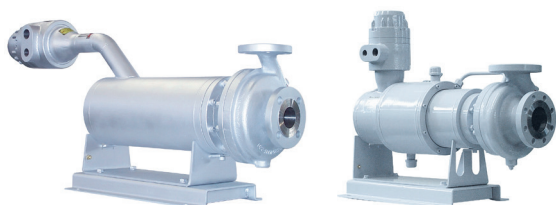


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SAMJIN SEALLESS CANNED MOTOR PUMPS
for Chemical/Petrochemical Industries and
Textile/Paper/General Industries

NEW
CLZ Series

Leakage Free
No Mechanical Seal



SAMJIN Industrial Co., Ltd.

Features and Uses

SAMJIN sealless canned motor pump model CLZ series based on the optimized design, have been manufactured since 1987 by our research and development. These pumps are mainly used for chemical and petrochemical industries and general industries. These pumps guarantee leakage free and various features with high reliability, high safety, long durability, economy and high efficiency by manufacturing through rich experienced technology and thorough quality control and by continuously stabilized operation records.

■ Features

1) Leakage free

As opposed to the conventional pumps, sealless canned motor pumps having neither mechanical seals nor shaft seals eliminate danger and environmental pollution caused by fluid leakage due to shaft seal troubles.

Leakage Free!!
Accident Free!!



2) Low noise and vibration

Entirely enclosed motor without motor fan and shaft coupling proves low noise level under 60 dB and vibration under 20 μ m peak to peak respectively.



3) Low maintenance cost

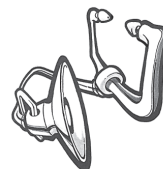
No mechanical seals and no coupling alignment enable low maintenance cost.



4) Safety protection devices

The motor monitor is a safety protection device designed specifically for SAMJIN canned motor pumps used in chemical plants. Designed and manufactured with a focus on safety.

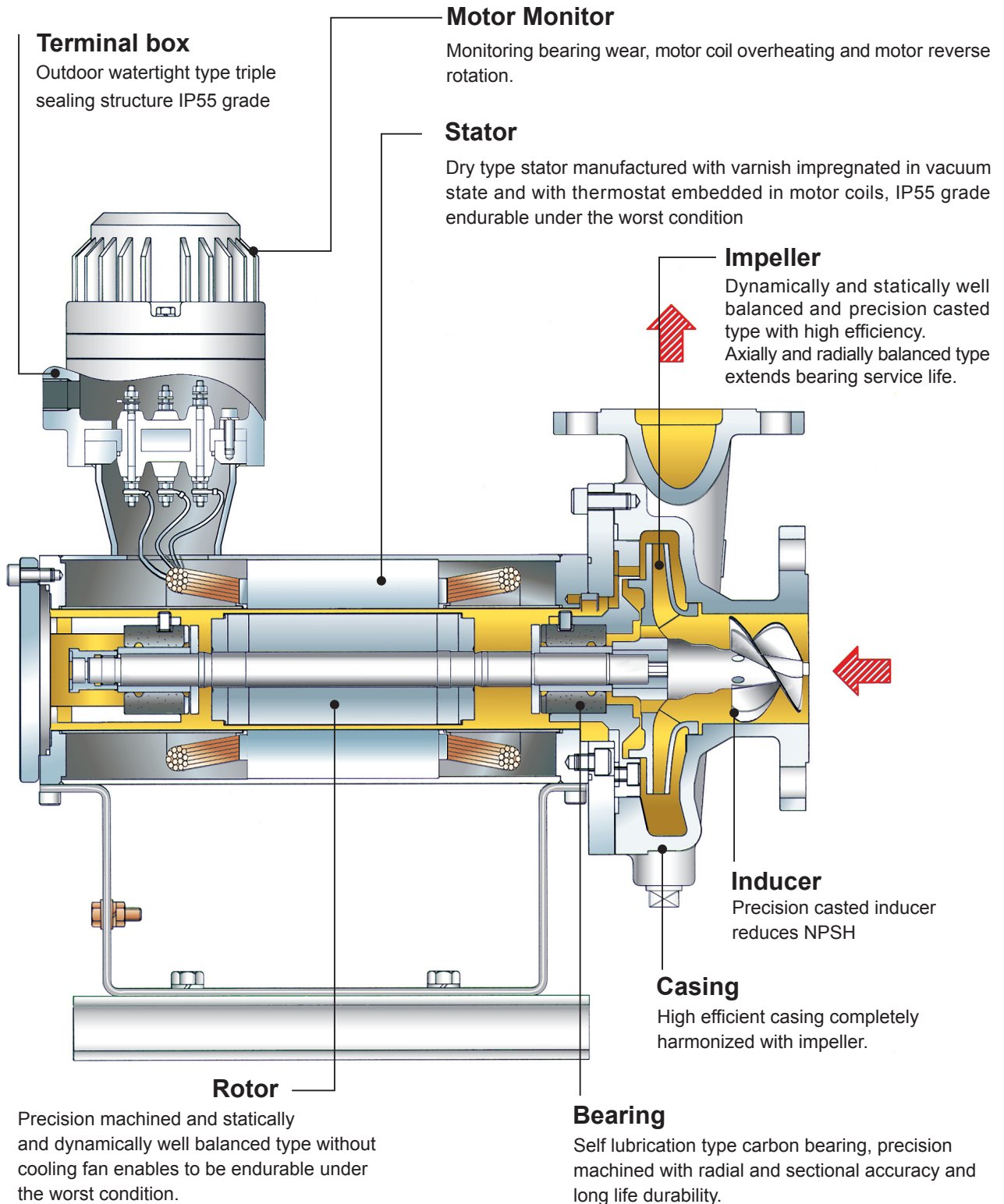
The motor is equipped with a motor monitor that can monitor bearing wear, motor coil overheating and motor reverse rotation, thereby detecting the canned motor operating status and ensuring stable operation.



■ Uses

This pump is widely used for chemical and petrochemical industries and textile, paper, plastic, synthetic rubber and fat/food industries.

NEW CLZ Series



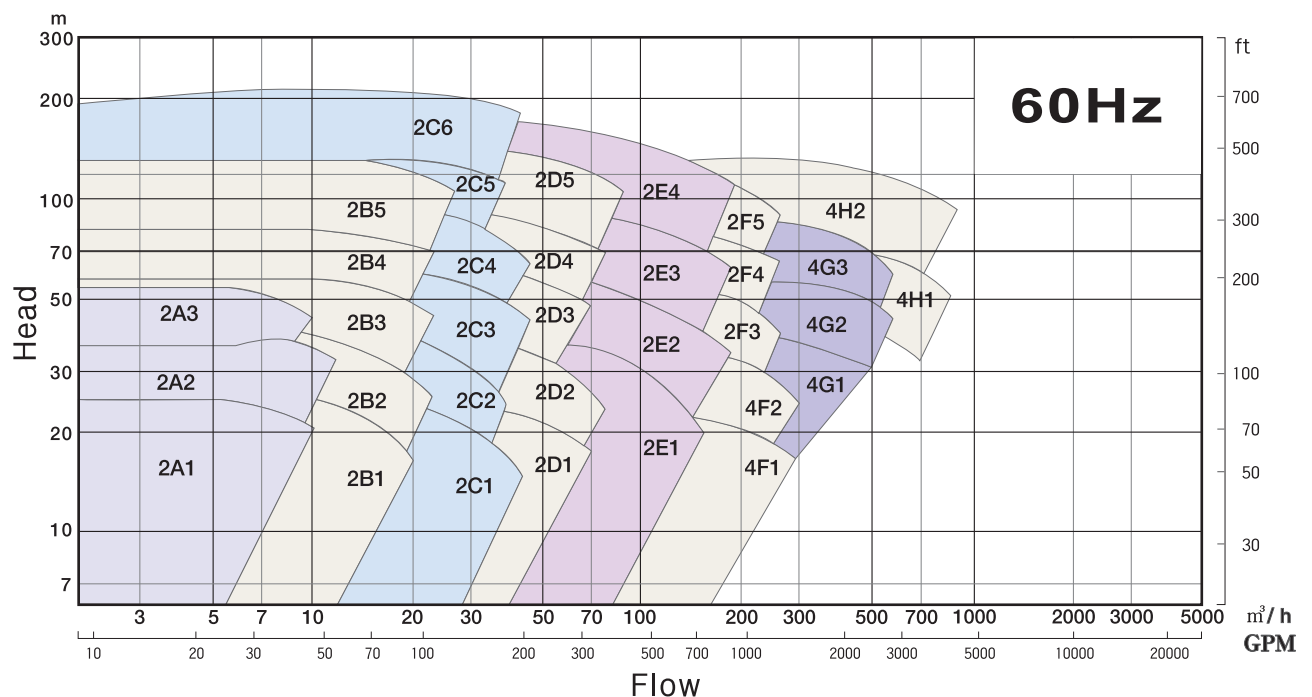
Technical Specifications

60Hz

CLZ Series Specifications

Flow	Max. 1850 m³/hour	Frequency	60 Hz
Head	Max. 550m	Motor Output	0.4 kW ~ 450 kW
Liquid Temp.	Max. 400°C	No. of Poles	2P, 4P, 6P
Sp.Gr.	0.3 ~ 6.0	Rated Voltage	220V, 230V, 380V, 440V, 460V, 480V
Viscosity	Max. 200 cP	Explosion Proof	Flameproof type(Outdoor) Increased safety type (Outdoor)
Design Pressure	Max. 500 kgf/cm²G		
Liquid End Material	Stainless Steel, Nickel Alloy, Carpenter 20, Hastelloy, Titanium, Zirconium		

CLZ Series Performance Curves



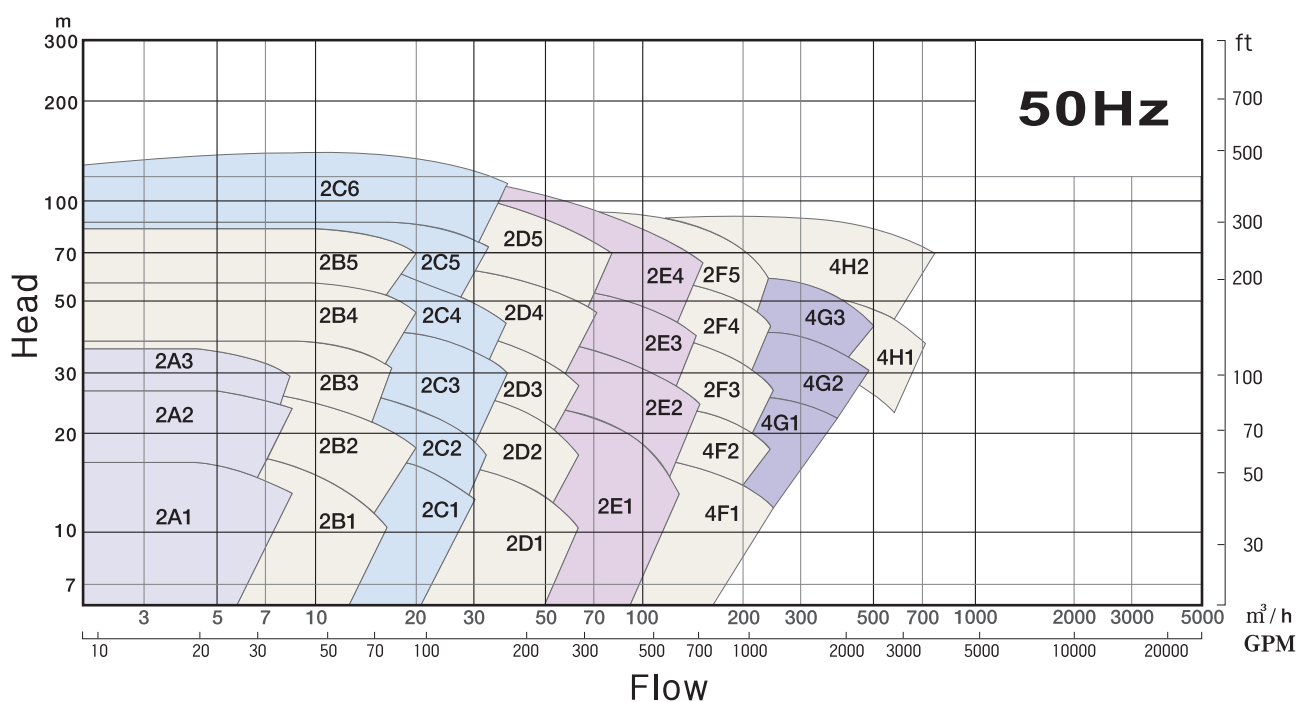
Technical Specifications

50Hz

CLZ Series Specifications

Flow	Max. 1500 m ³ /hour	Frequency	50 Hz
Head	Max. 430m	Motor Output	0.4 kW ~ 450 kW
Liquid Temp.	Max. 400°C	No. of Poles	2P, 4P, 6P
Sp.Gr.	0.3 ~ 6.0	Rated Voltage	200V, 380V, 400V
Viscosity	Max. 200 cP	Explosion Proof	Flameproof type(Outdoor) Increased safety type (Outdoor)
Design Pressure	Max. 500 kgf/cm ² G		
Liquid End Material	Stainless Steel, Nickel Alloy, Carpenter 20, Hastelloy, Titanium, Zirconium		

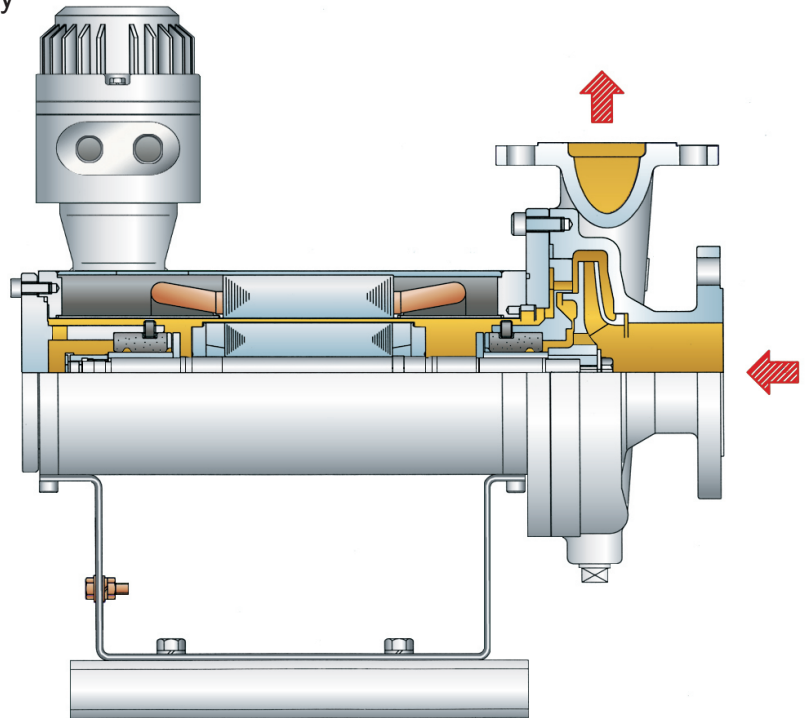
CLZ Series Performance Curves



Various Types

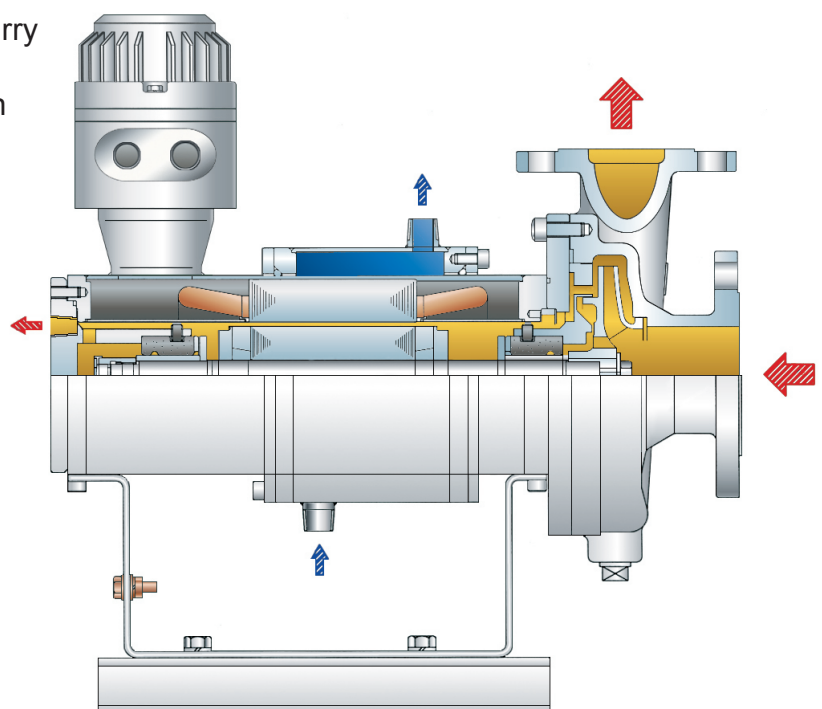
■ CB Type (Horizontal Basic Type)

Used for liquid without slurry
under temperature 155°C
and with low vaporization



■ CR Type (Horizontal Reverse Circulation Type)

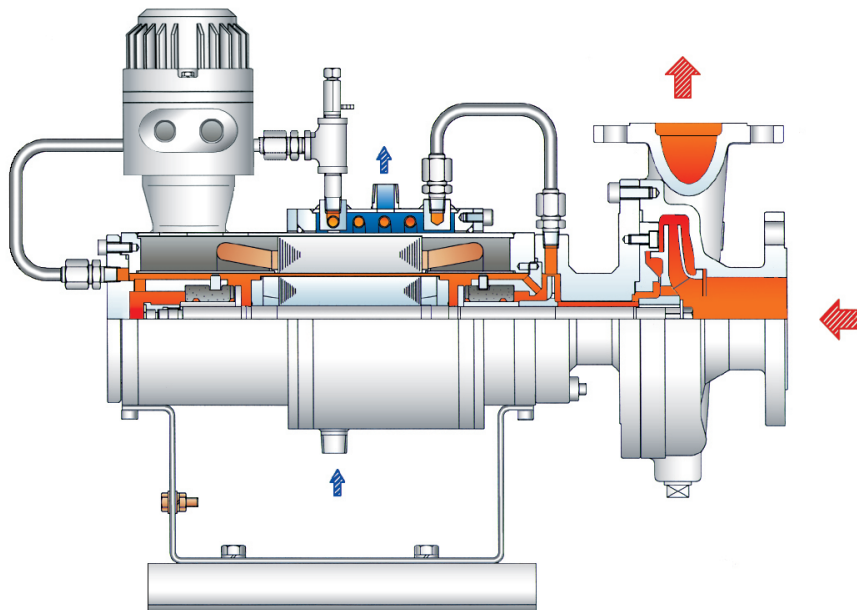
Used for liquid without slurry
under temperature 155°C
and with high vaporization



■ CC Type

(Horizontal High Temperature Type with Cooling Water)

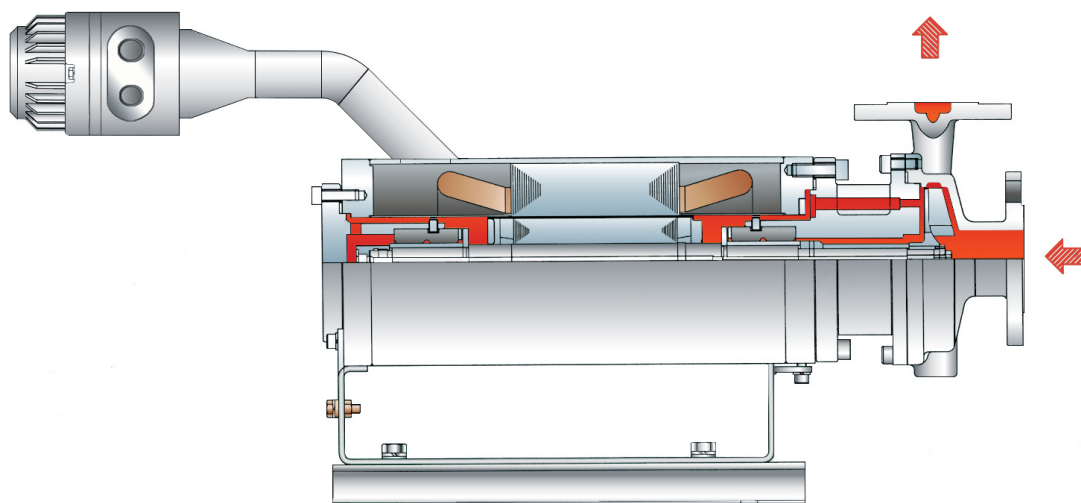
Used for liquid without slurry under temperature 350°C.
Cooling water through the cooling jacket.



■ CH Type

(Horizontal Non-Cooling High-Temperature Type)

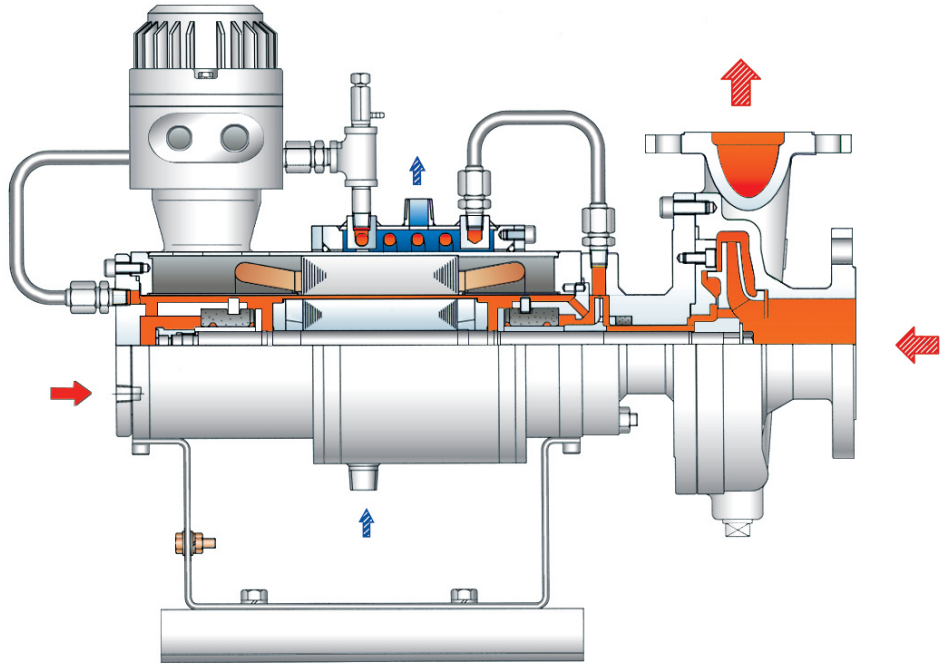
Used for liquid under temperature 400°C without slurry. Separate cooling system is not necessary for this type.



Various Types

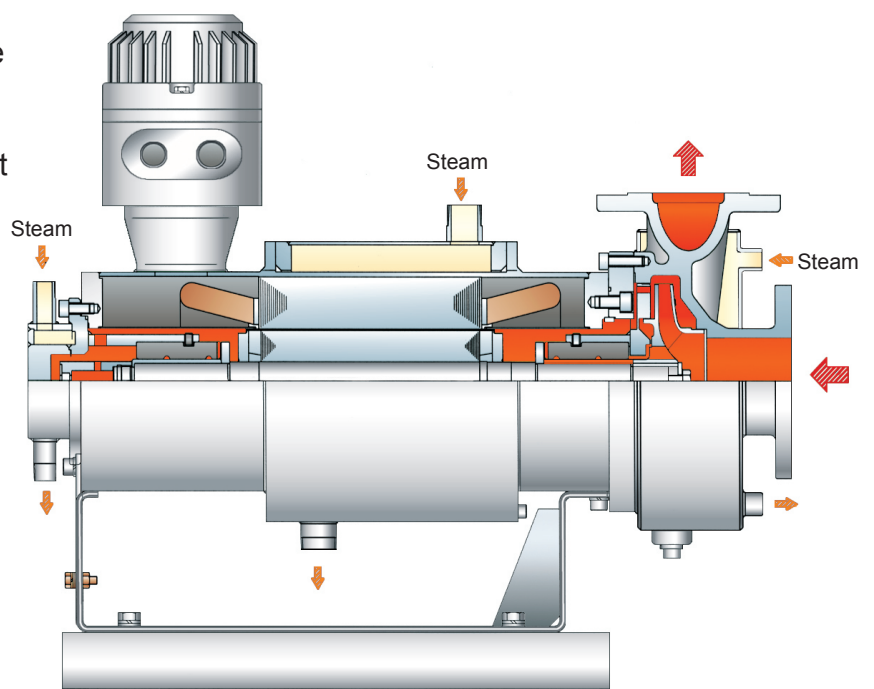
■ CL Type (Horizontal Slurry Separation Type)

Used for liquid with slurry
under temperature 350°C



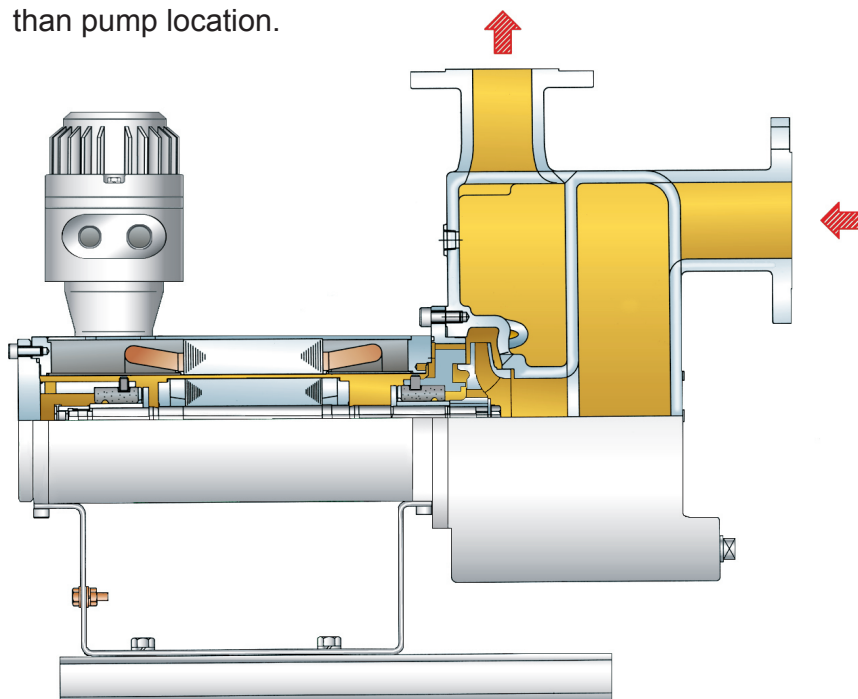
■ CS Type (Horizontal High Melting Point Liquid Type)

Used for liquid without
slurry under temperature
155°C and under melting
point 140°C.
Motor part and pump part
can be heated by steam
through steam jacket.



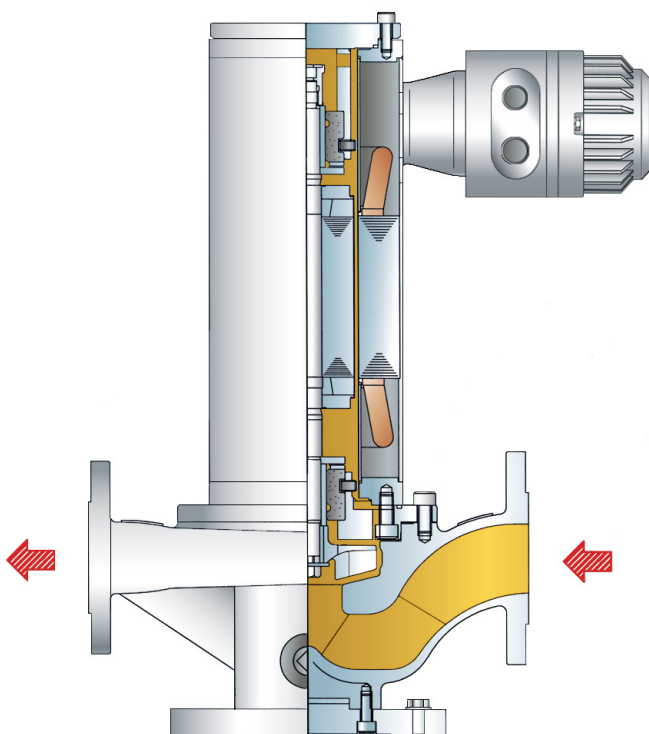
■ SB Type (Horizontal Self Priming Type)

Used for liquid without slurry under temperature 155°C and little vaporization. Suction can be possible by self priming from the lower underground tank than pump location.

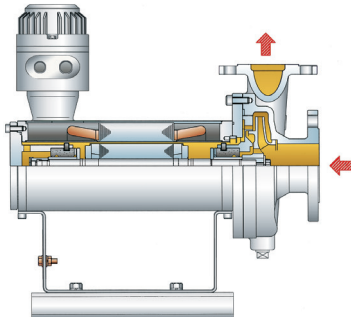
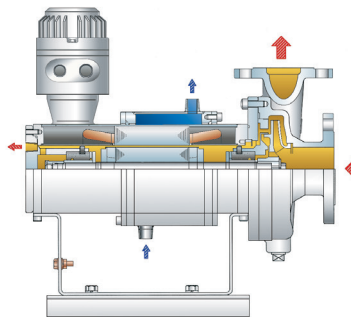
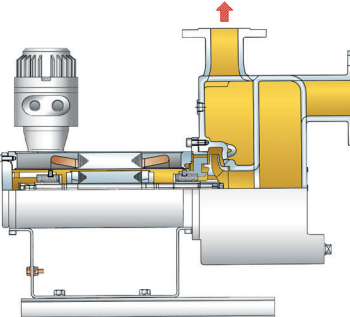
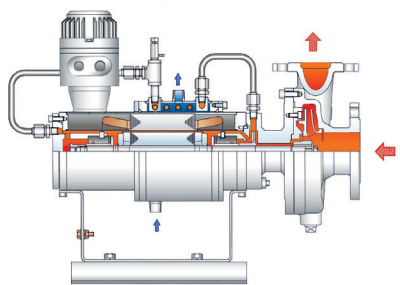
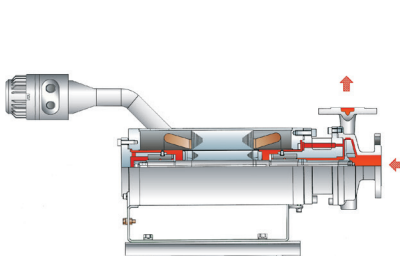
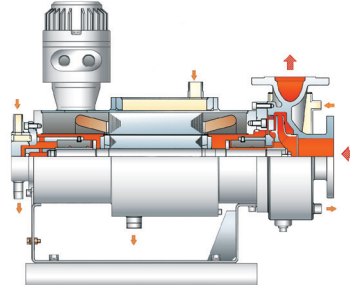
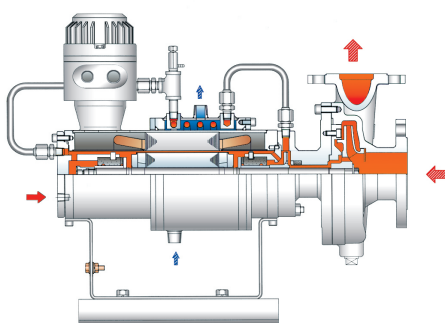
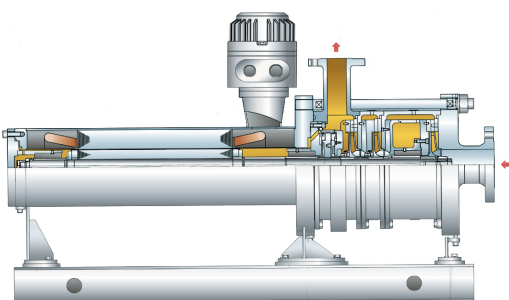
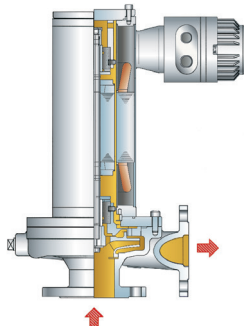
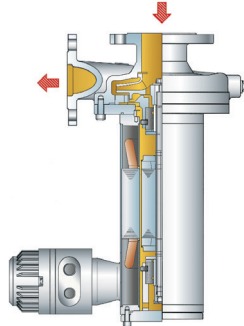
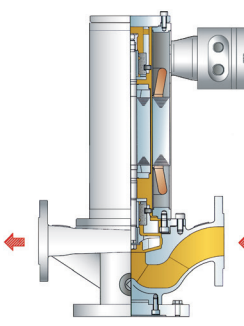
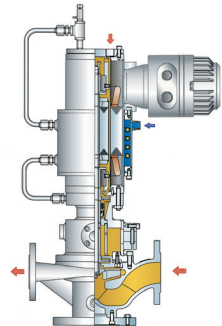


■ IB Type (Vertical In-Line Type)

In-line position of suction and discharge ports minimizes pump space and makes piping works easy.



Various Types

			
CB Type Horizontal Basic Type	CR Type Horizontal Reverse Circulation Type	SB Type Horizontal Self Priming Type	
			
CC Type Horizontal High Temperature Type with Cooling Water	CH Type Horizontal Non-Cooling High Temperature Type	CS/CW Type Horizontal High Melting Point Liquid Type	
			
CL/CM Type Horizontal Slurry Separation Type	CU Type Multi Stage Type		
			
PB/PG Type Vertical Motor Top Type	EB/EG Type Vertical Pump Top Type	IB Type Vertical In-Line Type	IG Type Gas Seal Type

Check List for Selection

■ Items to be checked for model selection

1) Uses	Item No.	
2) Liquid characteristics		
Liquid name	Temperature(max./nor./min.) °C	
Spec.Grav.	Vapor pressure kgf/cm ² G	
Viscosity (max./nor./min.) cP	Specific heat kcal/kgf°C	
Melting point	Corrosiveness	
Slurry condition	Slurry name	
Slurry content rate	Slurry spec. grav.	
Slurry particle size		
3) Operation condition		
Flow(max./nor./min.) m ³ /h	Head(max./nor./min.) m	
Suction pressure(max./nor./min.) kgf/cm ² G	Discharge pressure(max./nor./min.) kgf/cm ² G	
Differential pressure(max./nor./min.) kgf/cm ² G	NPSHa m	
Ambient temperature(max./nor./min.) °C	Daily operation hour(max./nor./min.) hours	
4) Power Source		
Phase x Frequency x Voltage		
5) Piping condition		
Suction flange spec.	Discharge flange spec.	
Other auxiliary piping spec.		
6) Material specification		
7) Pump specification		
Flow m ³ /h	Head m	
Suction pipe bore mm	Discharge pipe bore mm	
NPSHr m	Minimum flow m ³ /h	
8) Motor specification		
Power source	Phase x Hz x V	Output kW
Explosion proof grade	Insulation class	
Starting method	Protecting sensor	
Conduit tap	Enclosure grade	
Location(indoor/outdoor)		
9) Delivery		
10) Other requirement		

SIC

CAT. NO. 20251130

**SAMJIN SEALLESS
CANNED MOTOR PUMPS**



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