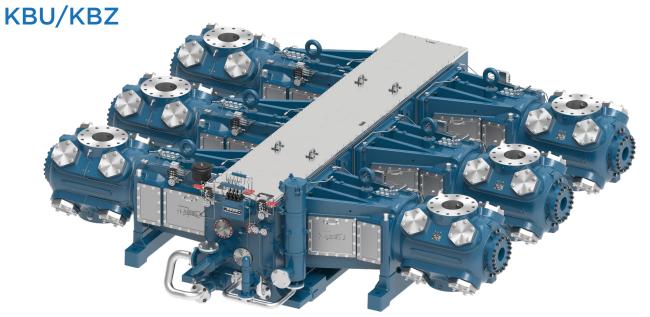
# **ARIEL CORPORATION**







	KBU			KBZ		
Number of Throws	2	4	6	2	4	6
Rated Power (BHP)	2,600	5,200	7,800	2,600	5,200	7,800
Rated Power (kW)	1,939	3,878	5,816	1,939	3,878	5,816
Stroke (in)	5.75			6.75		
Stroke (mm)	146			171		
Maximum RPM	1,200			1,000		
Piston Speed (FPM)	1,150			1,125		
Piston Speed (m/s)	5.84			5.71		
Total Rod Load (lbs)	150,000					
Total Rod Load (kN)	667					
Rod Load Tension (lbs)	75,000					
Rod Load Tension (kN)	334					
Rod Load Compression (lbs)	80,000					
Road Load Compression (kN)	356					
Rod Diameter (in)	2.875					
Rod Diameter (mm)	73					
Crankshaft Centerline, from bottom (in)	24					
Crankshaft Centerline, from bottom (mm)	610					

# **FEATURES**

Ariel's large medium-speed separable reciprocating compressors are capable of handling high rod loads of 150,000 lbs. The KBU and KBZ have proven to be the most cost effective method of compression for applications requiring large-horsepower drivers and high-compression capacity.







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 KBU/KBZ compressors feature forged steel, precision-machined crankshafts with integral counter-weights manufactured by Ariel Corporation.

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

Ariel KBU/KBZ compressors feature high-efficiency canister 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 KBU/KBZ compressors feature durable connecting rods manufactured from forged steel with 4 bolts and a heavyduty "I" section.

**Rugged Crossheads:** One-piece, long-life crossheads with hardened, ground stee

l crosshead pins feature direct, full-pressure lubrication at the top and bottom for minimum wear.

#### **Innovative Cylinders:**

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

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

KBU/KBZ 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.