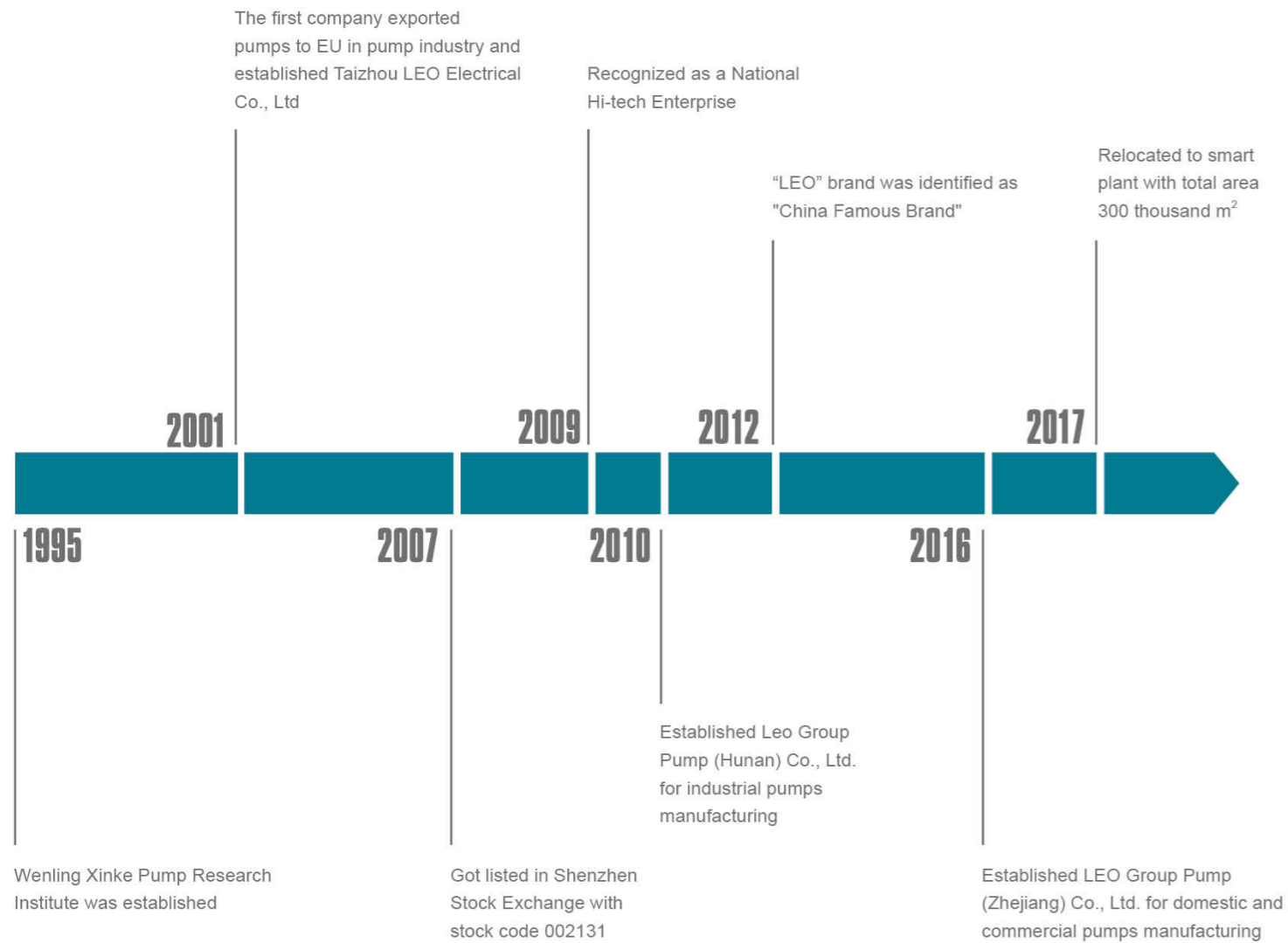




Horizontal Split Case Fire Pump



HISTORY



TO KNOW LEO

LEO Group (got listed in Shenzhen Stock Exchange with stock code 002131) is a national high-tech enterprise engaged in R&D, design, manufacture, sales and service of all series pumps and systems. LEO is the first listed company in Chinese pump industry, one of the drafters of pump industry standard and the vice president of drainage and irrigation machinery branch of China Agricultural machinery industry association as well. "LEO" has been identified as "China Famous Brand" by the State Administration of Industry and Commerce. It is mentionable that LEO has the only state-authorized technical center in pump industry.

We have set up many production and sales subsidiaries in key regional markets such as America, Hungary, Belgium, Thailand, Indonesia, United Arab Emirates and Bangladesh and authorized exclusive distribution agency in over 100 countries.

Our products have been sold to over 120 countries and regions, such as Europe, North America, Central & South America, Southeast Asia, Middle East, Africa, Oceania, etc., which play a crucial role in water conservancy, water resources, electric power construction, petrochemical industry, mining, metallurgy, fire-fighting, HVAC (Heating, Ventilation and Air Conditioning), agricultural irrigation, civil water supply and drainage, etc.

LEO has currently two industrial groups respectively for industrial and civilian applications. With four manufacturing bases in Wengling of Zhejiang, Xiangtan of Hunan, Wuxi of Jiangsu and Dalian of Liaoning, LEO possesses a solid foundation to become a world-class pump and system solution provider rapidly.

With over 70 years' professional technology, LEO will continue her consistent creativity and development ability in each pump for human's health.



NUMEROUS MEMBERS, ONE FAMILY

Based on market segment, LEO's pump business is divided into 5 fields, namely water conservancy & water resources, power station, petrochemical industry, mining & metallurgical industry and civilian applications. For each field there's a professional manufacturing base with relevant professional sales teams. Three subsidiary companies, Wuxi LEO Xi Pump, LEO Group Pump (Hunan) and Dalian LEO Pump are all well-known industrial pump manufacturers in their own fields. With over 70 years' industrial pump manufacturing experience and extraordinary comprehensive strength, LEO has become a leading company among all industrial pump manufacturers in China.



Pump Manufacturing Base for Domestic and Commercial Applications (Wenling City, Zhejiang Province)

LEO Group Pump (Zhejiang) Co., Ltd, a wholly-owned subsidiary of LEO Group Co., Ltd, is the core base for R&D, manufacturing, sales and service of domestic and commercial pumps for family water supply, pipeline boosting, garden and field irrigation, HVAC, etc.

The leading products include peripheral pump, jet pump, centrifugal pump, garden submersible pump, fountain pump, pool pump, doestic lifting station, gasoline engine pump, diesel engine pump, submersible pump, submersible borehole pump, submersible sewage pump, stainless steel vertical multistage pump, etc.

The product range covers 15 series with over 2,000 specifications, which are well sold in more than 120 countries and regions. The base has established steady cooperative relationships with world-class pump manufacturers, importers, dealers and hypermarkets.



Pump Manufacturing Base for General Industrial Pumps (Xiangtan City, Hunan Province)

Established in 2010, LEO Group Pump (Hunan) Co., Ltd. is a wholly-owned subsidiary by LEO Group Co., Ltd. Located in Jiuhua Economic Development Zone of Xiangtan City, Hunan Province. Covers an area of 85,000m² and construction area is about 92,635 m² with total investment of approximately 74 million dollars. It is the most important R&D, manufacturing and testing center of LEO Group. The leading products include large mixed flow and axial flow pump (vertical, horizontal, oblique, tubular, submersible etc.), double-suction centrifugal pump, multistage centrifugal pump, slurry pump, desulphurization pump and submersible centrifugal pump. Products are mainly used in mine, metallurgy, coal washing, FGD, municipal water etc.



Pump Manufacturing Base for Water Conservancy & Water Resources (Wuxi City, Jiangsu Province)

Formerly known as Wuxi Xi Pump Manufacturing Co., Ltd., a well-known manufacturer of water conservancy, is specialized in large and medium-sized pumps production for urban water supply and drainage, farmland irrigation, water conservancy projects and large water diversion project. The main products cover 32 series with nearly 1000 specifications. Products exported to more than 20 countries in Asia, Latin-America, Europe and Oceania.

As a main supplier, the base provides large pumps for South-to-North Water Diversion Project—a national key project. There are over 140 technicians, including 1 professor level senior engineer, 16 senior engineers, and 39 engineers.



Pump Manufacturing Base for Petrochemical Industry (Dalian City, Liaoning Province)

It is the pump manufacturing base for petrochemical industry, combined with Dalian LEO Huaneng Pump Co., Ltd and LEO (Dalian) Industrial Pump Technology Center Co., Ltd.

Formerly known as Dalian Huaneng Corrosion-Resistant Pump Works, the base is specialized in production of petrochemical pumps for crude oil transportation, crude oil refinery, heavy chemical industry, coal chemical industry and fine chemistry, etc. The base focuses on design and manufacture of 30 series (OH, BB, VS, etc.) of petrochemical pumps with over 3000 specifications, which are in accordance with API and ISO standard.

LEO (Dalian) Industrial Pump Technology Center Co., Ltd. is one of the research branch of national level technology center for petrochemical pumps, specializes in R&D, design of pumps of petro chemistry, coal chemical industry, long-distance transport pipes, energy resources, fine chemicals industry, etc. Design and develop software and large laboratories, explore liquid transport schemes under severe conditions and solve the difficult projects of ultralow temperature, high temperature, high pressure, low cavitation, highly corrosive, energy recovery, etc.

General

The GSX series fire fighting pump has passed UL certification. It's the third innovative generation of high efficiency double-suction pump, which is developed on the basis of advanced technology both domestic and overseas. The features include superior hydraulic performance, new reasonable structure, high efficiency and high reliability as well as low cavitations and low maintenance cost.

The design, manufacture and quality of this series are in accordance with National Standard GB/T5657 (The Technical Specifications of Centrifugal Pumps Type III). The efficiency rate meets National Standard GB197692 (Energy Efficiency Limit and Energy-saving Evaluation Value of Centrifugal Pumps for Clear Water).

Applications

1. The products are used to deliver clear water or other liquids similar to clear water in physical and chemical properties. Mainly used for water supply of fire fighting system.
2. With anti-corrosion or anti-abrasion material, also can be used to transfer industrial waste water, sea water and dirty water with little particles.
3. Applicable for supply and drainage systems and cooling systems in iron and steel industry, petrochemical industry, thermo power plants, mines, etc.
4. Urban water supply, heating systems, irrigation and water conservation projects.

Working Data

Capacities from 500 to 1000 US GPM

Pressure from 75.8 to 318 psi

Inlet Diameter: 6" , 8"

Temperature: Normal temperature

Medium: Pure water and similar to that of pure water

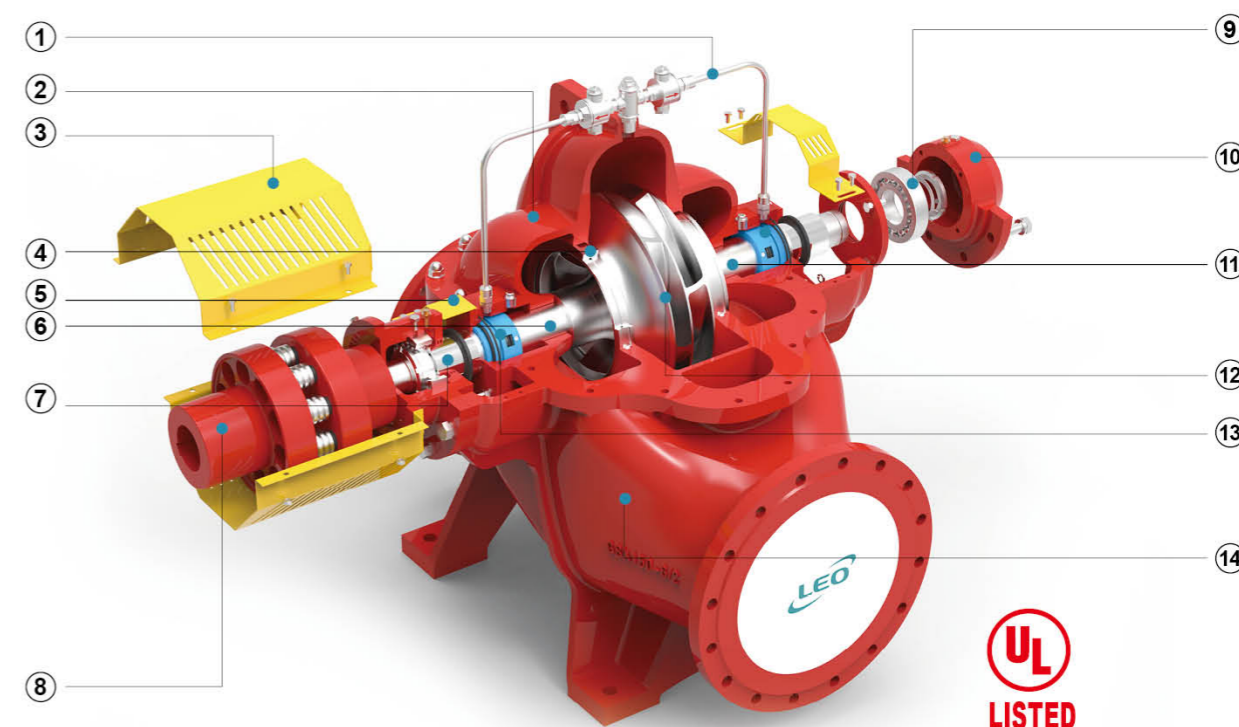
Drivers: Electric motor drive or diesel engine drive

Identification of Codes

GSX 200 - 9 G / 2

- 2 pole motor
- Modified Impeller
- 0.1×Specific speed at the design point
- Inlet diameter 200mm
- Horizontal Split Case Fire Pump

Open View



② Pump Casing

- Round water chamber design, with high efficiency.
- Double volute water chamber is to balance radial force, with advantages of good strength, low force for bearing and sealing, long operation period.
- Suction chamber is designed with guiding rib, with advantages of no whirl in suction, stable operating, noiseless and good cavitations performance.
- Anti - friction and anti-corrosion painting is adopted for suction & discharge flow channel that have low hydraulic loss.

③ Coupling Cover

- Split structure is safty and reliable that conform to UL standard.

④ Sealing Ring

- The seal ring is stepped designed that have low volume loss.

⑥ Shaft

- It is designed thicker that has good rigidity and stable operation.
- Complete sealing design is adopted without connecting with liquids that convenient for maintenance.
- Short time reverse rotation is allowable, and the shaft can be used for both rotations.

⑨ Bearing

- Short span and enlarged diameter design are adopted that have stable operation and long operation period.
- Grease lubricated deep groove ball bearings are provided on both sides. Infuse oil online

⑫ Impeller

- It is designed with three-dimensional flow theory and CFD calculation & simulation that have advantages of high efficiency and good cavitations performance.
- Adjacent vanes are interlaced design and V-type discharge that have advantages of good flowing, low pulsation, low vibration and high efficiency.
- Metal mould, digital machining, and accurate roughcast are adopted.

⑬ Packing Seal

- High quality packing seals that without any leakage while operating for long time.
- Stainless steel shaft sleeve is convenient for maintenance.
- Split packing cover has enough space for packing replacement.

Material Table

No.	Part	Material	No.	Part	Material
1	Sealing Pipe Parts	0Cr18Ni9	8	Coupling Parts	45# Steel
2	Pump Casing	QT500-7	9	Bearing Parts	SKF (Brand)
3	Coupling Cover	Q235-B	10	Bearing Housing	QT500-7
4	Sealing Ring ☆	ZG1Cr18Ni9	11	Impeller Resist Sleeve	0Cr18Ni9
5	Protecting Cover	Q235-B	12	Impeller	ZG1Gr18Ni9
6	Shaft	40Cr	13	Packing Seal Parts ☆	Metal asbestos
7	Bearing Resist Sleeve	0Cr18Ni9	14	Pump Body	QT500-7

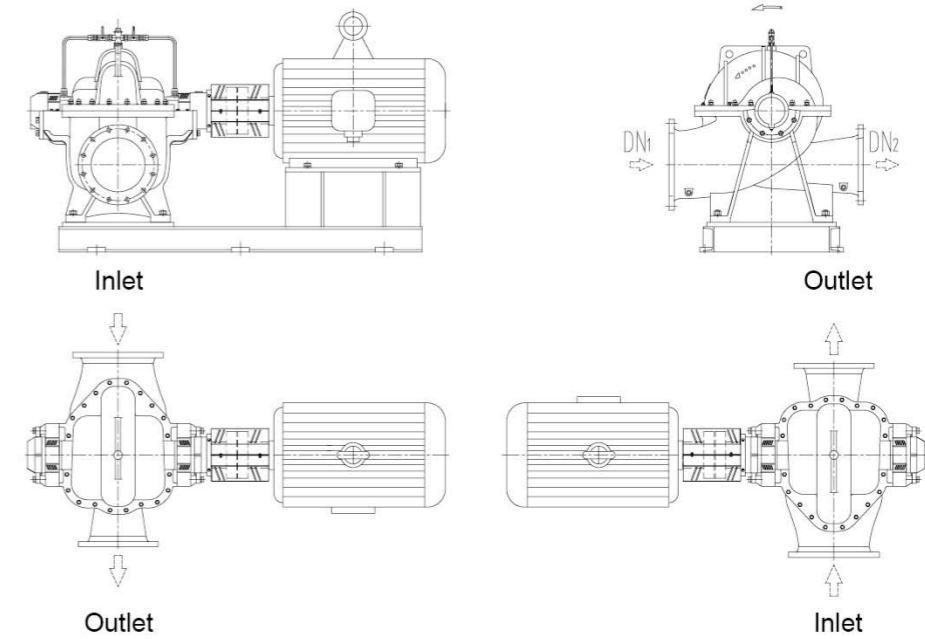
Remarks: The part with ☆ is wearing part.

Performance Parameter List

Model	Rated Capacity (UL Listed)		Pressure		Shaft Power Kw	Motor			Eff. %	Inlet Dia.	Outlet Dia.	Pump Weight Kg	
	US-GPM	m ³ /h	psi	bar		Power Kw	Volt V	Speed rpm					
GSX150-6/2	A	500	113.6	75.8	5.2	44	75	380	2990	50.2	6"	4"	170
	B			148.5	10.2	72							
GSX150-4/2	A	500	113.6	148.8	10.3	76.8	132	380	2990	41.4	6"	4"	200
	B			220	15.2	117.4							
GSX200-6/2	A	750	170.3	122.2	8.4	84.5	110	380	2990	63	4"	5"	200
	B			189.5	13.1	129.5							
GSX200-9/2	A	750	170.3	100	6.9	75	110	380	2990	63	4"	6"	260
	B			119	8.2	87.5							
GSX200-6G/2	A	1000	227.1	125	8.6	112	160	380	2990	65.1	4"	5"	300
	B			168.6	11.6	125							
GSX200-9G/2	A	1000	227.1	82	5.7	71	160	380	2990	67.8	4"	6"	260
	B			98.5	6.8	131.5							
GSX200-4G/2	A	1000	227.1	248	17.1	204	315	380	2990	61	4"	5"	340
	B			318	21.9	234							

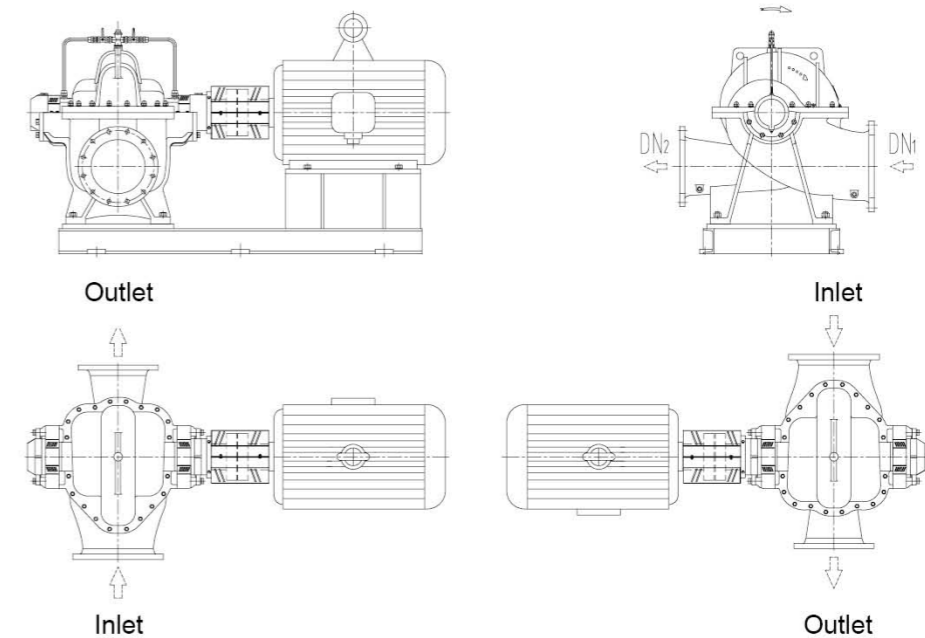
Standard type

Viewed from motor end, rotation is clockwise.

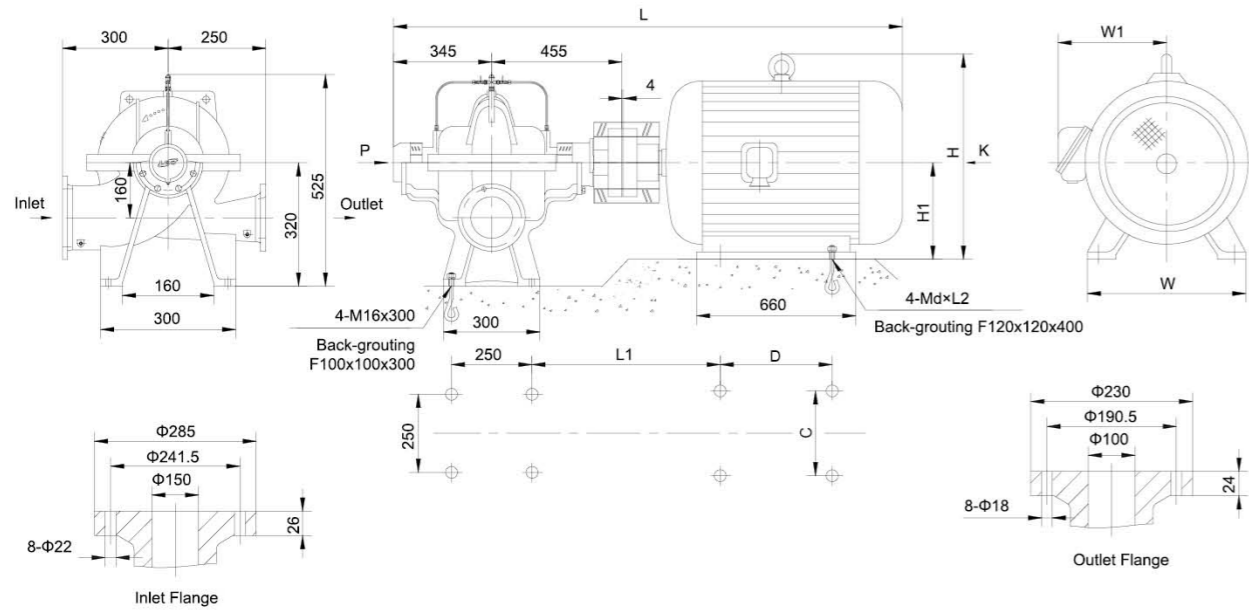


Special type

Viewed from motor end, rotation is counterclockwise.

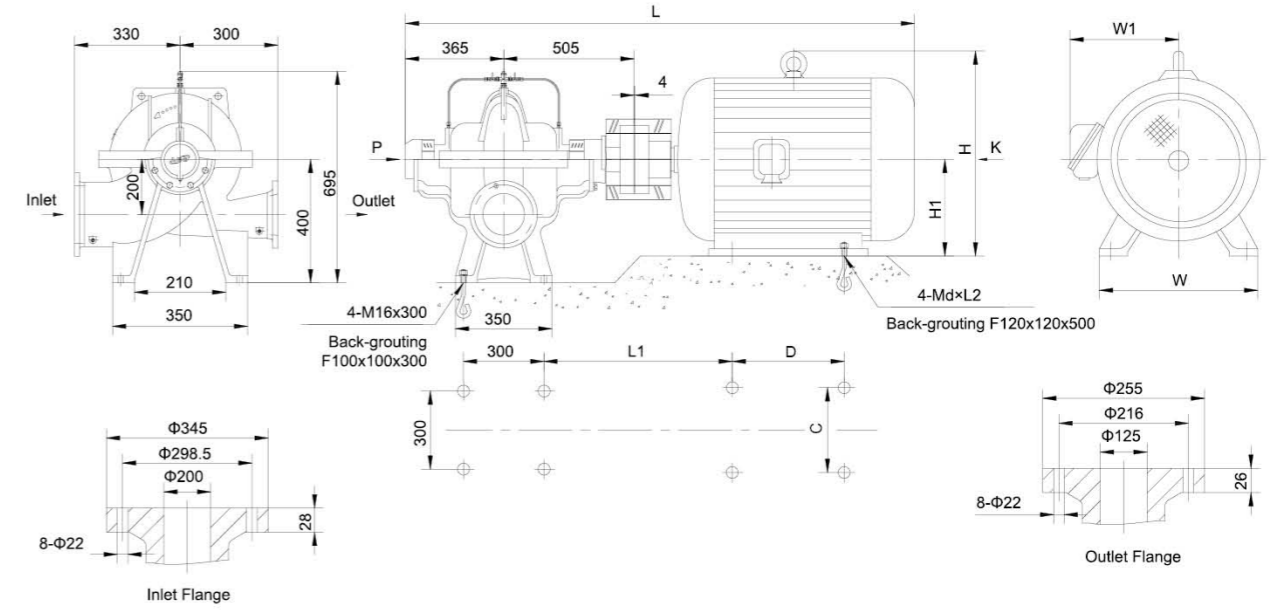


Installation Dimension Table

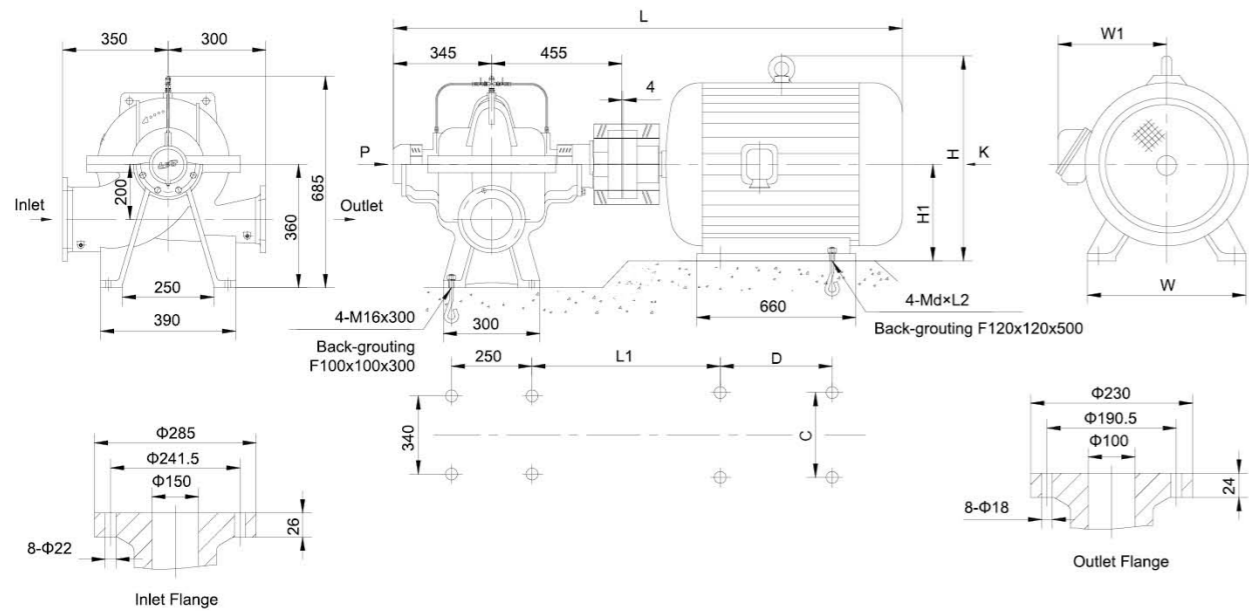


Model	Motor		Installation Dimensions (mm)										
	Type	Power Kw	Volt V	L	L1	C	D	H	H1	W	W1	MdxL2	
GSX150-6/2	A	YE2-280S-2	75	380	1806	666	457	368	680	280	550	410	M20X400
	B	YE2-315S-2	110	380	2406	692	508	406	845	315	628	576	M24X500

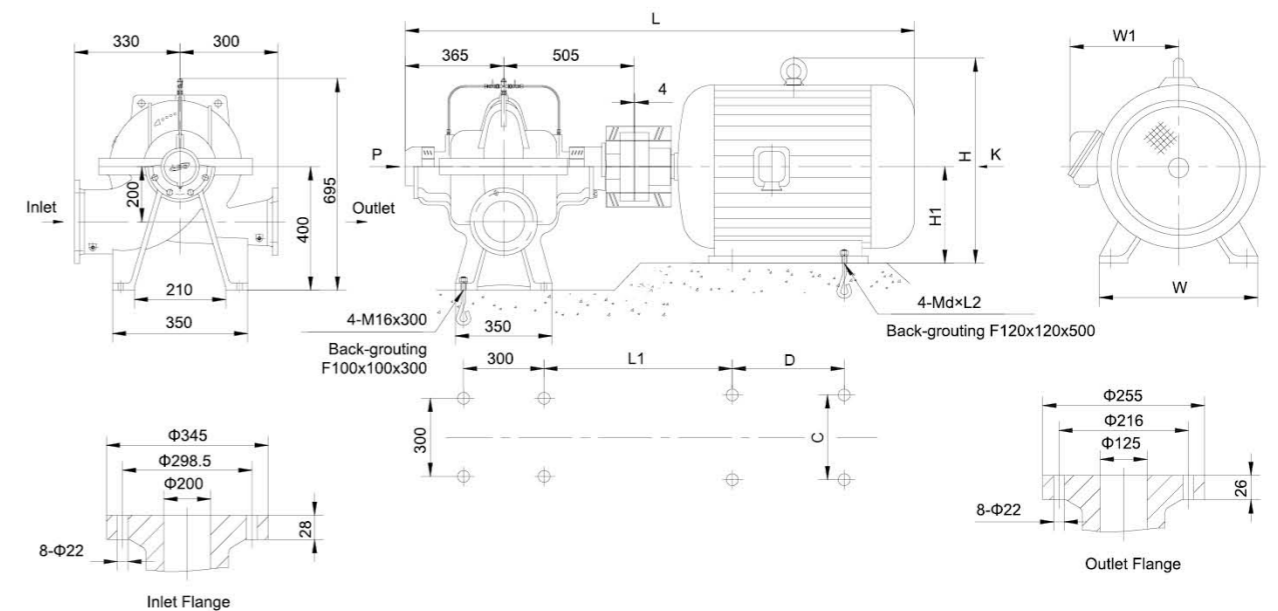
Installation Dimension Table



Model	Motor		Installation Dimensions (mm)										
	Type	Power Kw	Volt V	L	L1	C	D	H	H1	W	W1	MdxL2	
GSX200-6/2	A	YE2-315S-2	110	380	2116	717	508	406	845	315	628	576	M24x500
	B	YE2-315L2-2	200	380	2186	717	508	508	845	315	628	576	M24x500

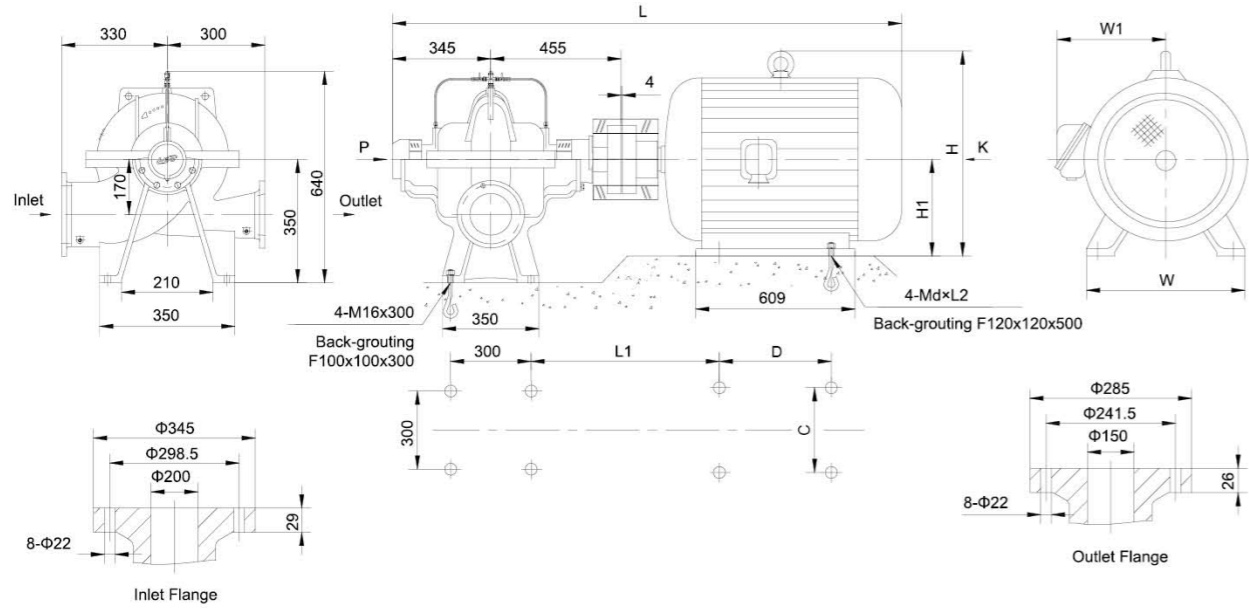


Model	Motor		Installation Dimensions (mm)										
	Type	Power Kw	Volt V	L	L1	C	D	H	H1	W	W1	MdxL2	
GSX150-4/2	A	YE2-315M-2	132	380	2186	692	508	457	865	315	628	576	M24x500
	B	YE2-315L2-2	200	380	2186	692	508	508	865	315	628	576	M24x500



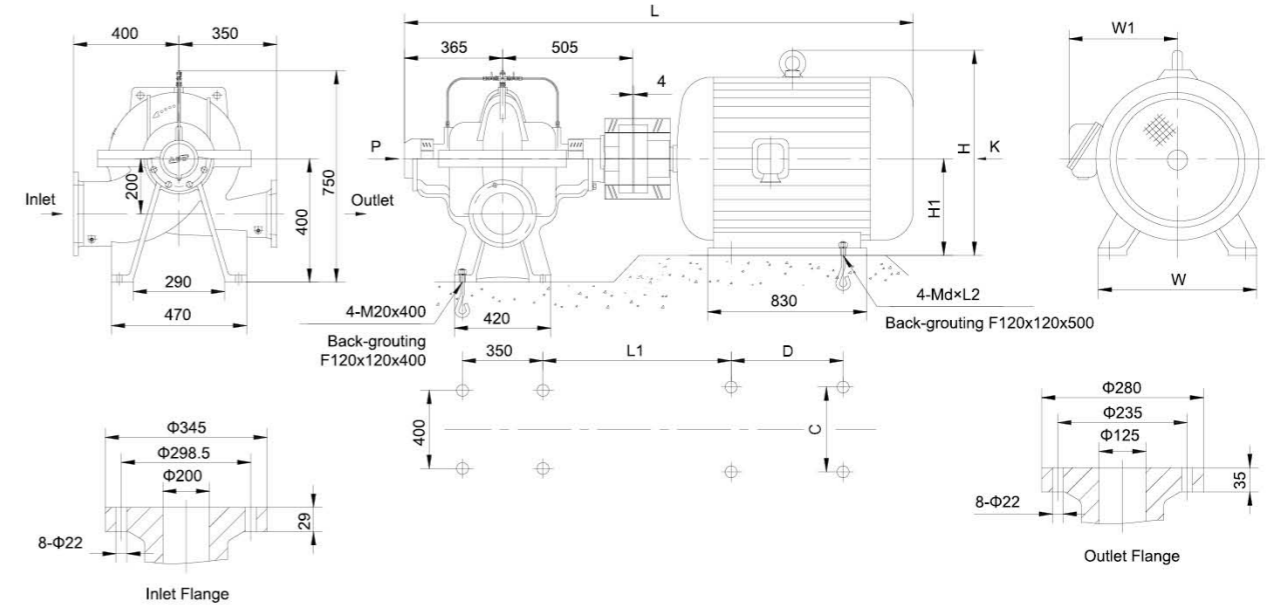
Model	Motor		Installation Dimensions (mm)										
	Type	Power Kw	Volt V	L	L1	C	D	H	H1	W	W1	MdxL2	
GSX200-6G/2	A	YE2-315L1-2	160	380	2186	717	508	508	845	315	628	576	M24x500
	B	YE2-315L2-2	200	380	2186	717	508	508	845	315	628	576	M24x500

Installation Dimension Table



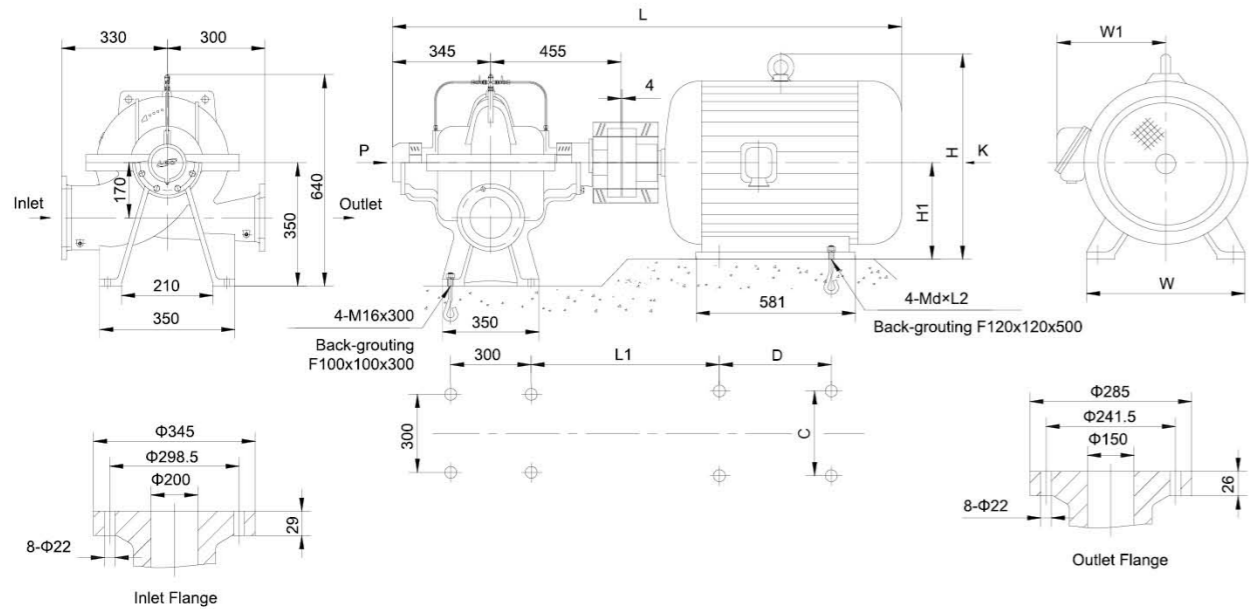
Model	Motor		Installation Dimensions (mm)										
	Type	Power Kw	Volt V	L	L1	C	D	H	H1	W	W1	MdxL2	
GSX200-9/2	A	YE2-315S-2	110	380	2046	667	508	406	680	280	628	576	M24x500
	B	YE2-315M-2	132	380	2046	667	508	457	845	315	628	576	M24x500

Installation Dimension Table



Model	Motor		Installation Dimensions (mm)										
	Type	Power Kw	Volt V	L	L1	C	D	H	H1	W	W1	MdxL2	
GSX200-4G/2	A	YE2-355L-2	315	380	2416	730	610	630	1035	355	740	680	M24x500
	B	YE2-355L-2	315	380	2416	730	610	630	1035	355	740	680	M24x500

- Notes:
1. Base plate setting (before piping), grouting procedures, and final alignment must be in accordance with leo fire pumps recommended procedures outlined in the instruction manual associated with this pump type.
 2. Motor dimensions are given according to our testing motor. Consult factory if space is limited.
 3. Both suction and discharge pipes must be supported independently near the pump to reduce strain on the pump casing. Also expansion joints, if used, must not exert force on casing.
 4. Inlet and outlet flanges: Standard ANSI/ASME B16.42.



Model	Motor		Installation Dimensions (mm)										
	Type	Power Kw	Volt V	L	L1	C	D	H	H1	W	W1	MdxL2	
GSX200-9G/2	A	YE2-315L1-2	160	380	1856	667	508	508	865	315	628	576	M24x500
	B	YE2-315L2-2	200	380	1856	667	508	508	865	315	628	576	M24x500

Pump Range



● Peripheral Pump



● Self-Priming Peripheral Pump



● Jet Pump



● Jet Pump for Deep Wells



● Centrifugal Pump



● Multistage Centrifugal Pump



● Self-Priming Centrifugal Pump



● Stainless Steel Multistage Centrifugal Pump



● Stainless Steel Centrifugal Pump



● Submersible Pump



● Stainless Steel Submersible Pump



● Stainless Steel Submersible Sewage Pump



● Flexible Shaft Pump



● Domestic Lifting Station



● Pool Pump



● Garden Submersible Pump



● Garden Jet Pump



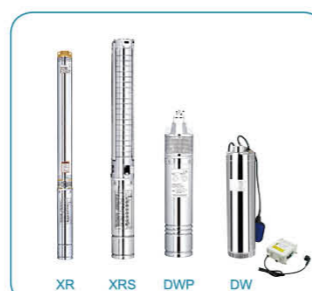
● Pressure Booster System



● Fountain Pump



● Standard Centrifugal Pump



● Submersible Borehole Pump



● Gasoline/Diesel Water Pump



● Booster Pump/Circulation Pump

Pump Range



● Submersible Sewage Pump



● Submersible Sewage Pump



● Submersible Dewatering Pump



● Submersible Slurry Pump



● Stainless Steel Vertical Multistage Pump



● Stainless Steel Horizontal Multistage Pump



● Semi-open Impeller Stainless Steel Centrifugal Pump



● Stainless Steel Standard Centrifugal Pump



● Pressure Booster System



● Vertical In-line Pump



● Bare Shaft End Suction Centrifugal Pump



● End Suction Centrifugal Pump



● High Efficiency Single Stage Double Suction Centrifugal Pump