LGLD2, LGLD3 & LGLD4 Pumps
Multi-Purpose Pumps for Bulk Plants, Terminals and Truck Systems

Applications
These rugged pumps are ideal for bulk plant service, multiple cylinder filling applications, vaporizers, bobtails and transports. Single- or double-ended drive shaft models are offered in 2-, 3- and 4-inch port sizes with capacities ranging from 30 to 350 U.S. gpm (114 – 1,325 L/min). The LGLD2 and LGLD3 models have long been popular for bobtail service because of their double-ended drive shaft arrangement, which allows the pump to be easily positioned for clockwise or counter-clockwise shaft rotation.

Design Features
All models have an internal relief valve, and a replaceable casing liner and end discs for easy rebuilding of the pumping chamber if ever necessary. In addition, these pumps feature cavitation suppression liners to reduce noise, vibration and wear.

Standard construction materials include Buna-N mechanical seals and Duravanes for handling both LP-gas and anhydrous ammonia.

Performance
Maximum differential pressure for the 2- and 3-inch models is 150 psi (10.34 bar), and 125 psi (8.62 bar) for the 4-inch models. Ports are offered with NPT tapped companion flanges or weld flanges.

Truck Mounted Drive
Blackmer LGLD2 pumps are often mounted to the chassis of a bobtail, or to a steel pad that is welded to the tank.

The 3- and 4-inch models can be mounted to a transport in a number of different ways, generally near or between the tank landing gear brackets.

Truck mounted pumps are normally driven through a P.T.O. or hydraulic drive system. Refer to Blackmer’s Liquefied Gas Handbook-Bulletin 500-001 for various types of bobtail and transport pump systems.

Assembled Pump Units

VB Drive Style
V-Belt Drive
Standard base-mounted VB units are available, complete with pump, hubs, sheaves, high-torque V-belts and belt guard, mounted on a common base, ready to accept a standard NEMA motor. All VB units are available with or without motors.

HR Drive Style
Helical Gear Reduction Drive
Standard base-mounted HR units are available, complete with pump, Blackmer Helical Gear Reducer, mounting brackets, couplings and coupling guards, mounted on a common base, ready to accept a standard NEMA motor. All HR units are available with or without motors.

How Blackmer’s sliding vane action works
Selection Data

When selecting a pump for truck or transport systems, use the performance curves on this page. For a standard pump or assembled unit, use the table shown. The table shows brake horsepower limitations for the unit's drive and base. Check these limits against the pump brake horsepower requirements, as shown in the curves. For continuous duty applications, it is generally advisable to use pump speeds of 400 rpm or less. Peak shaving plant systems, for example, involve continuous pump duty. Moreover, pumps used in peak shaving plant systems should be sized for a capacity of at least 150% of the normal peak load to prevent system failure due to abnormal vaporization in the intake line.

Companion Flanges

<table>
<thead>
<tr>
<th>Pump Model</th>
<th>Standard or Optional</th>
<th>Intake</th>
<th>Discharge</th>
</tr>
</thead>
<tbody>
<tr>
<td>LGLD2</td>
<td>Standard</td>
<td>2” NPT</td>
<td>2” NPT</td>
</tr>
<tr>
<td></td>
<td>Optional</td>
<td>2” Weld</td>
<td>2” Weld</td>
</tr>
<tr>
<td>LGLD3</td>
<td>Standard</td>
<td>3” NPT</td>
<td>3” NPT</td>
</tr>
<tr>
<td></td>
<td>Optional</td>
<td>3” Weld</td>
<td>3” Weld</td>
</tr>
<tr>
<td>LGLD4</td>
<td>Standard</td>
<td>4” Weld</td>
<td>4” Weld</td>
</tr>
<tr>
<td></td>
<td>Optional</td>
<td>4” Weld</td>
<td>4” Weld</td>
</tr>
</tbody>
</table>

1 Check the pump's delivery and brake horsepower requirements in the performance curves on opposite page. See footnote on the curves which explains the factors that can cause delivery to vary.
2 Maximum rated working pressure is 350 psi (24.13 Bar) for LPG and NH, limited by U.L. and N.F.P.A. 50.
3 Maximum horsepower that standard drive (V-belt/gearbox and base) will transmit. 
4 Motors may be specified from Electric Motor Price List No. 10-MTR-01.

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

Authorized PSG Partner: