



## LG1 Series Sliding Vane Pumps for Cylinder Filling



LGF1E  
and LGF1PE model

### Reliability

Durable pumps for fast and quiet operation. Sliding vane design provides sustained performance and trouble-free operation.

### Unique Features

The latest 6-vane design contributes to reduced noise levels in the pumps. All models have 1-in. NPT tapped parts and use an exclusive "combination" valve that acts as both a back-to-tank bypass valve and an internal safety valve (no separate bypass valve is needed). The LGF1 pumps accept standard C-face mounted motors.

### Flow Rates

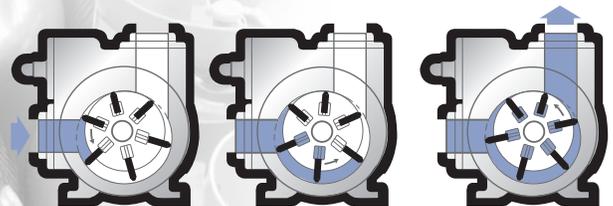
At motor speed 1,750, the LG1 Series pumps provide approximately 8.0 gpm (30.3 L/min) at 50 psi (3.4 bar) and the LG1P models provide 13 gpm (49.2 L/min) at 50 psi (3.4 bar).

### Applications

Cylinder filling, motor fueling, small vaporizers and dispensers.



LGB1E and  
LGB1PE model

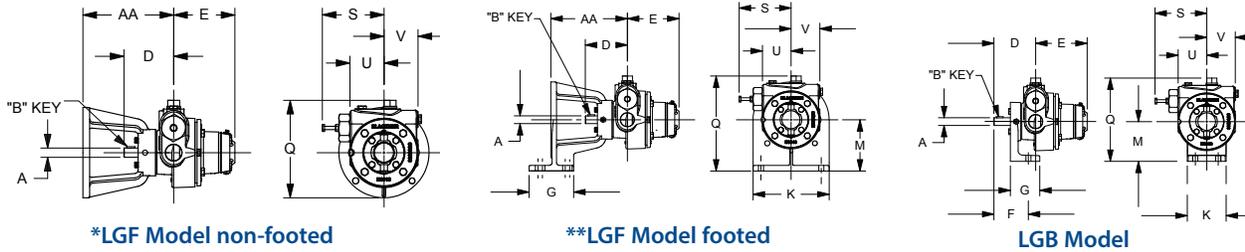


How Blackmer's sliding vane action works





# LG1 Series Sliding Vane Pumps for Cylinder Filling



\*LGF Model non-footed

\*\*LGF Model footed

LGB Model

## Dimensions

Pump Model			A	B	D	E	G	K	M	Q	S	U	V	AA	Approximate Wt.	
															lbs.	kg
*LGF1E	C-Face Mount	in.	1 <sup>1</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>16</sub>	3 <sup>11</sup> / <sub>16</sub>	4 <sup>1</sup> / <sub>2</sub>	–	–	–	7 <sup>1</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	6 <sup>11</sup> / <sub>16</sub>	39	17.7
LGF1PE		mm	–	–	93.7	114.3	–	–	–	181.0	114.3	63.5	63.5	169.9		
**LGF1E	C-Face Mount	in.	1 <sup>1</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>16</sub>	3 <sup>11</sup> / <sub>16</sub>	4 <sup>1</sup> / <sub>2</sub>	3 <sup>7</sup> / <sub>8</sub>	6 <sup>5</sup> / <sub>8</sub>	4 <sup>1</sup> / <sub>2</sub>	8 <sup>5</sup> / <sub>16</sub>	4 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	6 <sup>11</sup> / <sub>16</sub>	39	17.7
LGF1PE		mm	–	–	93.7	114.3	98.4	168.3	114.3	211.1	114.3	63.5	63.5	169.9		
LGB1E	Bracket Mount	in.	1 <sup>1</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>16</sub>	3 <sup>11</sup> / <sub>16</sub>	4 <sup>1</sup> / <sub>2</sub>	2 <sup>9</sup> / <sub>16</sub>	3 <sup>3</sup> / <sub>8</sub>	3 <sup>1</sup> / <sub>2</sub>	7 <sup>5</sup> / <sub>16</sub>	4 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	2 <sup>1</sup> / <sub>2</sub>	–	19	8.6
LGB1PE		mm	–	–	93.7	114.3	65.1	85.7	88.9	185.7	114.3	63.5	63.5	–		

## Performance Data

Assembled Pump Units		Pump and Motor Speed (rpm) <sup>1</sup>	Approx. Delivery of Propane at Diff Pressures and Pump Speeds				Maximum Differential Pressure		Maximum Working Pressure <sup>2</sup>		Typical Motor <sup>3</sup>	Motor Size for Standard Base <sup>4</sup>	
			50 psi (3.5 bar)		100 psi (6.9 bar)		psi	bar	psi	bar		Minimum Frame	Maximum Frame
Model	RV Setting		gpm	L/min	gpm	L/min					hp		
LGF1E	105 psi (7.2 bar)	1,750	8.0	30.3	6.0	22.7	125	8.6	350	24.1	1	56C	184C <sup>4</sup>
LGB1E-DM	105 psi (7.2 bar)	1,750	8.0	30.3	6.0	22.7	125	8.6	350	24.1	1	56	184
LGF1PE	120 psi (8.3 bar)	1,750	13.0	49.2	10.0	37.9	125	8.6	350	24.1	1.5	56C	184C <sup>4</sup>
LGB1PE-DM	120 psi (8.3 bar)	1,750	13.0	49.2	10.0	37.9	125	8.6	350	24.1	1.5	56	184

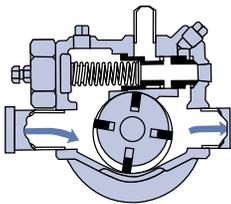
1 Maximum pump speed is 1,750 rpm. Slower electric motor speeds may be used with a corresponding reduction in flow rate.

2 Maximum rated working pressure is 350 psi (24.1 bar) for LPG and NH<sub>3</sub> (limited by U.L. and N.F.P.A. 58).

3 Motors may be specified from dimension charts above and electric motor price list No. 10-MTRG-01 (explosion proof manual start switch for 1 and 1<sup>1</sup>/<sub>2</sub> horsepower single phase motors also available).

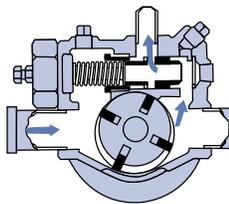
4 Pump flange accepts NEMA C-face motors with 5<sup>7</sup>/<sub>8</sub>" bolt circle diameter. Pump flange will not accept 182TC or 184TC frames.

## Combination Relief/Bypass Valve



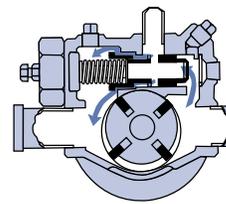
### Normal Operation

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



### 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.



### Pressure Relief

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



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