

Light-Duty Pedestal Rotary Gear Pumps

Description

Shertech self-priming, positive displacement, external rotary gear pumps are ideal for a wide range of light-duty industrial, marine, agricultural, and commercial applications, providing a nearly pulseless flow and are designed specifically for reduced speed operations. Some models include an internal pressure relief valve. Limited self-priming capability on packing seal types. Pillow block shaft assembly is required when pulley driven. Motors are not included.

Uses: For use with non-particulate and non-abrasive fluids compatible with pump wet-end construction component materials.

- Flows to 24.8 GPM
- Max. RPM: 1725
- Max. PSI: 100
- Suction lift to 19.5 ft.
- Maximum viscosity of 100,000 SSU at reduced speed (max. input torque of 45 -160 in.-lbs.)
- Temperature ranges from -20 to 280° F
- Seals – Viton lip or Kevlar[®]/Teflon[®] packing type
- Bushings – Steel, bronze or carbon/graphite
- Maximum working pressure: 130 PSI
- Pumps can operate bi-directionally (reversible). In the opposite rotation, the pump pressure relief valve, if equipped, will not function.

BRONZE – Excellent for water-based fluids. Pumps have 303 stainless steel shafts. Models without zerks are available with or without internal pressure relief valves and include carbon graphite drive shaft bushings. Packing Kevlar[®]/Teflon[®] seal with temperature range of -20° to 210° F. Wet-end parts: Zerk models are constructed from stainless steel (17-7, 300 series and/or 18-8), bronze, brass, vellumoid, Kevlar[®], and Teflon[®]. Non-zerk models are constructed from 303 stainless steel, bronze, brass, vellumoid, carbon, graphite, Kevlar[®], and Teflon[®]. Models that include internal pressure relief valves also have stainless steel (17-7, 300 series and/or 18-8) wet-end components.

CAST IRON – Specifically designed for use with oil-based fluids. Not to be used with water-based fluids. Models without grease zerks include steel spur gears with steel shafts, cast iron shaft support, Viton[®] lip seals having a temperature range of 32° to 280° F. Wet-end parts are constructed from cast iron, stainless steel (17-7, 300 series and/or 18-8), steel, vellumoid, and Viton. Models with grease zerks include steel spur gears with steel shafts, cast iron shaft support, Kevlar[®], and Teflon[®] packing seals having a temperature range of -20° to 210° F. Wet-end parts are constructed from cast iron, stainless steel (17-7, 300 series and/or 18-8), steel, vellumoid, Kevlar[®], and Teflon[®].

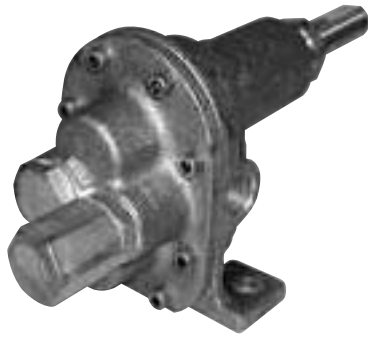
NOTE: Not for pulley drive systems without the use of a pillow block shaft assembly. See Rotary Gear Pump Selection Guide in the Motor Manual for suggestions concerning installation, selections, options, and accessories. For direct driving pumps, a coupler is required.

NOTE: Models with bearings and mechanical seal available as well as close-coupled.



WARNING: Do not use to pump flammable or explosive fluids such as gasoline, fuel oil, kerosene, etc. Do not use in flammable and/or explosive atmospheres. When pumping hazardous or dangerous materials, use only in a room or area designated for that purpose. For your protection, always wear proper clothing, eye protection, etc. in case of any malfunction. For proper handling techniques and cautions, contact your chemical supplier, insurance company and local agencies (fire dept., etc.). Failure to comply with this warning could result in personal injury and/or property damage.

Light-Duty Pedestal Rotary External Gear Pumps



BBV3



B3



C3K

Performance

Bronze Models	Cast Iron Models	Port Size*	Max. Input Torque in.-lbs.	Pump RPM	Suction** Lift (ft)	GPM Pumping 10 Wt. Oil at 70° F (500 SSU)											
						Free Flow		25 PSI		50 PSI		75 PSI		100 PSI			
						GPM	HP	GPM	HP	GPM	HP	GPM	HP	GPM	HP		
B1	C1K	1/4	45	900	1.5	1.2	1/4	1.0	1/4	0.8	1/4	0.6	1/4	0.4	1/4		
BB1	C1V					1200	2.0	1.6	1/4	1.5	1/4	1.4	1/4	1.3	1/4	1.2	1/3
BBV1						1725	2.5	2.2	1/4	2.1	1/4	2.0	1/4	2.0	1/3	1.9	1/2
B2	C2K	1/4	45	900	1.5	2.5	1/4	2.5	1/4	2.4	1/4	2.3	1/3	2.1	1/4		
BB2	C2V					1200	2.2	3.3	1/4	3.3	1/4	3.2	1/4	3.1	1/3	2.9	1/3
BBV2						1725	3.5	4.8	1/3	4.8	1/3	4.7	1/2	4.6	1/2	4.4	3/4
B3	C3K	3/8	90	900	2.8	3.7	1/4	3.6	1/3	3.5	1/3	3.4	1/2	3.2	1/2		
BB3	C3V					1200	5.7	4.9	1/4	4.8	1/3	4.7	1/2	4.6	1/2	4.4	3/4
BBV3						1725	7.9	7.0	1/2	6.9	1/2	6.8	3/4	6.7	1	6.5	1
B4	C4K	1/2	90	900	5.1	5.6	1/3	5.5	1/3	5.4	1/2	5.3	3/4	5	1		
BB4	C4V					1200	6.7	7.5	1/3	7.4	1/2	7.3	3/4	7.2	1	6.9	1
BBV4						1725	12.3	10.8	1/2	10.7	3/4	10.6	3/4	10.5	1	10.2	1½
B5	C5K	3/4	160	900	6.6	10.8	1/2	10.6	3/4	10.5	3/4	10.4	1	10	1		
BB5	C5V					1200	9.3	14.3	1/2	14.2	3/4	14.1	1	13.9	1½	13.5	1½
BBV5						1725	15.2	20.6	3/4	20.5	1	20.3	1½	20.2	2	19.8	2
B6	C6K	1	160	900	8.1	12.6	1/2	12.5	3/4	12.3	1	12.1	1	11.7	1½		
BB6	C6V					1200	11.7	16.7	3/4	16.6	1	16.4	1½	16.2	1½	15.8	2
BBV6						1725	19.5	24.8	3/4	24.7	1	24.5	1½	24.3	2	23.9	3

Test data taken on SAE 10 wt. oil at 70° F (500 SSU).

Performance in water will decrease by about 10%, and HP required will also be reduced by 10%. (Don't use water with Cast Iron.)

Pump performance when pump is new. As pump wears, the performance will decrease.

(*) Female NPT inlet and outlet (in inches).

(**) Suction lift for packing seal models may be reduced based on packing tightness or viscosity; requires wetted gears and primed seal chamber.

NOTES: Max. PSI = 100 PSI

Max. RPM = 1725 RPM

Max. Input Torque = See chart above.

Pumps can operate bi-directionally (reversible). In the opposite rotation, the pump pressure relief valve, if equipped, will not function.

Consult tables in the Motor Manual L-4082 on HP adders and speed recommendations for high viscosity fluids.

Manufacturer reserves the right to change performance without notification.

Source: Owner's Manual L-4085 (11/06)

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Price List and Specifications (Wet End)

List Price	Model	Port Size NPT*	Shaft Material	Casting Material	Gear Material	Bushing Material	Pressure Relief Valve**	Gasket Material	Packing/Lip Seal***	Shipping Weight (lbs.)
Bronze Models										
\$	B1†	1/4	303 SS	BR	BR	BR	NA	Vellumoid	Kevlar® Packing	3.5
\$	BB1	1/4	304 SS	BR	BR	CG	NA	Vellumoid	Kevlar® Packing	3.4
\$	BBV1	1/4	303 SS	BR	BR	CG	SS & BR	Vellumoid	Kevlar® Packing	3.6
\$	B2†	1/4	303 SS	BR	BR	BR	NA	Vellumoid	Kevlar® Packing	5.4
\$	BB2	1/4	303 SS	BR	BR	CG	NA	Vellumoid	Kevlar® Packing	5.2
\$	BBV2	1/4	303 SS	BR	BR	CG	SS & BR	Vellumoid	Kevlar® Packing	5.7
\$	B3†	3/8	303 SS	BR	BR	BR	NA	Vellumoid	Kevlar® Packing	9.1
\$	BB3	3/8	303 SS	BR	BR	CG	NA	Vellumoid	Kevlar® Packing	6.3
\$	BBV3	3/8	303 SS	BR	BR	CG	SS & BR	Vellumoid	Kevlar® Packing	6.8
\$	B4†	1/2	303 SS	BR	BR	BR	NA	Vellumoid	Kevlar® Packing	7.2
\$	BB4	1/2	303 SS	BR	BR	CG	NA	Vellumoid	Kevlar® Packing	7.0
\$	BBV4	1/2	303 SS	BR	BR	CG	SS & BR	Vellumoid	Kevlar® Packing	7.4
\$	B5†	3/4	303 SS	BR	BR	BR	NA	Vellumoid	Kevlar® Packing	9.4
\$	BB5	3/4	303 SS	BR	BR	CG	NA	Vellumoid	Kevlar® Packing	9.0
\$	BBV5	3/4	303 SS	BR	BR	CG	SS & BR	Vellumoid	Kevlar® Packing	10.2
\$	B6†	1	303 SS	BR	BR	BR	NA	Vellumoid	Kevlar® Packing	10.3
\$	BB6	1	303 SS	BR	BR	CG	NA	Vellumoid	Kevlar® Packing	9.9
\$	BBV6	1	303 SS	BR	BR	CG	SS & BR	Vellumoid	Kevlar® Packing	11.1
Cast Iron Models										
\$	C1V	1/4	CRS	CI	Steel	CI	NA	Vellumoid	Viton Lip Seal	2.8
\$	C1K†	1/4	CRS	CI	Steel	CI	NA	Vellumoid	Kevlar® Packing	4.0
\$	C2V	1/4	CRS	CI	Steel	CI	NA	Vellumoid	Viton Lip Seal	5.0
\$	C2K†	1/4	CRS	CI	Steel	CI	NA	Vellumoid	Kevlar® Packing	4.9
\$	C3V	3/8	CRS	CI	Steel	CI	NA	Vellumoid	Viton Lip Seal	5.7
\$	C3K†	3/8	CRS	CI	Steel	CI	NA	Vellumoid	Kevlar® Packing	6.1
\$	C4V	1/2	CRS	CI	Steel	CI	NA	Vellumoid	Viton Lip Seal	6.3
\$	C4K†	1/2	CRS	CI	Steel	CI	NA	Vellumoid	Kevlar® Packing	6.5
\$	C5V	3/4	CRS	CI	Steel	CI	NA	Vellumoid	Viton Lip Seal	8.2
\$	C5K†	3/4	CRS	CI	Steel	CI	NA	Vellumoid	Kevlar® Packing	8.7
\$	C6V	1	CRS	CI	Steel	CI	NA	Vellumoid	Viton Lip Seal	8.9
\$	C6K†	1	CRS	CI	Steel	CI	NA	Vellumoid	Kevlar® Packing	9.2

CG = Carbon Graphite BR = Brass CI = Cast Iron CRS = Cold Rolled Steel SS = Stainless Steel

(†) These models have grease zerks that require frequent greasing.

(*) NPT inlet and outlet ports (in inches).

(**) Bronze models with pressure relief valves are made of stainless steel (17-7, 300 series and/or 18-8), and bronze and/or brass.

(***) Kevlar® packing is Teflon® impregnated. Viton lip seals have 300 series stainless steel case.

NOTE: Manufacturer reserves the right to change specifications without notification.

To Order Optional Motors

For custom applications or configurations, select a motor from the motor section of this catalog.

Source: Owner's Manual L-4085 (11/06)