Z3500 Pump

Stationary and Truck Applications

Reversible sideplates provide twice the service life. They are easily reversed or replaced by removing the pump cover.

Elongated flange design retrofits other three-inch pumps with little to no change in piping.

Patented needle roller thrust bearings rated for 4,000 lbs minimizes sideplate wear. Typically, no field adjustment is required.

Unique porting and profiling of the cam reduces cavitation and noise and improves pump efficiency.

Silicon carbide seal seat offers unmatched sealing performance and a longer service life.



Higher flow rates for faster loading and unloading...

The Z3500 is a three-inch foot mount designed for both stationary and truck applications. This high capacity pump is capable of loading or unloading dual bobtail trucks. The locked rotor design ensures reliable performance and a long service life.

Installation is easy! The Z3500 retrofits the Corken model 1021 pump and other competitive three-inch pumps with little to no change in piping.

Other advantages:

- Unlike competitive pumps restricted to 640 RPM, the Z3500 can operate up to 800 RPM.
- Offers up to 7% or more capacity than competitive pumps at typical operating conditions.
- Silicon carbide seal seat offers unmatched sealing performance and a longer service life.

- Large diameter, non-metallic vane drivers are not speed sensitive allowing the pump to operate at a higher RPMs without causing damage.
- Advanced material specification for cam and blades extends the service life.
- Unique porting and profiling of the cam reduces cavitation and noise and improves pump efficiency.

Capacity Comparison ¹					
	RPM				
	420	520	640	780	
Corken gpm (L/min)	86	116	143	177	
	(326)	(439)	(541)	(670)	
Competitor gpm (L/min)	80	108	133		
	(303)	(409)	(503)		

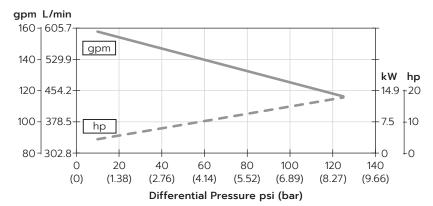
¹ All capacities are rated at 50 psid and system and condition dependent.



Operating Specifications

RPM range:	420-800 RPM	
Max working pressure:	350 psig (24.1 bar g)	
Temperature range:	-25°F-225°F (-32°C-107°C)	
Internal relief valve:	Yes	
Max differential pressure:	150 psid (10.3 bar d)	
Flow range:	52–197 gpm (197–746 L/min)	

Performance Curves at 640 RPM

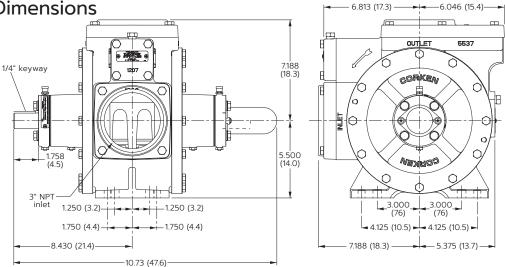


Material Specifications

Part	Standard Material	Optional Material
Case, head, rotor, relief-valve cap, bearing cap	Ductile iron ASTM A536	
Cam	Gray iron ASTM A48, Class 50	
Sideplate	Gray iron ASTM A48, Class 30	
Welding flange	Steel	
Seal seat	Gray iron	Stainless steel and Ni-Resist
Seal metal parts	Steel	
Shaft	8620 steel	
Vanes and vane drivers	Advanced polymers	
Relief valve spring	Stainless steel	
Relief valve	Steel	
Bearing	Steel	
Thrust bearing	Steel	
O-rings	Buna-N	PTFE, Viton ®1, Neoprene ®1
Retainer rings	Steel	

¹Registered trademark of the DuPont company.

Outline Dimensions



All dimensions are in inches (centimeters).

Solutions beyond products...



CORKEN, INC. • A Unit of IDEX Corporation 3805 NW 36th Street, Oklahoma City, OK 73112 U.S.A. Phone (405) 946-5576 • FAX (405) 948-7343 Website: www.corken.com • E-mail: cocsalesdept@idexcorp.com





