



by Gardner Denver

HG20 SERIES

MODEL HG20XXX GEAR DRIVE, HG20000 AND HGF20000 NON-GEARED

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 HG20 Series is suitable for applications to 300 BHP and 350 PSIG discharge pressure. 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.

Direct coupled natural gas engine or electric motor drives are equally acceptable with the HG20XXX and HGF20000 rotary screws. The HG20000 is suitable for electric motor drive. 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.

Performance

Brake Horsepower	300 Max.
Flow Range (MSCFD)	4,000 Max.
Inlet Pressure	20" Hg Vac. Min.* 50 PSIG Max.
Discharge Pressure	20*-350 PSIG (MAWP)
Input Speed Range	
HG20XXX	500/Min. 3,600/Max. RPM
HG20000	1,400/Min. 5,000/Max. RPM
HGF20000	940/Min. 3,300/Max. RPM

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

Features

Single-Stage operation from 20 PSIG to 350 PSIG maximum is possible with the HG20 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 applications with less than 60 PSI differential pressure.

Discharge porting can be selected 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.



HG20XXX Compressor with Versatrol Capacity Control and Oil Pump



Options & Specifications

Technical Specifications

- Model HG20
- Rotor Diameter 204 mm (8.03 inches)
- Rotor L/D 1.65
- Rotor Description
 - Twin Screw SRM Profile with Sealing Strips, 4 Lobe Male, 6 Lobe Female
- Shaft Seal(s) - Mechanical*
- Drive System
 - HG20XXX
 - Internal Helical Speed Increasing Gears (AGMA 11) Gear Ratios of .753 - 2.778 are available.
 - Rotation - Facing Shaft - CW
 - Drive Shaft 2½" Dia. with ½" Square Key
 - HG20000
 - Rotation - Facing Shaft - CCW
 - Suitable for electric motor or belt drive - oversized input bearings for belt side load up to 100 HP.
 - Drive Shaft 2½" Dia. with ½" Square Key
 - HGF20000
 - Rotation - Facing Shaft - CW
 - Drive Shaft 2½" Dia. with ½" Square Key Suitable for electric motor or belt drive - oversized input bearings for belt side load up to 100 HP.
- Materials
 - Rotors - Ductile Iron 65-45-12
 - Castings - Ductile Iron 65-45-12
 - Bearings - Roller bearings on the inlet end and tapered roller bearings on the discharge end - alloy steel races, rolling elements and cages.
- Weight
 - HG20XXX - 2,000 lbs
 - HG20000/HGF20000 - 1,650 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.
- Fixed Vi
 - H=5.0, M=3.0, L=2.0
 - Variable Vi - Consult Factory
- Oil Pump
 - Integral oil pumps are available for low-pressure differential applications
- SAE # 2 Flywheel Housing (BOLT-ON)
- SAE # 2 to SAE # 1 Flywheel Housing Adapter

Applications

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

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LeROI Gas Compressors by Gardner Denver policy is one of continuous improvement and we therefore reserve the right to alter specifications and prices without prior notice. All products are sold subject to the Company's conditions of sale.

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