# **ARIEL CORPORATION**



JGC/JGD/JGF



	JGC		JGD			JGF			
Number of Throws	2	4	6	2	4	6	2	4	6
Rated Power (BHP)	2,070	4,140	6,210	2,070	4,140	6,210	2,070	4,140	6,210
Rated Power (kW)	1,544	3,087	4,631	1,544	3,087	4,631	1,544	3,087	4,631
Stroke (in)	6.5			5.5			5.0		
Stroke (mm)	165			140			127		
Maximum RPM	1,000			1,200			1,200	1,400	
Piston Speed (FPM)	1,083			1,100			1,000	1,167	
Piston Speed (m/s)	5.5			5.59			5.1	5.9	
Total Rod Load (lbs)	114,000								
Total Rod Load (kN)	507								
Rod Load Tension (lbs)	57,000								
Rod Load Tension (kN)	254								
Rod Load Compression (lbs)	60,000								
Road Load Compression (kN)	267								
Rod Diameter (in)	2.5								
Rod Diameter (mm)	64								
Crankshaft Centerline, from bottom (in)	22								
Crankshaft Centerline, from bottom (mm)	559								

# **FEATURES**

Ariel's large medium-speed separable reciprocating compressors are designed to pair with electric motors and natural gas engines. These compressors are engineered for applications requiring large horsepower drivers and high-compression capacity.









Rigid Conrod with bronze bushing

Application-Specifc Efficient Valves

Rugged one-piece Crosshead

Ariel "necked-down" piston rod design

## **Precision Bearing Shells:**

Every Ariel compressor features precision-machined trimetal main and connecting rod bearings.

## **Versatile Unloading Devices:**

Ariel offers manual, head-end variable volume clearance pockets on most cylinders. Pneumatic suction valve un-loaders are available on a limited basis.

#### **Efficient Valving:**

Plate-type valves are designed for modern speeds, utilizing non-metallic sealing elements as standard. Valves are selected to comply with established low-valve velocity standards.

#### **Heavy-Duty Crankshafts:**

The JGC/JGD/JGF compressors feature forged steel, precision-machined crankshafts with integral counterweights manufactured by Ariel Corporation.

# **High-Efficiency Canister Type Oil Filters:**

Ariel JGC/JGD/JGF compressors feature high-efficiency canister type oil filters rated at 1 micron nominal and 12 micron absolute.

#### **Rugged Crankcases:**

Ariel crankcases are designed for long service life and ease of access during maintenance. Our crankcases feature a heavily-ribbed, high-strength cast iron base with a removable lightweight aluminum top cover.

#### **Full Pressure Lubrication:**

A frame-driven lube oil pump provides cooled oil through a full-flow oil filter to all moving parts in the frame. A divider-block system supplies metered oil to cylinder bores and rod packings.

#### **High-Strength Bolting:**

Durable Grade 8 bolting on all loaded joints combined with specially designed fatigue-fighting bolts on all valve caps ensure ultimate holding strength.

#### **Rigid Connecting Rods:**

The JGC/JGD/JGF compressors feature durable connecting rods manufactured from forged steel with 4 bolts and a heavy-duty "I" section.

#### **Rugged Crossheads:**

One-piece, long-life crossheads with hardened, ground steel crosshead pins and direct, full-pressure lubrication at the top and bottom for minimum wear.

#### **Innovative Cylinders:**

Ariel's single and double-acting non-cooled cylinders eliminate the cost and maintenance associated with water cooling.

#### **Durable Pistons and Rods:**

JGC/JGD/JGF compressors feature wear-resistant ductile or gray iron pistons and precision-ground alloy steel piston rods with locking crosshead nuts. Rolled threads are 1/4" under rod diameter for easy installation.