



# Filters, Regulators and Lubricators

## Features

- Modular design for service and interchangeability
- Miniature (M1) and Standard (M2)
- Small package size and light weight construction
- Competitively priced

## Filters

- M1 has polycarbonate bowl
- M2 has polycarbonate bowl with metal guard
- Stock Elements - 5, 25 or 50 micron
- Manual, semi-auto or auto drain available

## Regulators

- Bellofram® Rolling Diaphragm for superior regulator performance
- Panel, pipe, or bracket (included) mounting
- Metal body, polycarbonate bonnet and knob
- Non-rising adjustment knob with push-pull lock ring feature

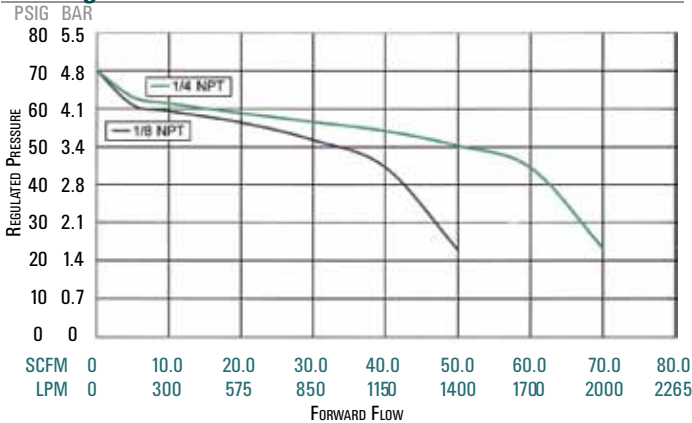
## Filter Regulators

- Aluminum and polycarbonate construction
- Manual, semi-auto or autodrain available
- M1 has polycarbonate bowl;
- M2 have polycarbonate bowl with metal guard
- Non-rising adjustment knob with push-pull lock ring feature
- For panel or bracket mounting
- Bellofram® Rolling Diaphragm for superior regulator performance

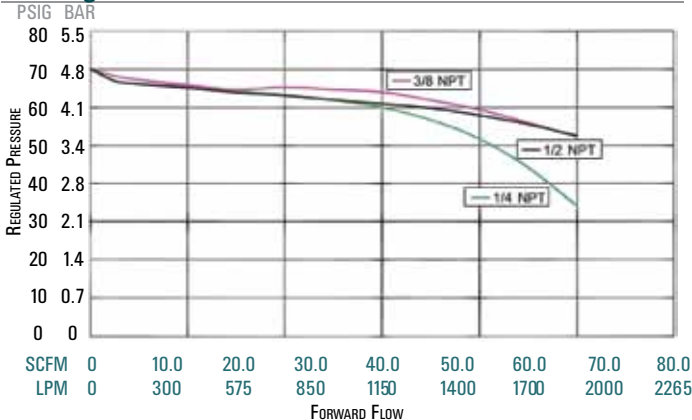
## Lubricators

- M1 has polycarbonate bowl; remove bowl for filling.
- M2 has polycarbonate bowl with metal guard; top plug permits filling without removing bowl or shutting off air
- Adjust drip rate by hand, using graduated ring on M1, with screwdriver on M2

**M1: Regulated Pressure VS. Flow**



**M2: Regulated Pressure VS. Flow**



**Filters, Regulator and Lubricators**



**M1 & M2 Regulators**

	Type M1	Type M2
<b>Filters</b>		
Port Size	1/8, 1/4 NPT	1/4, 3/8, 1/2 NPT
Filtration (micron)	5 $\mu$ , 25 $\mu$ , 50 $\mu$	5 $\mu$ , 25 $\mu$ , 50 $\mu$
Maximum Supply Pressure	1.0 MPa 10 BAR 145 PSI	1.0 MPa 10 BAR 145 PSI
Temperature Range	41–140 °F / 5–60 °C	41–140 °F / 5–60 °C
Drain	Manual / Semi-Auto	Manual / Semi-Auto / Auto
Bowl Capacity	0.75 inch <sup>3</sup>	2.75 inch <sup>3</sup>
Flow (based on 100 PSI inlet pressure with 50 micron filter)	55, 85 SCFM	120, 120, 120 SCFM

<b>Regulators</b>		
Effect of Supply Pressure variation (25 PSIG) on Outlet Pressure	< 0.2 PSIG (13.8 mBAR)	< 0.2 PSIG (13.8 mBAR)
Exhaust Capacity (5 PSIG above 20 psig set point)	<0.25 SCFM (<7 LPM)	<0.25 SCFM (<7 LPM)
Maximum Supply Pressure	145 PSIG (10 BAR)	145 PSIG (10 BAR)
Flow Capacity at 100 PSIG (6.9 BAR) supply and 70 PSIG (4.8 BAR) outlet	40, 60 SCFM	90, 120, 120 SCFM
Output Pressure Ranges	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	0.3 SCFH (0.14 LPM)	0.3 SCFH (0.14 LPM)
Port Size	1/8, 1/4 NPT	1/4, 3/8, 1/2 NPT
Mounting Options	Pipe, Panel or Bracket	Pipe, Panel or Bracket

<b>Filter-Regulators</b>		
Port Size	1/8, 1/4 NPT	1/4, 3/8, 1/2 NPT
Filtration (micron)	5 $\mu$ , 25 $\mu$ , 50 $\mu$	5 $\mu$ , 25 $\mu$ , 50 $\mu$
Maximum Supply Pressure	1.0 MPa 10 BAR 145 PSI	1.0 MPa 10 BAR 145 PSI
Temperature Range	41–140 °F / 5–60 °C	41–140 °F / 5–60 °C
Drain	Manual / Semi-Auto	Manual / Semi-Auto / Auto
Bowl Capacity	0.75 inch <sup>3</sup>	2.75 inch <sup>3</sup>
Regulator Output Range	0-10, 0-30, 0-60, 0-120 psi	0-10, 0-30, 0-60, 0-120 psi
Flow (based on 100 PSI supply/70 PSI out)	40, 60 SCFM	90, 120, 120 SCFM

<b>Lubricators</b>		
Port Size	1/8, 1/4 NPT	1/4, 3/8, 1/2 NPT
Lubrication	Mist	Mist
Maximum Supply Pressure	1.0 MPa 10 BAR 145 PSI	1.0 MPa 10 BAR 145 PSI
Temperature Range	41–140 °F / 5–60 °C	41 °–140 °F / 5 °–60 °C
Bowl Capacity	1.22 inch <sup>3</sup>	5.18 inch <sup>3</sup>
Flow (based on 100 PSI inlet pressure)	55, 115 SCFM	125, 125, 125 SCFM

FRL Ordering Information							
<b>M</b>	↑	↑	↑	↑	↑	↑	Size
	<b>1</b>						Miniature Series
	<b>2</b>						Standard Series
							Description
	<b>F</b>						Filter
	<b>R</b>						Regulator
	<b>L</b>						Lubricator
	<b>FR</b>						Filter Regulator
	<b>FRP</b>						Filter Regulator PLUS Lubricator
	<b>FRL</b>						Filter, Regulator, Lubricator
							Port Size
	<b>1N</b>						1/8 NPT (M1 only)
	<b>2N</b>						1/4 NPT (M1 or M2)
	<b>3N</b>						3/8 NPT (M2 only)
	<b>4N</b>						1/2 NPT (M2 only)
							Pressure Ranges
	<b>A</b>						0-10 PSI, (M1 and M2)
	<b>L</b>						0-30 PSI
	<b>M</b>						0-60 PSI
	<b>H</b>						0-120 PSI, Standard
	–						Omit for Filters and Lubricators
							Filters
	<b>C</b>						50 Micron Filter, Standard
	<b>B</b>						25 Micron Filter
	<b>F</b>						5 Micron Filter
	–						Omit for Regulators and Lubricators
							Drain
	<b>M</b>						Manual Drain, Standard
	<b>S</b>						Semi-Automatic Drain
	<b>A</b>						Auto Drain (M2 only)
	–						Omit for Regulators and Lubricators

NOTE: Individual regulators, FRs, filters, and lubricators come complete with bracket. FRL assemblies come complete with all bracket/connectors.

