Applications

These durable motor speed pumps offer capacities from 9 to 35 U.S. gpm (34 - 132 L/min), and are ideal for motor fueling, multiple-station cylinder filling and a variety of small transfer jobs. The LGL models are designed for foot mounting to a common base-plate. The LGFL models are fitted with an integral bracket and coupling for direct flange mounting to a NEMA or IEC C-face motor. This bracket also allows the pump body to be rotated to simplify installation to piping systems.

Design Features

Available with 1.25- or 1.5-inch NPT tapped ports, all models are equipped with an internal relief valve, and a replaceable casing liner and end discs for easy rebuilding of the pumping chamber if ever necessary. The LGRLF 1.25-inch model features a special liner, which offers lower flow rates than the LGL 1.25-inch pump. In addition, these pumps feature cavitation suppression liners to reduce noise, vibration and wear.

Standard construction materials for these models include Buna-N mechanical seals and Duravanes for handling both LP gas and anhydrous ammonia. Maximum differential pressure is 150 psi (10.34 bar) for all models.

LGF Drive Style

Flange Mounting - Direct Motor Drive

Standard LGRLF1.25, LGLF1.25, and LGFLF1.5 models are supplied with an integral bracket and a flexible shaft coupling, ready to accept a NEMA C-face or IEC flanged-face motors. All LGF units are available with or without electric motors.

DM Drive Style

Foot Mounting - Direct Motor Drive

LGL1.25-DM and LGL1.5-DM base-mounted units are available, complete with pump, coupling and coupling guard, mounted on a common base, ready to accept a standard NEMA motor. All DM units are available with or without electric motors.

How Blackmer’s sliding vane action works
Performance Curves

Selection Data

When selecting a standard pump or assembled unit from the table below, check the pump's delivery and brake horsepower requirements in the performance curves. These pumps are rated for continuous duty, although such applications may accelerate pump wear rates, particularly if vaporization occurs in the pump intake line. Pumps used on vaporizers should be mounted with inlet up, and sized for a capacity of at least 150% of the normal peak load to prevent system failure due to sudden pressure drop on startup. Additional system requirements can be achieved by series or parallel staging.

<table>
<thead>
<tr>
<th>Assembled Pump Units</th>
<th>Pump and Motor Speeds</th>
<th>Approximate Delivery of Propane at Differential Pressures and Pump Speeds Shown1</th>
<th>Maximum Differential Pressure</th>
<th>Maximum Working Pressure2</th>
<th>Motor Size For Mounting on Standard Base3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>50 psi (3.45 bar)</td>
<td>100 psi (6.89 bar)</td>
<td>gpm</td>
<td>L/min</td>
</tr>
<tr>
<td>LGL1.5</td>
<td>150 psi (10.34 bar)</td>
<td>1,750</td>
<td>16.0</td>
<td>1,150</td>
<td>1,150</td>
</tr>
<tr>
<td>LGLF1.25</td>
<td>150 psi (10.34 bar)</td>
<td>1,750</td>
<td>21.0</td>
<td>1,750</td>
<td>1,750</td>
</tr>
<tr>
<td>LGLF1.25 / LGL1.25</td>
<td>150 psi (10.34 bar)</td>
<td>1,750</td>
<td>33.0</td>
<td>1,750</td>
<td>1,750</td>
</tr>
<tr>
<td>LGL1.5</td>
<td>150 psi (10.34 bar)</td>
<td>1,750</td>
<td>21.0</td>
<td>1,750</td>
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<td>33.0</td>
<td>1,750</td>
<td>1,750</td>
</tr>
</tbody>
</table>

1 Check the pump's delivery and brake horsepower requirements in the performance curves. See footnote with the curves which explains the factors that can cause delivery to vary.
2 Maximum rated working pressure is 310 psi (21.3 bar) for LPG and NH3 (limited by U.L. and N.F.P.A. 58).
3 Motors may be specified from Electric Motor Price List No. 10-MTRG-01 (explosion-proof manual start switch for 1 & 1-1/2 horsepower single-phase motors also available). Motor adaptors are available for NEMA C-face or IEC flanged-face motors. Pump flange will not accept 213TC/215TC frames.
4 Motor adaptors available for NEMA C-face or IEC flanged-face motors. Pump flange will not accept 213TC/215TC frames.

Note: Refer to back cover for external bypass valve information.

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