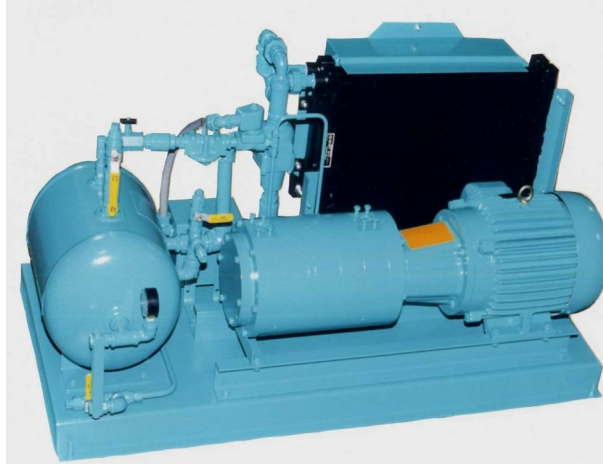


VECTOR 7000 SERIES GUIDED ROTOR COMPRESSORS



- Reciprocating air compressors
- Rotary air compressors
- Medium and high-pressure air compressors
- Engine starting air compressor packages
- Instrument air compressor packages
- Vapor recovery units
- Electric motor driven rotary screw gas compressors
- Breathing air compressor packages
- Specialty gas compressors
- Blowers
- Vacuum pumps
- Air dryers
- Air operated machinery
- Accessories

FEATURES

- High Adiabatic Efficiency
- High Compression Ratio Capability
- High Differential Pressure Capability
- High Inlet Pressure Capability
- Small Physical Compressor Envelop (High Capacity/Size Ratio)
- No Unbalanced Forces
- Virtually No Flow Pulsations
- Very Low Noise Levels
- No Compressor Valves or Rod Packings
- No Timing Gears
- Very Few Wearing Parts; Roller and Face Seal
- Wide Speed Range
- Very Smooth Torque Response (No Flywheel Required)
- Reduced Packaging and Piping Complexity

Vector 7000 Series packages utilize a patented Guided Rotor principle compressor. These unique and revolutionary positive displacement compressors represent a new family of rotary compression.

A wide range of construction materials (including stainless steel), make them well suited to a variety of gases including: natural gas, hydrogen, carbon dioxide, biogas, syngas and landfill/digester gas.



Type Number	Eccentricity	Max Suction	MAWP
Model 250	0.250"	250 PSIG	350 PSIG
Model 275	0.275"	250 PSIG	350 PSIG
Model 312	0.3125"	250 PSIG	350 PSIG
Model 350	0.350"	600 PSIG	1300 PSIG
Model 410	0.410"	250 PSIG	450 PSIG
Model 500	0.500"	250 PSIG	600 PSIG
Model 700	0.700"	600 PSIG	800 PSIG



STANDARD PERFORMANCE LIMITS:

	Model 250	Model 275	Model 312	Model 350
MAWP	350 PSIG	350 PSIG	350 PSIG	1300 PSIG
Max Suction Pressure With Standard Face Seal	250 PSIG	250 PSIG	250 PSIG	600 PSIG
Delta P for 1 st Stage Rotor	125 PSIG	110 PSIG	120 PSIG	250 PSIG
Delta P for 2 nd Stage Rotor	180 PSIG	160 PSIG	170 PSIG	400 PSIG
Total Delta P for Two Stage Assembly	305 PSIG	270 PSIG	290 PSIG	650 PSIG
Max Horsepower	30 HP	40 HP	40 HP	150 HP

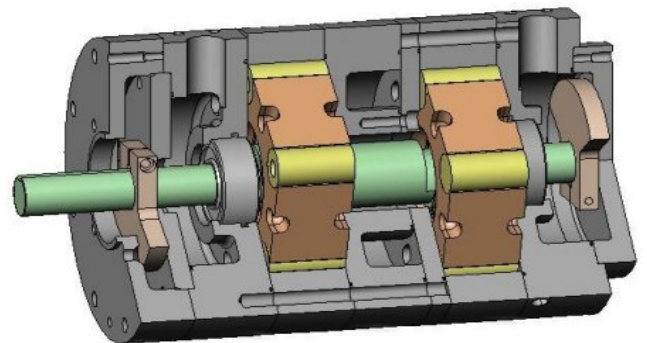
	Model 410	Model 500	Model 700
MAWP	450 PSIG	600 PSIG	800 PSIG
Max Suction Pressure With Standard Face Seal	250 PSIG	250 PSIG	250 PSIG
Delta P for 1 st Stage Rotor	165 PSIG	180 PSIG	250 PSIG
Delta P for 2 nd Stage Rotor	235 PSIG	250 PSIG	400 PSIG
Total Delta P for Two Stage Assembly	400 PSIG	430 PSIG	650 PSIG
Max Horsepower	175 HP	225 HP	600 HP

PRINCIPLE OF OPERATION

The Guided Rotor compressor is a positive displacement machine, representing a new family of rotary compressors. The compression volume is defined by a trochoidally rotating rotor mounted on an eccentric drive shaft, making these compressors simple in configuration and construction.

A single rotor compressor assembly is made-up of a housing, a rotor, roller seals, suction side plate, discharge side plate, crankshaft, rotor bearing, main bearings, end covers and a ceramic face seal. The compressor is modular in construction and can be configured as a multi-rotor and multistage assembly.

Although somewhat similar to the historic Wankel engine (and compressor), which utilized a theoretical trochoid, the GRC incorporates a patented involuted trochoid geometry. In addition the Guided Rotor compressor has a cylindrical seal rather than the linear seal of the Wankel. It is this combination of the involuted trochoid and the cylindrical seal, along with a proprietary geometric design, which allows the GRC to function and provide superior operating characteristics.



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