





No matter the application, critical to the operation of LPG dispensers are the pumps that are used to transfer the fuel from storage vessels into and through the dispenser. But with LPG's non-lubricating properties and gaseous nature, choosing the correct pump technology is vital.



# LG1 Sliding Vane Pumps | Motor Speed LPG Dispenser Pumps

Sliding vane pumps are the best choice for use on LPG dispensers, with the Blackmer® LG1 Sliding Vane Pump, being the ideal choice. For more than 50 years, the Blackmer LG1 Pump, which is UL-listed for use with LPG, has been the industry standard pump for LPG dispensers.

The leading advantage of sliding vane pumps is that the pump features no metal-to-metal contact due to the use of non-metallic vanes and locknuts on the rotor, both of which prevent this from happening. The LG1 Sliding Vane Pump's self-adjusting non-metallic duravanes provide consistent volumetric performance by wearing evenly and are easily replaced when needed. The LG1 Sliding Vane Pumps have cavitation-suppression features that enable them to better handle any LPG vaporization that may occur within the pump. Finally, the LG1 incorporates a combined relief/bypass valve which limits discharge pressure.

The combined valve also protects the pump from overpressurization where both the downstream connection and the back to tank bypass connections are blocked.

The LG1 Sliding Vane Pumps have 1-inch (26 mm) NPT tapped ports for 180° inline porting and can produce flow rates between 4 and 10 gpm (15 - 37 L/min) at temperatures from -25°F to 240°F (-32°C - 115°C) and working pressures up to 350 psi (24.1 bar). They offer two mounting styles: base mounted foot (LGB) and motor adapter, to a NEMA C-face motor, (LGF). The LG1 Sliding Vane Pumps can also be quickly and easily rebuilt. All of these advantages, along with a more than 50-year history Blackmer has of serving the LPG market, have made the LG1 the most popular pump option, with more than 50,000 units sold to date.

## **Applications**

- LPG, Butane, & Anhydrous Ammonia
- Cylinder Filling
- Motor Fueling
- Small Vaporizers
- Small Dispensers



LGB1 MOUNTING



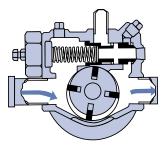
LGF1 MOUNTING
WITH NON-FOOTED BRACKET



LGF1 MOUNTING WITH FOOTED BRACKET

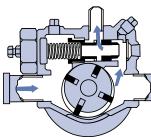
# Blackmer® LG1 Sliding Vane Pumps | Technical Data

## Combination Relief/Bypass Valve



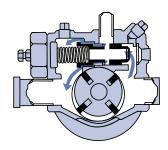
## 1. Normal Operation

Valve is completely closed during normal operation with discharge line open.



## 2. Back-to-Tank Bypassing

Discharge pressure exceeding the valve settings opens valve to second stage, returning all or part of pump flow back to supply tank.



#### 3. Pressure Relief

If back-to-tank line is closed, valve opens to third stage, passing flow back to inlet side of pump.

#### Maintenance Kit

MODEL(S)	DESCRIPTION	PART NUMBER
LGF1, LGB1, LGF1P, LGB1P	Kit - Maintenance	898994

#### Model Configurations

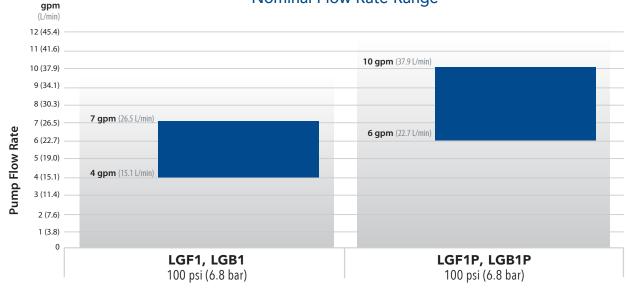
MODEL	DESCRIPTION	
F	C-Face Flange	
В	Bracket for base mounting	
Р	50% more flow	







#### Nominal Flow Rate Range



Maximum Differential Pressure 150 psi (10.3 bar)

(Internal relief valve setting)



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Where Innovation Flows

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