

Reciprocating gas compressors

Eagle Series

Eagle 2000 Series



Available in both two-throw and four-throw configurations with 3", 3-1/2", and 4-1/2" stroke, rated at 10,000 pounds Tension and Compression frame load capacity. This series uses the TP style as well as Eagle compressor cylinders mounted on a larger wider base, and accommodates up to 12" diameter bore cylinders.

SPECIFICATIONS	Two throw units models			Four throw units models		
	2230	2235	2245	2230	2235	2245
No. of crankthrows	2	2	2	4	4	4
Stroke (in.)	3	3.5	4.5	3	3.5	4.5
RPM, continuous	1,800	1,500	1,200	1,800	1,500	1,200
Piston speed, Ft./Min.	900	875	900	900	875	900
Rated horsepower	200	200	200	400	400	400
Crankshaft Cl. height (in.)	10	10	10	10	10	10
Overall width, max. (in.)	90	90	90	140	140	140
Overall length, max. (in.)	29	29	29	55	55	55
Crankshaft dia.- Drive end	2.875	2.875	2.875	2.875	2.875	2.875
Approx. wt. (lbs.)	750	750	750	1500	1500	1500
Oil pump capacity (GPM)	20	20	20	20	20	20
Sump capacity (gallons)	2.5	2.5	2.5	7.0	7.0	7.0
Rod loads (tension) (lbs.)	10,000	10,000	10,000	10,000	10,000	10,000
Rod loads (compression) (lbs.)	10,000	10,000	10,000	10,000	10,000	10,000
Rod loads (combined) (lbs.)	20,000	20,000	20,000	20,000	20,000	20,000
Crankpin diameter (in.)	3.00	3.00	3.00	3.00	3.00	3.00
Main bearing (dia.) (in.)	5.12	5.12	5.12	5.12	5.12	5.12
Piston rod diameter (in.)	1.125	1.125	1.125	1.125	1.125	1.125

COMPONENTS

	2000
Crankshaft	
Crankpin Diameter	3.00
Bearing Journal Diameter	2.95
Main Bearing Diameter	5.12
Connecting Rod CL to CL	9.00
Connecting Rod Bearing Width	1.85
Connecting Rod Bolting Size	1/2-13
Connecting Rod Bushing Width	1.91
Crosshead	
Crosshead Surface Area/Side (Sq. In.)	17.5
Floating Crosshead Pin Diameter	1.75
Piston rod diameter	1.12

Compressor materials Eagle Series*

Components	Material
Crankcase	Grey iron
Crosshead guides	Grey iron
Crankshaft	Ductile iron
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	D.I.	D.I.	D.I.	D.I.	D.I.	D.I.	D.I.	D.I.	D.I.	D.I.	D.I.	D.I.	D.I.	D.I.	D.I.	D.I.	D.I.

** For Special Cylinder Applications, contact your Knox Western Representative.