

# Z3500 Pump

For Truck and Stationary Applications

Reversible sideplates add twice the life. Sideplates are easily reversed/replaced by removing just twelve head bolts.

Unique elongated flange configuration enables you to retrofit other three-inch pumps with little or no change in piping.

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

Computer designed porting and profiling of the cam reduces cavitation and improves the pumping efficiency.



## New Z-Series pump with higher flow rates for faster loading and unloading!

The Z3500 is a three-inch foot mount pump designed for stationary and truck applications such as loading and unloading single and dual bobtails. It offers the same locked rotor design used in the Corken Z-Series truck pumps to ensure a longer pump life and excellent performance. The Z3500 also delivers higher flow rates than other three-inch competitive pumps, so your loading times are shortened.

Lastly, installation is easy because the Z3500 retrofits the Corken model 1021 pump and other competitive three-inch pumps with little or no change in piping.

### Advantages:

- Large diameter non-metallic pins are not speed sensitive so you can operate the pump at a higher RPM and not damage the pump.
- High tech materials used on cam and blades extend the life of the pump.
- Up to 7% or more capacity at 640 RPM.

- Unlike other three-inch stationary pumps rated at 640 RPM, the Z3500 is rated up to 800 RPM providing higher capacity without damage.
- Maintenance is made simple. When it becomes necessary to service the pump, all you need to do is remove twelve head bolts to inspect the bearings, seals, sideplates, rotor, vanes and vane drivers.
- Retrofits the Corken model 1021 pump and other three-inch competitive pumps with little or no change in piping.

CAPACITY COMPARISON*				
	RPM			
	420	520	640	780
Corken gpm (L/min)	86 (326)	116 (439)	143 (541)	177 (670)
Competitor gpm (L/min)	80 (303)	108 (409)	133 (503)	—

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

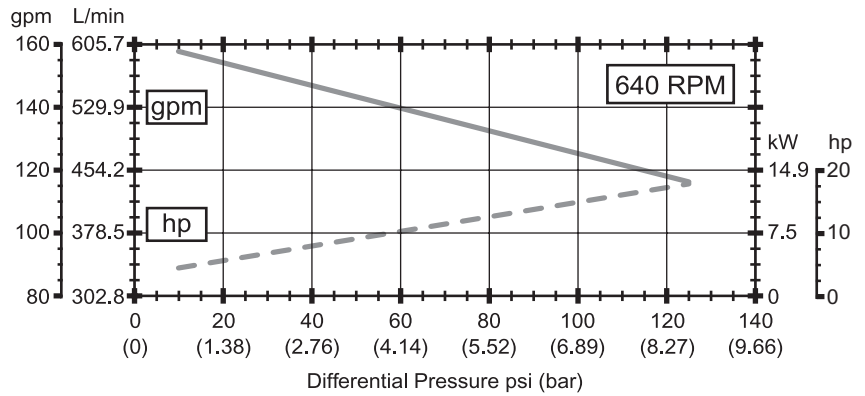
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IDEX

## Operating Specifications

<b>RPM range:</b>	420–800 RPM
<b>Max working pressure:</b>	400 psig (28.6 bar)
<b>Temperature range:</b>	-25°F–225°F (-32°C–107°C)
<b>Internal relief valve:</b>	Yes
<b>Max differential pressure:</b>	150 psid (10.3 bar d)
<b>Flow range:</b>	52–197 gpm (197–746 L/min)

## Performance Curves

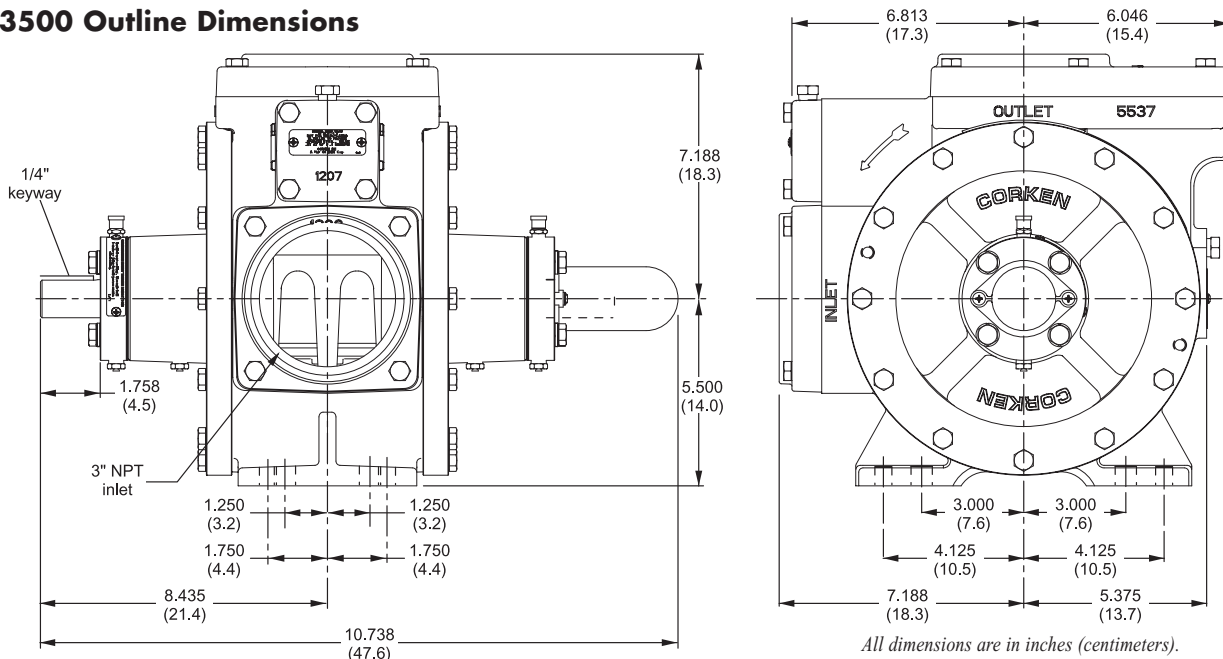


## Material Specifications

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 & 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®, Neoprene® <sup>1</sup>
Retainer rings	Steel	

<sup>1</sup>Viton® and Neoprene® are a registered trademarks of the DuPont company.

## Z3500 Outline Dimensions



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QUALITY  
**ISO 9001**  
SYSTEM

ENVIRONMENTAL  
**ISO 14001**  
MANAGEMENT  
SYSTEM

CORKEN, INC. • A Unit of IDEX Corporation  
3805 N.W. 36th St., Oklahoma City, OK 73112 U.S.A.  
Phone (405) 946-5576 • FAX (405) 948-7343

Visit our website at <http://www.corken.com> • E-mail us at [info.corken@idexcorp.com](mailto:info.corken@idexcorp.com)

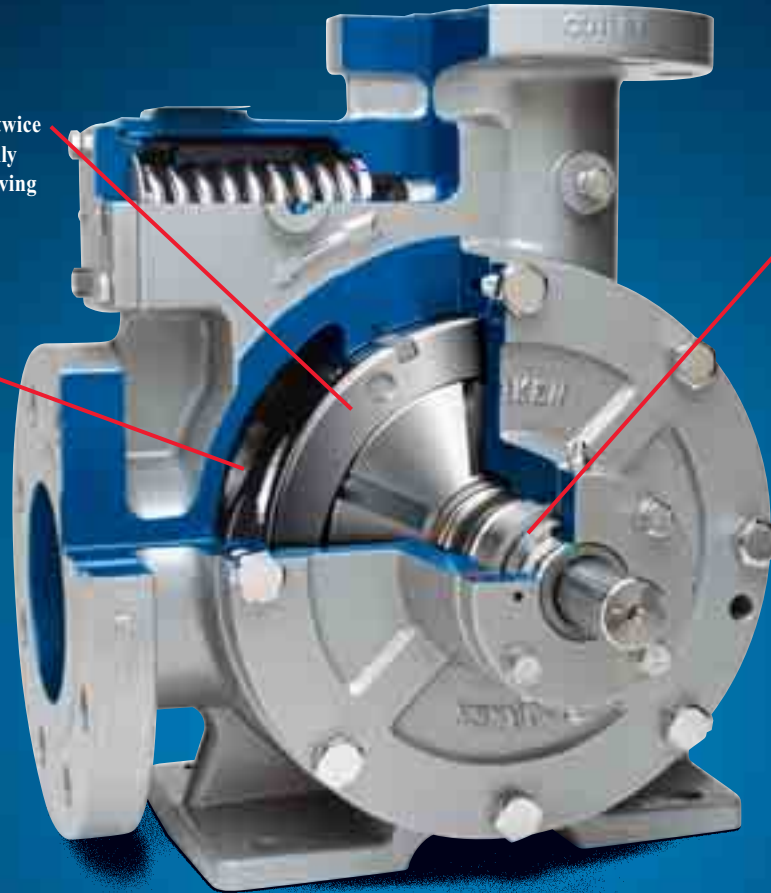
# Z4500 Stationary Pump

Reduces Fill Times to Save Time and Money

Reversible sideplates add twice the life. Sideplates are easily reversed/replaced by removing just eight head bolts.

Computer designed porting and profiling of the cam reduces cavitation and improves the pumping efficiency.

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



## Higher capacities shorten fill times for transports and multiple bobtail loading.

The Z4500 is a four-inch stationary pump designed for transport loading and multiple bobtail loading applications. If you have two or more bulkheads to load bobtails and transports and would like to shorten your fill times, then the Z4500 is the stationary pump for you. The Z4500 can fill two 3,000 gallon bobtails in 20 minutes or less at typical operating RPMs.

- Large diameter non-metallic pins are not speed sensitive so you can operate the pump at a higher RPM and not damage the pump.
- High tech materials used on cam and blades help extend the life of the pump.
- Unlike other four-inch stationary pumps rated at 640 RPM, the Z4500 is rated up to 800 RPM providing higher capacity without damage.

- Maintenance made simple. When it becomes necessary to service the Z4500 stationary pump, all you need to do is remove eight head bolts to inspect the bearings, seals, sideplates, rotor, vanes and vane drivers.
- Higher capacities than other four-inch stationary pumps—up to 15% more at typical operating conditions.

CAPACITY COMPARISON*				
	RPM			
	420	520	640	780
Corken gpm (L/min)	197 (746)	248 (939)	309 (1,170)	382 (1,446)
Competitor gpm (L/min)	170 (643)	220 (833)	270 (1,022)	—

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

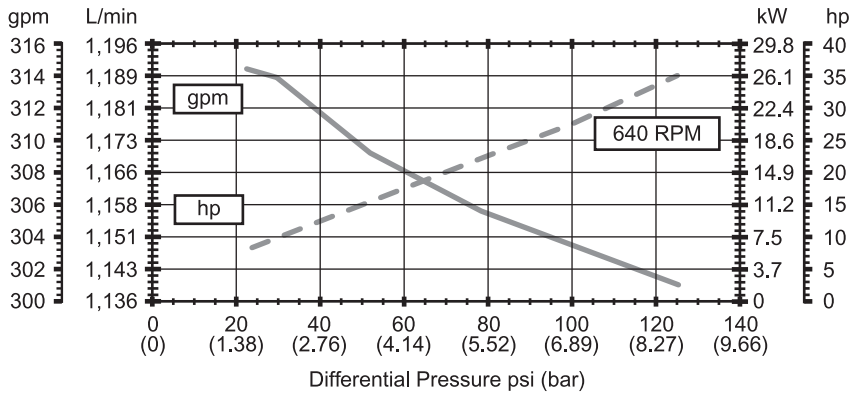
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## Operating Specifications

<b>RPM range:</b>	420–800 RPM
<b>Max working pressure:</b>	400 psig (28.6 bar)
<b>Temperature range:</b>	-25°F–225°F (-32°C–107°C)
<b>Internal relief valve:</b>	Yes
<b>Max differential pressure:</b>	125 psid (8.6 bar d)
<b>Flow range:</b>	190–382 gpm (719–1,457 L/min)

## Performance Curves

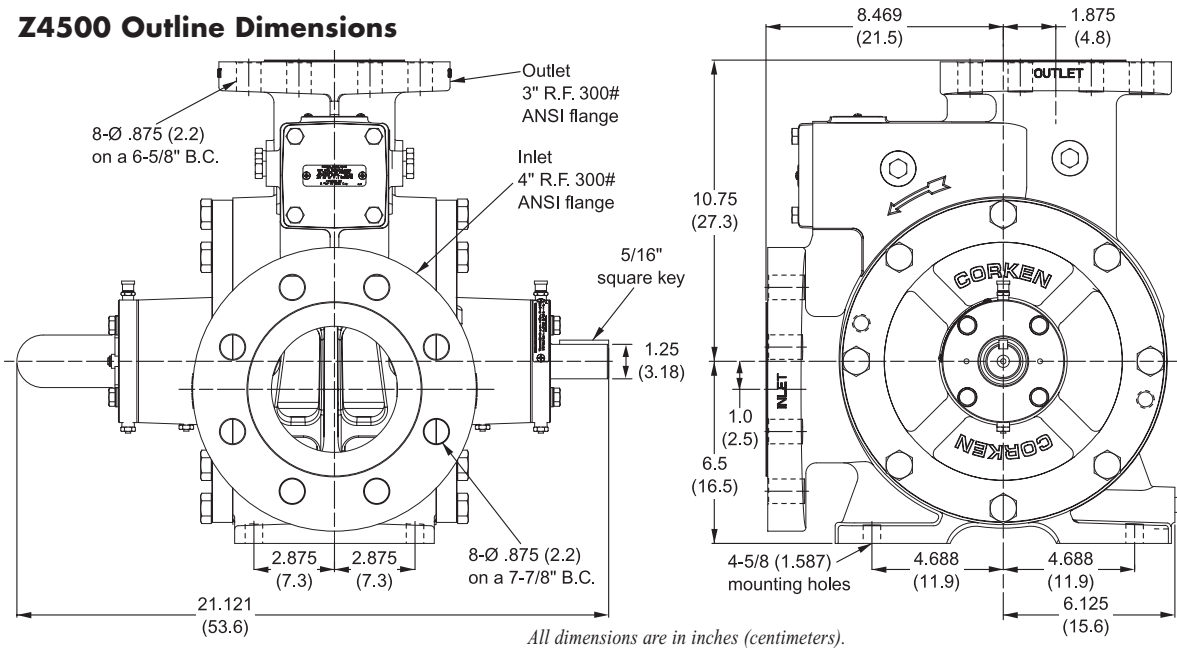


## Material Specifications

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 & Ni-Resist
Seal metal parts	Steel	
Shaft	8620 steel	
Vanes and vane drivers	Advanced polymers	
Relief valve spring	Stainless steel	
Relief valve	Stainless steel	
Bearing	Steel	
Thrust bearing	Steel	
O-rings	Buna-N	PTFE, Viton®, Neoprene® <sup>1</sup>
Retainer rings	Steel	

<sup>1</sup>Viton® and Neoprene® are a registered trademarks of the DuPont company.

## Z4500 Outline Dimensions



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Visit our website at <http://www.corken.com> • E-mail us at [info.corken@idexcorp.com](mailto:info.corken@idexcorp.com)