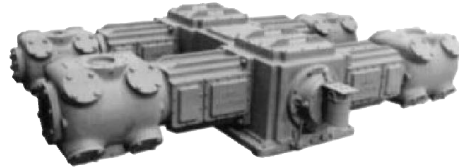


## Reciprocating gas compressors

### Eagle Series

#### Eagle 6000 Series



This series is currently the largest of the Knox Western compressors built in both two-throw and four-throw models in 3" and 4-1/2" strokes with a frame load rating of 30,000 pounds Tension and Compression.

SPECIFICATIONS	Two throw units models		Four throw units models	
	6230	6245	6430	6445
No. of crankthrows	2	2	4	4
Stroke (in.)	3	4.5	3	4.5
RPM, continuous	1800	1200	1800	1200
Piston speed, ft./min.	900	900	900	900
Rated horsepower	600	700	1350	1400
Crankshaft Cl. height (in.)	13	13	13	13
Overall width, max. (in.)	140	140	140	140
Overall length, max. (in.)	45	45	84	84
Crankshaft dia.- drive end	5.250	5.250	5.250	5.250
Approx. wt. (lbs.)	3000	3000	6500	6500
Oil pump capacity (GPM)	35	35	55	55
Sump capacity (gallons)	12	12	30	30
Rod loads (tension) (lbs.)	30000	30000	30000	30000
Rod loads (compression) (lbs.)	30000	30000	30000	30000
Rod loads (combined) (lbs.)	60000	60000	60000	60000
Crankpin diameter (in.)	5.250	5.250	5.250	5.250
Journal diameter (in.)	5.50	5.50	5.50	5.50
Main bearing (dia.) (in.)	9.84	9.84	9.84	9.84
Piston rod diameter (in.)	2.500	2.500	2.500	2.500

**COMPONENTS**

	6000
<b>Crankshaft</b>	
Crankpin diameter	5.25
Bearing Journal diameter	5.51
Main Bearing diameter	9.84
Connecting rod CL to CL	13.75
Connecting rod bearing width	3.00
Connecting rod bolting size	3/4-10
Connecting rod bushing width	3.25
<b>Crosshead</b>	
Crosshead surface area/side (sq. in.)	50.0
Floating crosshead pin diameter	3.75
<b>Piston rod diameter</b>	2.50

**Compressor materials Eagle Series\***

Components	Material
Crankcase	Grey iron
Crosshead guides	Grey iron
Crankshaft	Forged Steel
Connecting rods	Ductile iron 60-40-18
Connecting rod bearings	Steel backed babbit
Main bearings	Double row spherical roller
Connecting rod bushings	Phosphor bronze
Crossheads	Ductile iron 60-40-18 babbitt faced
Crosshead pin	Alloy steel 8620
Crosshead pin bushings	660 bronze
Piston rod	Alloy steel 4140
Rod packing rings	Non metallic full floating
All stress bolts	High tensile alloy
Pistons	Steel, grey iron, or alum
Standard piston rings	Non metallic
Standard rider rings	Non metallic
Valve cover O rings	Viton
Valve seats	Carbon steel
Valve guards	Carbon steel

\* API 618: Packages can be designed to API 618 third edition requirements including all piping, instrumentation and electrical systems. With some published exceptions, Knox Western compressors also meet the API 618 discipline.

**Eagle class double acting cylinder specifications \*\***

Bore Diameter (in.)	2	3	4	4.5	5	5.75	6	7	8	9	10	11	12	12.5	13	15	16	17	18.5
Cylinder Material	STL	STL	STL	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI	DI

Abbreviations: DI: Ductile Iron / STL: Steel.

\*\* For special cylinder applications, contact your Knox Western representative.

[www.knoxwestern.com](http://www.knoxwestern.com)

1111 Bacon Street, Erie, Pennsylvania 16511, U.S.A.  
 Phone: (814) 459 2754 | Fax: (814) 455 8493  
 info@knoxwestern.com