



# MAXIMATIC® FILTER-REGULATOR-LUBRICATORS



## Maximatic Filters, Regulators & Lubricators

Maximatic FRLs condition and prepare compressed air for use in fluid power systems. Pneumatic applications with properly conditioned air will operate longer, cost less and improve system efficiency. Clippard offers five different sizes from #10-32 to 1" NPT of Filter, Regulators, Lubricators and combination units. Their modular design and interconnecting brackets provide flexibility and facilitates simple field installation and/or modification.

**Filters.** Filters capture solid particulate and remove water by "spinning" the air centrifugally. Water and larger particles are thrown against the side of the bowl where they condense and/or fall to the lower part of the bowl. Smaller particles are captured as the air flows through the filter element.

**Regulators.** Controlling pressure is an important requirement in all systems. Maximatic Regulators are adjustable from 7 to 125 psig. For applications requiring better resolution, 7 to 30 or 7 to 60 psig models with spring are available. The #10-32 size is a piston-style due to its small size, while the 1/8" to 1" are a diaphragm design. Both types feature a poppet-type inlet valve which enables free reverse flow when the inlet air is removed.

**Lubricators.** Pneumatic actuators and valves perform better and last longer when properly lubricated. The bowl serves as a reservoir for the oil and supplies oil through the pick-up tube when pressurized. The amount of oil dispersed is controlled by an adjustable needle valve as well as the flow rate through the lubricator.

**Body Material:** Die Cast Aluminum

**Maximum Operating Pressure:** 150 psig

**Regulating Range:** 125 psig standard, 30 psig and 60 psig optional

**Regulator Type:** Relieving

**Filter Drain:** Semi-Automatic Differential or Optional Automatic Drain. When the air supply is below 7 psig, the semi-automatic drain will open.

**Bowl Material:** Polycarbonate standard up to 4Z model/size. Metal bowl standard on 4A and 5B models/sizes. Aluminum Cast with sight glass available.

**Bowl Guard:** Steel on models indicated

**Filtration:** 25 micron sintered brass filter standard, 5 micron optional

**Temperature Range:** 32 to 130°F (-0 to 54°C)

## Ordering Guide

Type	Enter	Enter						
FRL .....	.FRL	Filter .....	.F	<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto;"></div>				
Stacking FRL .....	.FRLS	Regulator .....	.R					
Stacking Filter-Regulator ..	.FRS	Lubricator .....	.L					
Body/Port Size	Enter	Enter						
#10-32 .....	.1N	3/8" NPT (High Flow) .....	.4W	<div style="border: 1px solid black; width: 40px; height: 40px; margin: 0 auto;"></div>				
1/8" NPT .....	.2P	1/2" NPT .....	.4Z					
1/4" NPT (Standard Flow) ..	.2Q	3/4" NPT .....	.4A					
1/4" NPT (High Flow) .....	.3Q	1" NPT .....	.5B					
3/8" NPT (Standard Flow) ..	.3W							
Options			<div style="display: flex; justify-content: space-around;"> <div>Automatic Drain (D)</div> <div>Metal Bowl (M)</div> <div>30 psig (P30) 60 psig (P60)</div> <div>5 Micron Filter (F5)</div> </div>					
			<div style="display: flex; justify-content: space-around;"> <div style="border: 1px solid black; width: 40px; height: 40px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px;"></div> <div style="border: 1px solid black; width: 40px; height: 40px;"></div> </div>					
Example: MM			F	-	4Z	-	D	M
			MM		-		-	

This numbering schematic is shown for illustration purposes only. All possible configurations are not available—For standard models, see the products illustrated in this catalog.

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#10-32 through 1" NPT ports available

Large selection of convenient mounting hardware offered

All FRL components are a modular design which allow easy connection and disconnection of the components for simple installation and maintenance.

Pressure Gauge allows for easy viewing

Die Cast Aluminum Body

Easy-to-view sight glasses standard on all metal bowls

Flow rates from 3 scfm to 280 scfm

Lubricators increase component life by dispensing oil into the airline supply

25 micron filters standard, 5 micron optional

Filters prevent moisture and solid particulates from getting into compressed air lines

Semi-Automatic or Automatic Drain

Regulator ensures a constant downstream air line pressure



**Bowl Shield**

Polycarbonate bowls are standard on all filters and lubricators. Bowl shields are standard on MMF/MML 4A and 5B. An optional metal bowl is available for filters and lubricators.



**Metal Bowl**