# **ARIEL CORPORATION**



JGM/JGP



	JGM		JGP	
Number of Throws	1	2	1	2
Rated Power (BHP)	85	170	85	170
Rated Power (kW)	63	127	63	127
Stroke (in)	3.5		3.0	
Stroke (mm)	89		76	
Maximum RPM	1,500		1,800	
Piston Speed (FPM)	875		900	
Piston Speed (m/s)	4.45		4.57	
Total Rod Load (lbs)	12,000			
Total Rod Load (kN)	53			
Rod Load Tension (lbs)	6,000			
Rod Load Tension (kN)	26			
Rod Load Compression (lbs)	7,000			
Road Load Compression (kN)	31			
Rod Diameter (in)	1.125			
Rod Diameter (mm)	29			
Crankshaft Centerline, from bottom (in)	9.25			
Crankshaft Centerline, from bottom (mm)	235			

## **FEATURES**

This family of separable reciprocating compressors readily couple with a wide range of high-speed engines. The Ariel JGM and JGP are known for their cost effectiveness and are well suited for gas gathering, gas lift and CNG applications.









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 tri-metal 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.

## **Heavy-Duty Crankshafts:**

The JGM/JGP compressors feature forged steel, precision-machined crankshafts with integral counter-weights manufactured by Ariel Corporation.

## **High-Efficiency Spin-on Oil Filters:**

Ariel JGM/JGP compressors feature high-efficiency non-bypassing spin-on oil filters rated at 5 micron nominal and 17 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 JGM/JGP compressors feature durable connecting rods manufactured from ductile iron 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:**

JGM/JGP 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.

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