

# ARIEL CORPORATION

## JGN/JGQ



WORLD STANDARD  
COMPRESSORS



	JGN		JGQ	
Number of Throws	1	2	1	2
Rated Power (BHP)	126	252	140	280
Rated Power (kW)	94	188	104	209
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)	18,000		20,000	
Total Rod Load (kN)	80		89	
Rod Load Tension (lbs)	9,000		10,000	
Rod Load Tension (kN)	40		44	
Rod Load Compression (lbs)	10,000		11,000	
Road Load Compression (N)	44		49	
Rod Diameter (in)	1.125			
Rod Diameter (mm)	29			
Crankshaft Centerline, from bottom (in)	9.25			
Crankshaft Centerline, from bottom (mm)	235			

# FEATURES

A workhorse in field-gas applications, these separable reciprocating compressors are engineered to effortlessly pair with high-speed engines. Available with high-pressure cylinders, the JGN and JGQ are excellent choices for gas-lift and CNG vehicle-fueling applications.



Rigid Conrod With  
Bronze Bushing



Application-Specific  
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. Valves are selected to comply with established low-valve velocity standards.

## Heavy-Duty Crankshafts:

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

## High-Efficiency Spin-on Oil Filters:

Ariel JGN/JGQ 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 JGN/JGQ 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:

JGN/JGQ 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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