

Miniature Regulators

& Subminiature Regulators

Precision
Control
Devices



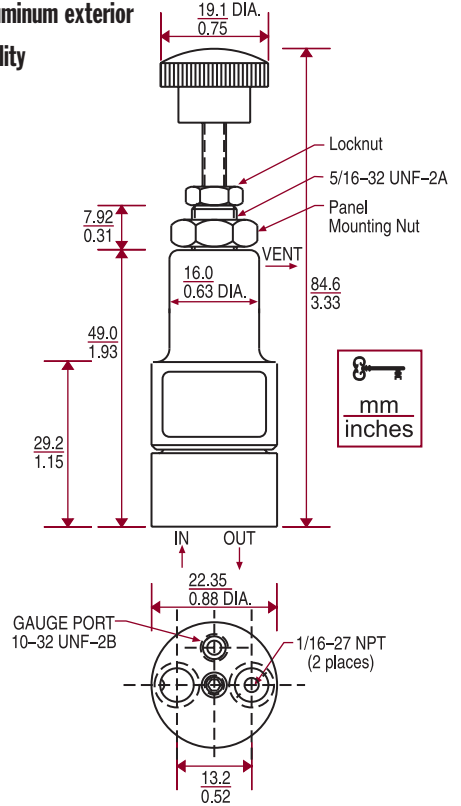


TYPE 91 FEATURES

- Designed for applications with limited space and for low flow or dead end service
- Small package size and lightweight construction
- Standard or low bleed versions available
- Corrosion resistant anodized aluminum exterior
- Excellent stability and repeatability
- Self relieving
- Low cost

TYPE 91

The Type 91 Subminiature Regulator is a compact, low-cost unit which operates in pressure ranges up to 100 psi, with a maximum supply pressure of 250 psi. It provides dependable reliability and accuracy for low flow or dead end applications, but is not designed for critical flow applications. The unit was designed with a corrosion resistant anodized aluminum body and bonnet with a standard fluorocarbon diaphragm.



TYPE 91 LOW BLEED

The Type 91 low bleed version is designed for applications where low air consumption is required. The Type 91 is ideal for applications where space is limited and for dead ended/low flow service. Such applications include ink control on printing presses, panel loading applications, hand-held analyzers and calibration equipment, small cylinder operations, and all types of instrumentation applications. It can be through panel mounted or, due to its lightweight, pipe mounted. A slotted adjustment screw is available for precision control.



M1R & M2R FEATURES

- Modular design for service & interchangeability
- Featuring Bellofram rolling diaphragms
- Miniature (M1) & Standard (M2) sizes
- Non-rising adjustment knob with push-pull lock ring feature
- Small package size and light weight construction
- Competitively priced

TYPE M1R

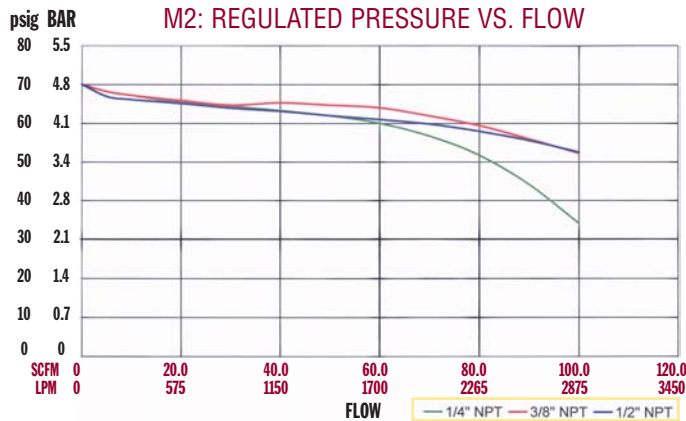
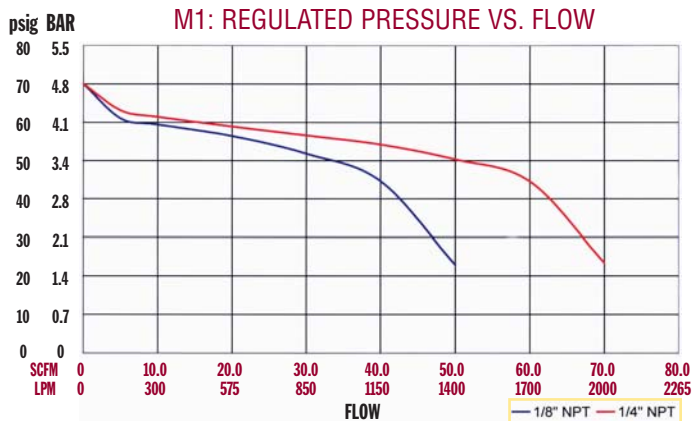
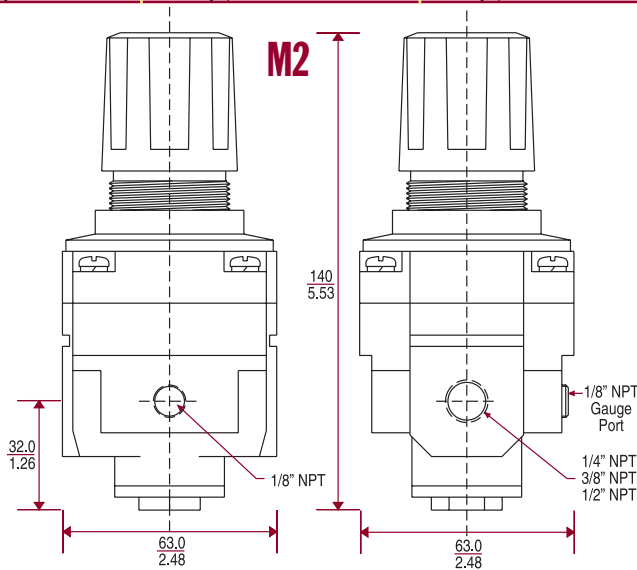
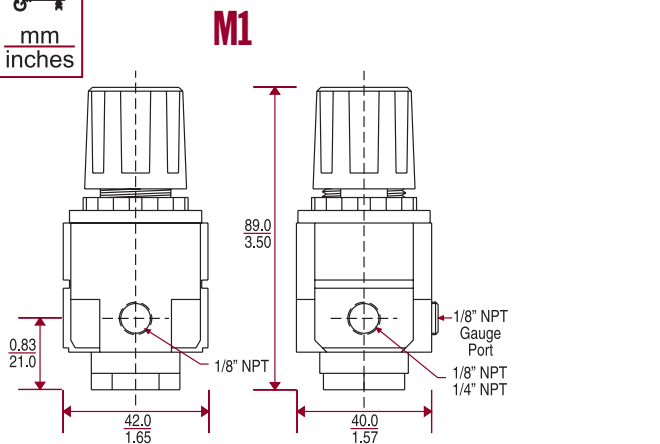
The Type M1R Miniature Air Regulator is a compact, low cost regulator, which operates in output pressure ranges up to 120 psi, with a maximum supply pressure of 145 psi. The Type M1R is available in 1/8" and 1/4" NPT port sizes. With a flow of up to 40 SCFM and low droop the M1R provides the features of a large regulator in a small package.

TYPE M2R

The Type M2R Air Regulator is a mid-sized version of the M1R Miniature Air Regulator. Like the M1R this is a low cost regulator with output ranges up to 120 psig with a maximum supply pressure of 145 psig. The M2R is available in 1/4", 3/8", or 1/2" NPT port size. The Type M2R can provide flow rates to 90 SCFM.

	TYPE 91 Regulator	TYPE 91 Low Bleed	TYPE M1 Regulator	TYPE M2 Regulator
Effect of Supply Pressure variation (25 psig) on Outlet Pressure	< 0.25 psig (17.02 mBAR)	< 0.5 psig (34.5 mBAR)	< 0.2 psig (13.8 mBAR)	< 0.2 psig (13.8 mBAR)
Exhaust Capacity (5 psig above 20 psig set point)	0.1–0.3 SCFM Typical (2.8–8.5 LPM)	0.1–0.3 SCFM Typical (2.8–8.5 LPM)	<0.25 SCFM (<7 LPM)	<0.25 SCFM (<7 LPM)
Max. Supply Pressure	250 psig (17.2 BAR)	150 psig (10.3 BAR)	145 psig (10.0 BAR)	145 psig (10.0 BAR)
Flow Capacity at 100 psig (6.9 BAR) supply and 20 psig (1.4 BAR) outlet	2.5 SCFM (71 LPM)	1.4 SCFM (40 LPM)	40 SCFM (1130 LPM) 70 psig outlet	90 SCFM (2550 LPM) 70 psig outlet
Output Pressure Ranges	0-5 psig (0-0.35 BAR) 0-15 psig (0-1.0 BAR) 0-30 psig (0-2.1 BAR) 0-60 psig (0-4.1 BAR) 0-100 psig (0-6.9 BAR)	0-5 psig (0-0.35 BAR) 0-15 psig (0-1.0 BAR) 0-30 psig (0-2.1 BAR) 0-60 psig (0-4.1 BAR) 0-100 psig (0-6.9 BAR)	0-10 psig (0-0.69 BAR) 0-30 psig (0-2.1 BAR) 0-60 psig (0-4.1 BAR) 0-120 psig (0-8.3 BAR)	0-10 psig (0-0.69 BAR) 0-30 psig (0-2.1 BAR) 0-60 psig (0-4.1 BAR) 0-120 psig (0-8.3 BAR)
Total Air Consumption @ Maximum Output	3 SCFH (1.42 LPM)	0.3 SCFH (0.14 LPM)	0.3 SCFH (0.14 LPM)	0.3 SCFH (0.14 LPM)
Port Size	1/16"–27 NPT / 5mm	1/16"–27 NPT / 5mm	1/8", 1/4" NPT	1/4", 3/8", 1/2" NPT
Materials of Construction	Body: Anodized Aluminum Adjusting Screw: Plated Steel Trim: Brass, Acetal Diaphragm: Fluorocarbon with Polyester Fabric Knob: Acetal Resin Spring: Music Wire	Body: Anodized Aluminum Adjusting Screw: Plated Steel Trim: Brass, Acetal Diaphragm: Fluorocarbon with Polyester Fabric Knob: Acetal Resin Spring: Music Wire	Body: Diecast Aluminum with Vinyl Paint Trim: Aluminum, Engineered Plastic, Plated Steel Diaphragm: Buna-N with Polyester Fabric Knob: Engineered Plastic Spring: Music Wire	Body: Diecast Aluminum with Vinyl Paint Trim: Aluminum, Engineered Plastic, Plated Steel Diaphragm: Buna-N with Polyester Fabric Knob: Engineered Plastic Spring: Music Wire
Size & Weight	0.875" X 0.875" X 3.33" (22.2 X 22.2 X 84.6 mm) 2.2 oz. (0.06 kg)	0.875" X 0.875" X 3.33" (22.2 X 22.2 X 84.6 mm) 2.2 oz. (0.06 kg)	1.6" X 1.7" X 3.5" (40.6 X 43.2 X 89 mm) 0.4 lb. (0.18 kg)	2.5" X 2.5" X 5.4" (63.5 X 63.5 X 137.2 mm) 1.0 lb. (0.45 kg)
Mounting Options	Pipe or panel	Pipe or panel	Pipe, Panel or Bracket	Pipe, Panel or Bracket

mm
inches



TYPE 91 ORDERING INFORMATION

Part Number		Port Size (NPT)	Set Point Range	
			BAR	psig
T-91	960-240-000	1/16"	0-0.3	0-5
	960-236-000	NPT	0-1.0	0-15
	960-237-000		0-2.1	0-30
	960-238-000		0-4.1	0-60
	960-239-000		0-6.9	0-100
T-91	962-036-000	5mm	0-0.3	0-5
	962-083-000		0-1.0	0-15
	962-033-000		0-2.1	0-30
	962-034-000		0-4.1	0-60
	962-035-000		0-6.9	0-100

OPTION ORDERING MATRIX:

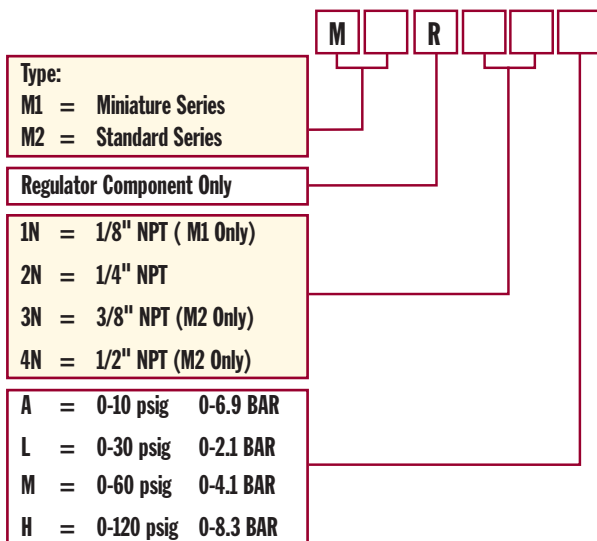
Add three digits from table below to end of part number.

OPTION	Non Relieving	Slotted Adj. Screw	Low Bleed
Non-Relieving	002	032	—
Slotted Adv. Screw		003	103
Low Bleed			010

BARBED FITTINGS:

Port	Size	Part No.
In/Out Port	1/16-27 NPT	622-000-007
Gauge Port	10-32 UNF	622-000-031

TYPE M1 & M2 ORDERING INFORMATION



Filters, Lubricators & Filter-Regulators components available for interchangeability with the M1 & M2 Regulators



Superior quality and compact size, ideal for medical applications!

USA

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Newell, WV 26050
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