

PACKO ALWAYS A STEP AHEAD

**VERDER**  
passion for pumps

ROTARY LOBE PUMPS | CIRCUMFERENTIAL PISTON PUMPS | TWIN SCREW PUMPS

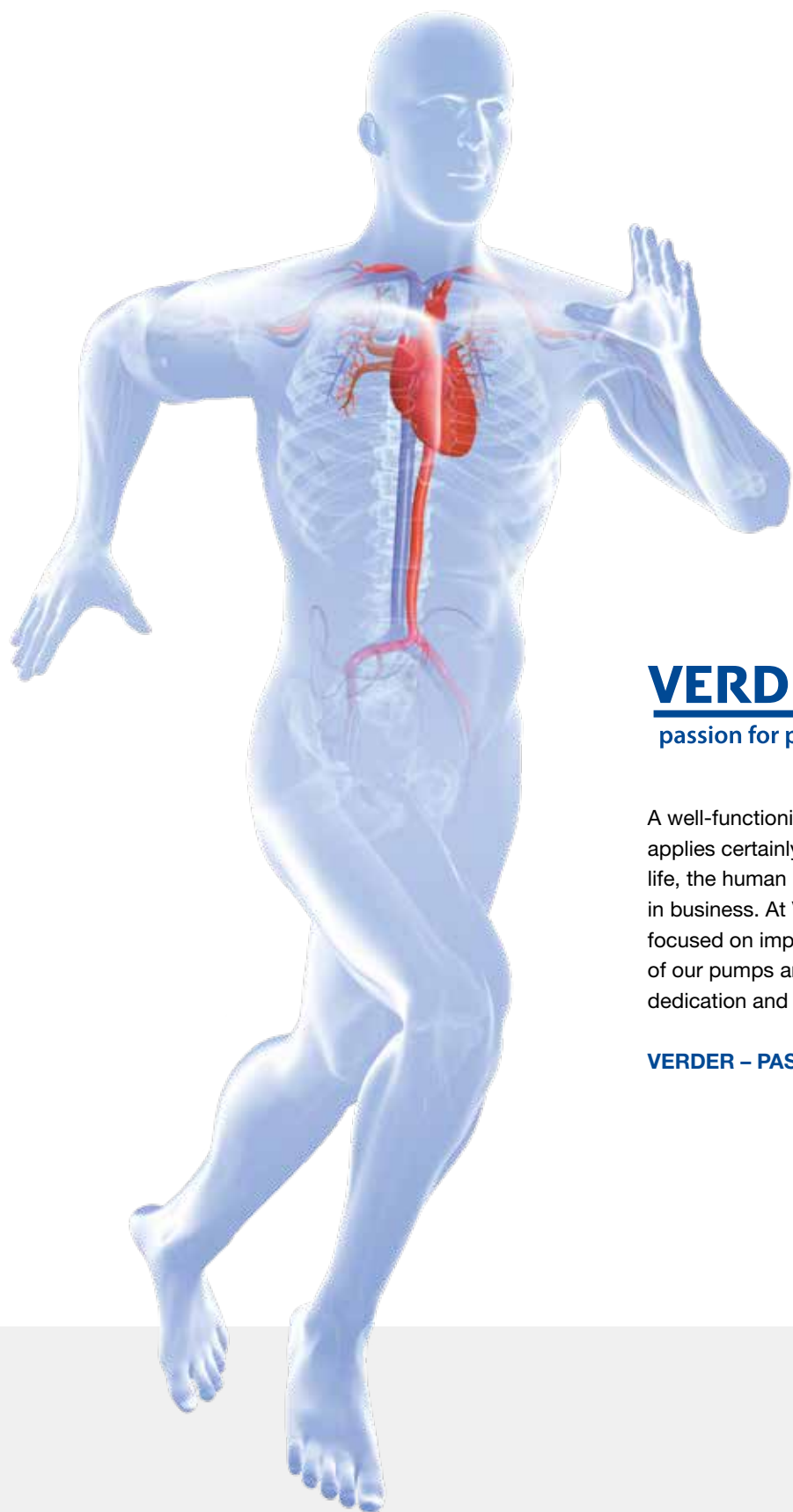
# PACKO

The hygienic pump  
specialist



- ✓ Large selection
- ✓ Best quality
- ✓ Highest standards

**Packo**






**VERDER**   
passion for pumps

A well-functioning pump helps you succeed. That applies certainly to the most important pump in life, the human heart, but the same goes for pumps in business. At Verder, all energy and attention is focused on improving the quality and performance of our pumps and service. We do so with energy, dedication and most importantly, with our heart.

**VERDER – PASSION FOR PUMPS**

# PACKO HYGIENIC

	Rotary lobe pumps		
	ZL	TP	ZW
			
Max. flow rate [l/min]	1.670	1.141	250
Max. pressure [bar]	20	15	6
Surface roughness Ra [µm]	< 0,6	< 0,6	< 0,6
Rotor types	Single-Wing Bi-Wing Tri-Lobe / Bi-Lobe Heli-Lobe Multilobe	Tri-Lobe	Elastomer-Heli-Lobe
Connection versions	DIN 11851 Flange (ANSI / DIN) rectangular inlet SMS RJT	DIN 11851 Flange (ANSI / DIN) rectangular inlet SMS	DIN 11851 Flange (ANSI / DIN) Tri-Clamp SMS RJT
Options	Heating jacket Relief valve Stainless steel gear housing ATEX Flushed GLRD Double-acting GLRD O-ring seal Double O-ring seal Triple lip seal	Heating jacket Relief valve ATEX Options on request	Stainless steel gear housing Double-acting GLRD Triple lip seal
Certificates	3A Material 3.1 FDA Performance Test 1935/2004 EHEDG	3A Material 3.1 FDA Performance test 1935/2004	3A Material 3.1 FDA Performance test 1935/2004
Standard configuration	Stainless steel 316L Bi-wing Single-acting GLRD (SiC/SiC/EPDM) DIN 11851 connections Cast iron gear housing	316L stainless steel Tri-lobe Single-acting GLRD ( SiC/SiC/EPDM) DIN 11851 connections Cast iron gear housing	316L stainless steel Elastomer heli-lobe Single-acting GLRD (SiC/SiC/EPDM) DIN 11851 connections Cast iron gear housing

100% TESTED BE

# ROTORS

For rotary lobe pumps, circumferential piston twin screw pumps

The large selection of rotor types makes it possible to find the perfect fit for your application.

	BI-WING SINGLE-WING	TRI LOBE	MULTI LOBE
			
Low pulsation	O	+	+
NPSH	O	+	+
Solids handling	++	+	O
CIP feed pump	+	+	+
Low noise	O	O	O
Pressure	+	+	++

+++ *excellent*  
 ++ *very good*  
 + *good*  
 O *satisfactory*

# PACKO ROTARY PUMPS

Packo's range of rotary lobe pumps in the state of the art in its specific applications configurations to suit your specific application.



## Unique Sealing concept

Front-accessible seals allow for faster maintenance, easier cleaning and shorter downtime. All sealing options, such as O-ring seals, PTFE lip seals, flushed seals, are designed for quick and easy conversion

## Optimised Cleaning

Short flushing paths enable perfect CIP results.

## Range of rotors & connections

The wide range of rotor types and connections makes it possible to achieve a perfect fit for the application.

## Stainless steel gear housing

As an option, the gear housing can be made from precision-cast stainless steel, providing a paint-free, rust-free surface with long durability and thus increasing quality and service life.

# ZL SERIES



Pumps with heat jacket

Designed for products that require temperature control, such as sugar solutions, chocolate, syrup and brewer's yeast. Available for pump head cover and housing.



Rectangular inlet

An extended rectangular inlet makes it possible to pump highly viscous fluids such as semi-solid pastes or mixtures with semi-solid particles.



# PACKO ROTARY TRUCK PUMPS



## TP SERIES

- The TP series has been developed for use on tankers. It provides high capacity and pressure for both low and high-viscosity fluids, enabling faster loading and unloading.
- Hygienic due to a specially profiled sealing system, Ra <0.6 µm surface finish and minimal dead space in the sealing area.
- Parts in contact with fluids are made of 316L stainless steel.
- Front-accessible seals allow for easier and faster maintenance, without having to dismantle the pump housing.
- TP pumps have a lightweight housing, high efficiency and, compared to other tanker pumps, save fuel.
- Hollow shafts enable direct-coupled SAE B or C hydraulic flange motors as an alternative to standard PTO shafts.

Model	liter/rev	Max pressure (bar)	Connection (mm)	Weight (kg)	Max speed (rpm)
TP/220	0.78	15	50	77	700
TP/230	1.07	10	76	83	700
TP/330	1.16	12	76	53	700
TP/340	1.63	8	100	60	700

# PACKO PHARMACEUTICAL



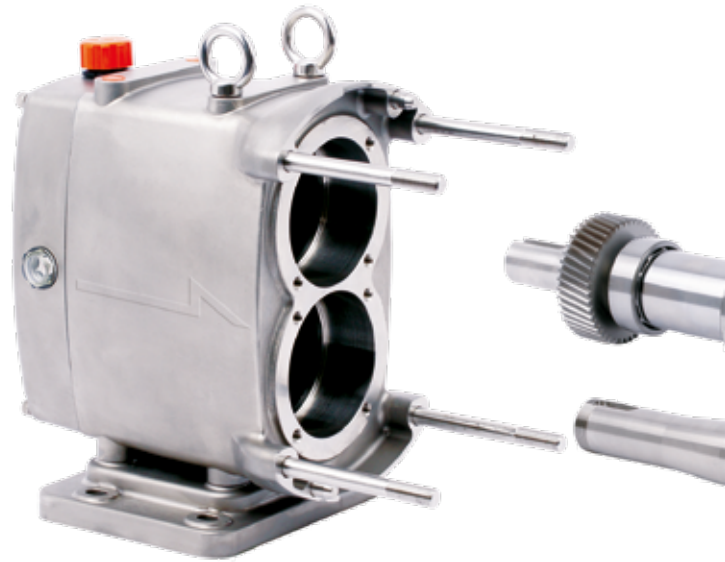
## ZLC SERIES

- The new ZLC series has been especially designed for applications in the pharmaceutical industry. All parts in contact with fluids are made of 316L stainless steel (optionally 1.4435), have surface roughness of  $Ra < 0.4 \mu m$  and are electropolished to meet the stringent requirements of the industry.
- The specially adapted pump head, in combination with its vertical alignment, facilitates complete residual drainage.
- All current certificates applicable to the pharmaceutical industry are obtainable (e.g. FDA, USP class VI, material certificate 3.1, etc.).
- The wide range of rotor types and connections makes it possible to achieve the perfect fit for the application.



# PACKO CIRCUMFERENTIAL PISTON PUMPS

Packo's new ZP series has been developed on the basis of Packo's proven experience and accumulated knowledge in the field of hygienic pumps. The front-accessible sealing system makes the ZP series CIP-capable and compliant with the strictest hygiene standards.



## Non-Galling Stainless steel rotor

Rotors are made from nickel-based 'non-corrosive' non-galling stainless steel. The narrow gap dimensions together with the rotor geometry ensure a long sealing distance between the pump inlet and outlet. This results in low slip (optional: stainless steel rotors).

## Optimised Cleaning

The front-accessible seals allow for better cleanability. In addition, they can also be replaced without having to dismantle the housing, thus reducing downtime.

## Easy Adjustment

Compared to other major circumferential piston pump manufacturers, the dimensioning of the piston clearance, which is adjusted by means of stainless steel discs between the gear and housing, can be carried out effortlessly.

## Stainless steel gear housing

As an option, the gear housing can be made from precision-cast stainless steel providing a paint-free, rust-free surface with long durability and thereby increasing quality and service life.

# ZP SERIES

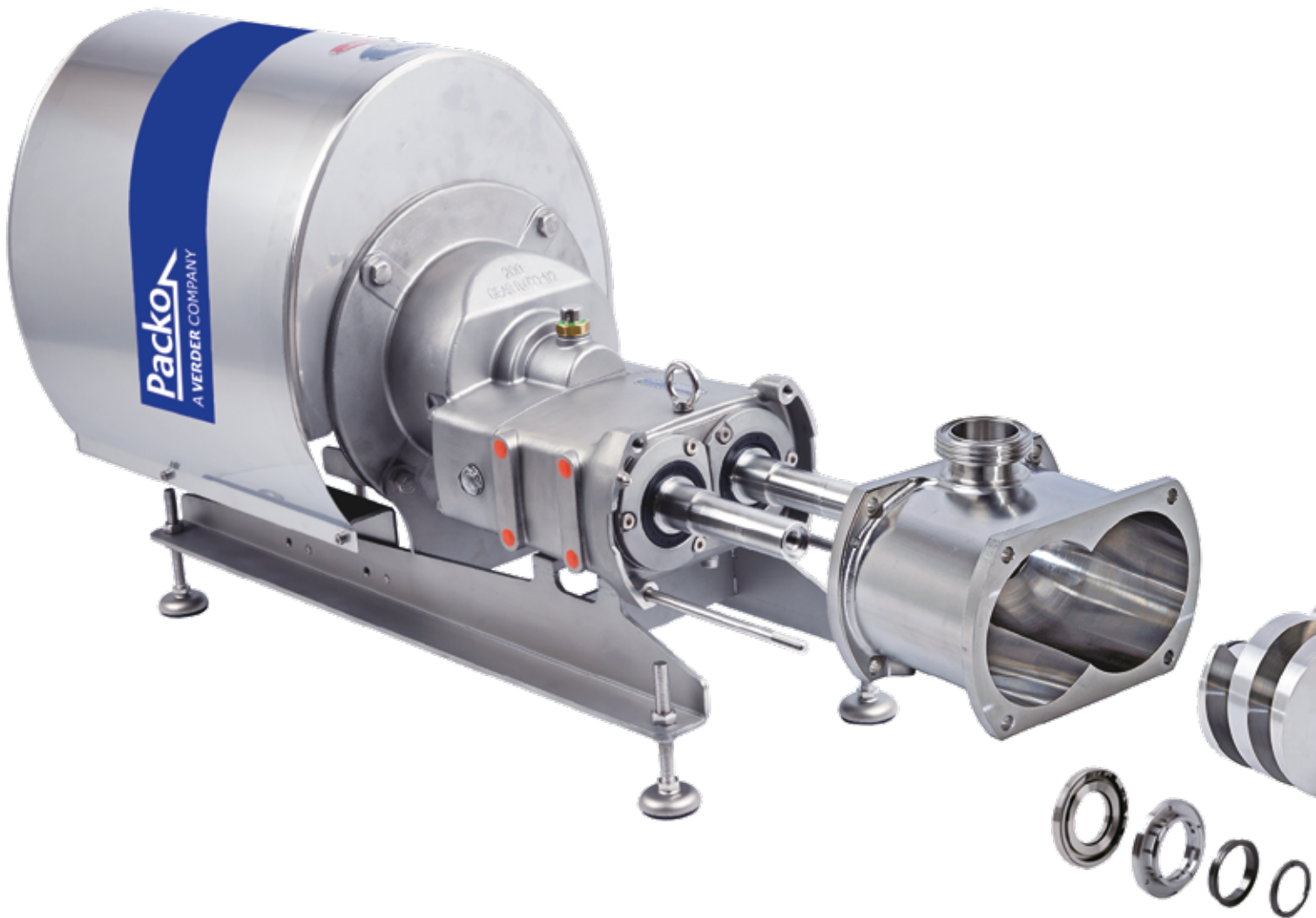


- The ZP series is hydraulically and dimensionally comparable to the Waukesha U2 series.
- The compact sealing system results in a shorter shaft overhang compared to other well-known circumferential piston pump manufacturers. It is a key feature that enables quiet operation, even at high pressure.
- A variety of sealing options allow for rapid adaptation to changing operating conditions, including mechanical seals, lip seals and O-ring seals.
- Two keys on each rotor enable smooth operation at high output pressure or external vibration.
- The oil-bath lubrication is more efficient than grease lubrication.
- A variety of connection options are available, including SMS, RJT, DIN, ISO, Tri-Clamp and flanges.
- A heating jacket is available for the front housing cover and pump housing.

Model	Liter/rev	Max pressure (bar)	Connection (mm)	Max speed (rpm)
ZP/015	0.063	15	38	800
ZP/018	0.12	12	38	800
ZP/030	0.26	10	50	700
ZP/060	0.74	15	63	600
ZP/130	1.18	08	76	600

# TWIN SCREW PUMP

Packo's ZS twin screw pumps are the most hygienic processes as well as the lobe pumps. For this reason, these pumps have a number of advantages over conventional pumps.



## Optimised housing

The housing has large radii, which means that there are no dead spaces at the pump outlet. This greatly benefits both operation (smoother flow rates) and cleaning.

## Quick and easy maintenance

The sealing system allows seals to be changed from the front without having to remove the pump from the system. The design enables faster and easier maintenance.

## High energy efficiency

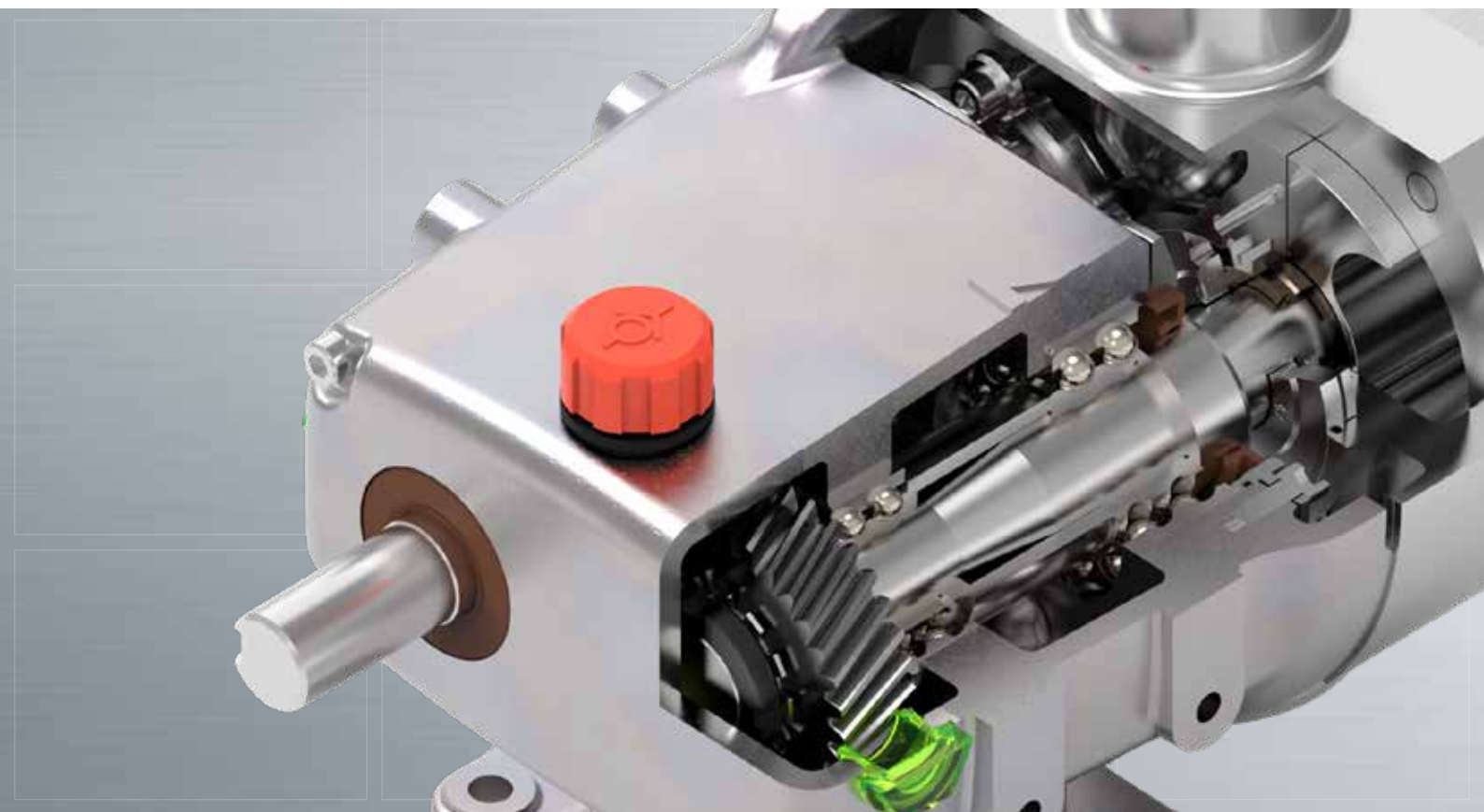
The ZS gear assembly contains double angular ball bearings, which allow high speeds with lower heat development. This design is already used successfully in our rotary lobe pumps.

# ZS SERIES

**Unique – Smart – Innovative!**

Packo has combined its lengthy experience in rotary lobe and centrifugal pumps to develop a range of twin screw pumps, which combine the benefits of both products.





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**VERDER**  
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