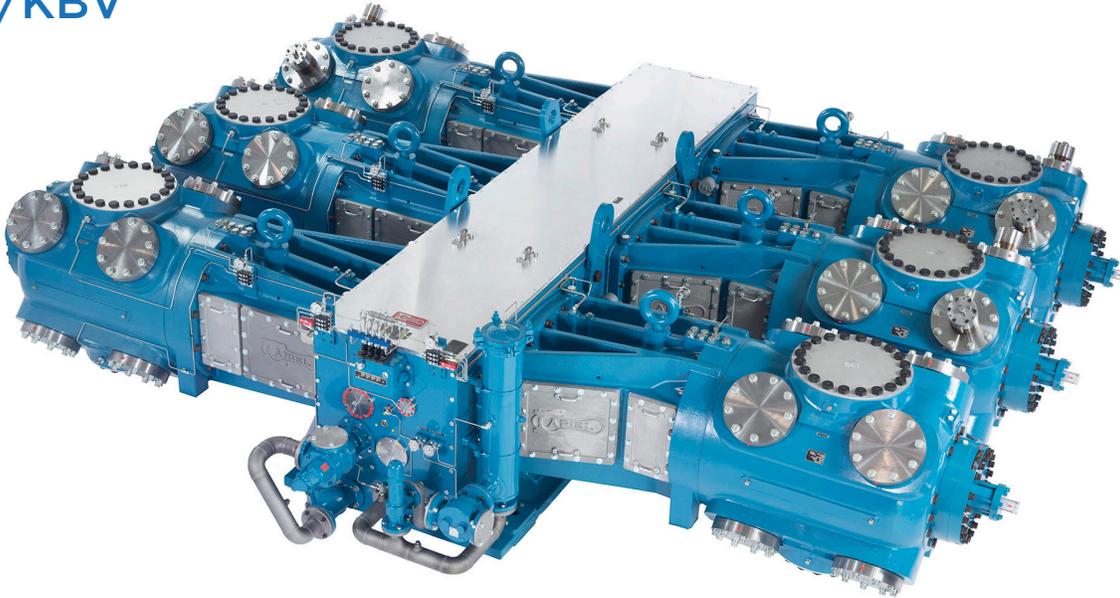


# ARIEL CORPORATION



WORLD STANDARD  
COMPRESSORS

## KBB/KBV



	KBB		KBV	
	4	6	4	6
Number of Throws	4	6	4	6
Rated Power (BHP)	6,668	10,002	6,668	10,002
Rated Power (kW)	4,972	7,458	4,972	7,458
Stroke (in)	7.25		8.50	
Stroke (mm)	184		216	
Maximum RPM	900		750	
Piston Speed (FPM)	1,088		1,063	
Piston Speed (m/s)	5.53		5.40	
Total Rod Load (lbs)	190,000			
Total Rod Load (kN)	845			
Rod Load Tension (lbs)	95,000			
Rod Load Tension (kN)	423			
Rod Load Compression (lbs)	100,000			
Road Load Compression (kN)	445			
Rod Diameter (in)	3.125			
Rod Diameter (mm)	79			
Crankshaft Centerline, from bottom (in)	27			
Crankshaft Centerline, from bottom (mm)	686			

# FEATURES

Ariel's largest compressor frames, the KBB and KBV are rated up to 10,000 bhp. Each compressor features a modern, durable design with a strengthened internal structure. This family of frames is recommended for use in pipeline transmission and high pressure injection 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 KBB/KBV compressors feature forged steel, precision-machined crankshafts with integral counter-weights manufactured by Ariel Corporation.

## High-Efficiency Canister Type Oil Filters:

Ariel KBB/KBV 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 KBB/KBV 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:

KBB/KBV 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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