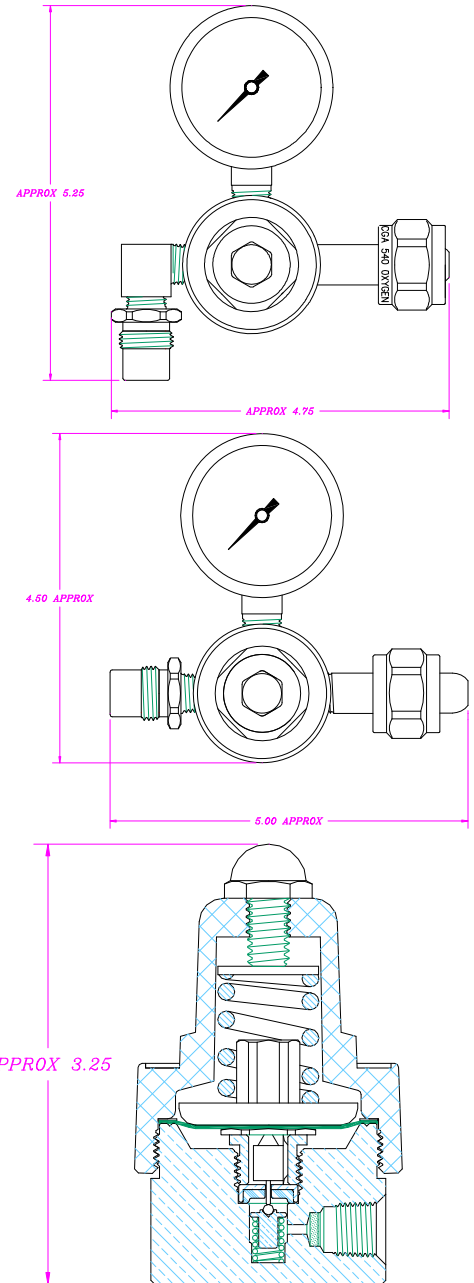


GAS CONTROL TECHNOLOGY

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
Diaphragm and Safety Components	Y	UNS C36000 Brass
Slip Ring	N	Mylar
Diaphragm Back-up Plate	N	Zinc Plated Cold Rolled Steel
Filters	Y	Electroless Ni Plated, Sintered Porous Bronze
Gauge	Y	Copper Alloy (Brass)
Seat	Y	PCTFE (Neoflon) or PEEK*
Seat Holders and Bushing	Y	UNS C36000 Brass
Valve and Plunger	Y	UNS C36000 Brass
Anti-vibrator	Y	UNS S30100 SST
Valve Spring	Y	UNS S17700 SST
Valve Ball	Y	UNS S44000 SST
Inlet and Outlet Fittings	Y	UNS C36000 Brass - Chrome Plated
Hand Tight Tips	Y	PCTFE
Hand Tight Washer	Y	Dupont PA 101P (for CO ₂)
Lubricant	Y	Krytox GPL-206
Pivots	N	Zinc Plated Steel
Delivery and Safety Springs	N	Zinc Plated Music Wire
Set Screw	N	Black Oxide Coated Steel

* PEEK Seat for CO₂ and N₂O regulator applications only.



PHYSICAL CHARACTERISTICS

- Approx Dimensions: 5" Wide x 4.5" Tall x 3.25" 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 - 30µ Filtration in HP Ports
- 30 - 45µ Filtration in non-hand tight nipples (140µ Nominal for CO₂)
- Weight: Approx 2 lbs. 2 ozs.
- Available CGA Inlet / Outlet (DISS) Connections

Gas	CO2	N2O	Air	Mixed	O2	N2
Inlet (CGA)	320	326	346	500	540	580
Outlet (DISS)	1080-A	1040-A	1160-A	1020	1240	1120-A

- 2" Inlet Pressure Gauge, Range: 0-4000 psig (0 – 2000 psig for N₂O models)

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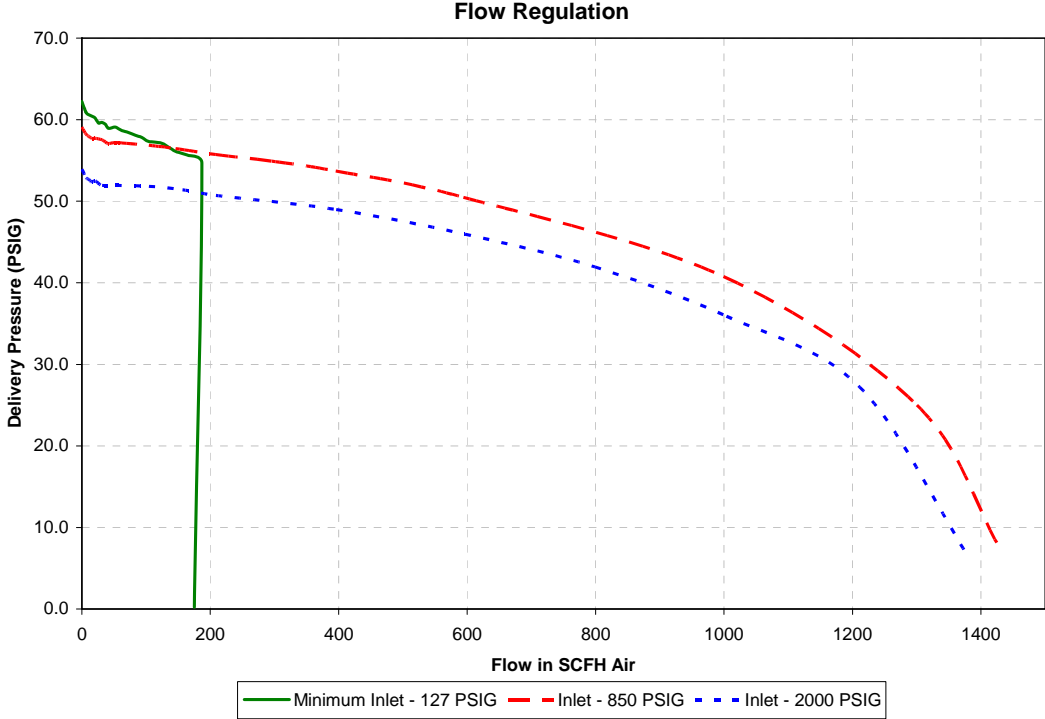
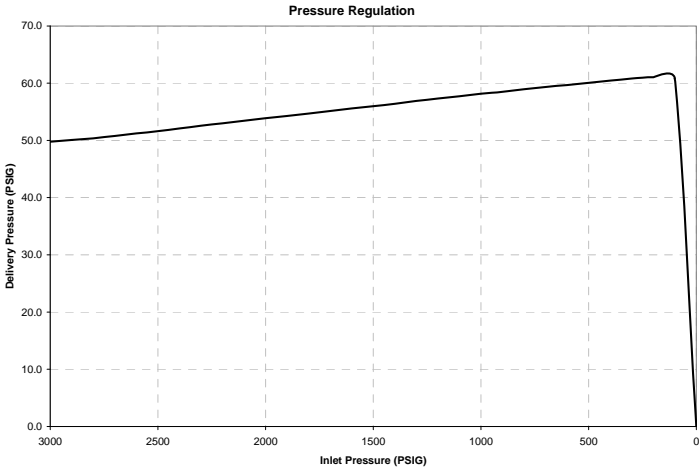
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PERFORMANCE SPECIFICATIONS

- Maximum Rated Inlet Pressure: 3000 psig
- Preset Delivery Pressure: 50 - 56 psig static @ 2000 - 2200 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): 0.4
- Static Increment: 1.1 psig
- Overall Flow Coefficient (C_v): 0.045
Outlet Cv: 0.40
- Flow Regulation: 4.7 psig
- Oxygen Units tested to ASTM G175 Phase 1
- Maximum Rated Flow: See Table Below
- Device Life: 10 years



Maximum Rated Delivery Pressure (psig)	Minimum Rated Inlet Pressure (psig)	Max rated flow at min rated inlet pressure (SCFH Air)	Max rated flow at 850 psi inlet pressure (SCFH Air)	Max rated flow at 2000 psi inlet pressure (SCFH Air)
56	127	150	1140	1100

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.