

LG30 AND LGL30 SERIES MODELS LG30XXX 600 HP AND LGL30XXX 900 HP GEAR DRIVE

Rotary Screw Gas Compressors

Benefits

LeROI Rotary Screw Gas Compressors are very cost-effective for handling high volumes of gas in field gathering, vapor recovery, and other applications. The LG30XXX is suitable for applications to 600 BHP and discharge pressures up to 200 PSIG. The LGL30XXX is suitable for applications to 800 BHP and discharge pressures up to 150 PSIG. Low maintenance and high reliability are inherent with rotary screws because they have few moving parts. There are no valves, rings or packing to wear out or cause loss of efficiency.

Smooth operation results from no unbalanced forces and no pressure pulsation. No foundation is required and there are no piping vibrations from pressure pulsation.

Natural gas engine or electric motor drives are equally acceptable with LG30XXX and LGL30XXX rotary screws. LeROI Rotary Screw Gas Compressors are available in various models covering a flow range of 20 to 15,000 MSCFD and horsepower from 10 to 900.

Features

Single-Stage operation from 5 PSIG to 250 PSIG maximum is possible with the LG30XXX and 150 PSIG for the LGL30XXX Series oil-flooded compressors. Compressor packages are simple, reliable and cost-effective. The gas differential pressure provides oil circulation for proper lubrication at differential pressures over 60 PSI. Optional oil pumps are available for with less than 60 PSI differential pressure.

Adjustable Vi allows discharge porting to be selected in the field to match the internal compression to the application requirement for maximum compression efficiency. All iron or steel construction with no copper or copper alloys makes these compressors compatible with natural gas, sweet or sour.

Performance

Brake Horsepower

LG30XXX 600 Max. LGL30XXX 800 Max.

Flow Range (MSCFD)

LG30XXX 13,000 MSCFD LGL30XXX 15,000 MSCFD 20" Hg Vac. Min.* Inlet Pressure 30 PSIG Max.

Discharge Pressure

20*-250 PSIG (MAWP) LG30XXX 20*-150 PSIG (MAWP) LGL30XXX Speed Range 350 RPM Min.

2,400 RPM Max.

* Consult Factory for use with lower vacuum inlet or discharge pressures.



Options & Specifications

Technical Specifications

- Model LG30 and LGL30
- Rotor Diameter 309 mm (12.174 inches)
- Rotor L/D
 - LG30 1.66
 - LGL30 2.2
- Rotor Description
 - Twin Screw SRM Profile with Sealing Strips,
 4 Lobe Male, 6 Lobe Female
- Shaft Seal(s) Mechanical*
- Drive System
 - Internal Helical Speed Increasing Gears (AGMA 11)
 - Gear Ratios available
 - LG30 1.104 2.525
 - LGL30 1.585 3.059
 - Rotation Facing Shaft CW, Drive Shaft 2⁷/₈" Dia.
 with ³/₄" Square Key
- Materials
 - Rotors Ductile Iron 65-45-12
 - Castings Cast Iron G3000
 - Bearings Roller bearings on the inlet end and tapered roller bearings on the LGL30 discharge end, angular contact bearings on the LG30 discharge end - alloy steel races, rolling elements and cages.
- Weight
 - LG30 3.700 lbs
 - LGL30 4,500 lbs
- * LeROI's mechanical seals prevent air from entering the gas stream when operated with any attainable vacuum inlet gas pressure.

Options

- Versatrol Internal Bypass Valves
 - Versatrol internal bypass valves are available for efficient capacity control from 100-50% of design flow. Control can be manual with four steps or stepless with a microprocessor. Control system is not included.
- Internal Volume Ratio
 - The LG30 and LGL30 have LeROI's standard externally adjustable Vi feature, allowing internal compression optimization while the compressor is operating. Fixed Vi of H = 4.4, M = 3.3 and L = 1.9 are also available.
- Oil Pump
 - Integral oil pumps are available for low-pressure differential applications.
- SAE # 0 Flywheel Housing for LG30
- SAE # 00 Flywheel Housing for LGL30 (Bolt On)

Applications

- Gas Gathering
- Well Head Gas Compression
- Fuel Gas Boosting
- Vapor Recovery
- Inert Gas Boosting
- Landfill Gas



LeROI Gas Compressors

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