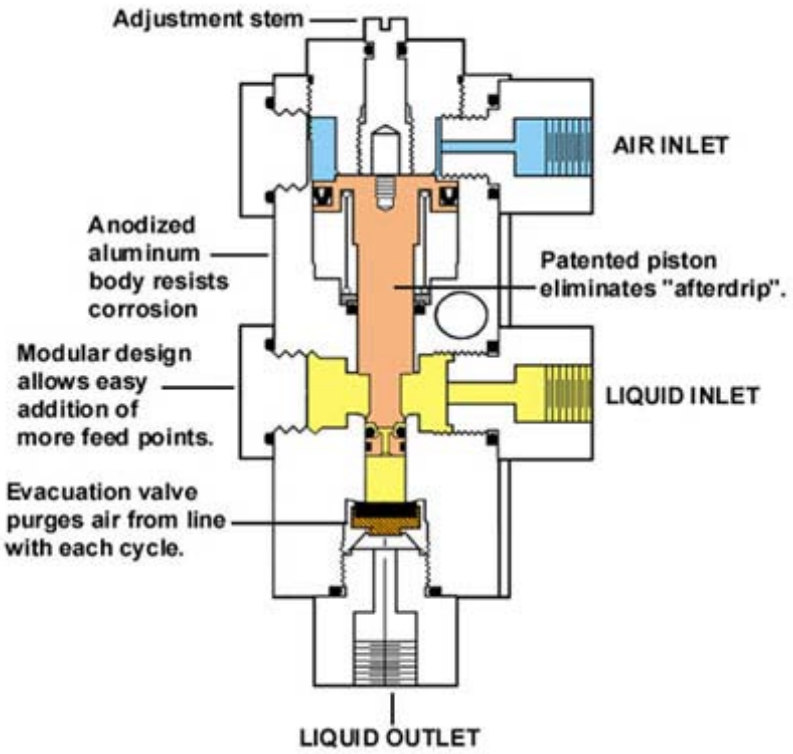
The PurgeX® Theory

How It Works

The PurgeX® is a piston pump that dispenses a precise amount of lubricant with each cycle of the pump. It is available air operated or electric motor operated, and can deliver oil or grease directly through a 1/8 NPT port, or through a spray nozzle.



Patent Numbers 5,984,652 4,784,578

Delivering the Smallest Amounts of Lubrication

The ability to deliver very small amounts of lubricant with each cycle is what distinguishes PurgeX® from all other lubrication products. In fact the name PurgeX®, comes from its designed ability to purge air from the lubrication system. This eliminates the need to pre-fill lubrication lines during initial installation. If the oil reservoir runs low or air is introduced in some other manner into the system, the self-priming PurgeX® will fill lines with lubricant automatically. The net result is the ability to reliably deliver the smallest amount of lubricant with each cycle.

Each PurgeX® pump has a adjustable lubricant delivery per cycle (see Chart below). On air operated models, the oil output is adjustable from 0 to .012 cubic inches (.20 cc's). on electric motor operated models the output is adjustable from 0 to .009 cubic inches (.15cc's). By setting the cycle rate of the PurgeX® pump, a wide range of lubricant delivery over time is achieved. If needed, lubricant delivery can be completely shut off at any time by adjusting the piston to the fully closed position.

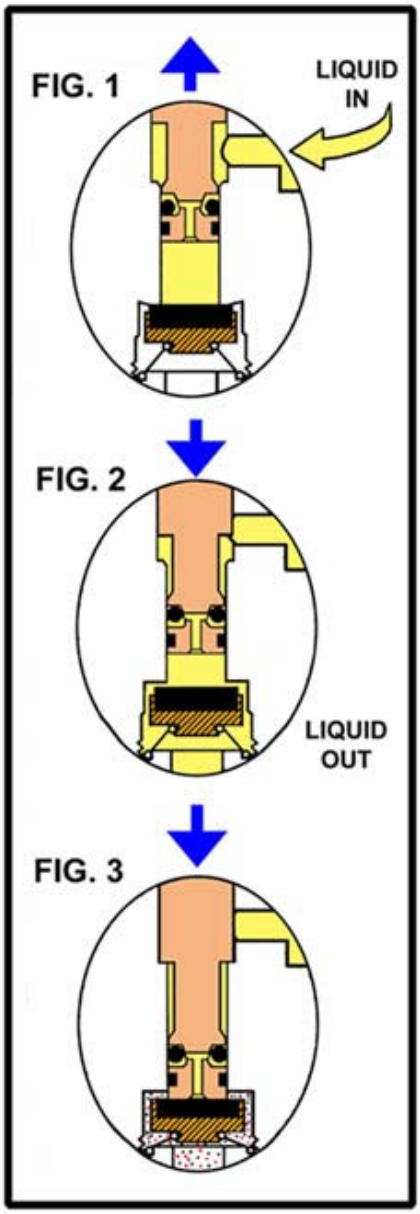


FIG. 1

-As piston moves up sealing member opens...

-Evacuation valve is closed by spring.

-Liquid flows into pump chamber thru piston...

FIG. 2

-As piston moves down sealing member closes...

-Pressure increases in pump chamber forcing evacuation valve to open, allowing a measured volume of liquid to flow out of pump chamber

FIG. 3

-Piston continues down and out of pump chamber ejecting liquid from the pump chamber. Piston physically pushes open the evacuation valve. This motion creates a differential pressure which causes all remaining air bubbles and small impurities to flush out of the seal cavity and clearances. These air bubbles and small impurities are carried downstream during each cycle.

Drop Size (Dia.)	Max. Drops Per Cycle	Volume Per Turn of Adjusting Screw	
		Drops	Cubic Inch
1/16	95.8	14.20	.0018
3/32	28.4	4.20	
1/8	12.0	1.70	
5/32	6.2	.93	
3/16	3.5	.53	

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