

ALWAYS A STEP AHEAD

HIGH PRIDE / HIGHER PERFORMANCE / THE HIGHEST QUALITY

JEC
P U M P S

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KOREA

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ALWAYS A STEP AHEAD

JEC LTD. was founded as Jun Engineering in 1990 and started export in 1995.

As a result of continuous growth over the years and innovative management dedicated to the fulfillment of our customer's needs, now we have

Over 40 partners including Germany, U.S.A, Japan and all over the world.

JEC LTD. could only exist because of our dream to be in the TOP 3 pump solution provider and to be the most reliable company to the customer and all JEC family.



Global Top 3

JEC, being always a step ahead, will be in the best three manufacturers in the sanitary pump's fields in world wide through never-stop of research and developments.

Fast Innovation/Best Benefit

JEC will provide you a pure and clean quality of life through continuous innovation. JEC customer will be offered the most reliable products which will bring the best benefit.

Professional/Initiative

Professional and initiative JEC members will create new value for customer's satisfaction. And we will keep our efforts to provide the best benefit and welfare to employees.



JEC SPECIALIST OF **SANITARY PUMPS**

HIGH PRIDE
HIGHER PERFORMANCE
THE HIGHEST QUALITY

JEC pumps have been tested in accordance with EHEDG requirements and authorized to carry the 3-A symbol.



Foods

soup, syrup, vinegar, chocolate, candy and sausages etc.

Dairy Products

milk, yogurt, cheese, butter, ice cream and cream etc.

Beverages

juice, coffee, healthy drink, beer, wine and makgeolli(raw rice wine) etc.

Oil

cooking oil, olive oil, palm oil, grape seed oil and grease etc.

Pharmaceuticals

water for injection(WFI), RO and DI Water etc.

Chemicals

skin, lotion, cream, purified water and various solvent etc.



JEC ROTARY LOBE PUMPS

HIGH PRIDE
HIGHER PERFORMANCE
THE HIGHEST QUALITY

The JEC range of rotary pumps comprises a number of different pump types-each one is state-of-the art within its specific application area. The pumps can be fitted with a variety of features to adapt to specific pumping tasks. In addition, it is possible to customize the pumps for optimum function or performance in relation to the job at hand.



Hygienic Design

JEC pumps offer a number of features that maximizes cleanability in order to provide a perfect CIP. ZL series have been certified in accordance with EHEDG standards and are authorized to carry the 3-A symbol.

Unique Seal Type

Front Loading Seal provides faster maintenance, easier cleaning and less downtime. All seal options O-ring seal, PTFE Triple lip-seal, Flushing seal are designed for quick and simple retrofit.

Upgraded CIP

Minimized product contact area at only 3mm between seal rings and case-profiled front cover O-ring positioned 0.5mm inside rotor case enable CIP performance perfectly under any circumstances.

Bi-wing Rotor

A low-slip Bi-wing rotor maintains efficiency even on low viscosity products and smooth movement of delicate products; simple timing to reduce maintenance and minimize the potential for rotor-to-rotor contact.

Stainless Steel Gearbox

Optional stainless steel gearbox made from precision casting (Lost Wax) offers paint free, rust free and long last durability, therefore yields high life time value.

Helical Timing Gears

The pump rotors are driven smoothly at less vibration and extended of pump efficiency and seal lifetime by a high-precision ground helical gear even under high speed and discharge pressure.

SS316L and 0.6 μ mRA standard

All of product contact areas are standardized with SS316L and 0.6 μ m RA below of mirror surface in order to perfectly meet the GMP, EHEDG and 3-A requirements.

Universal Mounting

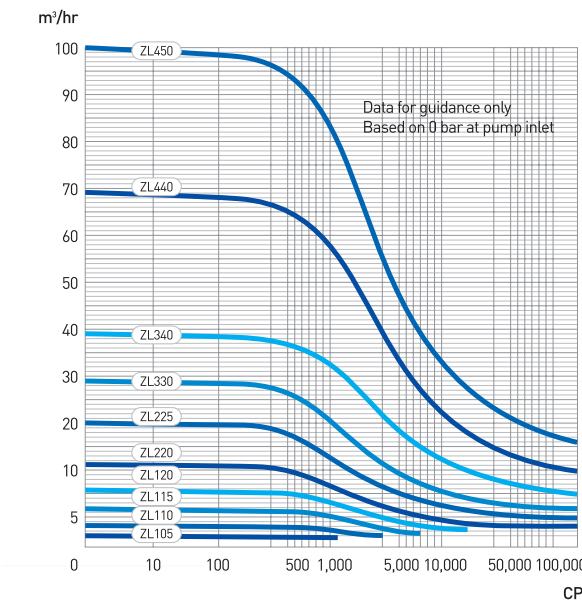
To allow high flexibility when fitting the pump into a production line, pumps can be mounted with top/bottom shaft drive, vertical/horizontal in/outlet and feet upward.

JRZL SERIES

HIGH PRIDE
HIGHER PERFORMANCE
THE HIGHEST QUALITY

You can always be sure of the greatest possible hygiene.

- JRZL series are designed for broad applications spectrum covering dairy, food, beverages, pharmaceuticals, cosmetics, bakery, detergent, liquor, chemical industries and LCD/PDP manufacturing etc. They are designed specifically for conveying fluids in the low to high viscosity range with smooth product handling.
- With high grade 0.6 μ mRa surface finish, unique seal and casing design, JRZL series are suitable for Cleaning In Place (CIP) and offer exceptional levels of hygiene.
- Wetted parts are made of SS316L
- Our broad range of seal options such as mechanical seal, O-ring seal and Lip seal provides optimal solution for your need and application.
- Optimal CIP is realized with O-ring position which minimizes dead-end between front cover and casing.
- JEC's various rotors (Single wing, Bi-wing, Bi-lobe, Tri-lobe, Multi-lobe, Heli-lobe, Spur gear) provides utmost efficiency of operation.
- A variety of connection options are available such as SMS, RJT, DIN, ISO, Tri-Clamp, Flanges and so on.



Model	Liters [gal]/rev	Max Pressure Bar/psi	Port mm	Max Speed rpm
ZL105-002-20	0.02 [0.005]	20/290	25	1000
ZL110-005-20	0.05 [0.013]	20/290	25	1000
ZL115-012-12	0.12 [0.031]	12/174	38	800
ZL120-021-08	0.21 [0.055]	8/116	50	800
ZL220-040-12	0.40 [0.105]	12/174	50	700
ZL225-062-08	0.62 [0.163]	8/116	63	700
ZL330-102-12	1.02 [0.269]	12/174	76	600
ZL340-144-08	1.44 [0.380]	8/116	100	600
ZL440-227-12	2.27 [0.599]	12/174	100	500
ZL450-334-08	3.34 [0.882]	8/116	125	500



Thermal Jacket Pumps

Designed for products that require temperature control such as sugars, chocolate, corn syrup and brewer's yeast with easy attachment to pump front cover or casing.



Rectangular Inlet

Enlarged rectangular inlet allows highly viscous products such as semi-solid pastes or mixtures containing semi-solid pieces to be pumped.



Pressure Relief Valve

The pressure relief valve protects the system from pressure peaks or restrictions in the discharge, providing a pressure relief valve loop from discharge to the suction areas.



Ultra Clean Pumps

Fully self-draining pump head and external rotor fixing can eliminate any contaminations and internal crevices, and match to sterile pharmaceuticals, ultra-hygienic food processing, aseptic manufacturing, which need "the best clean".

JRZL SERIES

JRZL WITH VARIOUS OPTIONS FOR YOUR NEEDS

HIGH PRIDE
HIGHER PERFORMANCE
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High Pressure Pumps

High pressure pumps adapt front bearing cover to support shafts on front and back position. This well-balanced shaft design is allowed to be used up to 30bar without shafts' deflection from sudden pressure peaks or restrictions in the discharge. Hygienic design provides a perfect CIP and simply engineered construction with Front Loading Seal enables easy maintenance.



AccuLAB

AccuLAB is specially designed for superior metering accuracy with multi-lobe rotors or spur gear rotors which allows minimum pulsation, precise volumetric dosing and packaging, lab and pilot plant or manufacturing applications as well as general fluid transfer.



Integrated Pumps

Directly flanged coupling to geared motor minimizes a risk of shaft misalignment and is less restricted to installed-area by eliminating common base plate, allowing less down time for assembling.

Heli-Lobe Rotor

Heli-lobe rotors realize the maximum pumping efficiency with pulsation-free, increased capacity through higher speed limits and increased suction capability through decreasing cavitation limits.



Double Heli-Lobe Rotor Pumps

This pump is designed to transfer up to 7 liters/rev with double Heli-lobe rotors which two heli-lobe rotors are installed into each top and bottom shaft.



JEC TRUCK PUMPS



JTP SERIES

JTP series hailed as the best truck pump in the world.

- JTP series provide higher capacity, higher pressure, and unmatched efficiency on a variety of viscosities enabling faster unloading and loading.
- Optimal hygienic construction is realized with profiled gasket system , high grade 0.6µmRa surface finish and minimized dead-end seal area.
- Wetted parts are made of SS316L
- Front Loading Seal makes faster and easier maintenance without removing the rotor housing.
- JTP series have light body, high efficiency and saving fuel consumption than other truck pumps.
- Female drive shaft accepts direct-coupled SAE B or C flanged hydraulic motors as an alternative to the standard PTO male shaft (JTP300 series only).

Model	Liters [gal]/rev	Max Pressure Bar/psi	Port mm	Weight kg	Max Speed rpm
JTP 220-078-15	0.78 [0.206]	15/217	50	77	700
JTP 230-107-10	1.07 [0.282]	10/145	76	83	700
JTP 330-116-12	1.16 [0.306]	12/174	76	53	700
JTP 340-163-08	1.63 [0.430]	8/116	100	60	700
ZLT 330-116-12	1.16 [0.306]	12/174	76	91	700
JTP 430-116-12	1.16 [0.306]	12/174	76	80	700



JEC WINE PUMPS

JRZW SERIES

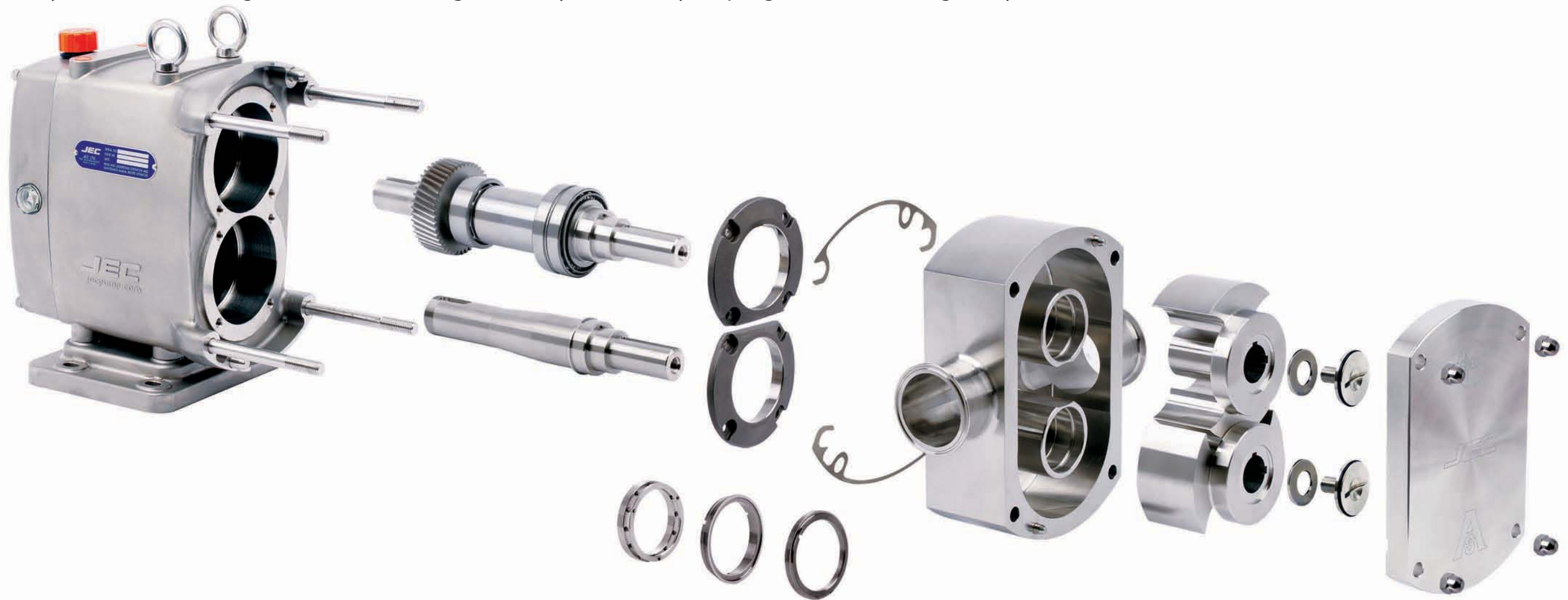
JRZW series are the best choice for winemaking process.

- During red wine making process, 4~5days fermentation and 30~40 days maceration is needed. The process of fermentation in wine is the catalyst function that turns grape juice into an alcoholic beverage and maceration is the main wine making process by which the red wine receives its red color, since 99% of all grape juice is clear-grayish in color by pumping wine out from under and over onto the top.
- ZW series are specially designed for red winemaking process in order to provide the top quality wine and the best efficiency for wine maker.
- Since ZW series rotors are made of PE, pumps are safe from galling by grape skins, seeds and stems.
- Rubber Heli-lobe rotors are standard.
- Standard stainless steel gearbox made from precision casting offers paint free, rust free and long last durability and therefore yields high lifetime value.
- Specially designed triple lip seal provides faster maintenance, reliable sealing and an extended seal lifetime.
- ZW series can adapt Front Loading Seal same as ZL series which have been certified of EHEDG and 3-A standard. (optional)
- A various connection options are available such as SMS, RJT, DIN, ISO, Tri-Clamp, Flanges and so on.

JEC CIRCUMFERENTIAL PISTON PUMPS

JEC's New ZP series are developed based on JEC's proven expertise and accumulated knowledge in a field of sanitary pumps. Fully CIP'able, the ZP design meets the most stringent sanitary standards by adapting ZL's Front Loading Seal system.

HIGH PRIDE
HIGHER PERFORMANCE
THE HIGHEST QUALITY



Hygienic Design

ZP series, certified EHEDG and 3-A Standard, offer a perfect CIP better than other major CP pumps and enables stable operation under severe condition of high discharge pressure through upgraded Front Loading Seal design.

Alloy Illium8 Rotor

ZP rotors are made of stainless steel 316L. The close clearances combined with the rotor geometry, which gives a long sealing path between the pump inlet and outlet, means low slip operation. (optional: Alloy Illium8 steel rotor)

Upgraded CIP

Upgraded balance type Front Loading Seal System offers reliable sealing and perfect CIP under pressure. Moreover, changing of seal is possible without disassembling of casing which realizes less down time.

Easy Fitting

Compared to other major CP pumps' shim location, stainless steel shim being located between gearbox and rotor case makes easy fitting of rotor clearance.

Stainless Steel Gearbox

Optional stainless steel gear box made from precision casting (Lost Wax) offers paint free and long last durability and therefore yields high lifetime value.

Helical Timing Gears

The pump rotors are driven smoothly at less vibration and extended of pump efficiency and seal lifetime by a high-precision ground helical gear even under high speed and discharge pressure.

SS316L and 0.6 μ mRA standard

All of product contact areas are standardized with SS316L and 0.6 μ m RA below of mirror surface in order to perfectly meet the GMP, EHEDG and 3-A requirements.

Universal Mounting

To allow high flexibility when fitting the pump into a production line, pumps can be mounted with top/bottom shaft drive, vertical/horizontal in/outlet and feet upward.



JRZP SERIES

ZP SERIES

- ZP series have same hydraulic and dimensional characteristics with U2 series, so, ZP series are compatible with U2 series.
- Compact seal design is key feature to make smooth operation even at high discharge pressure.
- Bearing oil seal made of stainless steel has corrosion-resistance so, it ensures longer life time even under the harsh cleaning condition.
- A variety of seal options such as mechanical seal and lip seal.
- O-ring seal allows the pumps to be easily adapted to changing conditions of service.
- 2 shaft keys on rotors provide smooth operation at high discharge pressure or external vibration.
- Oil bath type lubrication provides is more efficient than grease type lubrication.
- A variety of connection options are available such as SMS, RJT, DIN, ISO, Tri-Clamp, Flanges and so on.
- Heating jacket on front cover and case are available that require controlling temperature.
- Wetted parts are made of SS316L.

Model	Litres(gal)/rev	Max Pressure Bar/psi	Port mm	Max Speed rpm
ZP015-0063-15	0.063 [0.17]	15/217	38	800
ZP030-026-10	0.26 [0.069]	10/145	50	700
ZP060-074-15	0.74 [0.195]	15/217	63	600
ZP130-118-08	1.18 [0.312]	8/116	76	600
*ZP220	2.04 [0.539]	12/174	100	500
*ZP320	3.07 [0.811]	8/116	150	500

* Above ** marked model is not developed yet.

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JEC CENTRIFUGAL PUMPS

The JEC centrifugal pumps are ideal for hygienic application in a field of dairies, food, beverage, pharmaceutical and other industries where acid-proof steel is resistant to the liquids to be pumped. In all aspects of design, construction and performance, JEC centrifugal pumps are generation ahead of the industry, more durable, efficient and economical than other centrifugal pumps.

HIGH PRIDE
HIGHER PERFORMANCE
THE HIGHEST QUALITY



Hygienic Seal

Through upgraded balance type Front Loading Seal system, JEC pumps provide maximizing efficiency and cleanability under pressure. JEC pumps have been tested in accordance with EHEDG requirements and many are authorized to carry the 3-A symbol.

Fast, Easy Maintenance.

With JEC centrifugal pumps' unique stub shaft construction, you can keep the pump head in line when setting the impeller or changing seals. Compact and upgraded external balanced seal design makes easy convert from single to double mechanical seal.

High Class Centrifugal Pumps

JEC is the only pump manufacturer in the world who makes every parts by precision investment casting. Nice appearance, robust durability, standardized parts are achieved through our leading manufacturing.

Hygienic Material

Wetted parts are made of SS 316L stainless steel for corrosion resistance. $0.8\mu\text{m Ra}$ surface finish provides upgraded hygienic.
(Optional : $0.4\mu\text{m Ra}$)

Perfect CIP & SIP

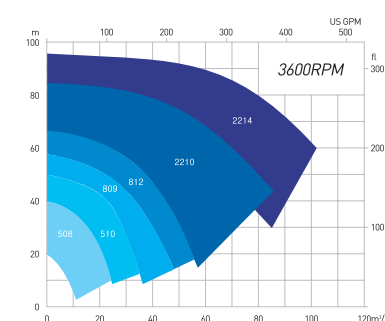
With compact seal, ideal casing design and polished surface, JEC centrifugal pumps provide a perfect CIP & SIP.

JEC CENTRIFUGAL PUMPS

PROVIDES YOU THE BEST CLEANABILITY, EFFICIENCY AND EASY MAINTENANCE.

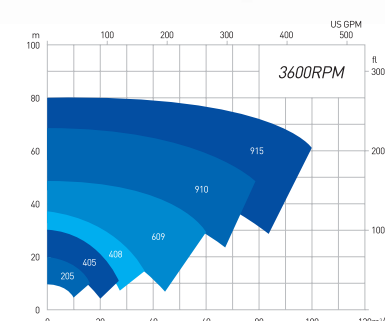
JCP SERIES

- JCP series offer a number of features that maximize cleanability, and it is proved of EHEDG and 3-A authorization.
- Precision investment casted casing and compact seal system extend seal life, which minimizes system down time.
- External balanced Front Loading Seal extends seal life and easy maintenance.



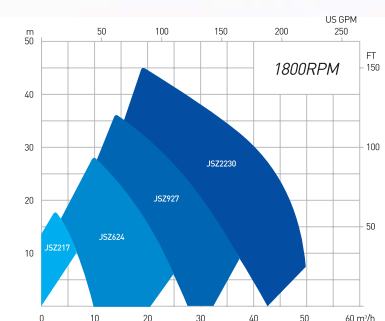
JWP SERIES

- JEC JWP series (Water For Injection) are ideal for high purity, pyrogen-free fluid for pharmaceutical process and deionized water which are requiring to meet GMP and FDA standards.
- All parts in contact with the liquid are made of SS 316L stainless steel for corrosion resistance.
- All internal surfaces are finished to 0.4 μm Ra and additional electro-polish is available.
- Ensures totally cleanable and self-draining for CIP and SIP so as to meet EHEDG and 3-A standard.



JP SERIES

- JP series have been the corner stone of the JEC history with it's versatile heavy-duty.
- JP series have been designed to eliminate common-field problems with vibration, short bearing life, high NPSH requirements, high seal maintenance costs and poor tolerance.
- Streamlined in-outlet volute channel minimize noise level, maximize efficiency and provide 360° free way setting of outlet.



JSZ SERIES

- JSZ series are a self-priming side channel pump particularly suitable for pumping products which contain varying quantities of air and gases which cannot be pumped by a centrifugal pump for CIP return application.
- JSZ series are suitable as booster pump in mixing system by improving suction capability.

HIGH PRIDE
HIGHER PERFORMANCE
THE HIGHEST QUALITY

JEC CENTRIFUGAL PUMPS

HIGH PRIDE
HIGHER PERFORMANCE
THE HIGHEST QUALITY

The JEC centrifugal pumps are ideal for hygienic application in a field of dairies, food, industries where acid-proof steel is resistant to the liquids to be pumped.

In all aspects of design, construction and performance, JEC centrifugal pumps are durable, efficient and economical than other centrifugal pumps.

beverage, pharmaceutical and other

generation ahead of the industry, more



Hygienic Seal

Through upgraded balance type Front Loading Seal system, JEC pumps provide maximizing efficiency and cleanability under pressure. And JEC pumps have been tested in accordance with EHEDG requirements and many are authorized to carry the 3-A symbol.

Fast, Easy Maintenance.

With JEC centrifugal pumps' Unique stub shaft construction, you can keep the pump head in line when setting the impeller or changing seals. Compact and upgraded external balanced seal design extends seal lifetime.

High Class Centrifugal Pumps

JEC is the only pump manufacturer in the world who makes every parts by precision investment casting. Nice appearance, robust durability, standardized parts are achieved through our leading manufacturing.

Hygienic Material

Wetted parts are made of SS 316 stainless steel for corrosion resistance. All parts made by precision investment casting and pressed for front cover.

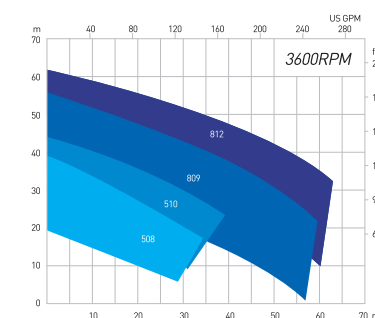
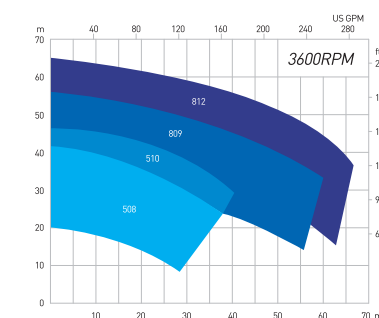
Perfect CIP & SIP

With compact seal, ideal impeller and casing design with fine surface, JEC centrifugal pumps provide a perfect CIP & SIP.

JEC CENTRIFUGAL PUMPS

PROVIDES YOU THE BEST CLEANABILITY, EFFICIENCY AND EASY MAINTENANCE.

HIGH PRIDE
HIGHER PERFORMANCE
THE HIGHEST QUALITY



JEP SERIES

- JEP series have been designed to eliminate problems with vibration, short bearing life, high NPSH requirements, high seal maintenance costs and poor tolerance to adverse operating conditions.

- Streamlined in-outlet volute channel minimize noise level, maximize efficiency by unique designed volute case.

- Consists of same parts of the JCP's impeller, seal and shaft already EHEDG 3-A certified design.

JEPS SERIES

- JEPS, self-priming pumps are specialized for air and gas contained products which cannot be pumped by general centrifugal pumps.

- Special designed air screw generates self-priming effect can optimize pump operation.

- Optimized and customized impeller size.

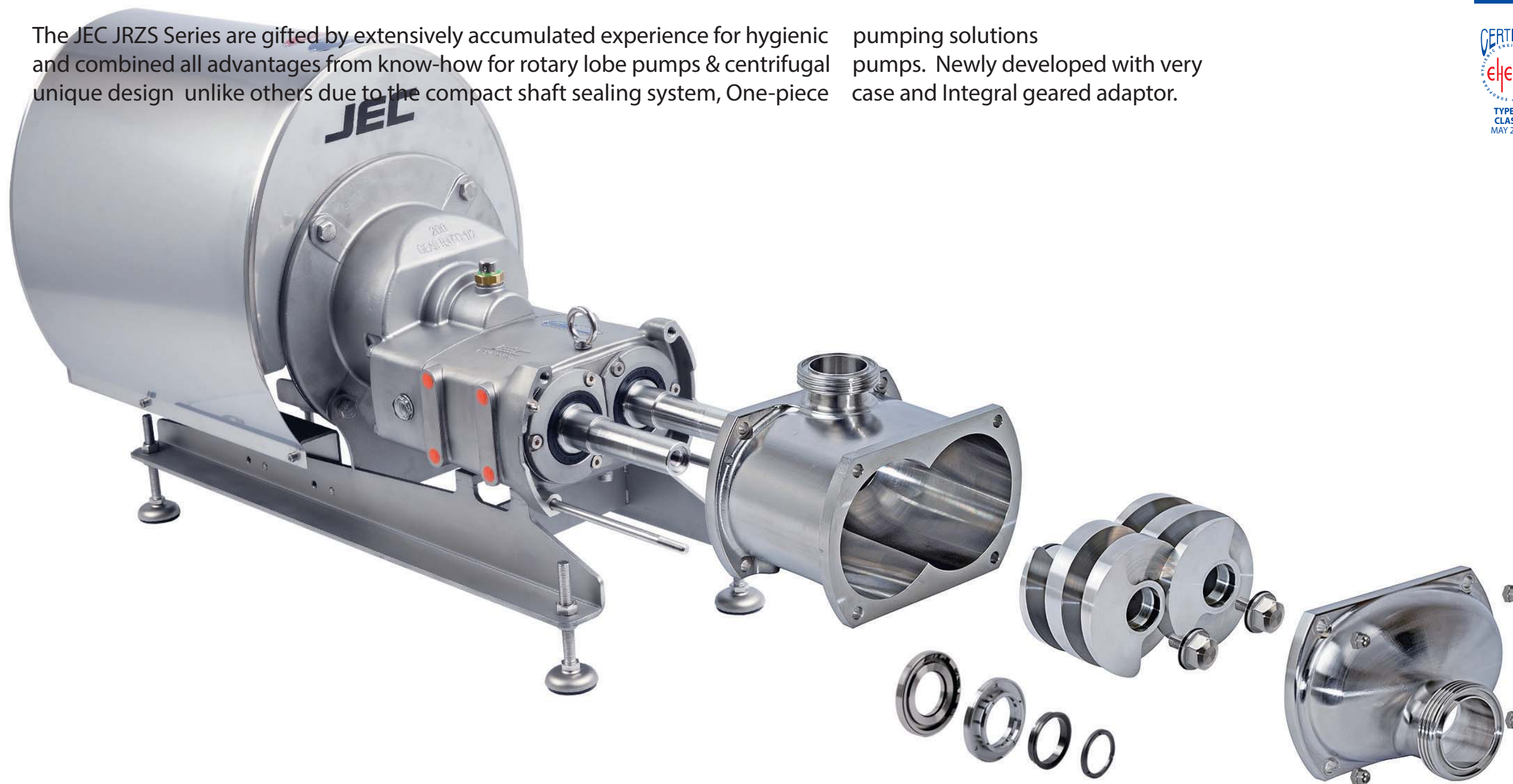
- Lower noise level and better power consumption.

- Modular designed with JEP series.

JEC TWIN SCREW PUMPS

The JEC JRZS Series are gifted by extensively accumulated experience for hygienic and combined all advantages from know-how for rotary lobe pumps & centrifugal pumps. Newly developed with very unique design unlike others due to the compact shaft sealing system, One-piece case and Integral geared adaptor.

HIGH PRIDE
HIGHER PERFORMANCE
THE HIGHEST QUALITY



One piece case with large radius corner

The most unique design at screw-case which differentiated from others enable to avoid the dead space at discharge port and ensure smooth flow path with anti-cavitation at discharge port typically.

Compact & diverse shaft sealing system

Majority kind of sealing system available and Compact "Front loaded self-balanced mechanical shaft sealing system" enable to easy & fast maintenance.

High power efficiency

JRZS gearbox consists of double angular ball bearings with large cavity chamber which is very good for high speed with less heated and strong enough confirmed by rotary lobe pumps.

Integral geared adaptor

JRZS standard, 'Integral type' consists of integral geared adaptor with 'IEC B5, 4pole motor' directly coupled and provides the most cost & space effective due to the size and higher Efficiency of 4pole motor.

2-in-1 & gentle operation

Maximized application flexibility at wide range of speeds, providing many different operating conditions (pressures, viscosity and temperatures) and & CIP possible with only one pump. Pulsation free for gentle operation.

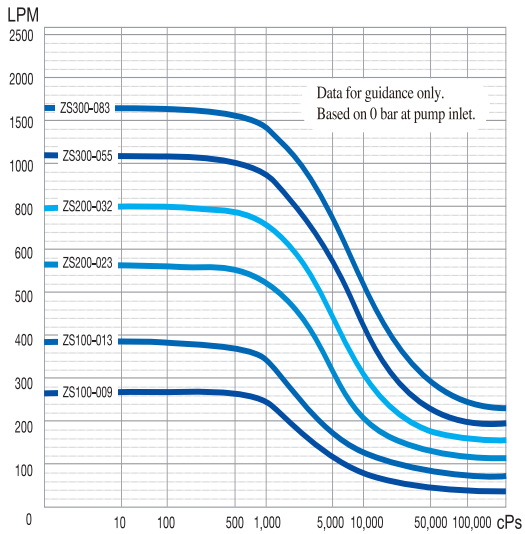
Perfect CIP & SIP

JRZS series are fully certified by 3-A & EHEDG with unique & good design. This ensure the top result of CIP & SIP cleaning and prove the high quality.

JRZS SERIES

NEWLY DEVELOPED BY UNIQUE, SMART AND INNOVATIVE!

Thanks to JEC’s accumulated know-how of the Rotary lobe pumps and Centrifugal pumps, JEC combines all the advantage of both pumps into Twin screw pumps. Most of all, JEC developed JRZS Series as a Modular system based on the Rotary lobe pumps with gearbox, so majority parts can be interchangeable each other. This provides the highest efficiency and utilization with good interchangeability with the current pumps.



Model	Litres(gal)/rev	Max Pressure Bar/psi	Port mm	Max Speed rpm
ZS100-009-12	0.09[0.024]	12/174	50x38	3,000
ZS100-013-08	0.13[0.034]	8/116	63x50	3,000
ZS200-023-12	0.23[0.061]	12/174	63x50	2,500
ZS200-032-08	0.32[0.085]	8/116	76x63	2,500
ZS300-055-12	0.55[0.145]	12/174	76x63	2,000
ZS300-083-08	0.83[0.219]	8/116	100x76	2,000

ONLY ONE IN THE FIELD OF “TWIN SCREW PUMPS”!

- JRZS series pumps have been designed to be conveyed with all hygienic pumping applications found in the food, dairy, beverage, cosmetic, pharmaceutical and chemical industries.
- 2-in-1 operation from aqueous to the high viscous media can be handled up to 1,000,000cPs, 3000rpm for operation speed of CIP, 16 bar for Maximum differential pressure optionally.
- The most unique design “One-piece with large radius corner of twin screw case” differentiated from others enable to avoid the dead space at discharge port and ensure smooth flow path with anti-cavitation at discharge port typically.
- No bottleneck & shortest span unlike others due to the compact shaft sealing system and gearbox
- Compact “Front loaded self-balanced mechanical shaft sealing system” enable to easy & fast maintenance and provide spacious for cooling in a gearbox
- Gearbox consists of large cavity chamber with double angular ball bearing good for high speed with less heated and strong enough confirmed by rotary lobe pumps.
- Optimal CIP & SIP cleaning with unique and good design certified by 3A & EHEDG. This prove the highest quality.

JEC MIXING SYSTEM

HIGH PRIDE
HIGHER PERFORMANCE
THE HIGHEST QUALITY

PROVIDES AN OPTIMAL WORKING EFFICIENCY AND
EASY MAINTENANCE.

JSB SERIES

- In a range of products from simple to demanding applications to blend, emulsify, disperse, dissolve and homogenize, JSB series with unique impeller-vane, inducer design enable quick dissolution and hydration of stabilizers, gums, powders, sugars and fluids requiring sensitive shearing.
- Due to configuring impeller-vane design being capable of better suction capability and shearing, JSB series are supremely efficient and rapid in operation and are capable of reducing mixing times when compared to conventional paddles or agitators.
- Fully CIP ability reduces downtime consuming hand cleaning and risks of equipment damage from CIP.
- Shear blender as line mixer is able to be shear pump modified easily by removing just hopper.

JSB SELECTION GUIDE (Guidance only)

Model	Motor	Water	Powder	Viscosity	Pressure
JSB508	5.5kW	~ 5000L	~ 500kgs	~ 100cps	less 1bar
	7.5kW	~ 5000L	~ 500kgs	500 ~ 1000cps	
JSB809	15kW	5000L~10000L	1000kgs	~ 100cps	
	18.5kW	5000L~10000L	1000kgs	500 ~ 1000cps	
JSB2210	22kW	15000L	2000kgs	~ 100cps	

* Based on 1hr batch time and 3600rpm (60Hz)

