



LGRL1.25, LGL1.25 & LGL1.5 Pumps

Motor Speed Pumps for Motor Fueling and Multi-Cylinder Filling



LGL1.25 / LGL1.5



LGRLF1.25 / LGLF1.25

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 LGLF 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

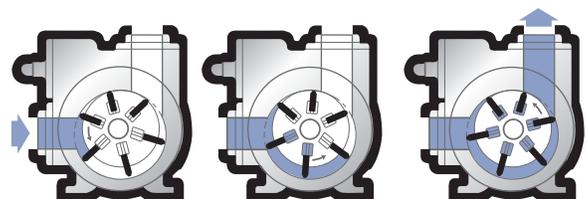
Standard LGRLF1.25, LGLF1.25, and LGLF1.5 models are supplied with an integral bracket and a flexible shaft coupling, ready to accept a NEMA C-face or IEC flanged-face motors. All LGF units are available with or without electric motors.



DM Drive Style

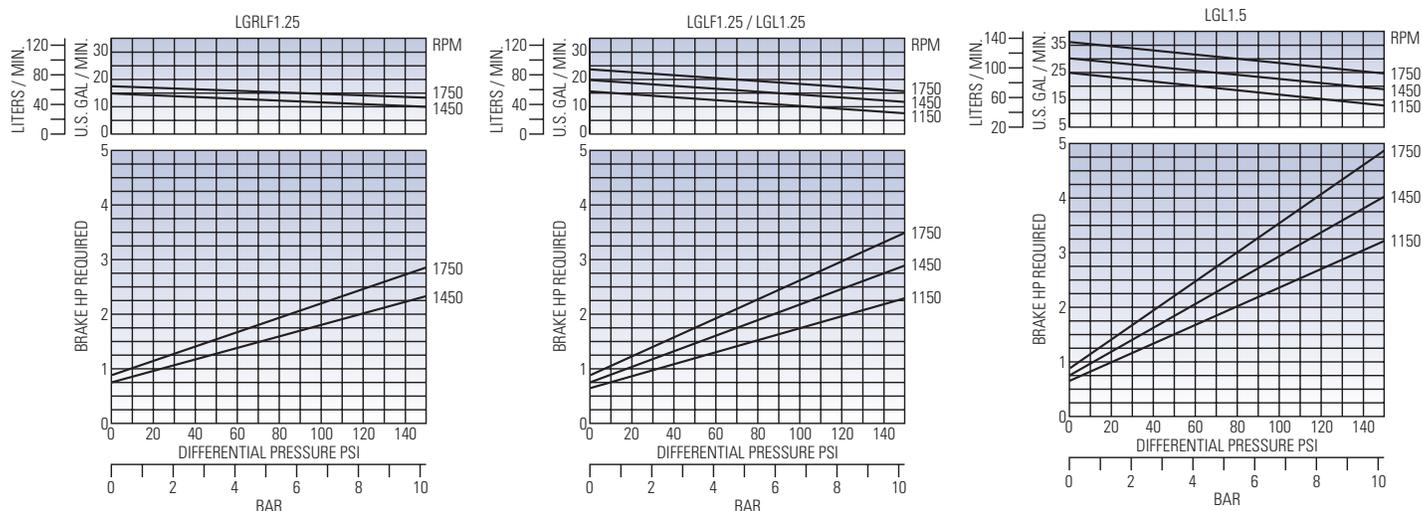
Foot Mounting - Direct Motor Drive

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



These curves are based on approximate delivery rates when handling propane or anhydrous ammonia at 80°F (26.7°C). Line restrictions such as excess flow valves, elbows, etc. will adversely affect deliveries. For propane at 32°F (0°C), actual delivery will be further reduced to about 80% of nominal. Delivery of butane at 80°F (26.7°C) will be 60% to 70% of these values and may run as low as 35% to 45% at 32°F (0°C). This loss of delivery is not a pump characteristic but is caused by natural thermodynamic phenomena of liquefied gases.

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.

Assembled Pump Units		Pump and Motor Speed rpm	Approximate Delivery of Propane at Differential Pressures and Pump Speeds Shown ¹				Maximum Differential Pressure		Maximum Working Pressure ²		Motor Size For Mounting on Standard Base ³	
Model	Factory Relief Valve Settings		50 psi (3.45 bar)		100 psi (6.89 bar)		psi	bar	psi	bar	Minimum Frame Size	Maximum Frame Size
			gpm	L/min	gpm	L/min						
LGRLF1.25	150 psi (10.34 bar)	1,750	16.0	60.6	14.0	53.0	150	10.34	350	24.13	56C	215C ⁴
		1,150	13.0	49.2	10.0	37.9	150	10.34	350	24.13	56C	215C ⁴
LGLF1.25	150 psi (10.34 bar)	1,750	21.0	79.5	18.0	68.1	150	10.34	350	24.13	56C	215C ⁴
		1,150	13.0	49.2	10.0	37.9	150	10.34	350	24.13	56C	215C ⁴
LGLF1.5	150 psi (10.34 bar)	1,750	33.0	124.9	29.0	109.8	150	10.34	350	24.13	56C	215C
		1,150	20.0	75.7	17.0	64.4	150	10.34	350	24.13	56C	215C
LGL1.25-DM	150 psi (10.34 bar)	1,750	21.0	79.5	18.0	68.1	150	10.34	350	24.13	56	215T
		1,150	13.0	49.2	10.0	37.9	150	10.34	350	24.13	56	215T
LGL1.5-DM	150 psi (10.34 bar)	1,750	33.0	124.9	29.0	109.8	150	10.34	350	24.13	56	215T
		1,150	20.0	75.7	17.0	64.4	150	10.34	350	24.13	56	215T

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 350 psi (24.13 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).

⁴ Motor adaptors are 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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