

Where there is Kaiquan, there is water!

XBC系列柴油机消防泵

XBC Series Diesel Fire-Fighting Pump



Flexible Equipment Selection

Various brands of diesel engines can be used with the company's production of double suction pumps, horizontal multi-suction pumps, etc., to achieve the flexible combination of capacity and head

Full Protection Functions

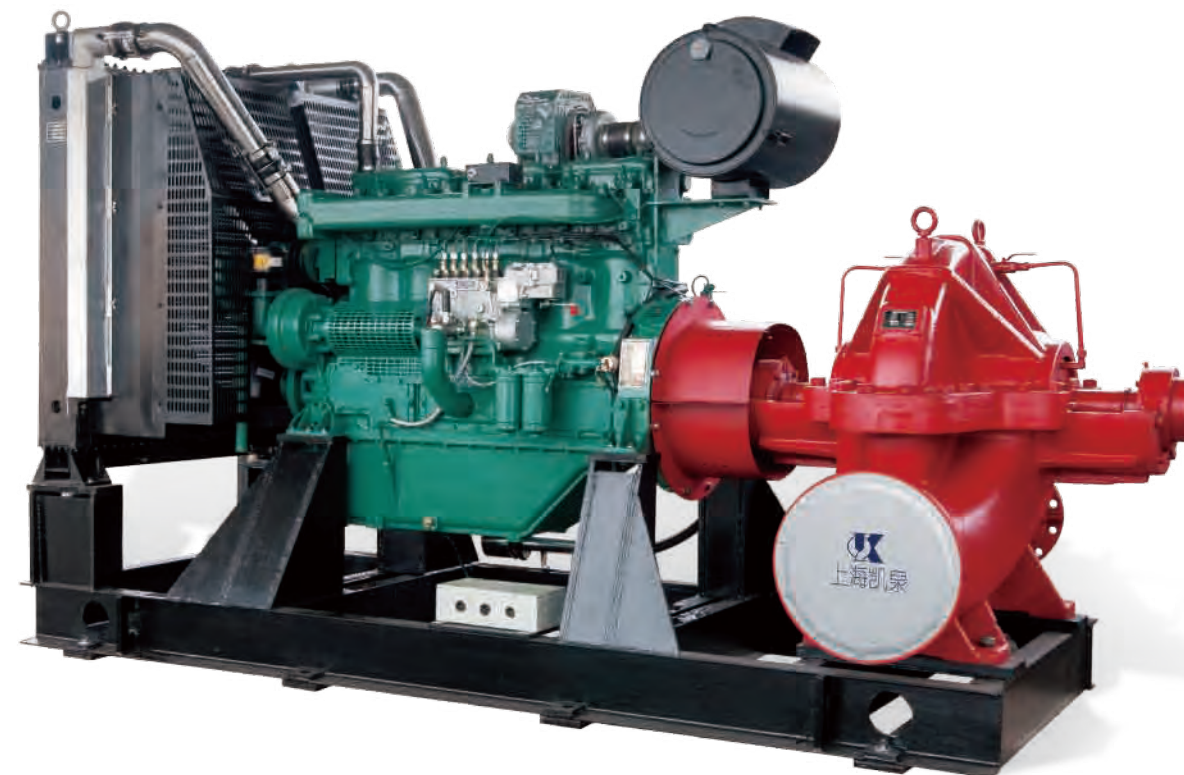
It will alarm or shut down when the water temperature is high, the oil temperature is high, the voltage is low, the oil pressure is low, the starting failure and overspeed, etc.

Strong Reliability

When remote control, mains power failure, and electric pump failure, the unit will automatically start and run, and reach the rated operating conditions with the best speed-up characteristics

High Degree of Automation

The equipment has automatic program process control function. Real-time data collection and display, fault self-diagnosis and alarm information storage



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Product Overview

XBC series diesel engine fire pumps are fire-fighting water supply equipment developed by our company in accordance with the national standard GB6245-2006 "Fire Pumps". They are mainly used in petroleum, chemical, natural gas, power plants, docks, gas stations, storage, high-rise buildings and other industries and fields. Fire water supply system. The products have reached the domestic leading level by the Fire Products Conformity Assessment Center (certification) of the Emergency Management Department.

Diesel engine fire pumps can be used to transport clear water below 80°C without solid particles or liquids with physical and chemical properties similar to water. On the premise of meeting the fire conditions, the requirements of living, production and water supply should be taken into consideration. The XBC diesel engine fire pump can be used for independent firefighting water supply systems, firefighting and living shared water supply systems, and water supply systems for various occasions such as construction, municipal administration, industrial and mining, water supply and drainage, ships, and field operations.

The XBC series of fire-fighting products produced by our company have reliable performance, compact structure, convenient operation and maintenance, and a wide range of pressure and capacity options. The equipment selects the fire-fighting water pump produced by our company, the diesel engine of the famous brand at home and abroad, and the control system with a high degree of automation. The equipment has the characteristics of leading technology, high degree of automation, superior performance, complete protection functions, reasonable structure, easy installation, and high cost performance. It is used for fire fighting or other places where emergency backup pumps are required. This system is equipped with various automatic control functions to ensure that the unit is in normal standby for a long time and can be put into operation at any time.

Work Scope

Capacity Range: 10-800L/s

Pressure Range: 0.2-2.2MPa

Rated Speed: 990RPM, 1480RPM, 2960RPM

Usage Condition

Ambient Atmospheric Pressure $>90\text{kPa}$

Ambient Temperature $5^{\circ}\text{C}\sim 40^{\circ}\text{C}$

Relative Air Humidity $\leq 80\%$

Performance Characteristics

- ※ Wide range of model spectrum: The unit uses single-stage single-suction centrifugal pumps, horizontal multi-stage pumps, single-stage double-suction pumps, long shaft pumps and other pump types, with a wide range of capacity and pressure.
- ※ Automatic operation: When the water pump unit receives a remote control command, or a signal (starting) such as mains power failure, electric pump failure, etc., the unit will automatically start to run. The equipment has automatic program process control, automatic data acquisition and display, automatic fault diagnosis and protection.
- ※ Process parameter display: According to the current actual working condition of the equipment, the current status and parameters of the equipment are displayed. The status display includes starting, running, speed up, speed down, (idle speed, full speed) shutdown, etc. Process parameters include speed, oil pressure, water temperature, oil temperature, battery voltage, accumulated running time, etc.
- ※ Alarm function: start failure alarm, low oil pressure alarm and shutdown, high water temperature alarm, high oil temperature alarm, low battery voltage alarm, low fuel level alarm, overspeed alarm and shutdown.
- ※ A variety of starting methods: on-site manual start-stop control, remote start-stop control from the control center, and start-up operation after mains power failure.
- ※ Status feedback signal: status feedback signal nodes such as running instruction, start failure, comprehensive alarm, control power closed, etc.
- ※ Automatic charging: In normal standby, the control system automatically floats the battery. When the machine is running, the charging generator that comes with the diesel engine will charge the battery.
- ※ The working speed is adjustable: when the capacity and head of the water pump are inconsistent with the actual requirements, the rated speed of the diesel engine can be adjusted.
- ※ Dual battery starting circuit: when one set of batteries fails to start, it will automatically switch to another set of batteries.
- ※ Maintenance-free battery: no need to add electrolyte frequently.
- ※ Water jacket preheating: it is easier to start the unit when the ambient temperature is low.

Equipment Composition

(1) Water Pump

Single-stage single-suction horizontal centrifugal pump (IS), horizontal multi-stage single-suction centrifugal pump (KQDW), horizontal single-stage split double-suction centrifugal pump (KQSN), in line with GB6245-2006 "Fire Pump" National standard.

(2) Diesel Engine

The driving source power of this product selects domestic and foreign famous brand diesel engines. Products with high performance, high reliability, strong load capacity, and low pollution emissions are preferred. This series of products usually choose the diesel engines of Wuxi Power, Shanghai Internal Combustion Engine Plant, Chaochai, Weichai, Jichai, Chongqing Cummins, Dongfeng Cummins, VOLVO, MAN, IVECO and other companies, and the speed is 1000r/min, 1500r/min, 1800r/min and 3000r/min.

All the diesel engines of our company's XBC diesel engine fire pumps are all cooled by water. Fan tank cooling and heat exchanger cooling refer to the difference in secondary cooling methods. The hot water generated when the diesel engine is working flows from the outlet pipe of the diesel engine to the heat exchanger. The cold water in the cooling pipe of the heat exchanger cools the circulating hot water of the diesel engine. cool down.

The cold water in the cooling pipe of the heat exchanger increases in temperature after cooling the circulating hot water of the diesel engine, and is pumped to the cooling tower for cooling, and then sent to the cooling pipe of the heat exchanger after cooling.

(3) Connecting Device

The diesel engine and water pump of this product are generally directly connected with elastic sleeve pin coupling, so it has the characteristics of easy installation, low cost, small size, reliability and safety. When the speed of diesel engine and pump do not match or long shaft pump is used, reducer or corner gear box coupling is required.

(4) Control Cabinet

The equipment is matched with the KQK900 series control cabinet developed and produced by Kaiquan Company. The KQK900 series diesel engine fire pump control cabinet is developed, designed and produced by the water supply equipment division of Shanghai Kaiquan Pump Industry Group. It is a supporting control system for the automatic diesel engine fire fighting, production and living water supply equipment. This series of products are fully functional, reliable and easy to use, sturdy and beautiful.

(5) Storage Battery

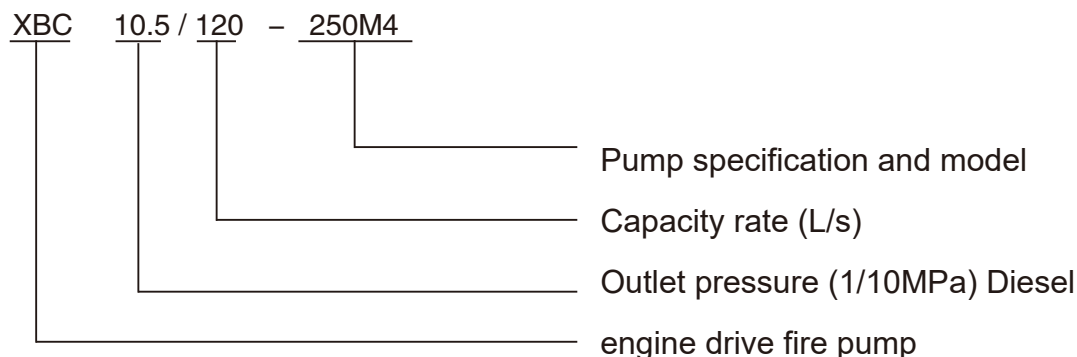
The equipment is equipped with maintenance-free storage battery, the specification is 12V/200Ah, according to the capacity of the starting motor of the machine and the starting requirements, different numbers of storage batteries can be equipped. In order to meet the individual needs of customers, other brands and models of battery products can also be selected according to the special designation of customers.

(6) Fuel Tank

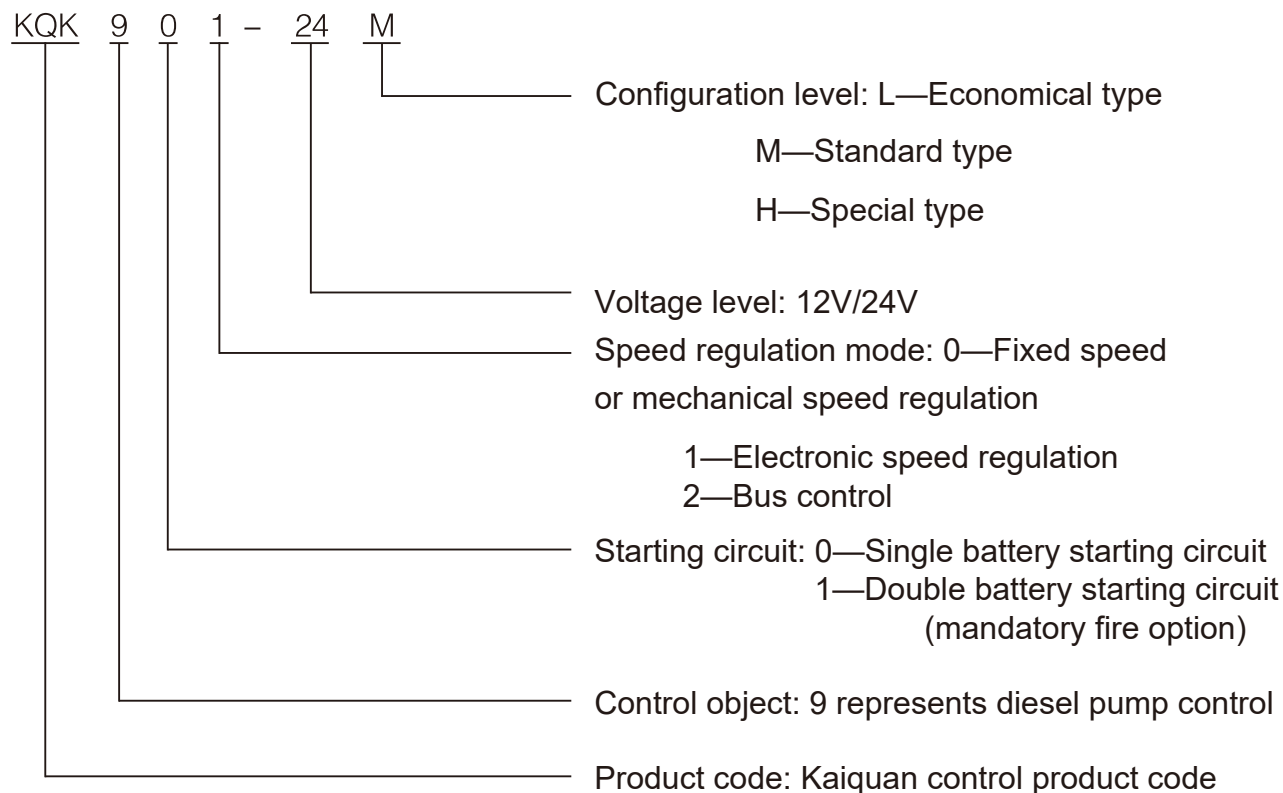
According to the requirements of equipment power, fuel consumption and operating time, fuel tanks of various volumes can be selected. Usually fire emergency products are selected for 6 hours. Our company provides fuel tank products of various specifications from 50L to 2000L.

Model Naming

※ Pump Set Model Naming Method



※ Control Cabinet Model Naming Method



Product Selection

※ Selection Instructions

This series diesel fire water supply equipment can be equipped with 10KW ~ 1500KW imported and domestic diesel engines of various series. The fire-fighting forensics models are listed in the data table. Our company can design and produce according to the requirements of users to achieve flexible combination of capacity and head. The company will continue to adopt new technology, new process to improve the performance and quality of products. This table is for type selection and installation reference only. If there is any change, it will be revised accordingly.

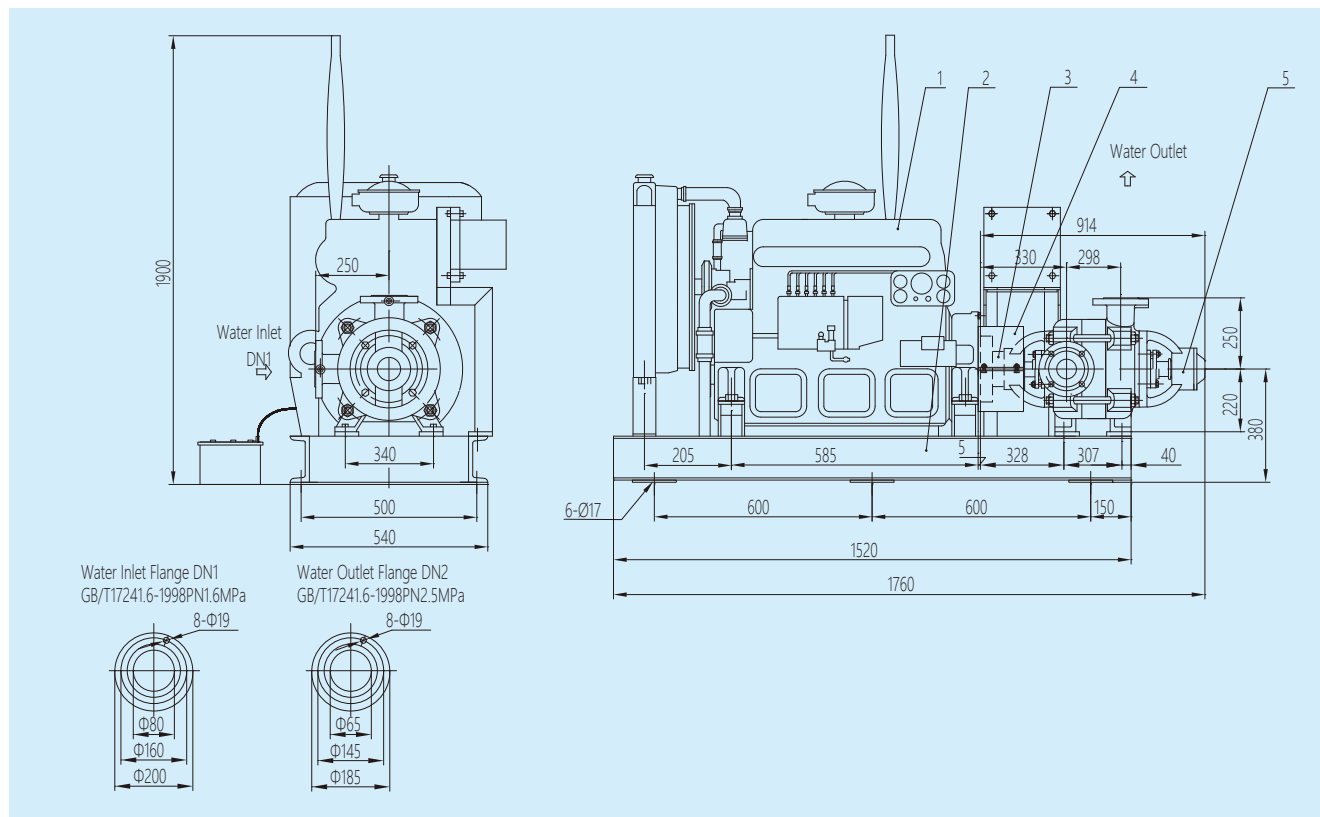
Supporting KQDW Horizontal Multi-Stage Pump

Comprehensive Technical Parameter Table

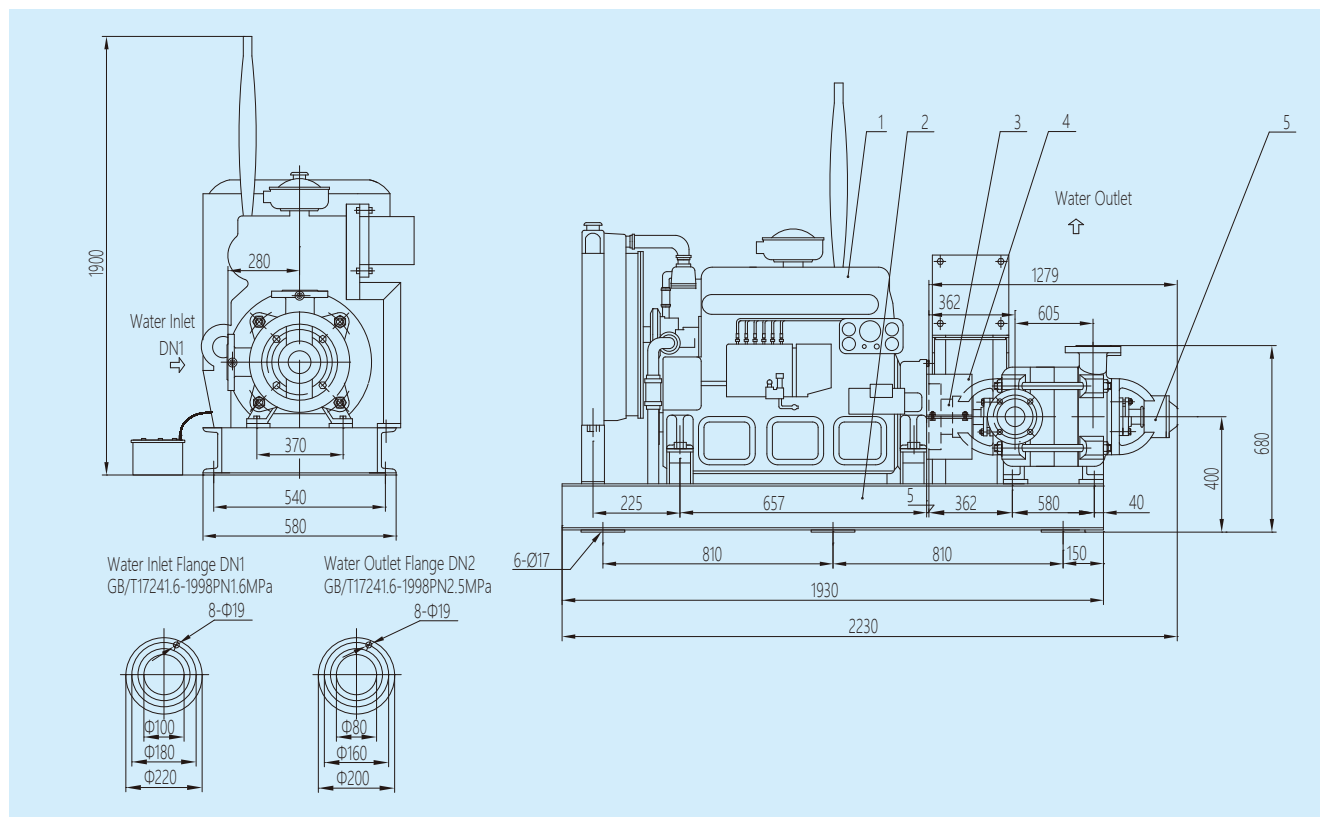
No.	XBC Equipment Mode	Capacity	Pressure	Pump Model	Diesel Engine Parameters			Fuel Tank	Battery	Installation Diagram
		L/s	MPa		Model	Power	Speed			
1	XBC5.8/15-W80-20X3	15	0.58	KQDW80-20×3	395BD	20.6	1500	50L	6-Q(W)-200=3	D1-01
2	XBC9/15-W100	15	0.9	KQDW100X-20×5	495BZD	34.3	1500	50L	6-Q(W)-200=3	D1-02
3	XBC6/20-W100X-20X3	20	0.6	KQDW100X-20×3	495BD	30.8	1500	50L	6-Q(W)-200=3	D1-03
4	XBC10/20-W100-20X5	20	1.0	KQDW100-20×5	4BTA3.9-G2	50	1500	100L	6-Q(W)-200=4	D1-04
5	XBC18/20-W100	20	1.8	KQDW100X-20×10	WDJ129B11-2	110	1500	200L	6-Q(W)-200=4	D1-05
6	XBC6/30-W150-20X3	30	0.6	KQDW150-20×3	WDJ86B7-4	74	1500	200L	6-Q(W)-200=4	D1-06
7	XBC9/30G-W150	30	0.9	KQDW150-20×4	WDJ86B7-4	74	1500	200L	6-Q(W)-200=4	D1-07
8	XBC13.0/30G-W150	30	1.3	KQDW150-20×6	WDJ86B7-4	74	1500	200L	6-Q(W)-200=4	D1-08
9	XBC14.3/40-W150	40	1.43	KQDW150-25×6	WDJ129TB16-1	162	1500	300L	6-Q(W)-200=4	D1-09
10	XBC5/60-W200-30X2	60	0.5	KQDW200-30×2	WDJ98B8-2	88	1500	200L	6-Q(W)-200=4	D1-10
11	XBC6.6/60G-W200-30X2	60	0.66	KQDW200-30×2	6BT5.9-G2	86	1500	200L	6-Q(W)-200=4	D1-11
12	XBC6.6/60-W200-30X2	60	0.66	KQDW200-30×2	WDJ129B11-2	110.3	1500	200L	6-Q(W)-200=4	D1-12
13	XBC11/60-W200	60	1.1	KQDW200-30×4	WDJ129TB16-1	162	1500	300L	6-Q(W)-200=4	D1-13
14	XBC12.5/60-W200	60	1.25	KQDW200-30×4	WD129TAB19-17	191	1500	500L	6-Q(W)-200=4	D1-14
15	XBC13.3/60-W200	60	1.33	KQDW200-30×4	WDJ129TB16-1	162	1500	300L	6-Q(W)-200=4	D1-15
16	XBC7.0/65G-W200	65	0.7	KQDW200-30×3	6135AD	110.3	1500	200L	6-Q(W)-200=4	D1-16
17	XBC12.5/65-W200	60	1.25	KQDW200-30×4	WDJ129TB16-1	162	1500	300L	6-Q(W)-200=4	D1-17
18	XBC7.5/70-W200-30X3/2-II	70	0.75	KQDW200-30×3	6135AD	110.3	1500	200L	6-Q(W)-200=4	D1-18
19	XBC15.3/70-W200-30×5	70	1.53	KQDW200-30×5	WD129TAB23L	235	1500	500L	6-Q(W)-200=4	D1-19

Installation Dimension Diagram

D1-01: XBC5.8/15-W80-20X3

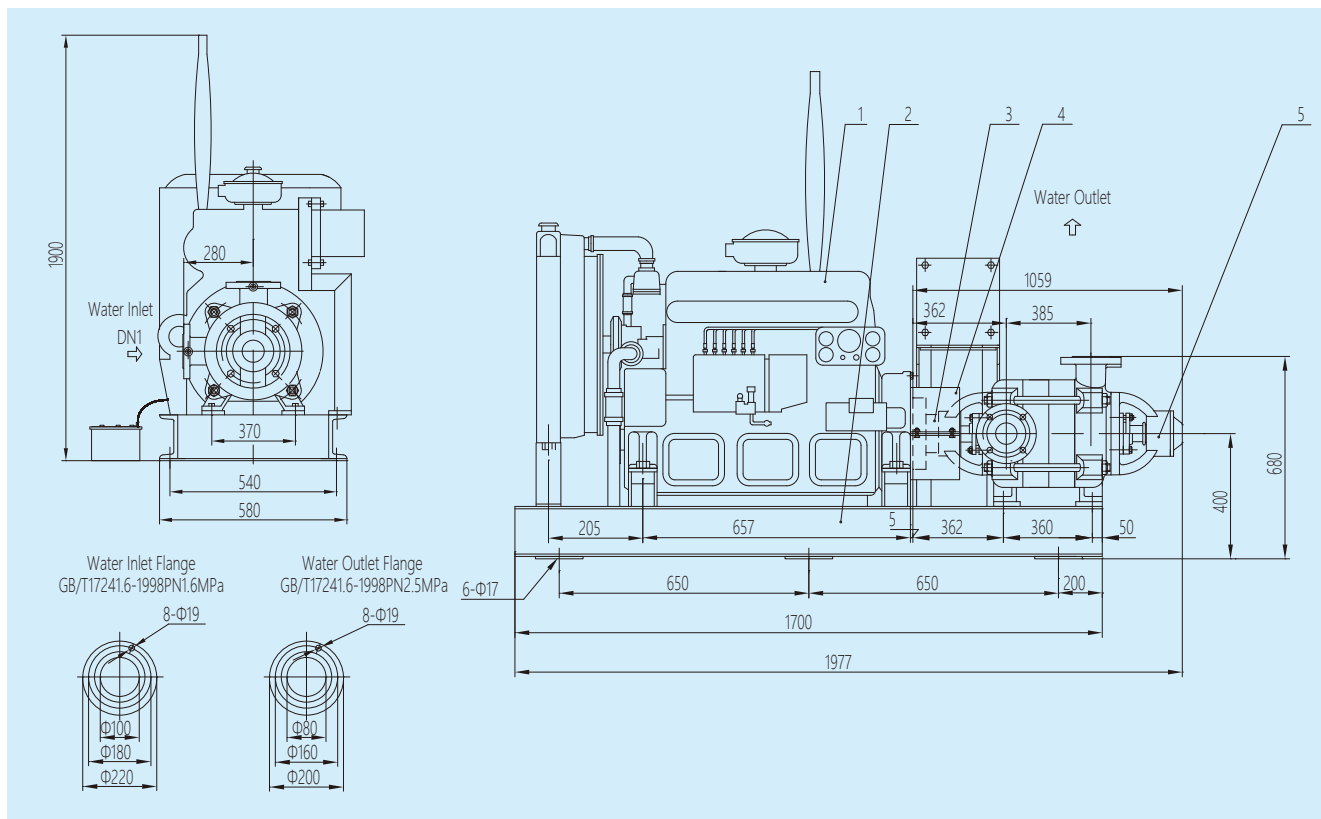


D1-02: XBC9/15-W100

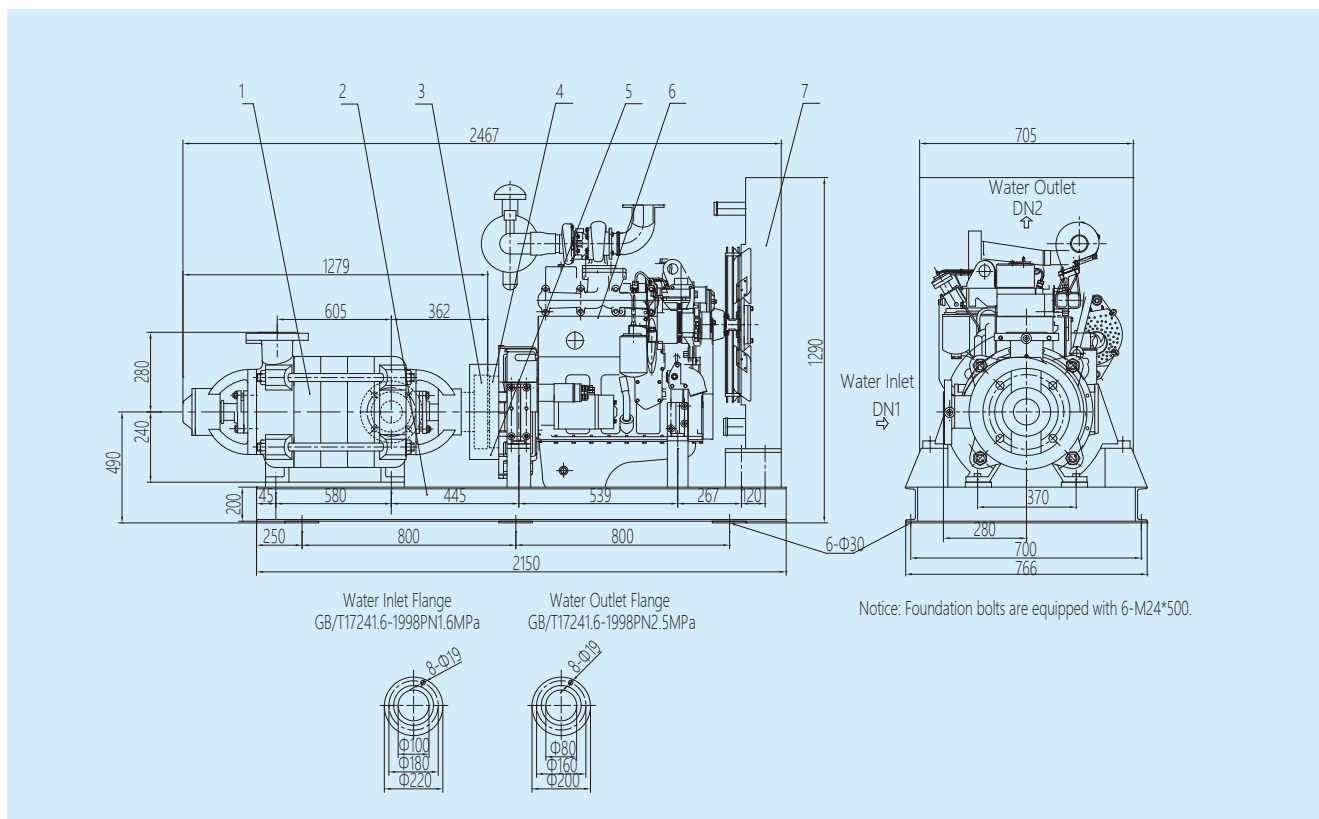


Installation Dimension Diagram

D1-03: XBC6/20-W100X-20X3

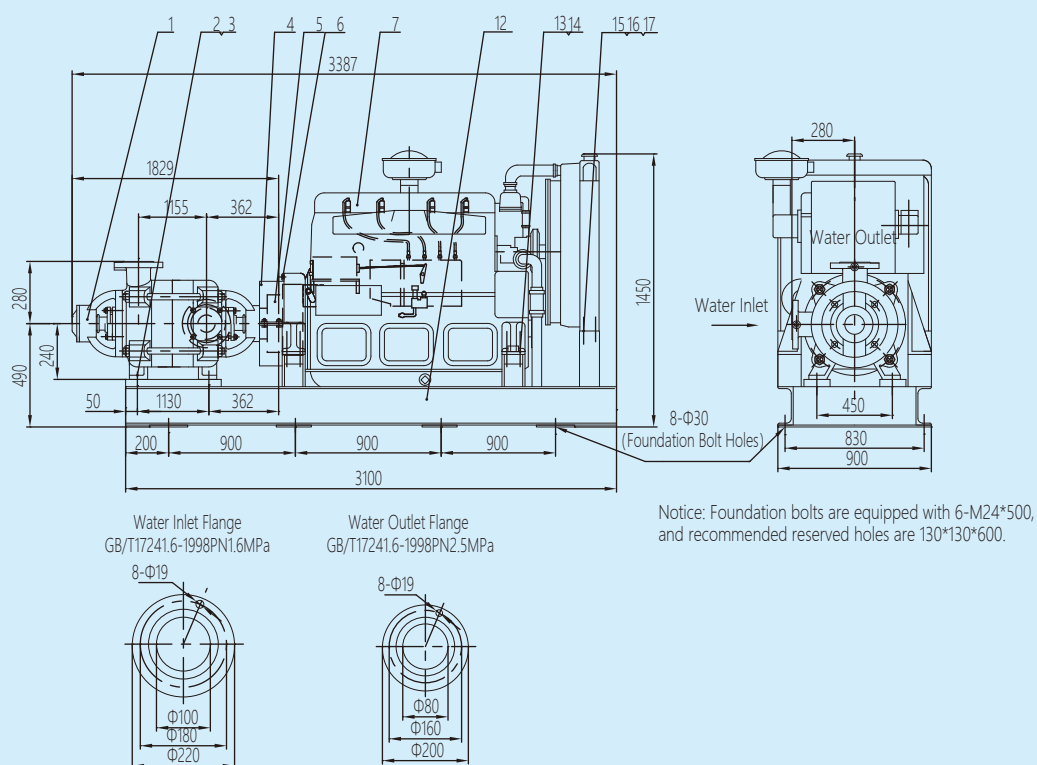


D1-04: XBC10/20-W100-20X5

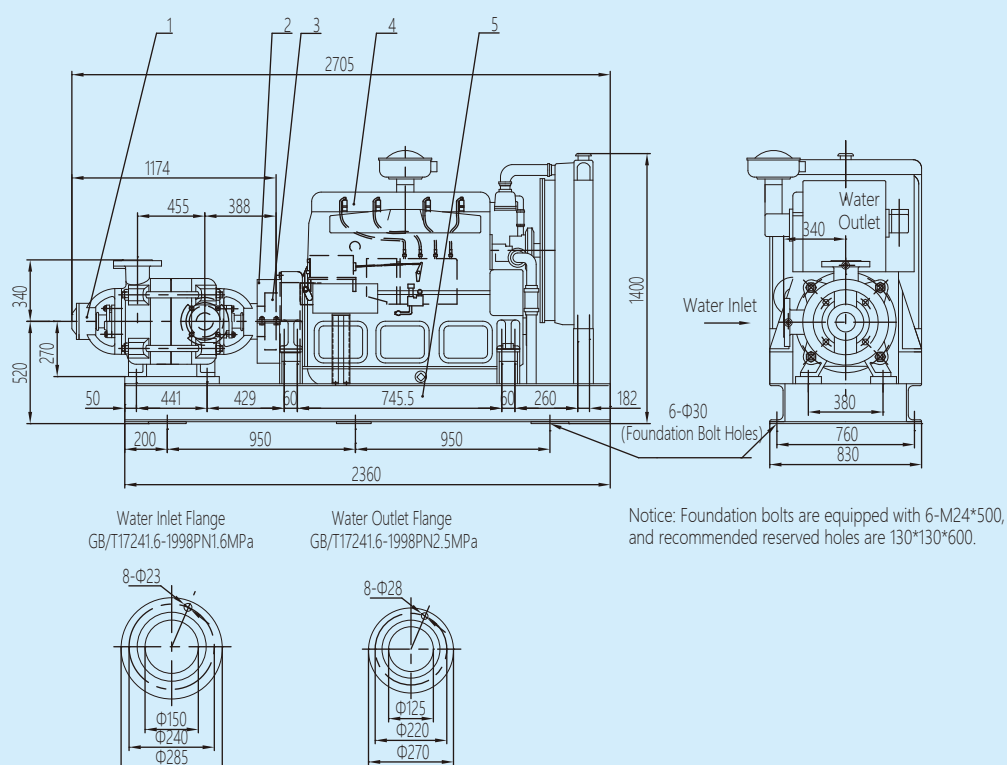


Installation Dimension Diagram

D1-05:XBC18/20-W100

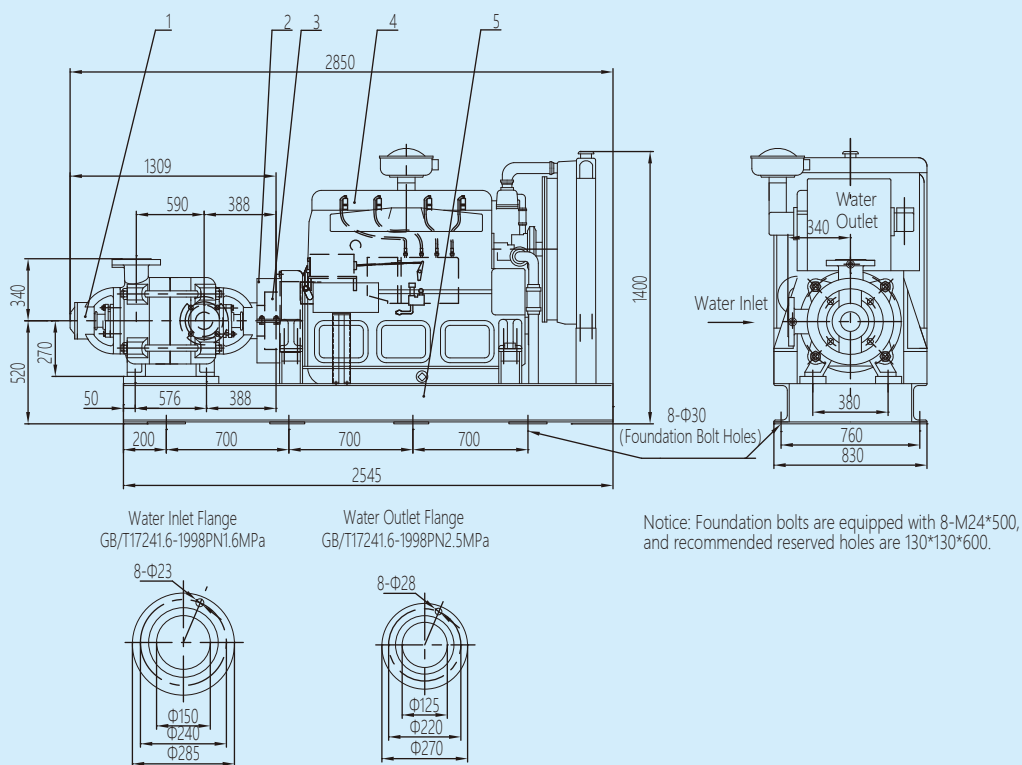


D1-06:XBC6/30-W150-20X3

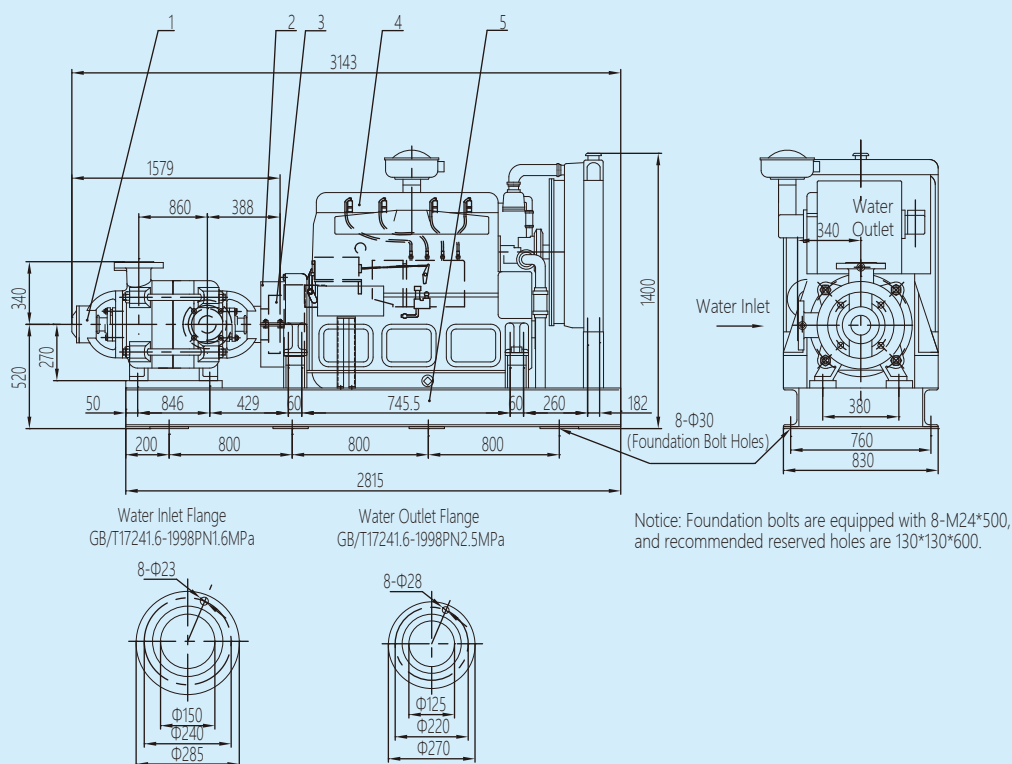


Installation Dimension Diagram

D1-07: XBC9/30G-W150

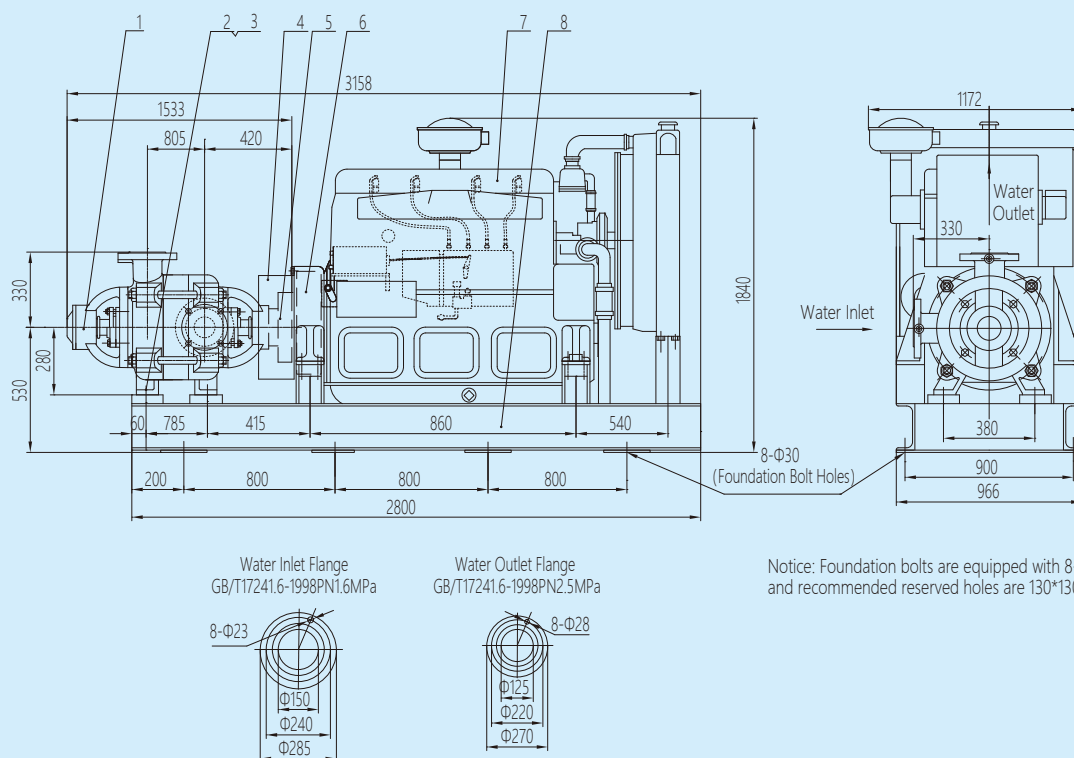


D1-08: XBC13/30G-W150

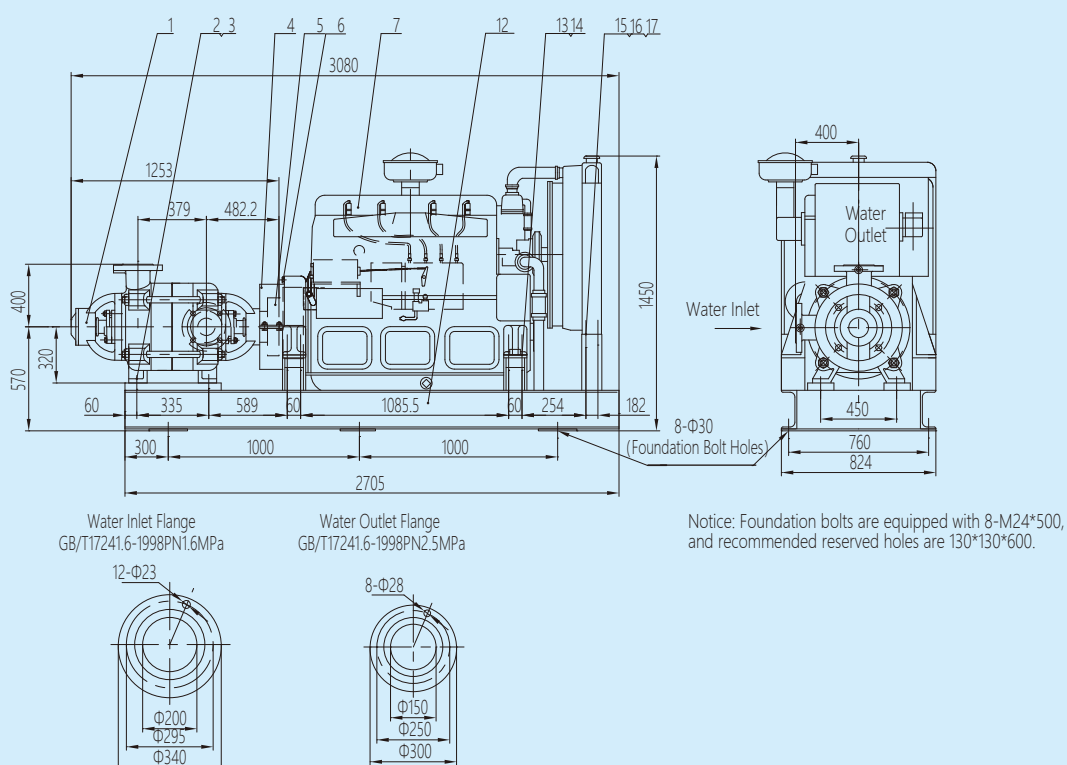


Installation Dimension Diagram

D1-09: XBC14.3/40-W150

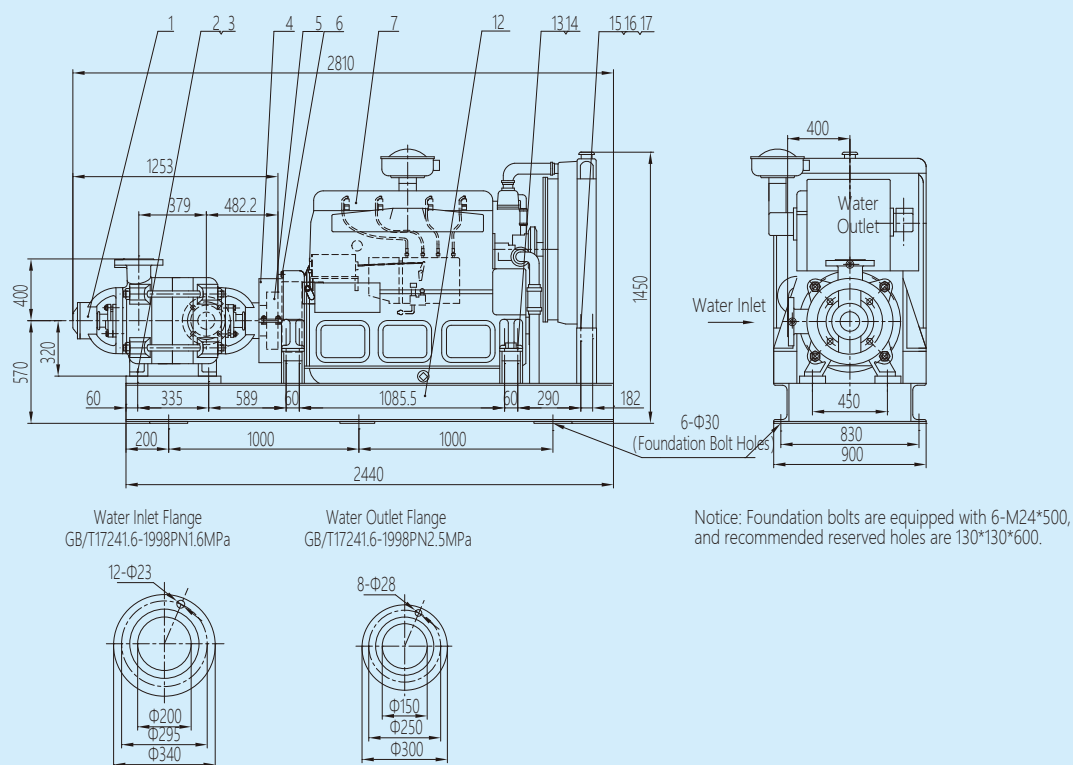


D1-10: XBC5/60-W200-30X2

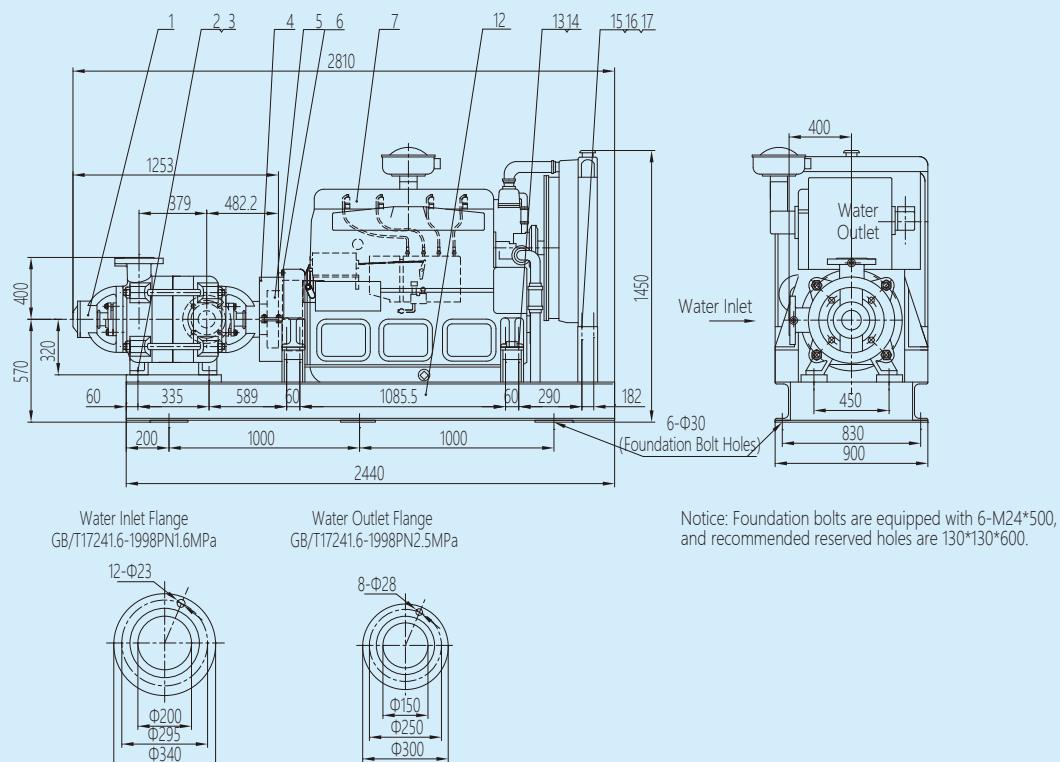


Installation Dimension Diagram

D1-11:XBC6.6/60G-W200-30X2

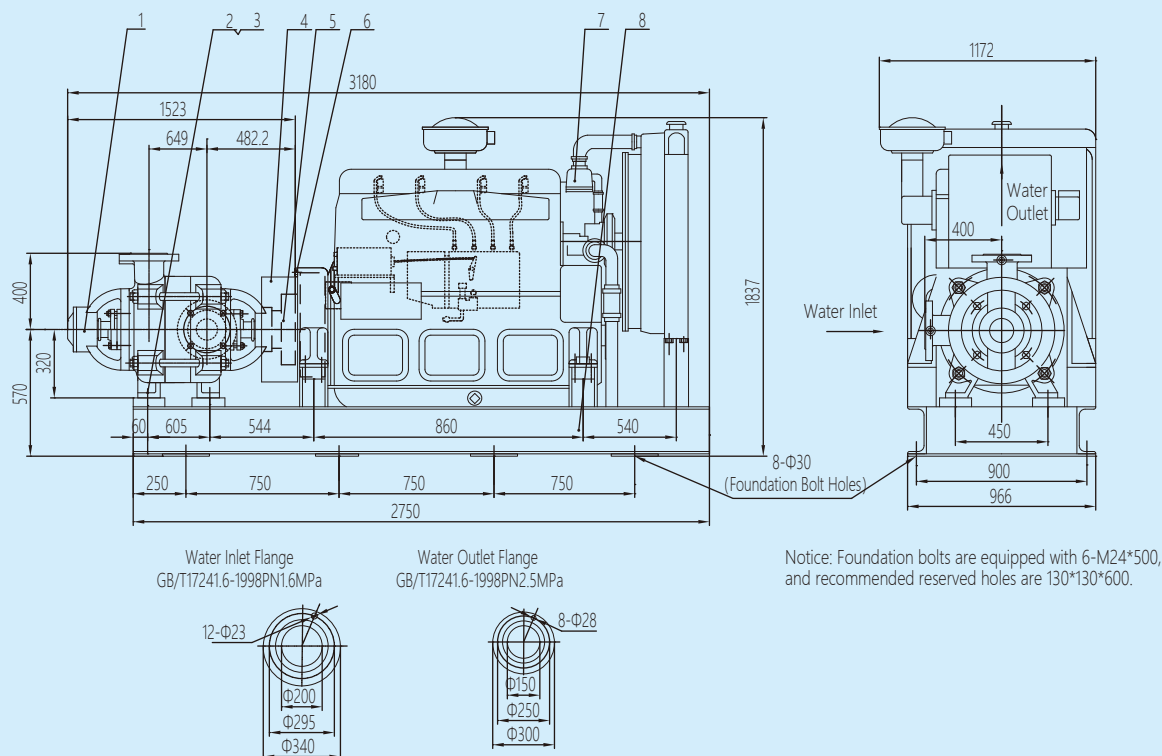


D1-12:XBC6.6/60-W200-30X2

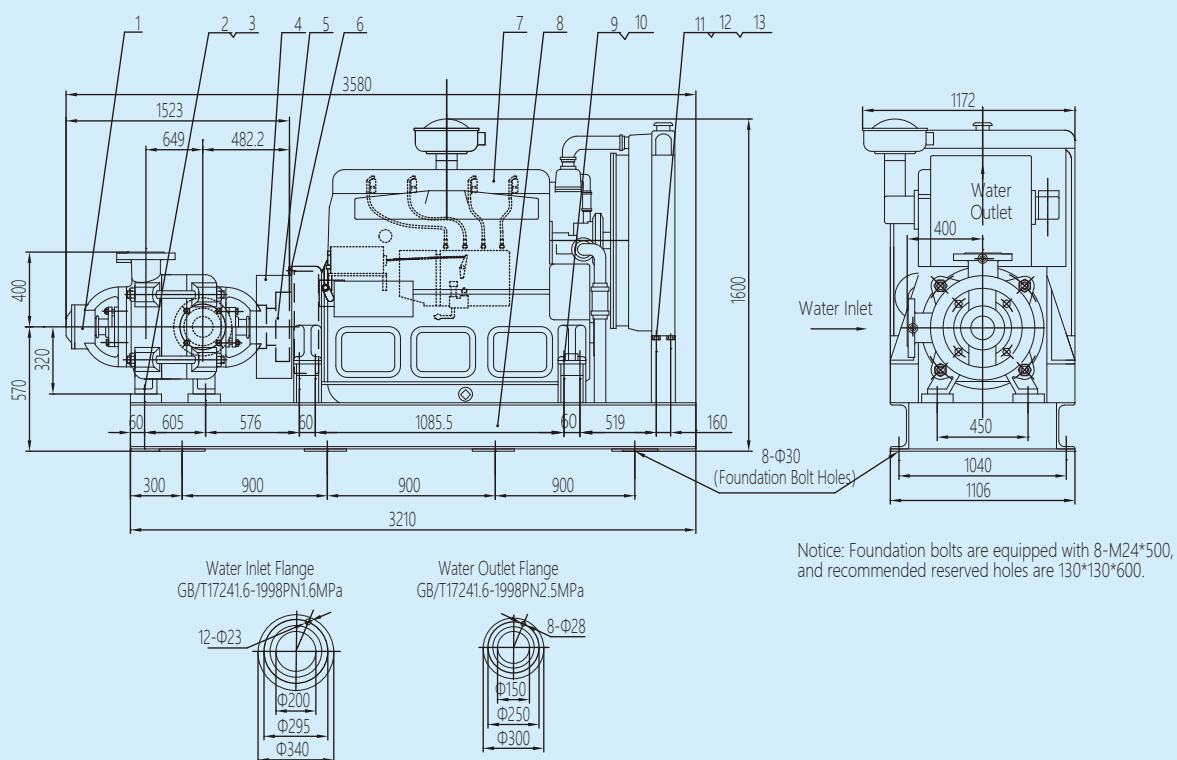


Installation Dimension Diagram

D1-13: XBC11/60-W200

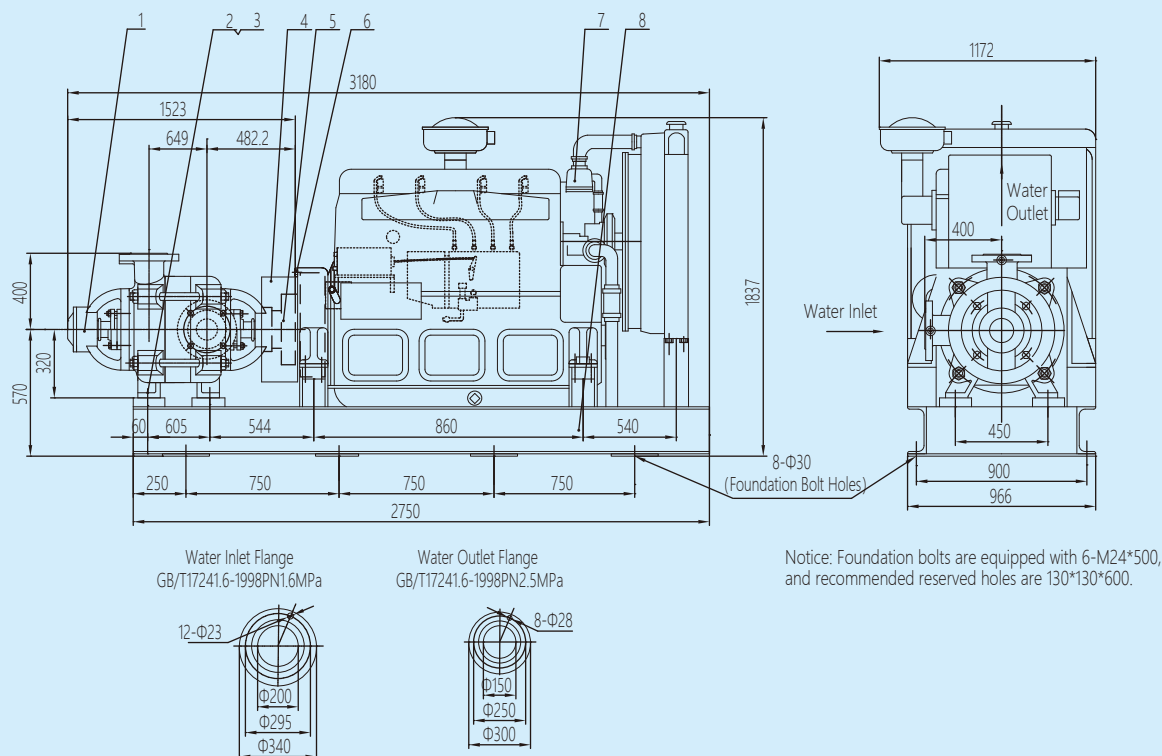


D1-14: XBC12.5/60-W200

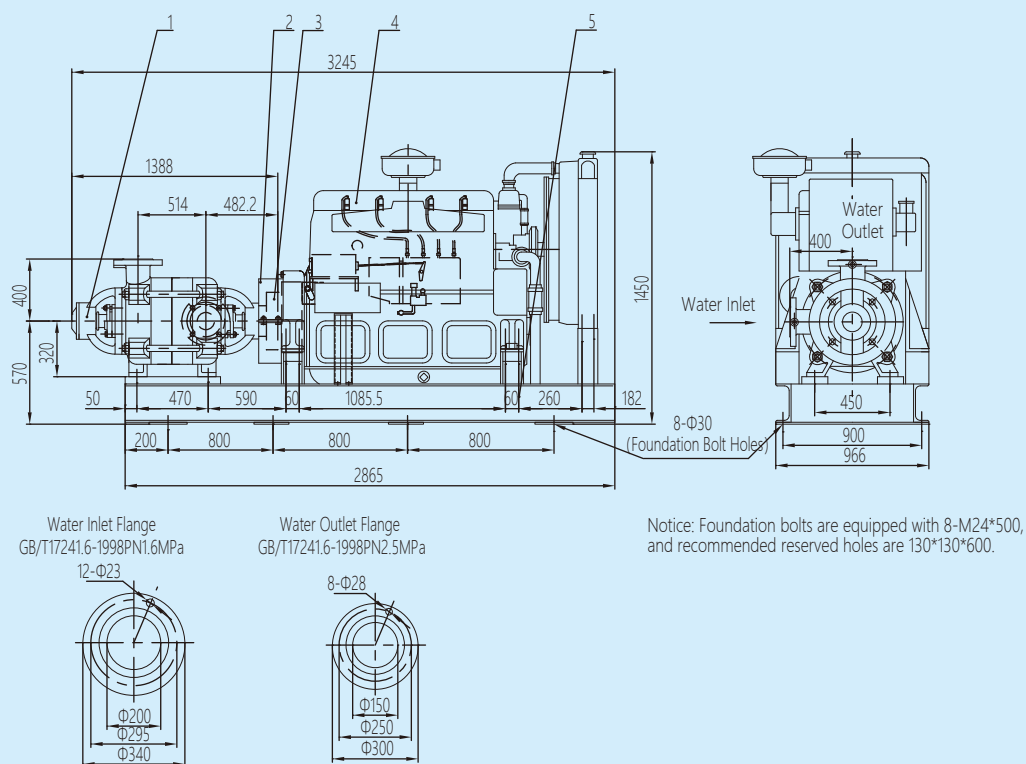


Installation Dimension Diagram

D1-15: XBC13.3/60-W200

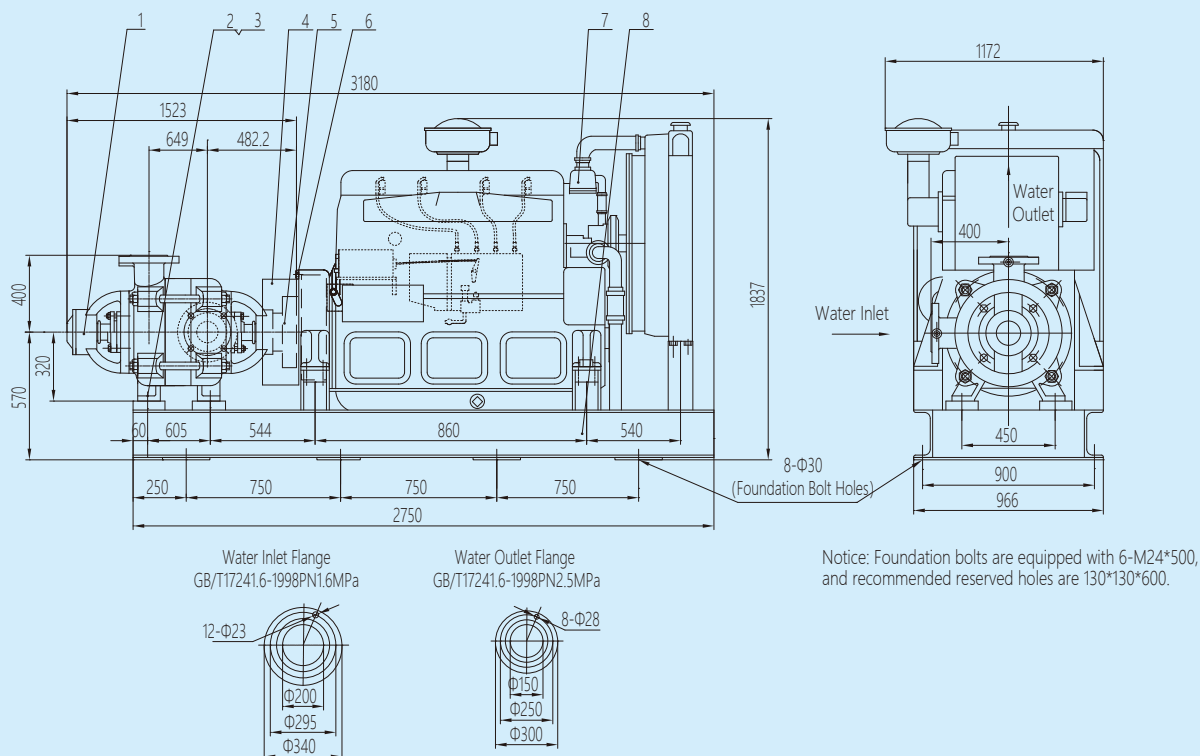


D1-16: XBC7.0/65G-W200

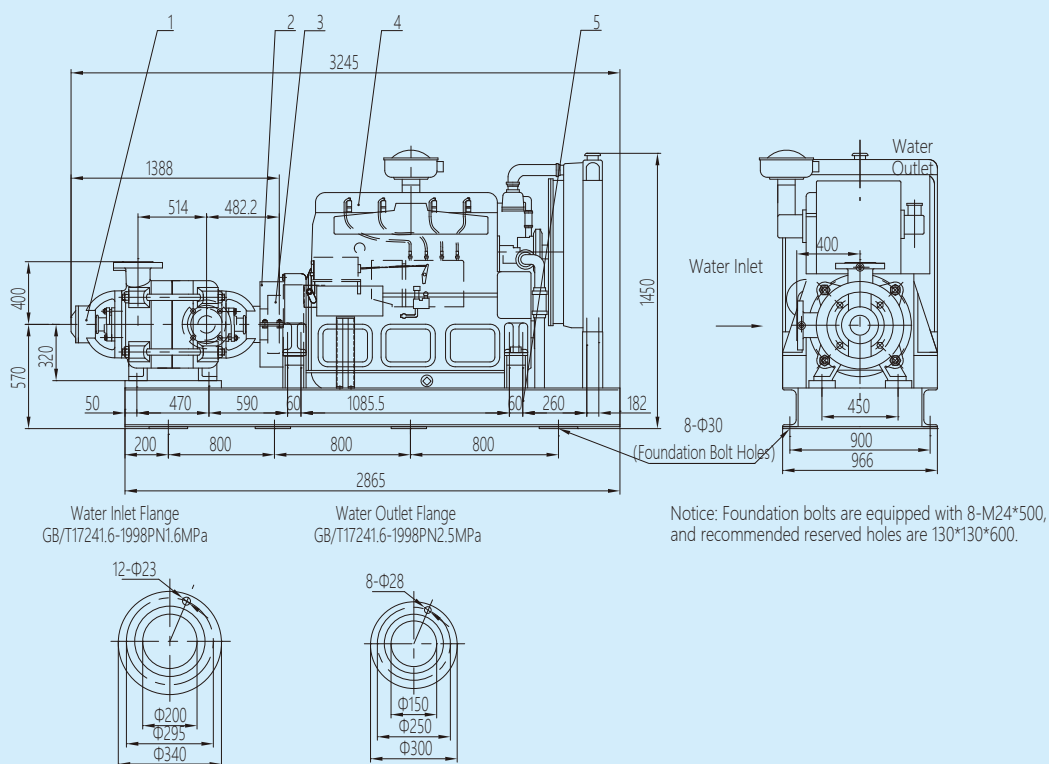


Installation Dimension Diagram

D1-17: XBC12.5/65-W200

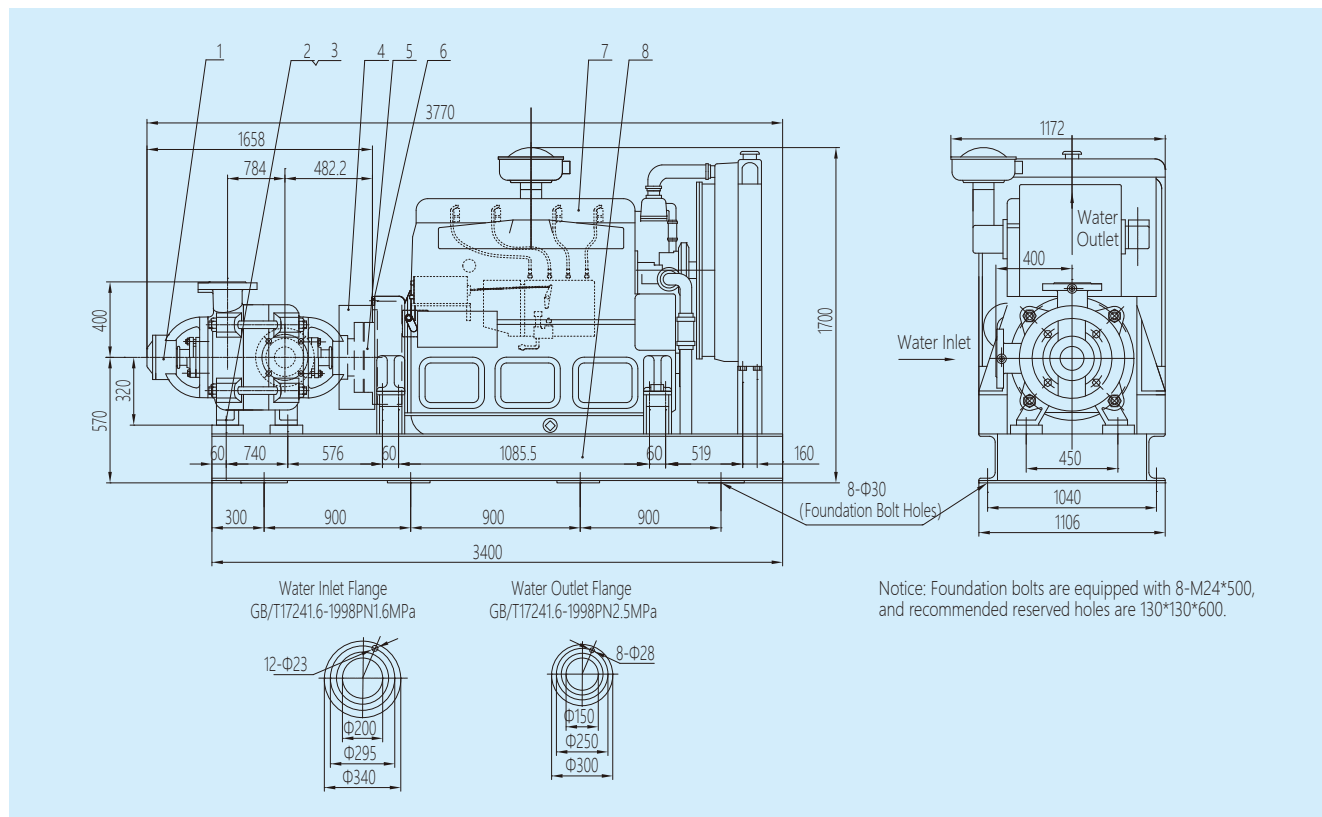


D1-18: XBC7.5/70-W200-30X3/2-II



Installation Dimension Diagram

D1-19: XBC15.3/70-W200-30X5



Supporting KQSN Double Suction Pump

Comprehensive Technical Parameter Table

No.	XBC Equipment Model	Capacity	Pressure	Pump Model	Diesel Engine Parameters			Fuel Tank	Battery	Installation Diagram
		L/s	MPa		Model	Power	Speed			
1	XBC7/50-200N6	50	0.7	KQSN200-N6/244	CY4102BZQ	88	2800	150L	6-Q(W)-200=4	D2-01
2	XBC6.5/80-250N4	80	0.65	KQSN250-N4/475	WDJ129TB16-1	162	1500	300L	6-Q(W)-200=4	D2-02
3	XBC9.5/80-250N4	80	0.95	KQSN250-N4/475	WDJ129TB16-1	162	1500	300L	6-Q(W)-200=4	D2-02
4	XBC12/80-250N4	80	1.2	KQSN250-N4/595	WDJ129TAB19-2	191	1500	500L	6-Q(W)-200=4	D2-03
5	XBC12/80-250M4	80	1.2	KQSN250-M4/565	NT855-P300	202	1500	500L	6-Q(W)-200=4	D2-04
6	XBC9/90-250N4	90	0.9	KQSN250-N4/531	WDJ129TAB19-2	191	1500	500L	6-Q(W)-200=4	D2-03
7	XBC14/90-300N4	90	1.4	KQSN300-N4/665	NTA855-P400	268	1500	500L	6-Q(W)-200=4	D2-05
8	XBC11/94-250N4	94	1.1	KQSN250-N4/595	WD129TAB23L	235	1500	500L	6-Q(W)-200=4	D2-10
9	XBC7.5/100-250N6	100	0.75	KQSN250-N6/473	WDJ129TAB19-2	191.2	1500	500L	6-Q(W)-200=4	D2-06
10	XBC10/100-250N4	100	1.0	KQSN-250N4/565	6LTAA8.9-G2	220	1500	500L	6-Q(W)-200=4	D2-07
11	XBC19/110G-300N3	110	1.9	KQSN300-N3/780	NT271ZW56	605	1500	1500L	6-Q(W)-200=4	D2-08
12	XBC8/120-250M4	120	0.8	KQSN250-M4/540	6CTAA8.3-G2	183	1500	500L	6-Q(W)-200=4	D2-09
13	XBC10.5/120G-250M4	120	1.05	KQSN250-M4/580	NTA855-P400	268	1500	500L	6-Q(W)-200=4	D2-10
14	XBC10.5/120-250M4	120	1.05	KQSN250-M4/580	WD135TAB28L	280	1500	500L	6-Q(W)-200=4	D2-10

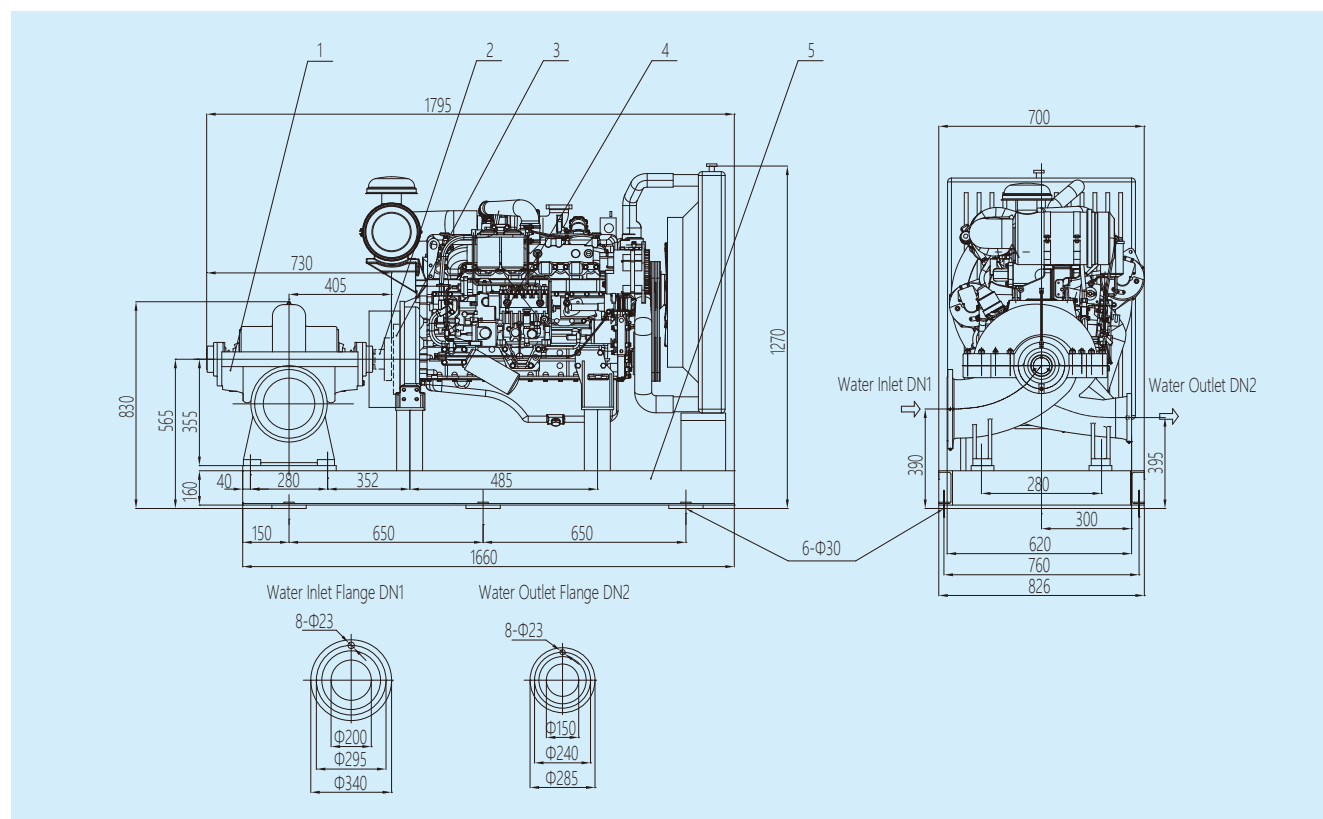
XBC Series Diesel Fire (Emergency) Pump

No.	XBC Equipment Mode	Capacity	Pressure	Pump Model	Diesel Engine Parameters			Fuel Tank	Battery	Installation Diagram
		L/s	MPa		Model	Power	Speed			
15	XBC11.5/120-250M4	120	1.15	KQSN250-M4/595	WD135TAB28L	280	1500	500L	6-Q(W)-200=4	D2-10
16	XBC13/120-250M4	120	1.3	KQSN250-M4/595	WD135TWB28	280	1500	500L	6-Q(W)-200=4	D2-11
17	XBC10.0/130G-300N4	130	1.0	KQSN300-N4/585	WD129TAB25L	258	1500	500L	6-Q(W)-200=4	D2-12
18	XBC12/130-250M4	130	1.2	KQSN250-M4/595	WD135TAB28L	280	1500	500L	6-Q(W)-200=4	D2-10
19	XBC11/140-300N4	140	1.1	KQSN300-N4/612	WD135TAB28L	280	1500	500L	6-Q(W)-200=4	D2-13
20	XBC16/140-300M4	140	1.6	KQSN300-M4/690	KTA38-P980	664	1500	1500L	6-Q(W)-200=8	D2-14
21	XBC10/150-300N4	150	1.0	KQSN300-N4/585	NTA855-P400	268	1500	500L	6-Q(W)-200=4	D2-05
22	XBC12/150-300N4	150	1.20	KQSN300-N4/612	NTA855-P470	316	1500	700L	6-Q(W)-200=4	D2-15
23	XBC12/150-300M4	150	1.20	KQSN300-M4/618	KTA19-P600	403	1500	700L	6-Q(W)-200=4	D2-16
24	XBC12/150-300M4	150	1.20	KQSN300-M4/618	WD269TAB38L	382	1500	700L	6-Q(W)-200=4	D2-17
25	XBC18/150G-300N3	150	1.8	KQSN300-N3/780	NT283ZW48	530	1500	900L	6-Q(W)-200=4	D2-08
26	XBC12/160-300M4	160	1.2	KQSN300-N4/638	WD269TAB38L	382	1500	700L	6-Q(W)-200=4	D2-17
27	XBC8.5/160-300N6	160	0.85	KQSN300-N6/509	WD135TAB28L	280	1500	500L	6-Q(W)-200=4	D2-18
28	XBC10.5/160-300M4	160	1.05	KQSN300-M4/592	WD145TAB30L	309	1500	700L	6-Q(W)-200=4	D2-13
29	XBC10.5/160-300M4	160	1.05	KQSN300-M4/592	SC15G500P2	330	1500	700L	6-Q(W)-200=4	D2-19
30	XBC12.4/160-300N4	160	1.24	KQSN300-N4/638	WD269TAB38L	382	1500	700L	6-Q(W)-200=4	D2-17
31	XBC16/160-300M4	160	1.6	KQSN300-M4/690	NT283ZW48	482	1500	900L	6-Q(W)-200=4	D2-20
32	XBC16/160G-300M4	160	1.6	KQSN300-M4/690	WD269TAB48L	482	1500	900L	6-Q(W)-200=4	D2-17
33	XBC11.5/170-300M4	170	1.15	KQSN300-M4/618	WD145TAB33L	339	1500	700L	6-Q(W)-200=4	D2-21
34	XBC11.5/170-300M4	170	1.15	KQSN300-M4/592	KTA19-P500	340	1500	700L	6-Q(W)-200=4	D2-22
35	XBC11.5/170-300M4	170	1.15	KQSN300-M4/618	WD269TAB38L	382	1500	700L	6-Q(W)-200=4	D2-17
36	XBC6.5/180-300M9	180	0.65	KQSN300-M9/445	WD129TAB25L	258	1500	500L	6-Q(W)-200=4	D2-23
37	XBC12/180-300M4	180	1.20	KQSN300-M4/618	WD269TAB41L	418	1500	700L	6-Q(W)-200=4	D2-24
38	XBC12/180G-300M4	180	1.2	KQSN300-M4/618	KTA19-P600	403	1500	700L	6-Q(W)-200=4	D2-22
39	XBC8/200-300M6	200	0.8	KQSN300-M6/509	NTA855-P470	316	1500	700L	6-Q(W)-200=4	D2-25
40	XBC10/200-350N6	200	1.0	KQSN350-N6/575	NT151LU35	356	1500	700L	6-Q(W)-200=4	D2-26
41	XBC10/200G-350N6	200	1.0	KQSN350-N6/575	KTA19-P600	403	1500	700L	6-Q(W)-200=4	D2-27
42	XBC11/200-300M4	200	1.10	KQSN300-M4/592	WD269TAB38L	382	1500	700L	6-Q(W)-200=4	D2-17
43	XBC12/200-300M4	200	1.2	KQSN300-M4/618	KTA19-P680	450	1500	700L	6-Q(W)-200=4	D2-28
44	XBC15.0/200-300M4	200	1.50	KQSN300-M4/690	WD287TAB61L	618	1500	1500L	6-Q(W)-200=4	D2-29
45	XBC12/220G-350N6	220	1.2	KQSN350-N6/653	6M33D633E200	575	1500	1000L	6-Q(W)-200=4	D2-30
46	XBC16.0/220G-350N4	220	1.6	KQSN350-N4/693	WD287TAB61L	618	1500	1500L	6-Q(W)-200=4	D2-31
47	XBC8.5/230-350N6	230	0.85	KQSN350-N6/575	WD269TAB38L	382	1500	700L	6-Q(W)-200=4	D2-32
48	XBC15/230-350N4	230	1.5	KQSN350-N4/693	KTA38-P980	664	1500	1500L	6-Q(W)-200=8	D2-33
49	XBC12/240G-350N6	240	1.2	KQSN350-N6/627	KTAA19-P673	507	1500	900L	6-Q(W)-200=4	D2-34
50	XBC14.0/250G-350M6	250	1.4	KQSN350-M6/654	WD287TAB61L	618	1500	1500L	6-Q(W)-200=4	D2-35
51	XBC5.9/260-350N9	260	0.59	KQSN350-N9/452	WD135TAB28L	280	1500	500L	6-Q(W)-200=4	D2-36

No.	XBC Equipment Mode	Capacity	Pressure	Pump Model	Diesel Engine Parameters			Fuel Tank	Battery	Installation Diagram
		L/s	MPa		Model	Power	Speed			
52	XBC10.2/270-350N6	270	1.02	KQSN350-N6/601	KTA19-P680	450	1500	900L	6-Q(W)-200=4	D2-27
53	XBC12/280-350N6	280	1.2	KQSN350-N6/653	WD287TAB58L	588	1500	1000L	6-Q(W)-200=4	D2-37
54	XBC12/280-350N6	280	1.2	KQSN350-N6/653	KTA38-P980	664	1500	1500L	6-Q(W)-200=8	D2-38
55	XBC14/280-350M4	280	1.4	KQSN350-M4/666	WD327TAB88	882	1500	1500L	6-Q(W)-200=8	D2-39
56	XBC10/300-400N6	300	1.0	KQSN400-N6/619	WD269TAB56L	562	1500	1000L	6-Q(W)-200=4	D2-40
57	XBC13/300-350M6	300	1.3	KQSN350-M6/654	TC283LW64	640	1500	1500L	6-Q(W)-200=4	D2-41
58	XBC14/300G-350M6	300	1.4	KQSN350-M6/654	KTA38-P1080	813	1500	1500L	6-Q(W)-200=8	D2-38
59	XBC12/310-350M6	310	1.2	KQSN350-M6/634	KTA38-P980	664	1500	1500L	6-Q(W)-200=4	D2-42
60	XBC11/320-350M6	320	1.10	KQSN350-M6/608	WD287TAB61L	618	1500	1500L	6-Q(W)-200=4	D2-35
61	XBC11/320-350M6	320	1.1	KQSN350-M6/608	WD287TWB61-25	618	1500	1500L	6-Q(W)-200=4	D2-35
62	XBC8.0/320-350M9	320	0.8	KQSN350-M9/503	KTA19-P680	450	1500	900L	6-Q(W)-200=4	D2-43
63	XBC12/320-350M6	320	1.2	KQSN350-M6/634	KTA38-P980	664	1500	1500L	6-Q(W)-200=4	D2-42
64	XBC12/320G-400N6	320	1.2	KQSN400-N6/619	KTA38-P1080	813	1500	1500L	6-Q(W)-200=8	D2-44
65	XBC5.0/350-400N9	350	0.5	KQSN400-N9/446	KTA19-P500	340	1500	700L	6-Q(W)-200=4	D2-45
66	XBC7.7/350-350M9	350	0.77	KQSN350-M9/503	WD269TAB45L	465	1500	900L	6-Q(W)-200=4	D2-46
67	XBC10/400-400M6W	400	1.0	KQSN400-M6W/570	TC283LW64	664	1500	1500L	6-Q(W)-200=4	D2-47

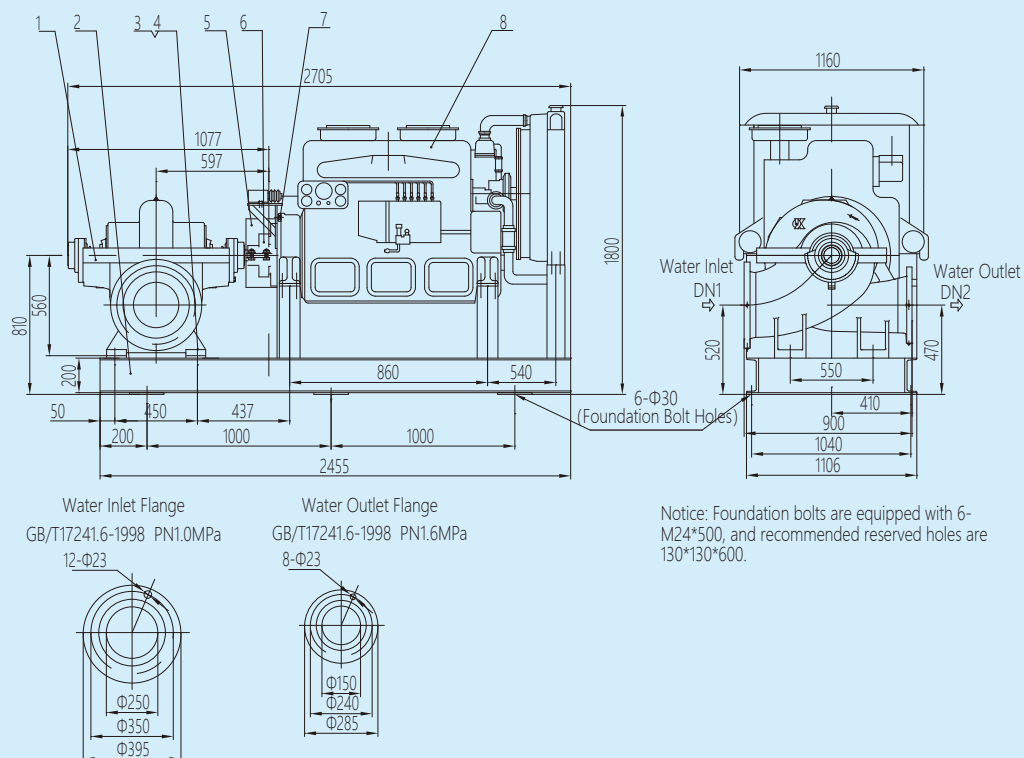
Installation Dimension Diagram

D2-01: XBC7/50-200N6

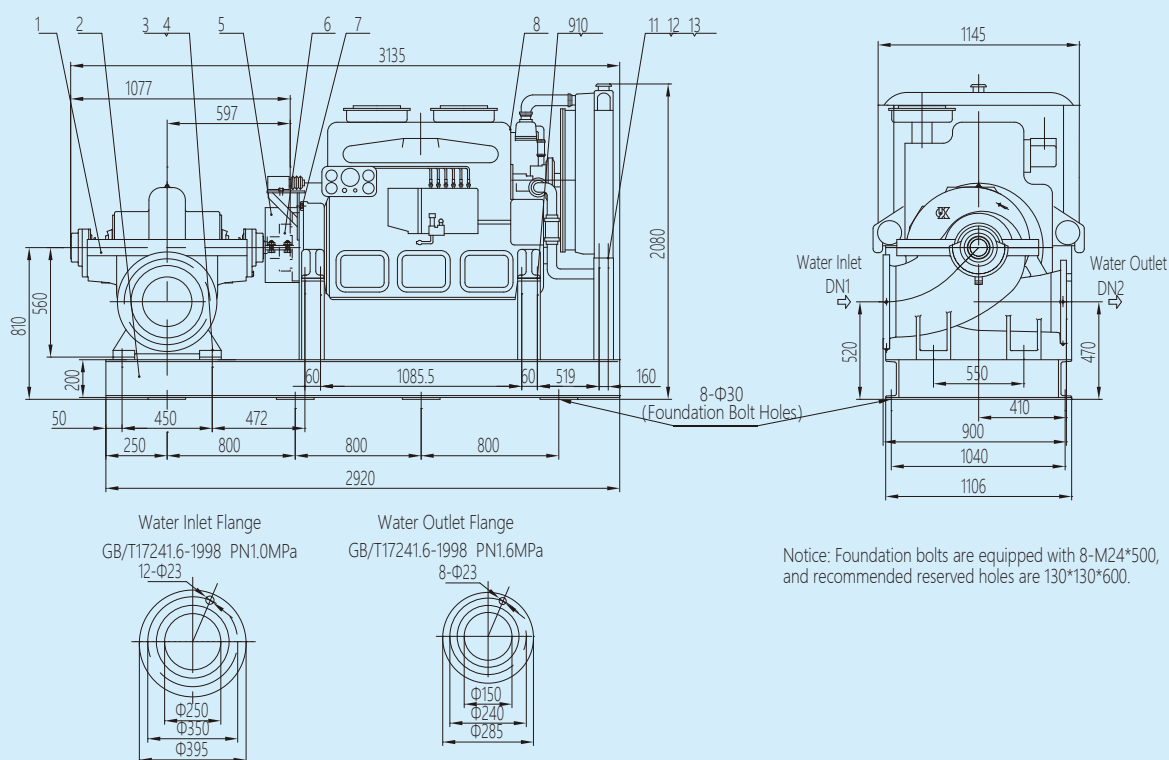


Installation Dimension Diagram

D2-02: XBC6.5/80-250N4\XBC9.5/80-250N4

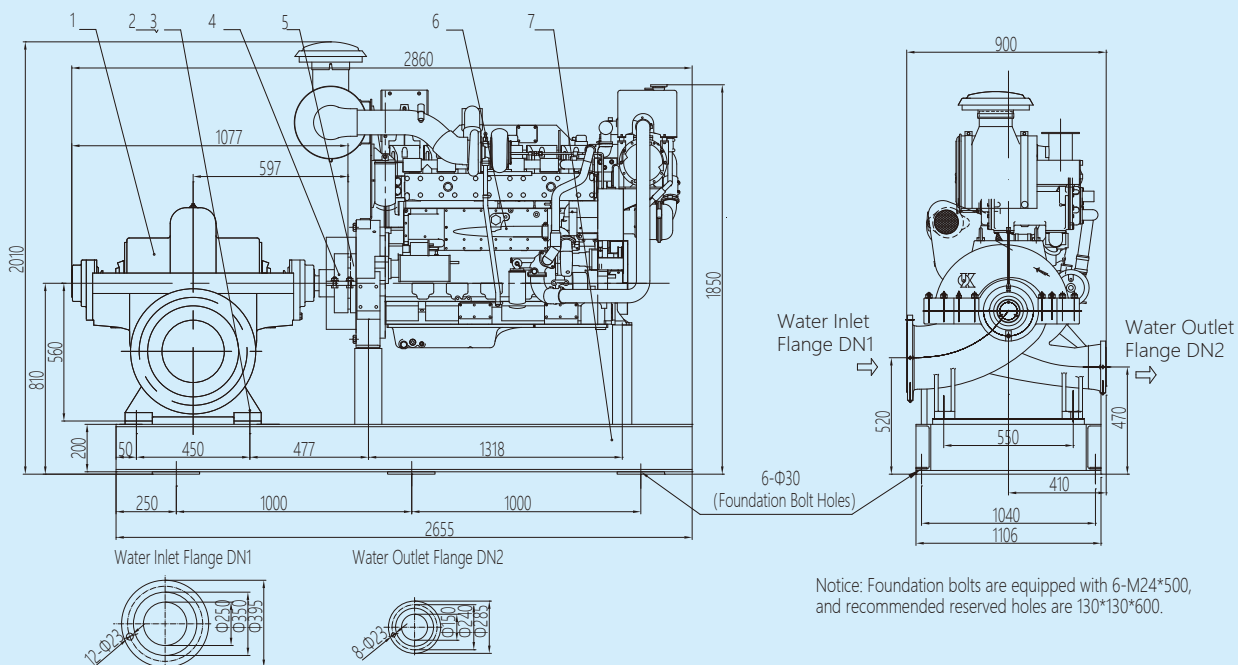


D2-03: XBC9/90-250N4\XBC12/80-250N4

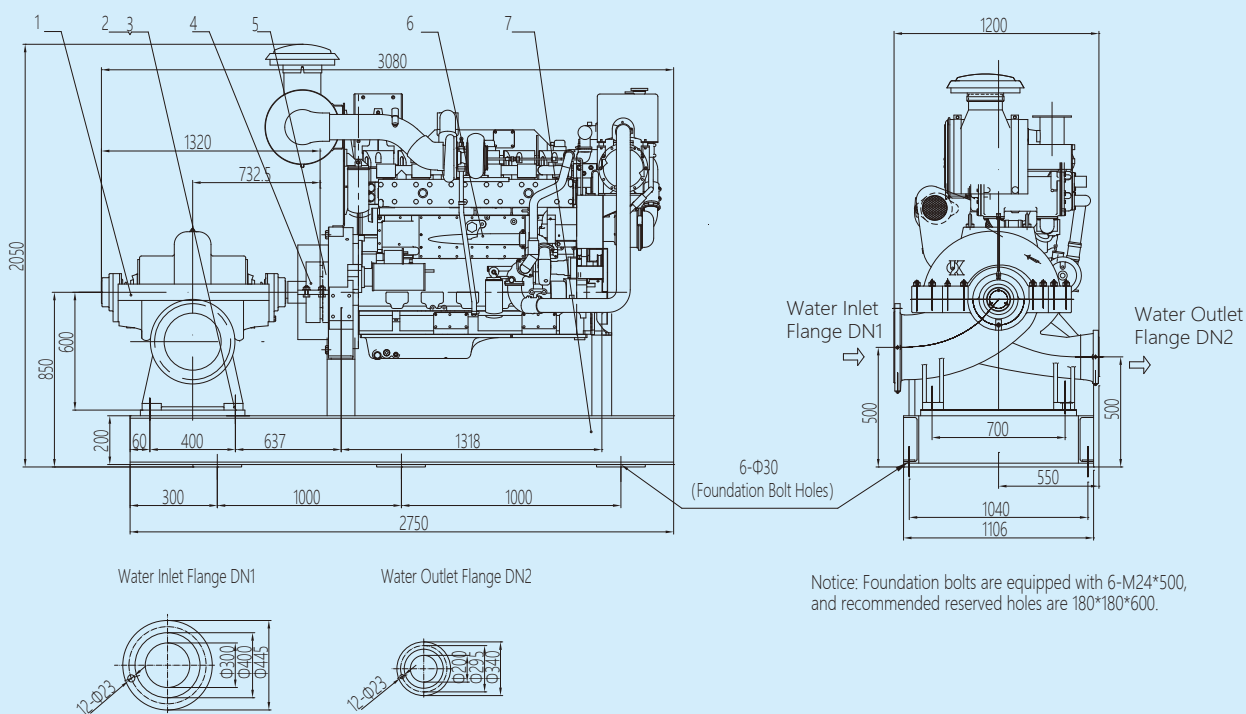


Installation Dimension Diagram

D2-04:XBC12/80-250M4

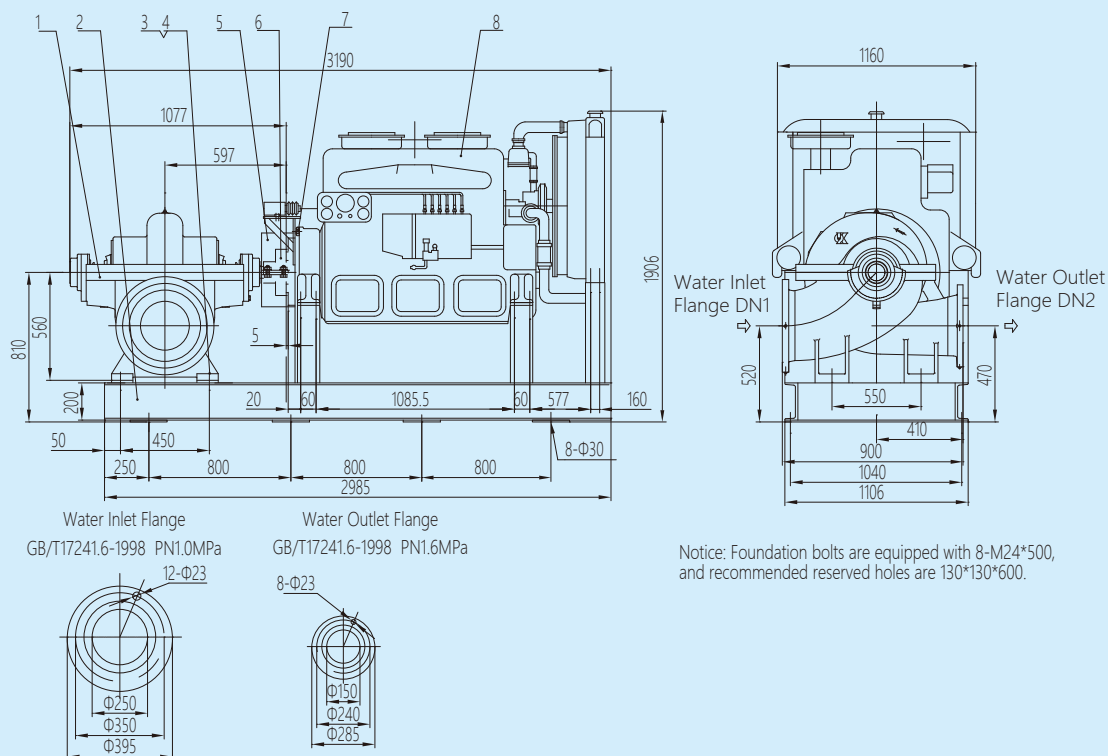


D2-05:XBC14/90-300N4\XBC10/150-300N4

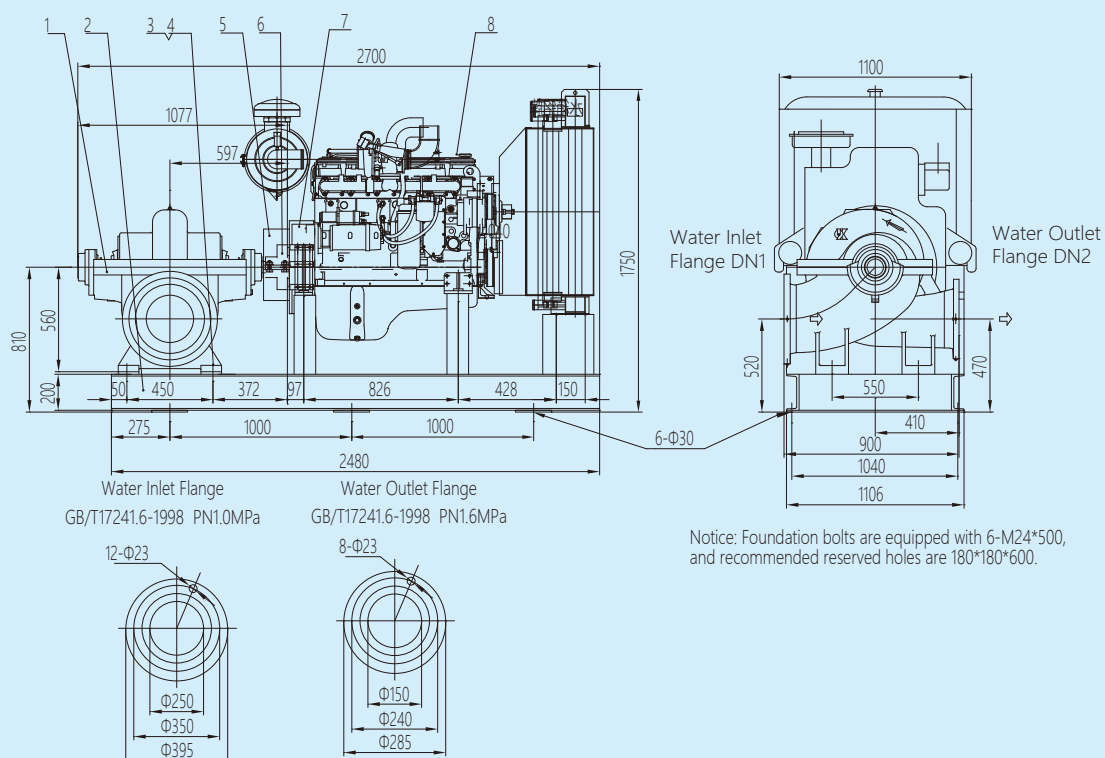


Installation Dimension Diagram

D2-06:XBC7.5/100-250N6

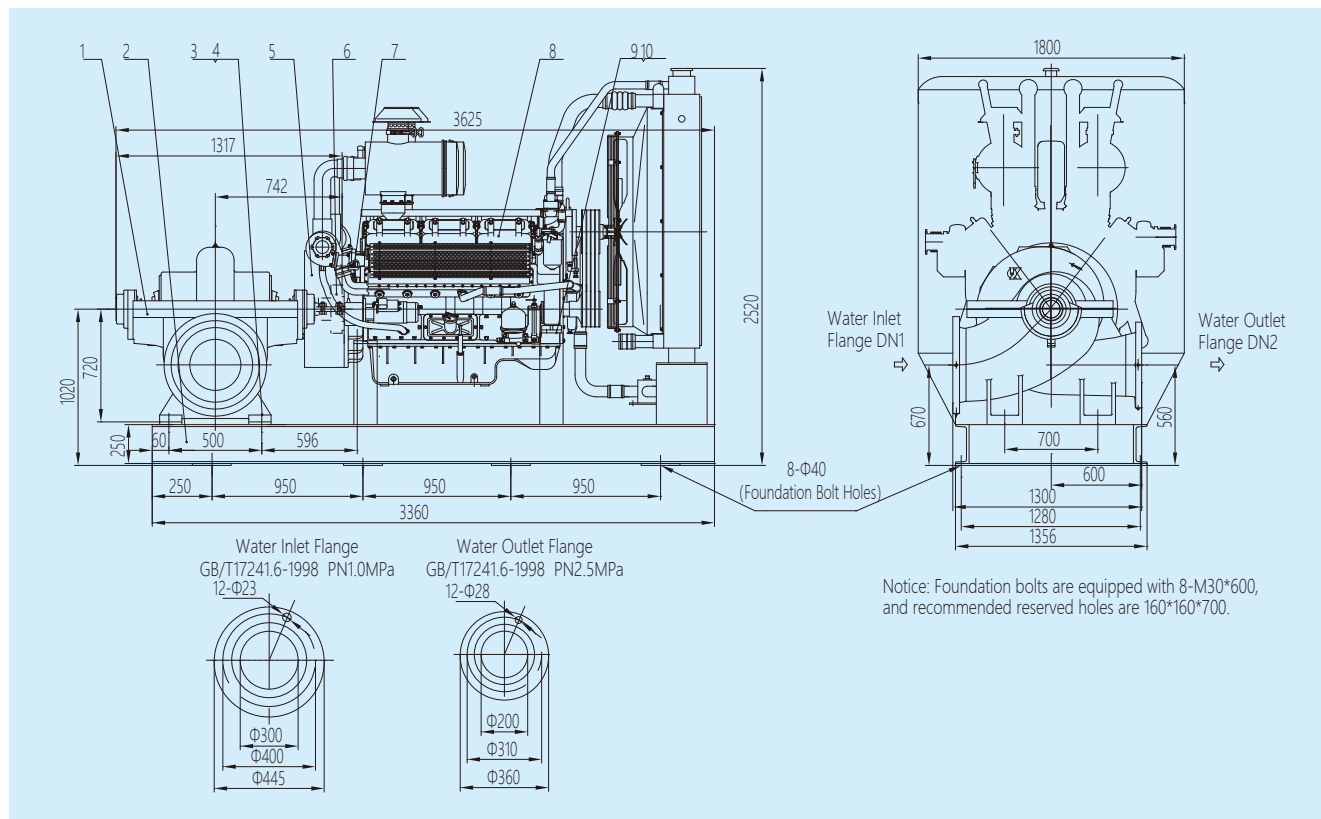


D2-07:XBC10/100-250N4

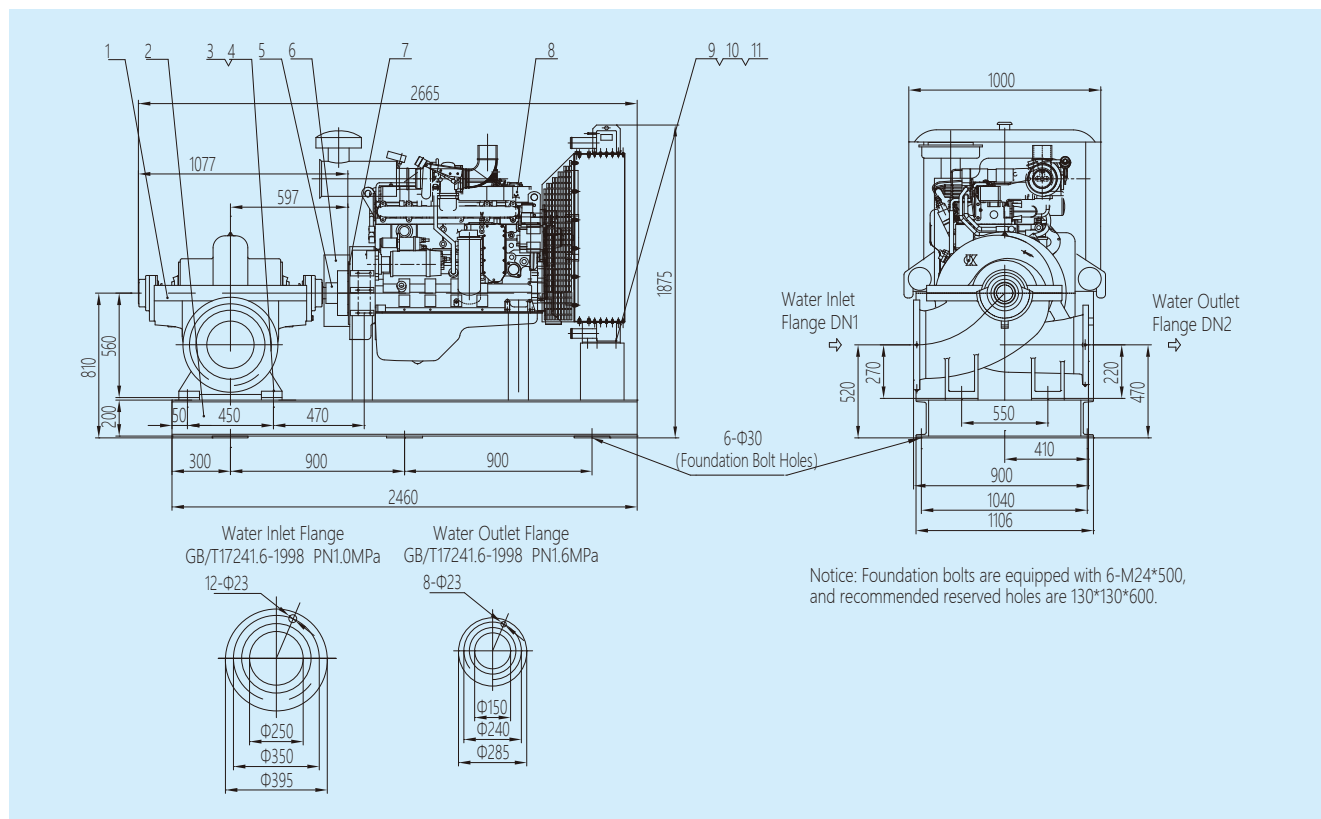


Installation Dimension Diagram

D2-08: XBC19/110G-300N3\XBC18/150G-300N3

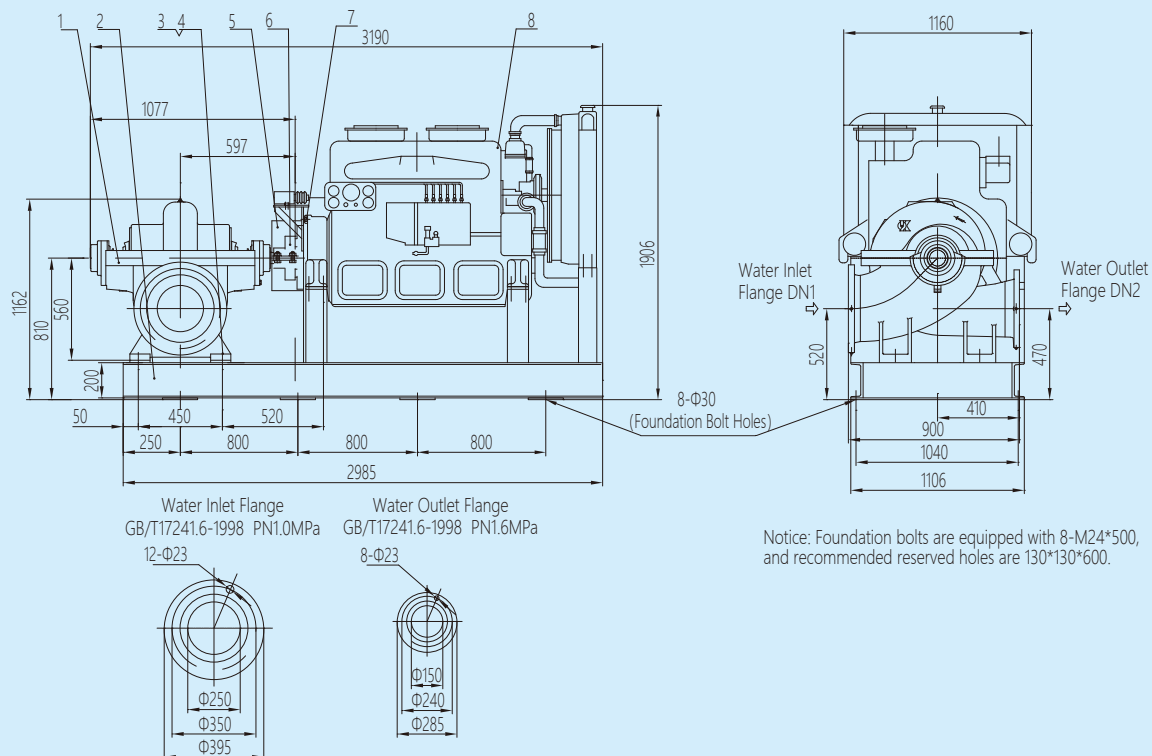


D2-09:XBC8/120-250M4

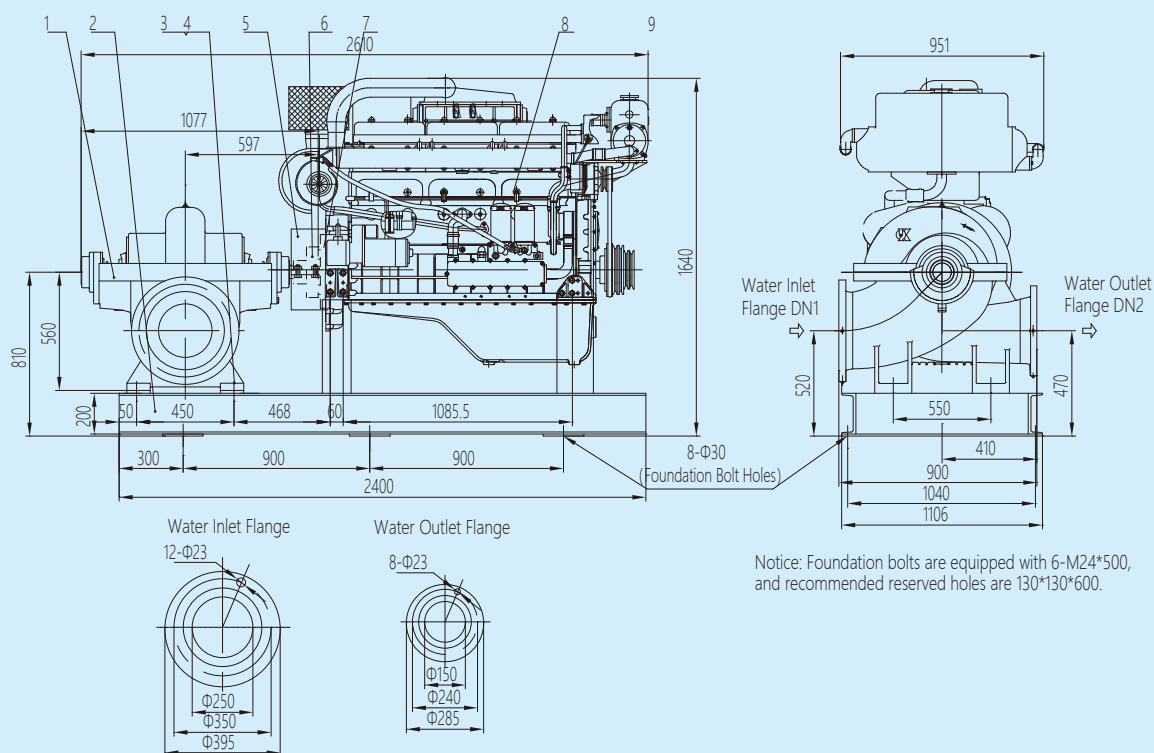


Installation Dimension Diagram

D2-10: XBC10.5/120-250M4\XBC11.5/120-250M4\XBC11/94-250N4\XBC12/130-250M4

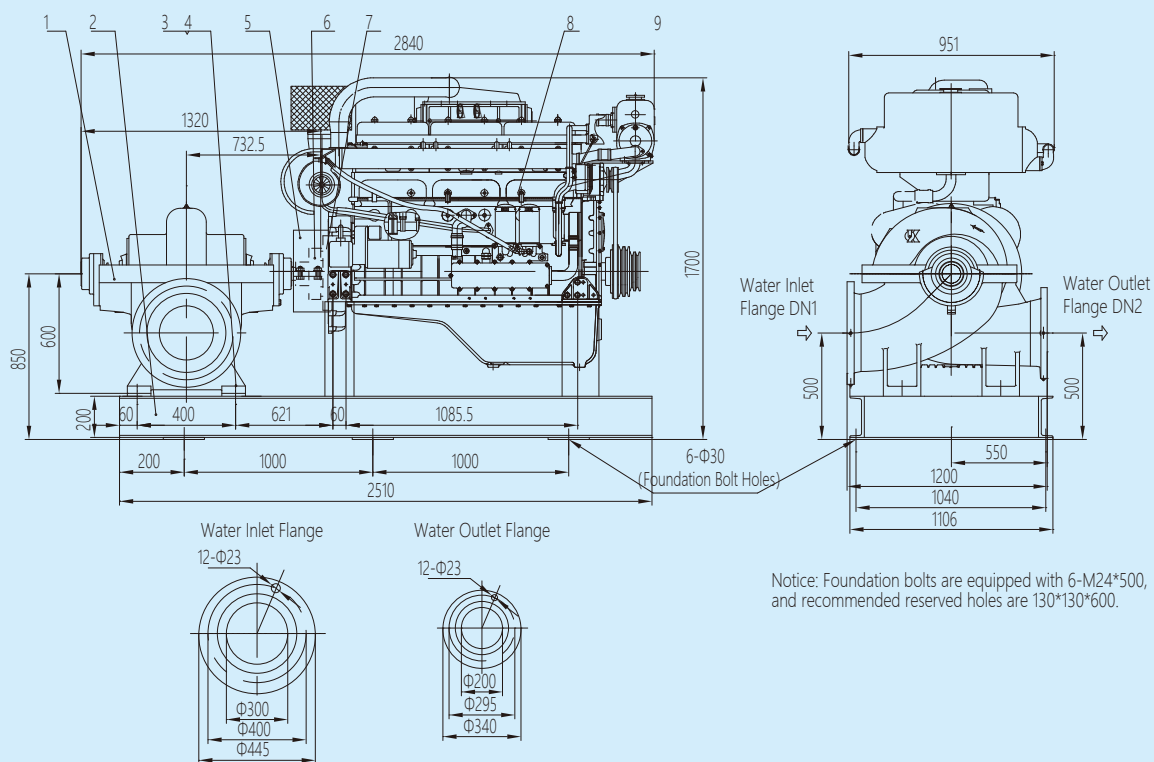


D2-11: XBC13/120-250M4

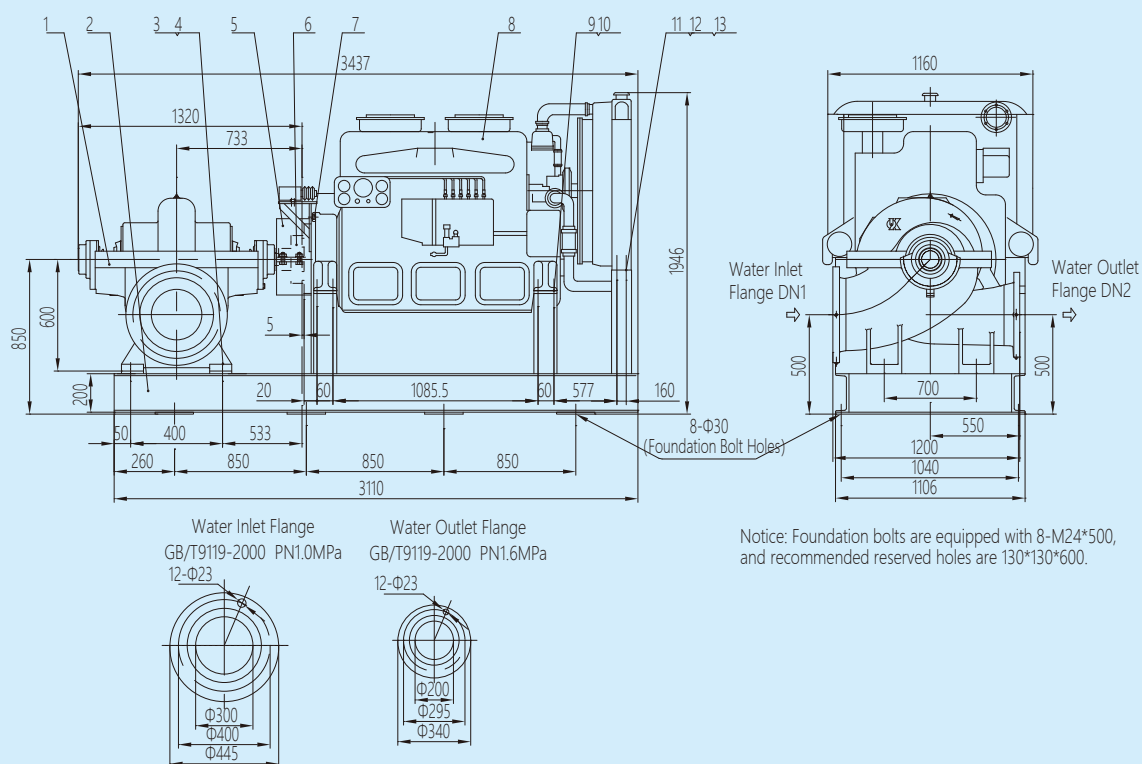


Installation Dimension Diagram

D2-12: XBC10.0/130G-300N4

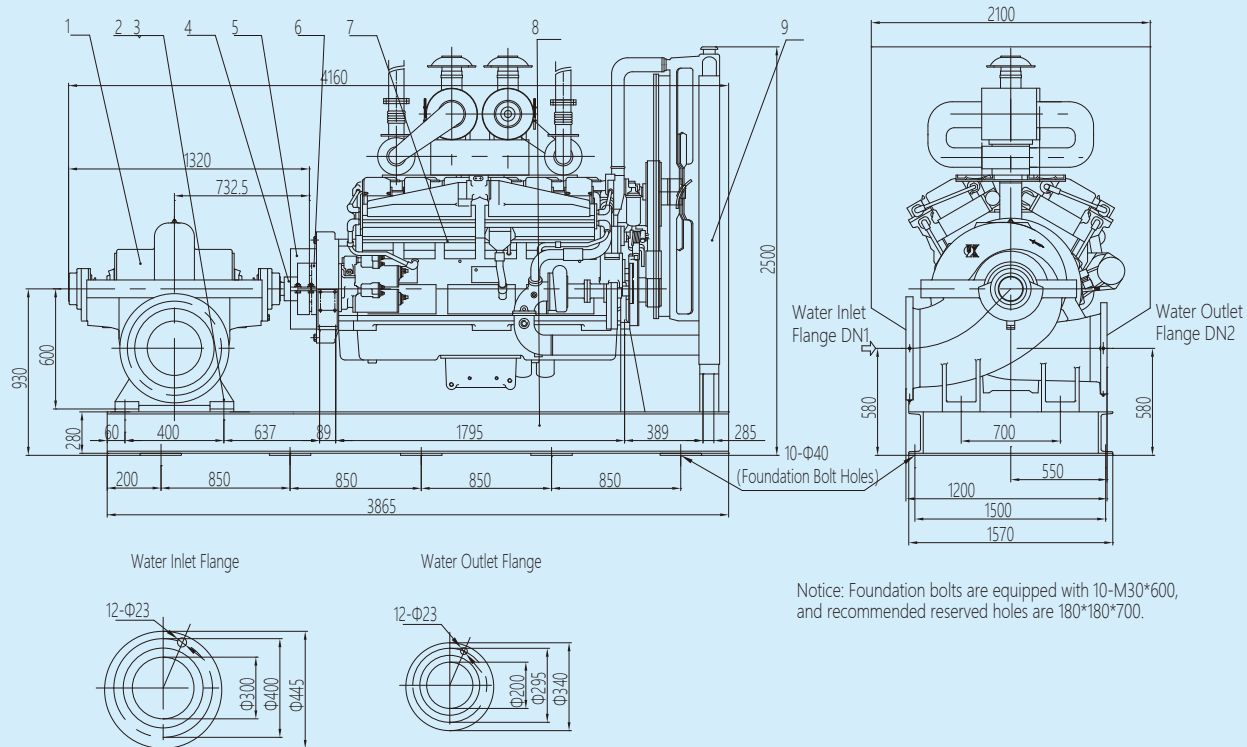


D2-13: XBC11/140-300N4\XBC10.5/160-300M4(WD145TAB30L)

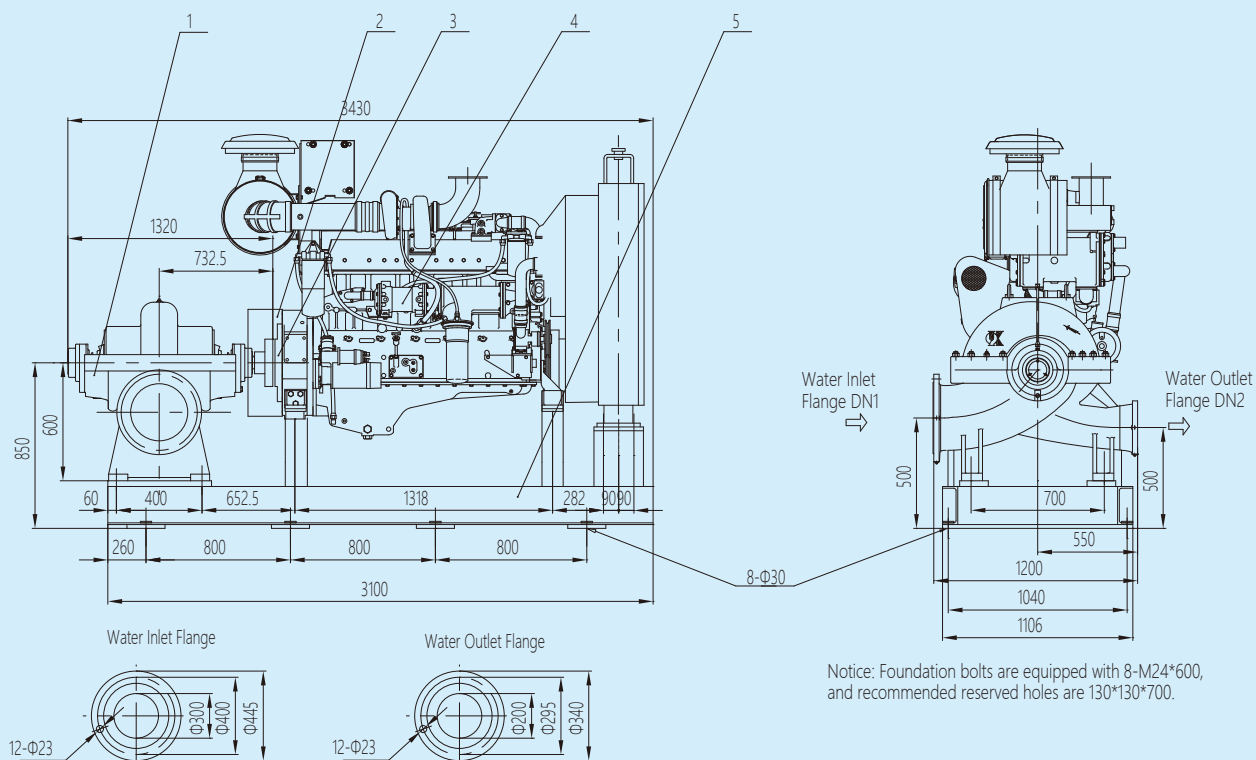


Installation Dimension Diagram

D2-14: XBC16/140-300M4

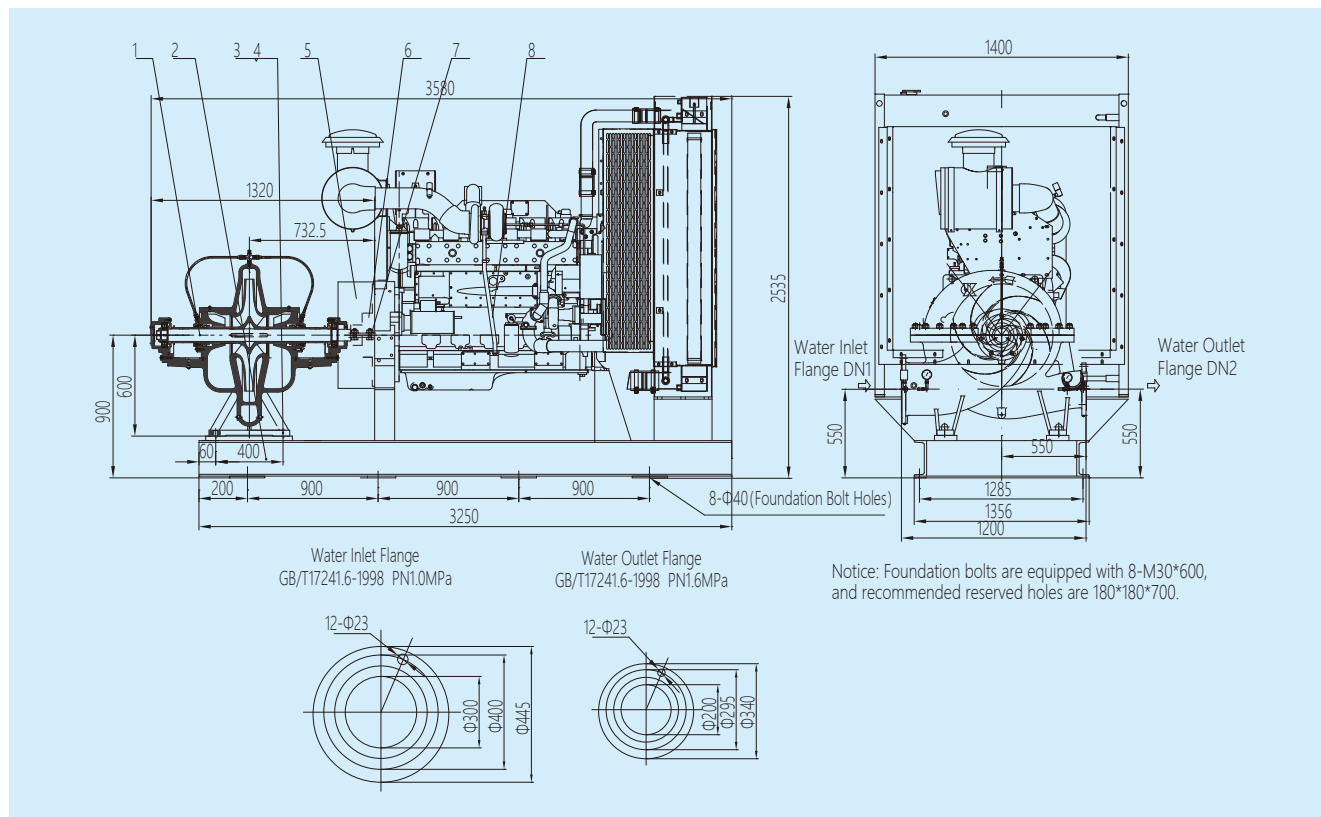


D2-15: XBC12/150-300N4

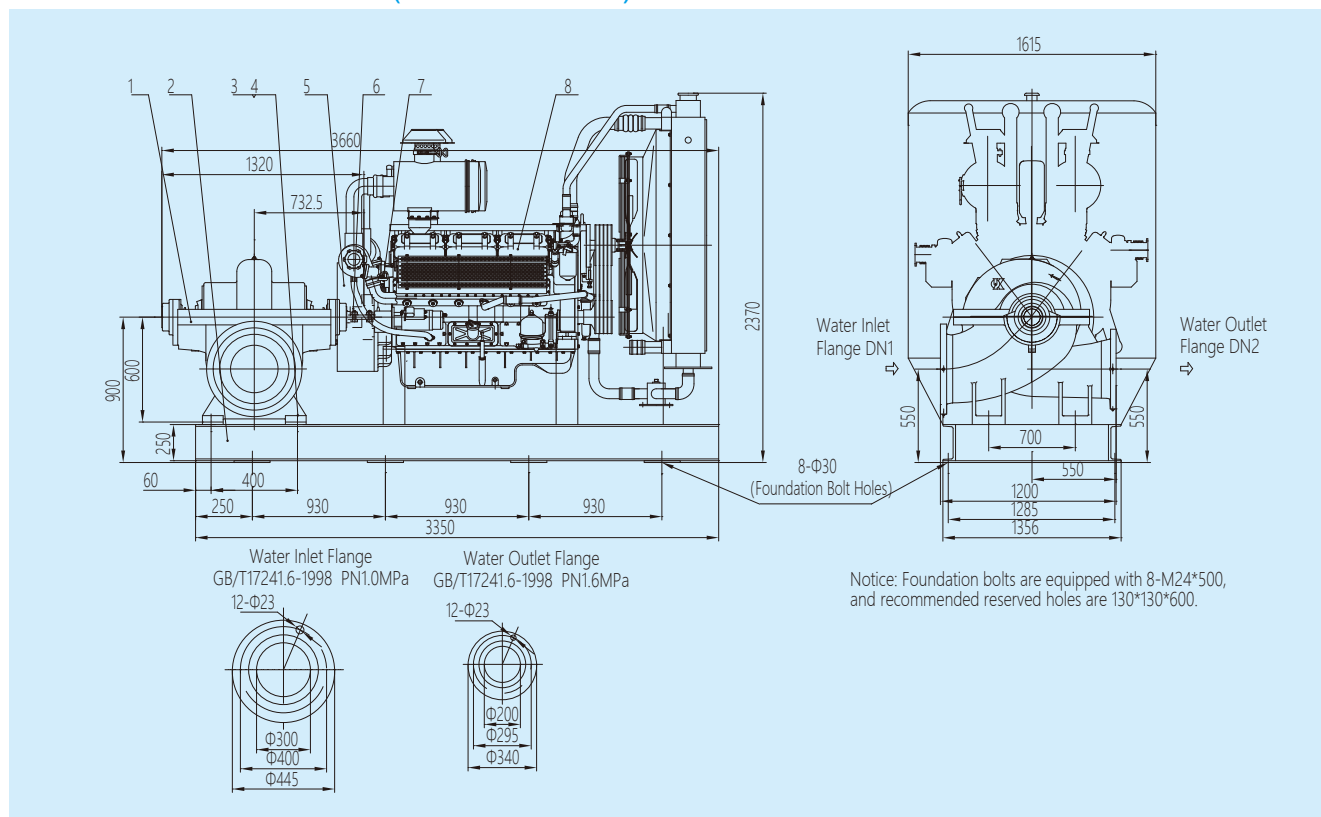


Installation Dimension Diagram

D2-16: XBC12/150-300M4

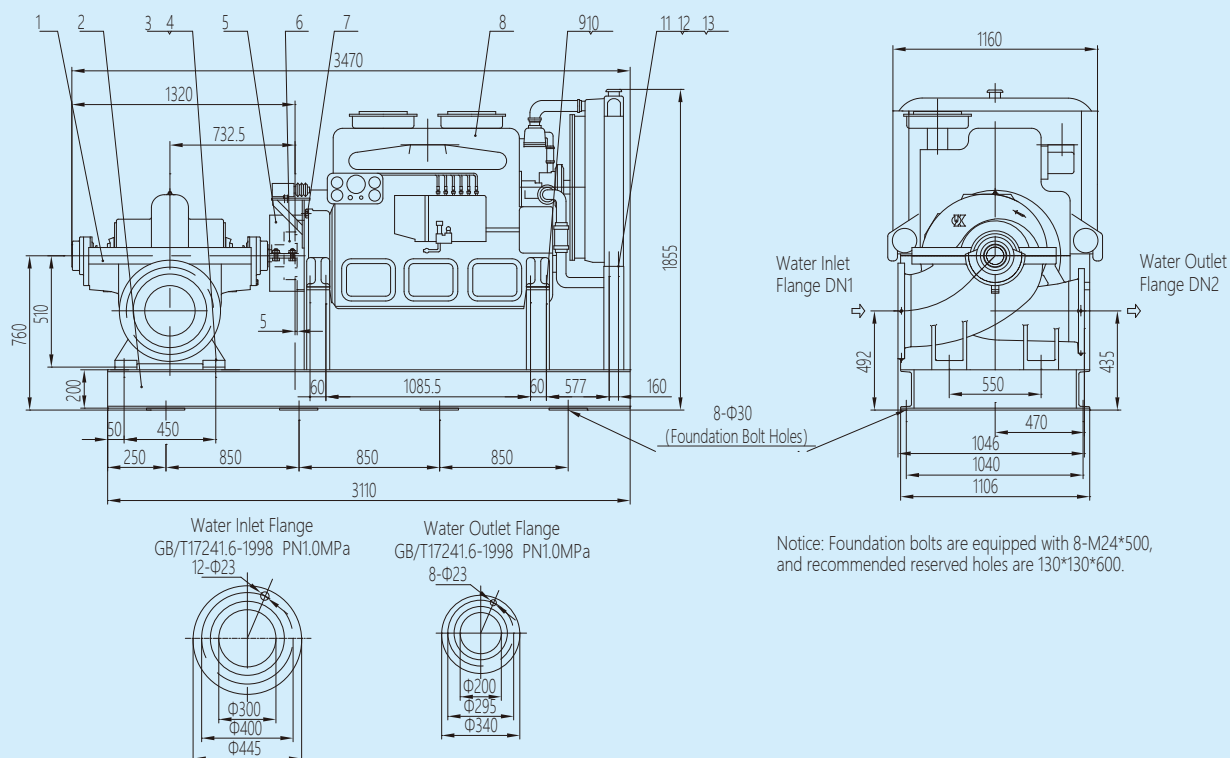


D2-17: XBC12/150-300M4(WD269TAB38L)\XBC12/160-300N4\XBC12.4/160-300N4 XBC11.5/170-300M4(WD269TAB38L)\XBC11/200-300M4\XBC16/160G-300M4

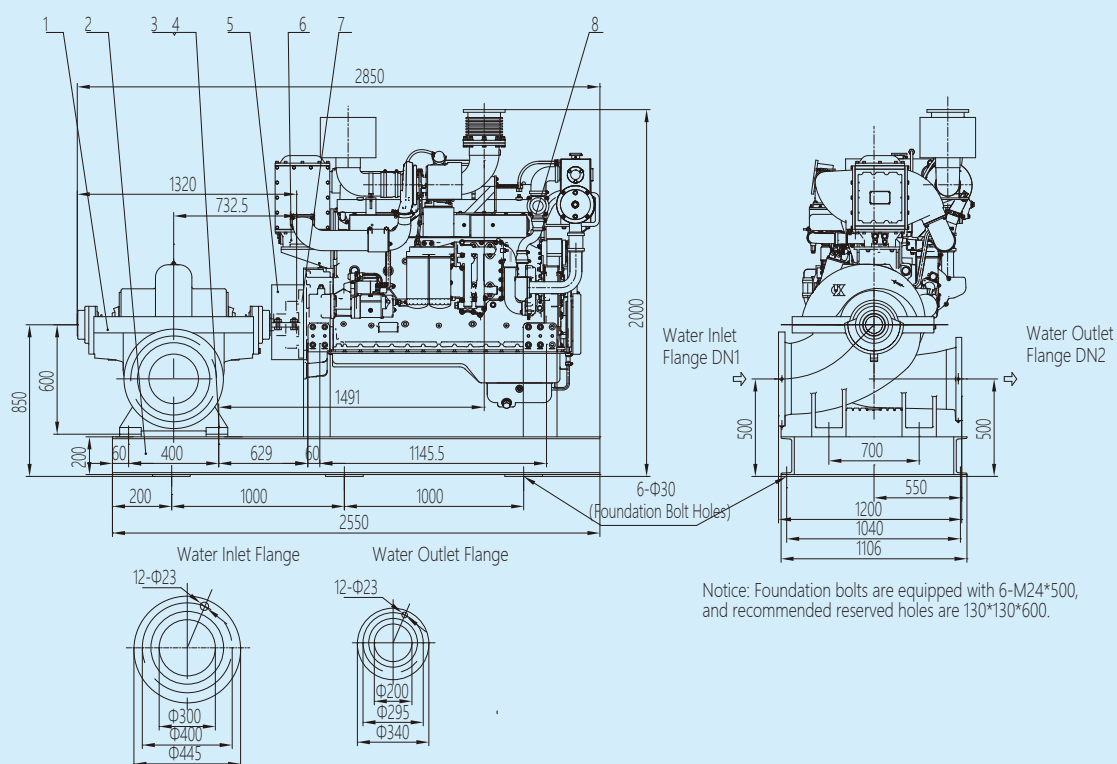


Installation Dimension Diagram

D2-18: XBC8.5/160-300N6

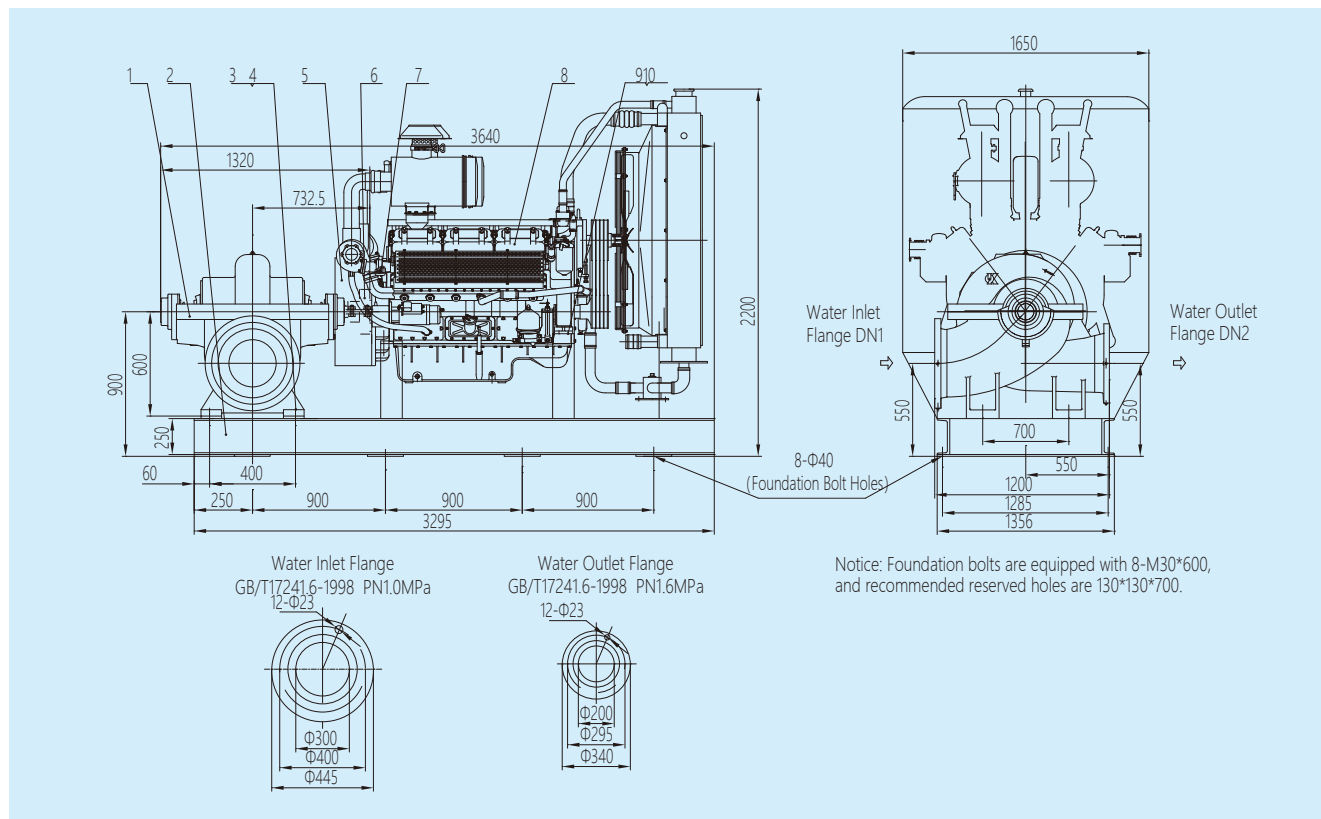


D2-19: XBC10.5/160-300M4

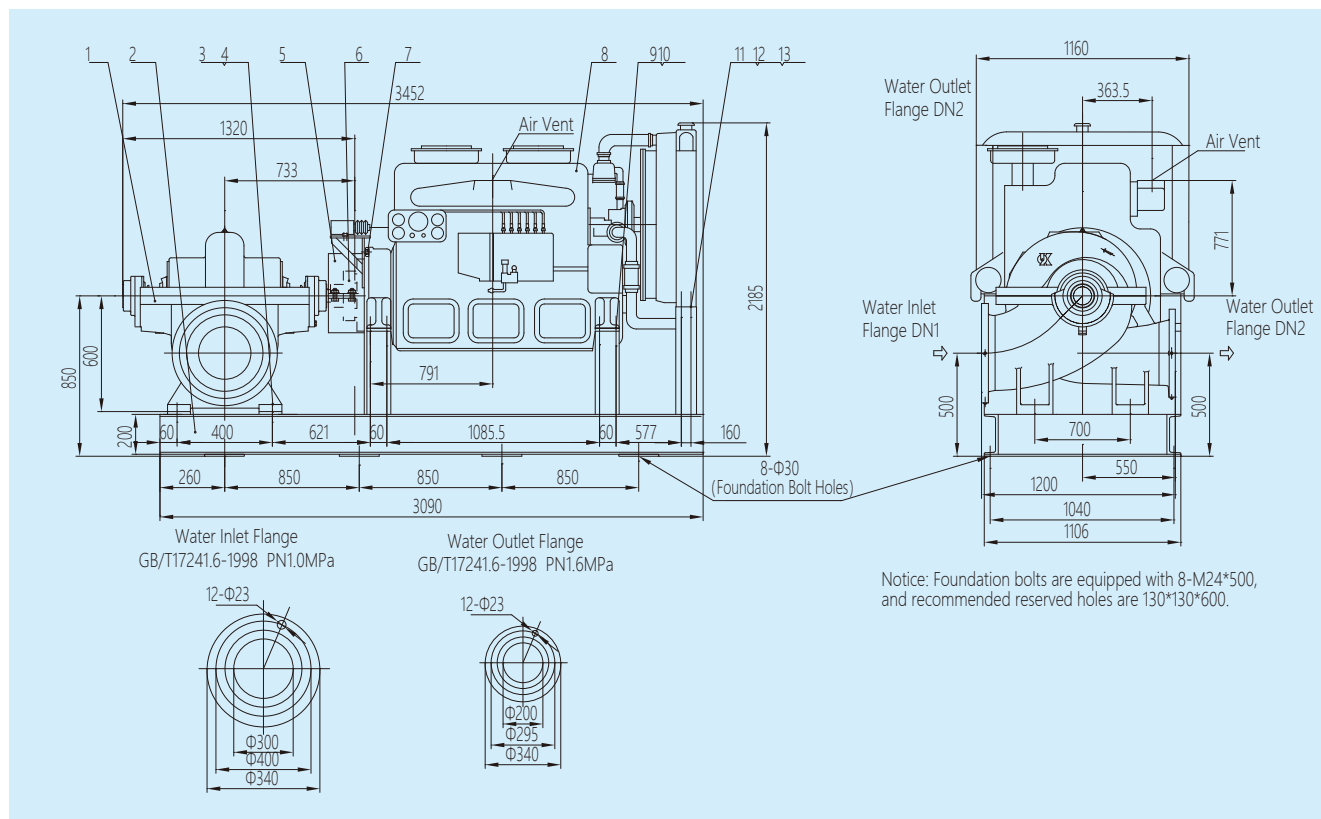


Installation Dimension Diagram

D2-20: XBC16/160-300M4

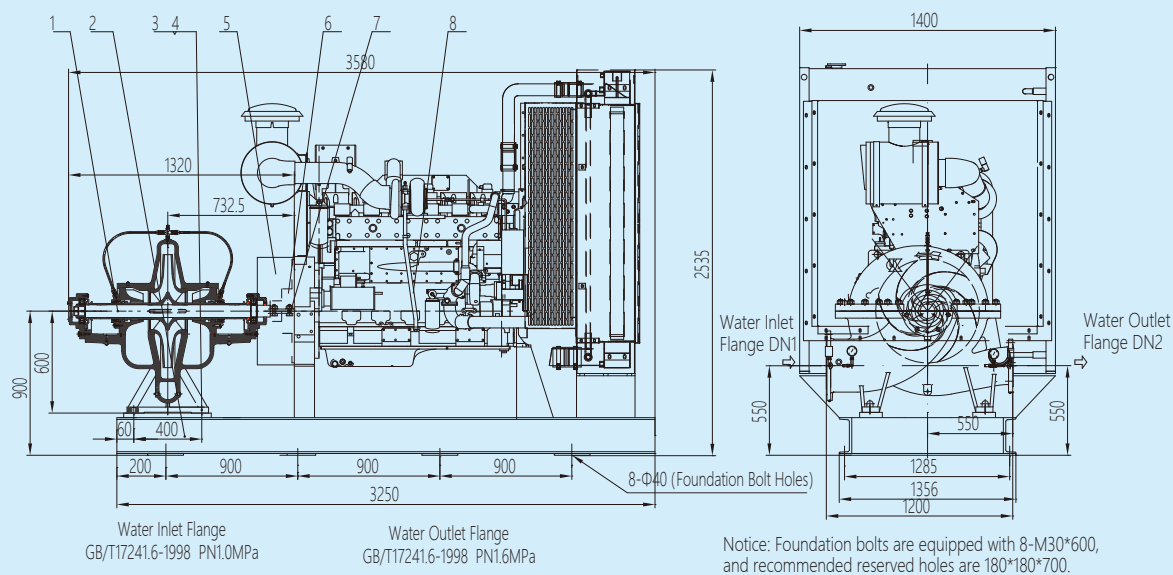


D2-21: XBC11.5/170-300M4

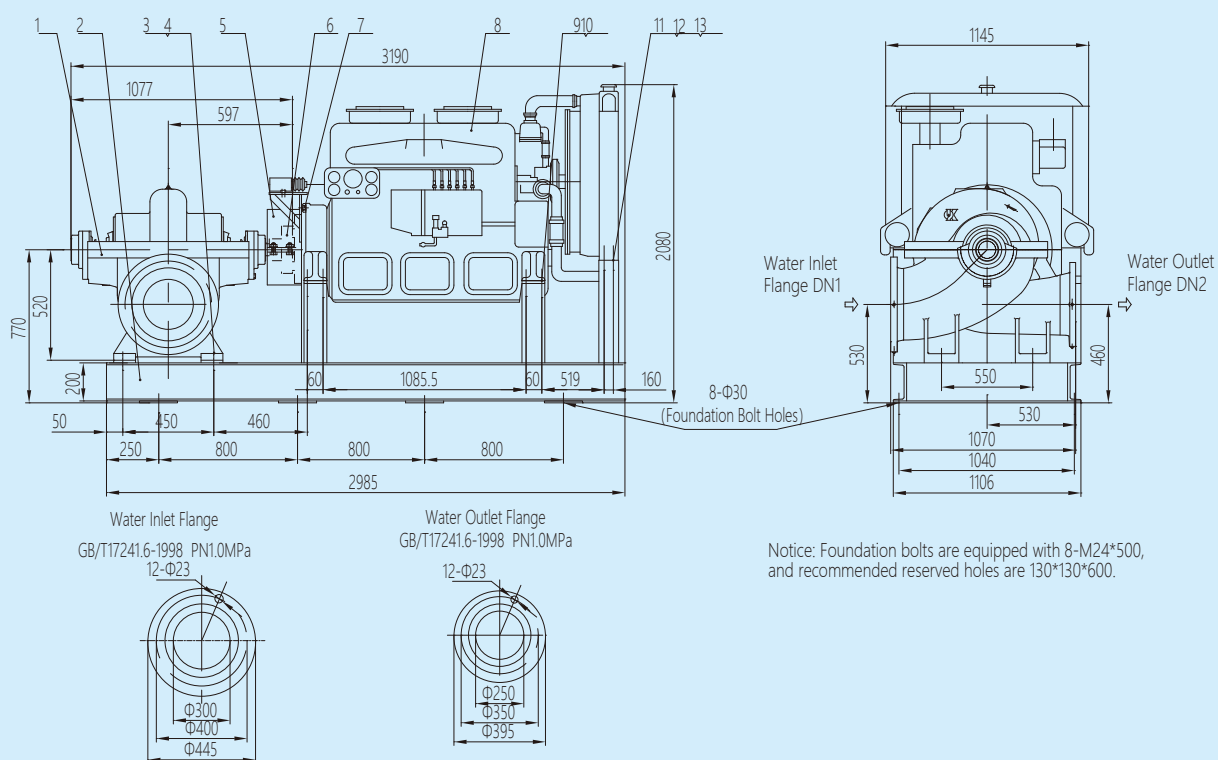


Installation Dimension Diagram

D2-22: XBC11.5/170-300M4\XBC12/180G-300M4

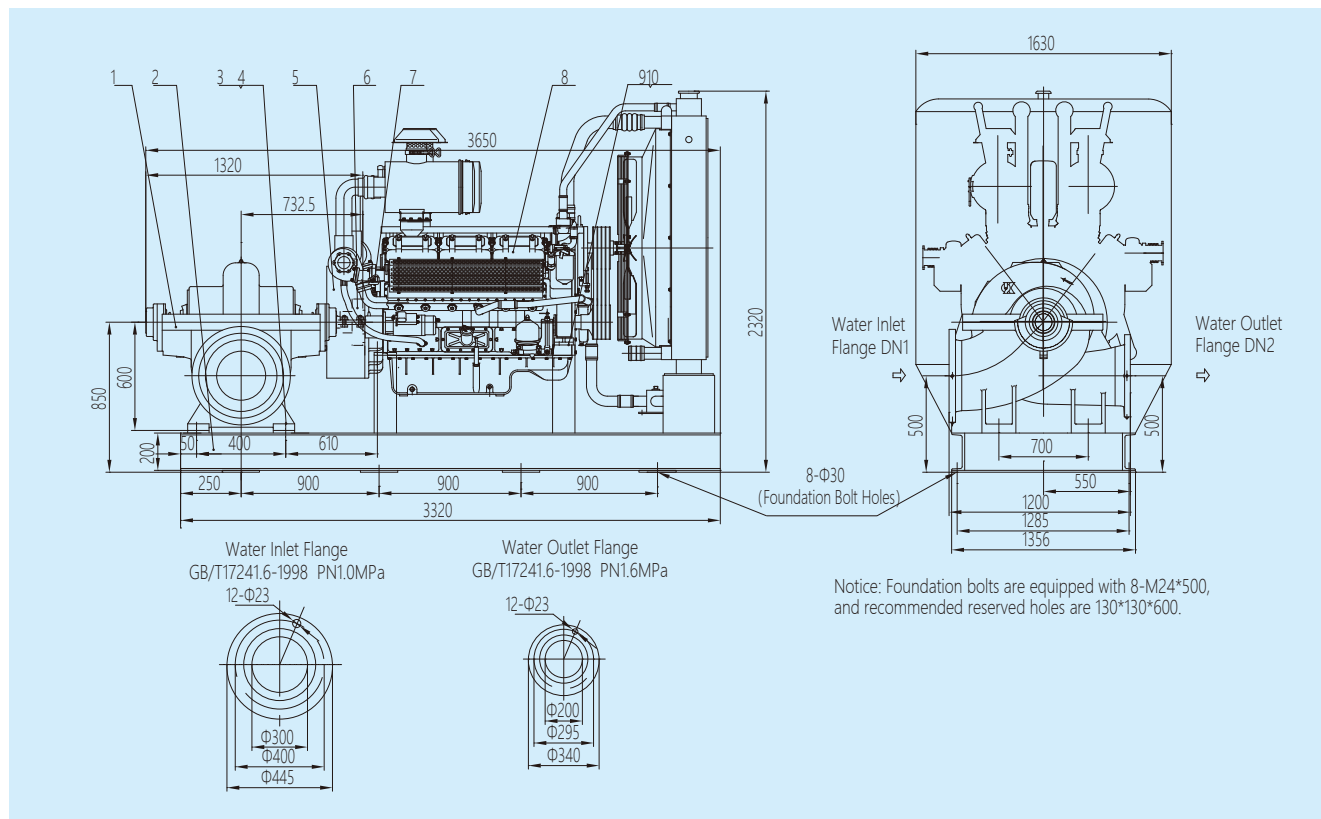


D2-23: XBC6.5/180-300M9

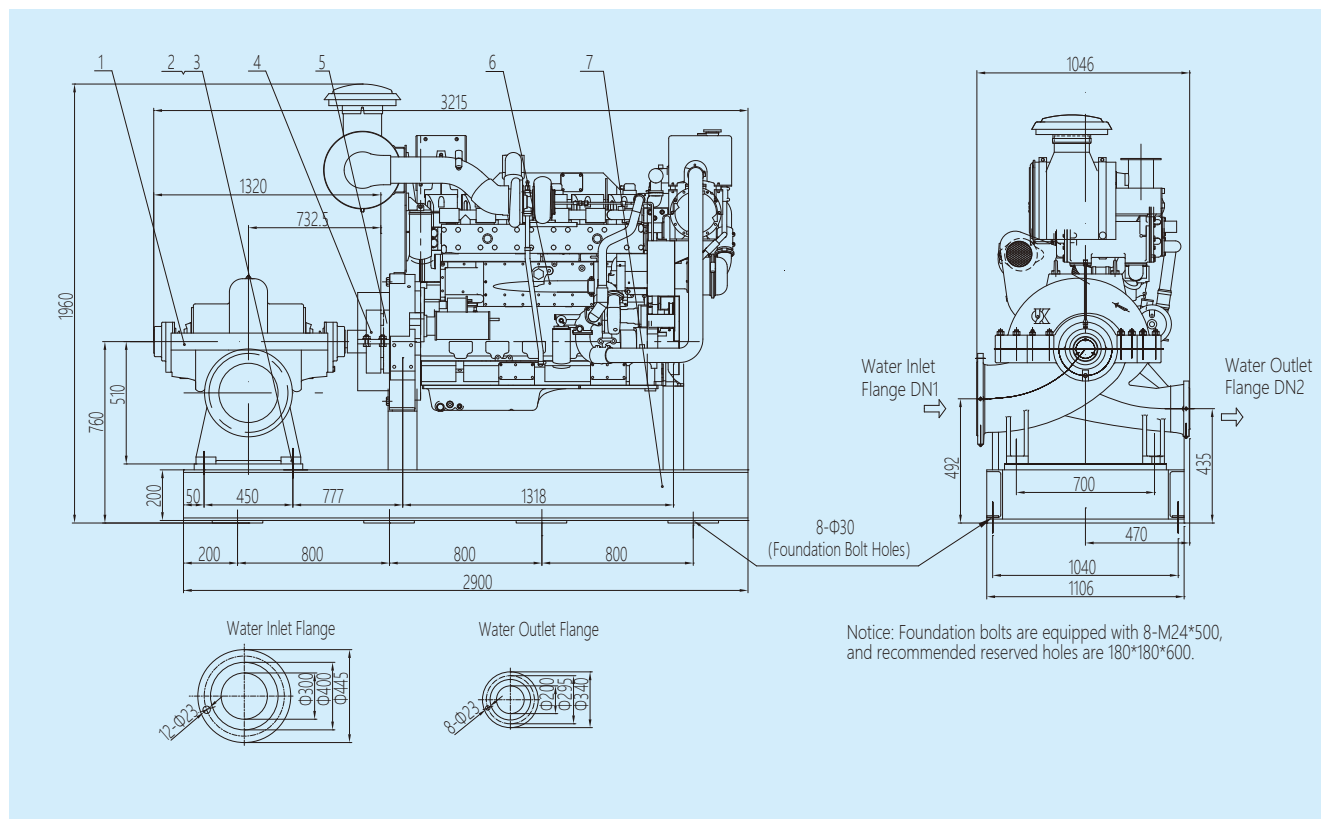


Installation Dimension Diagram

D2-24: XBC12/180-300M4

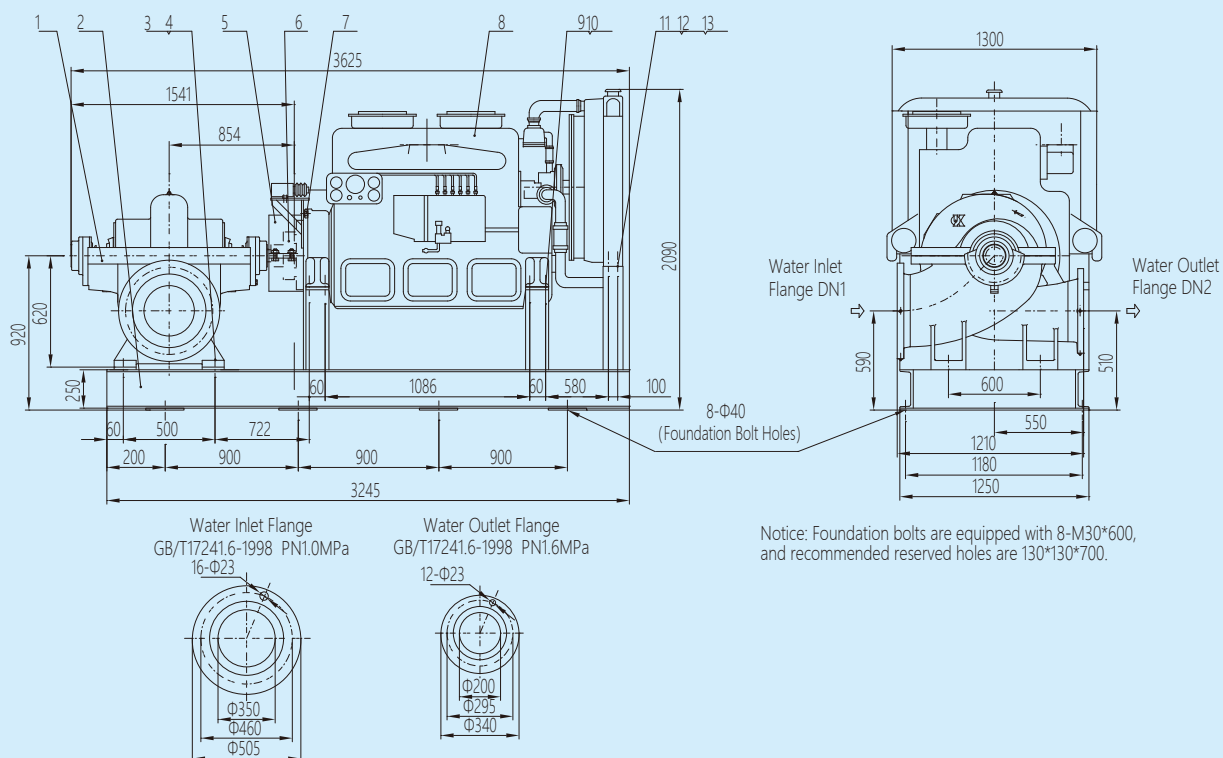


D2-25: XBC8/200-300M6

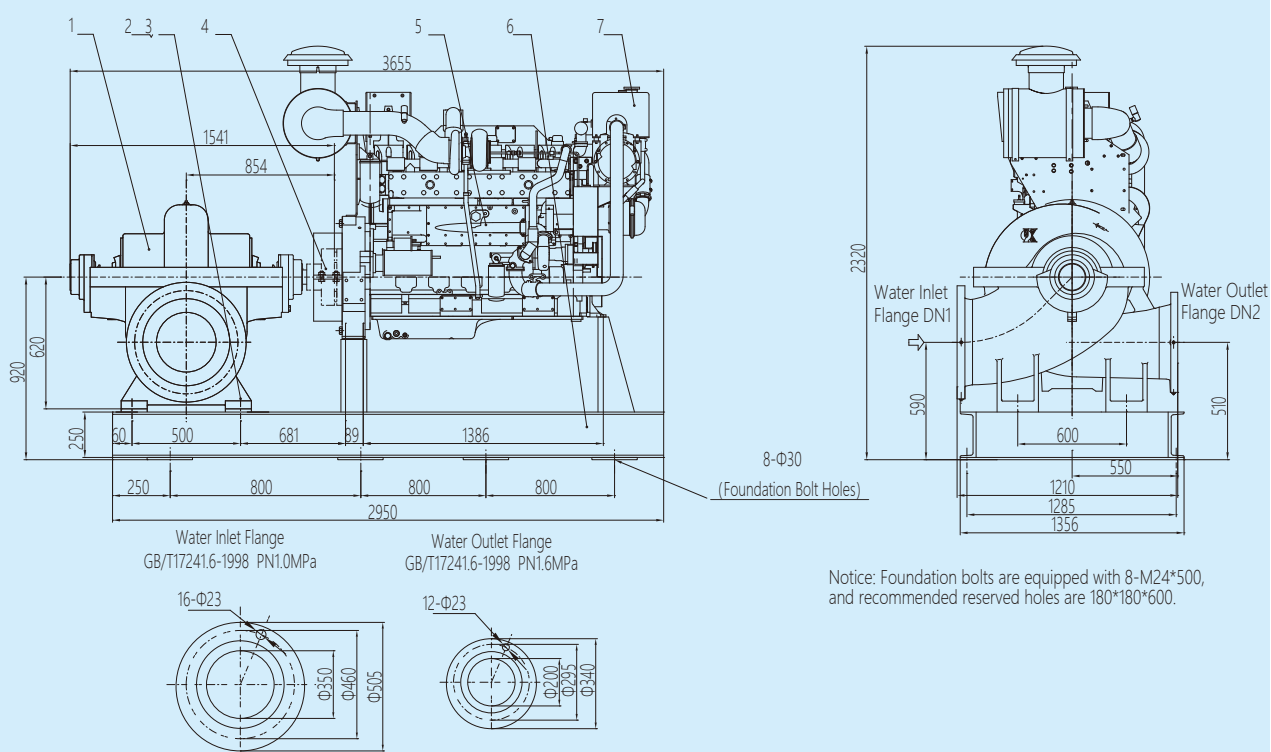


Installation Dimension Diagram

D2-26: XBC10/200-350N6

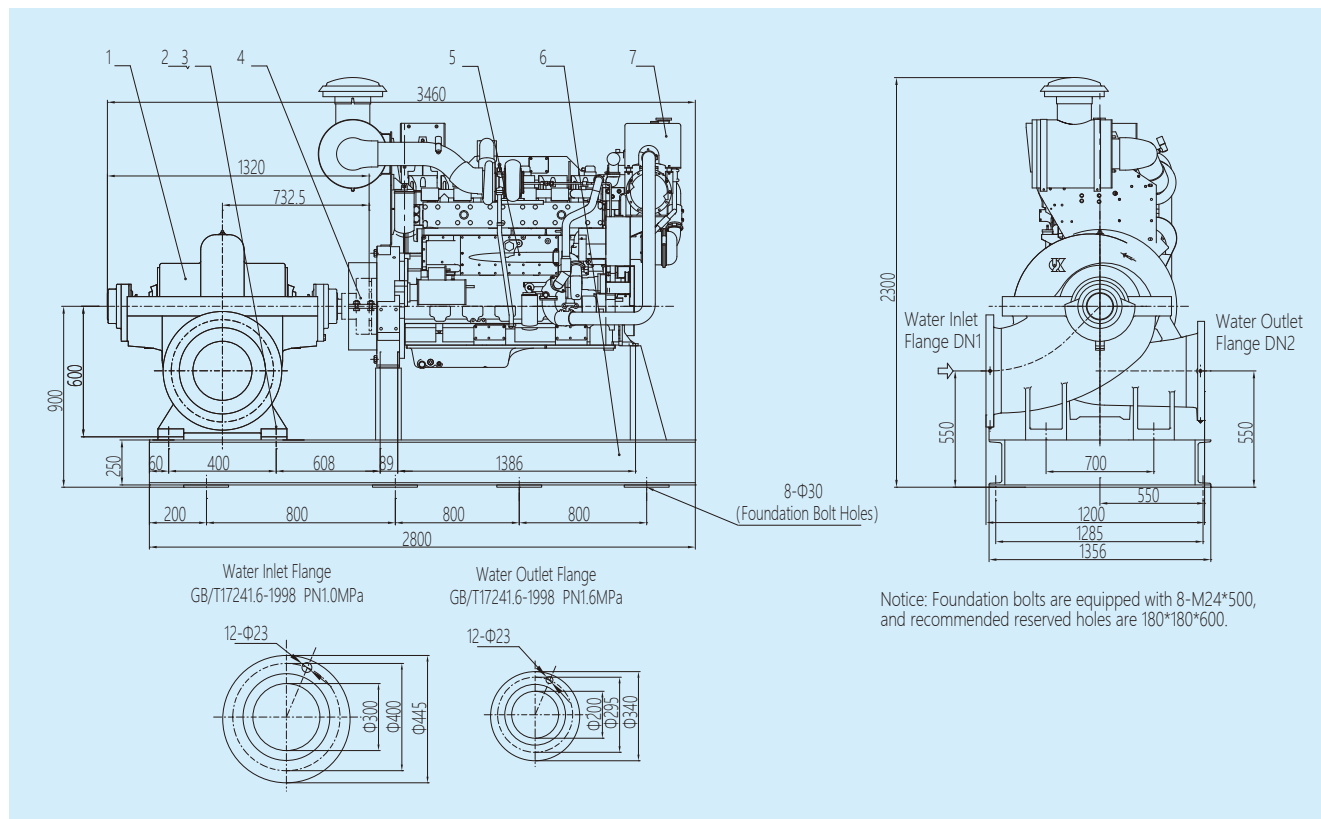


D2-27: XBC10/200G-350N6\XBC10.2/270-350N6

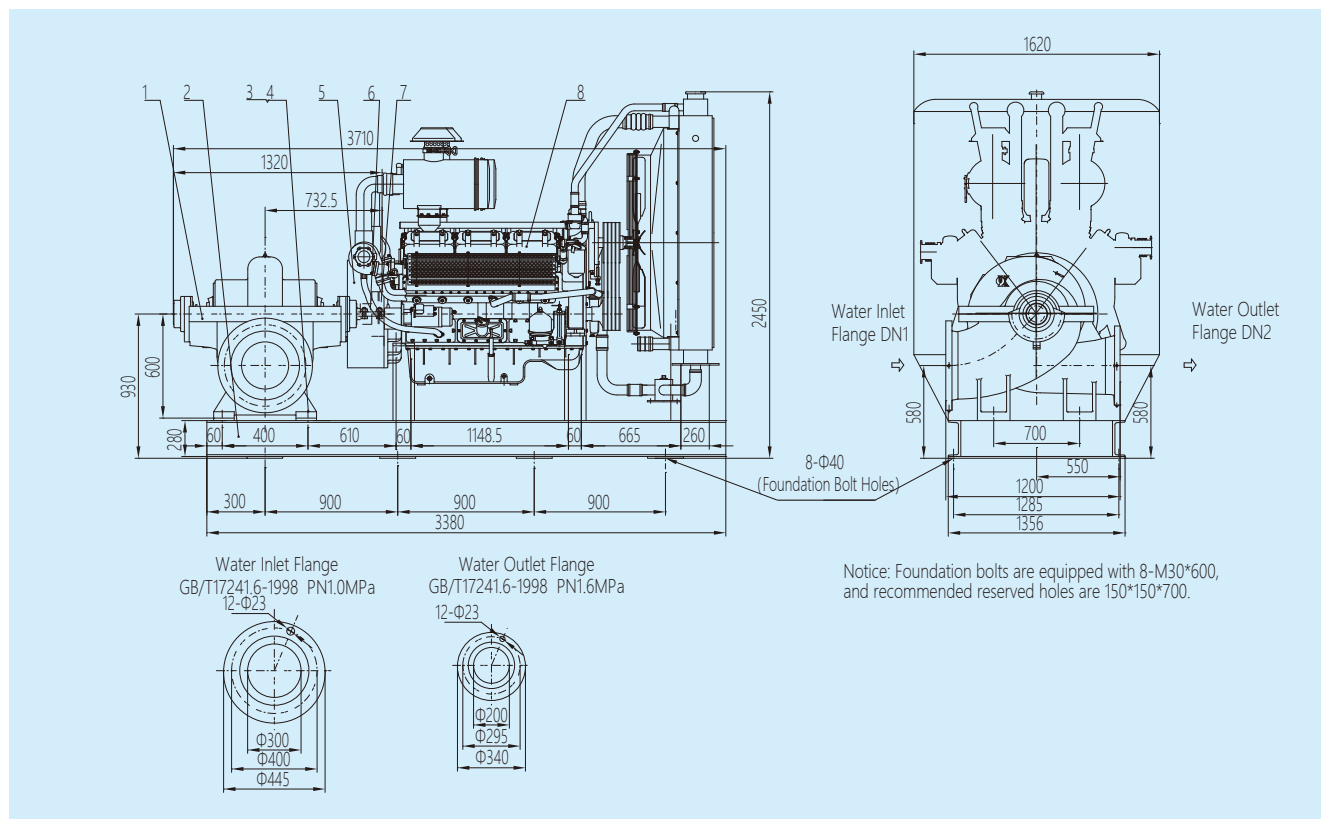


Installation Dimension Diagram

D2-28: XBC12/200-300M4

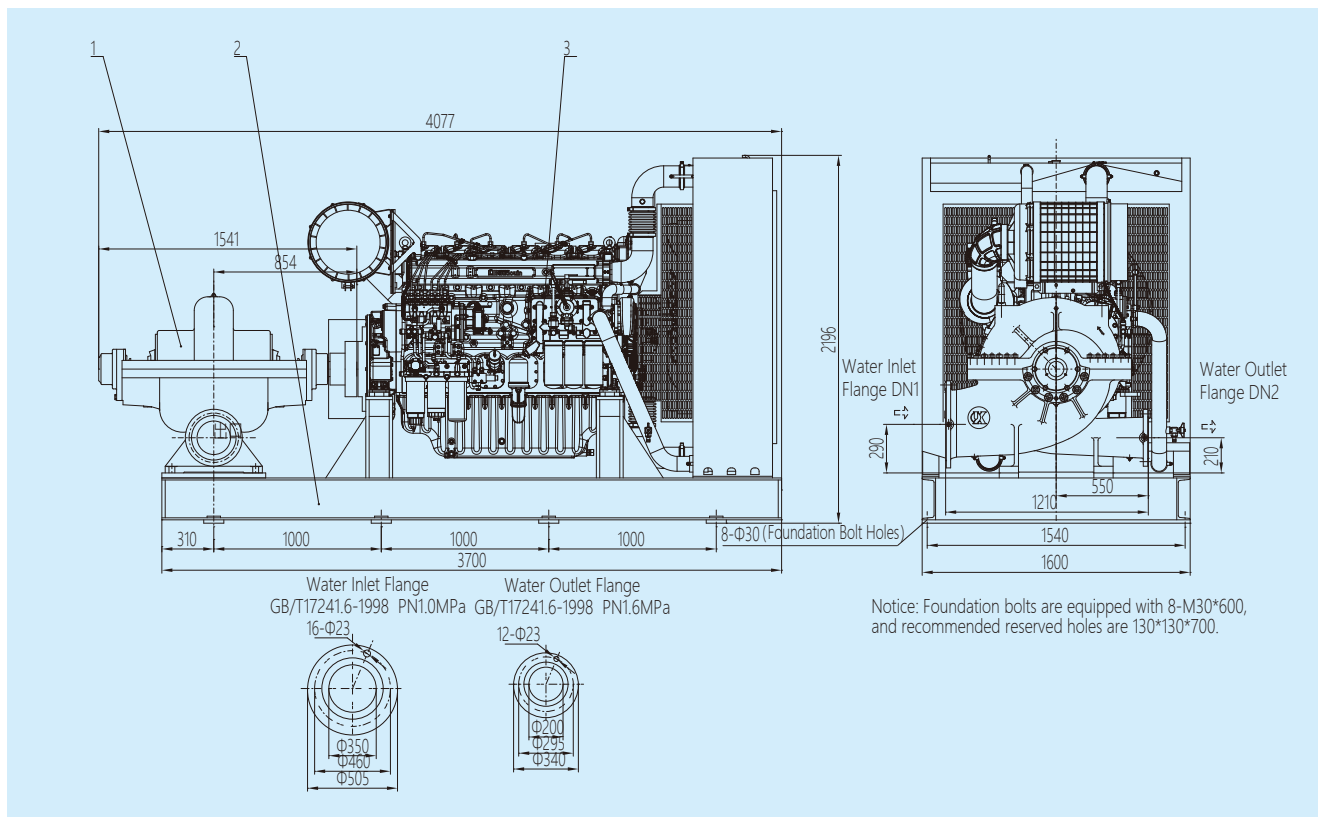


D2-29: XBC15.0/200-300M4

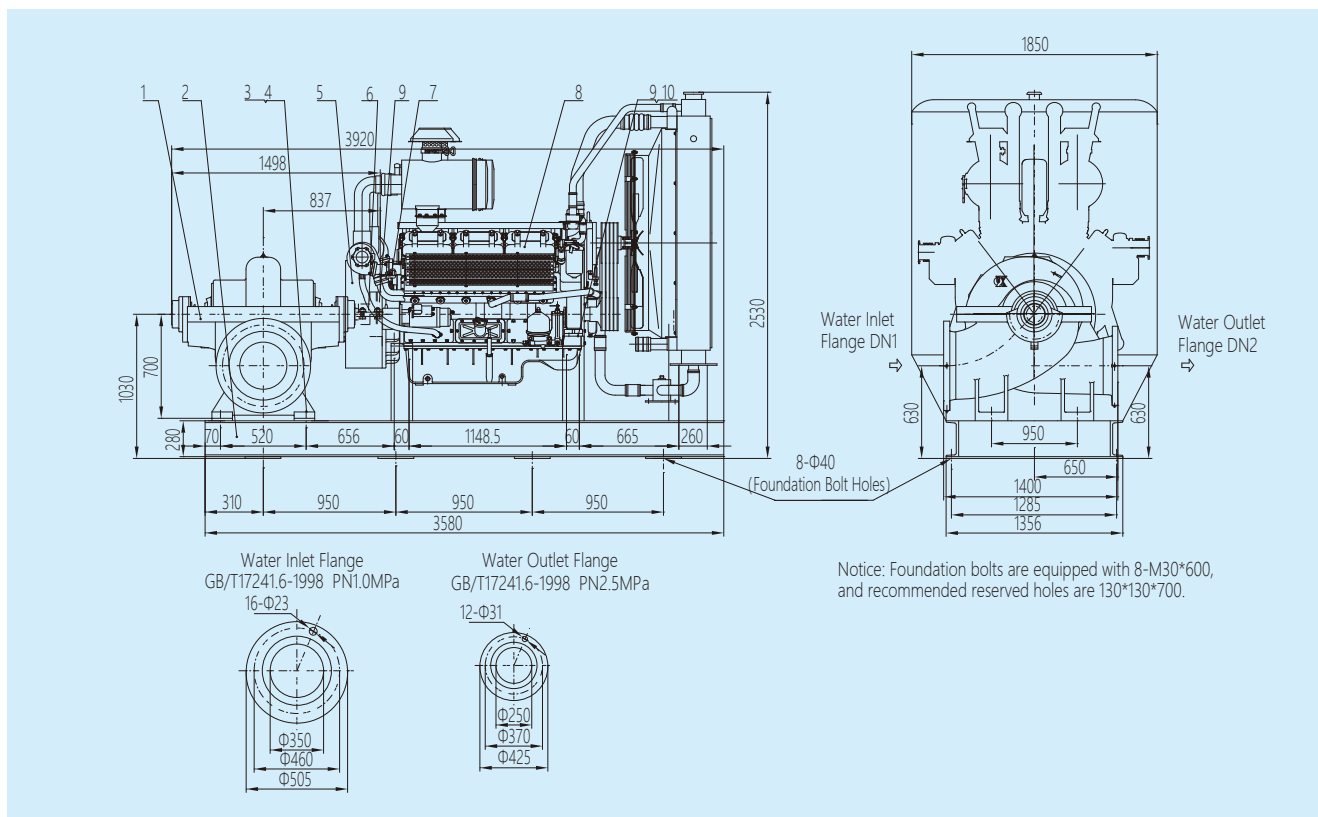


Installation Dimension Diagram

D2-30:XBC12/220G-350N6

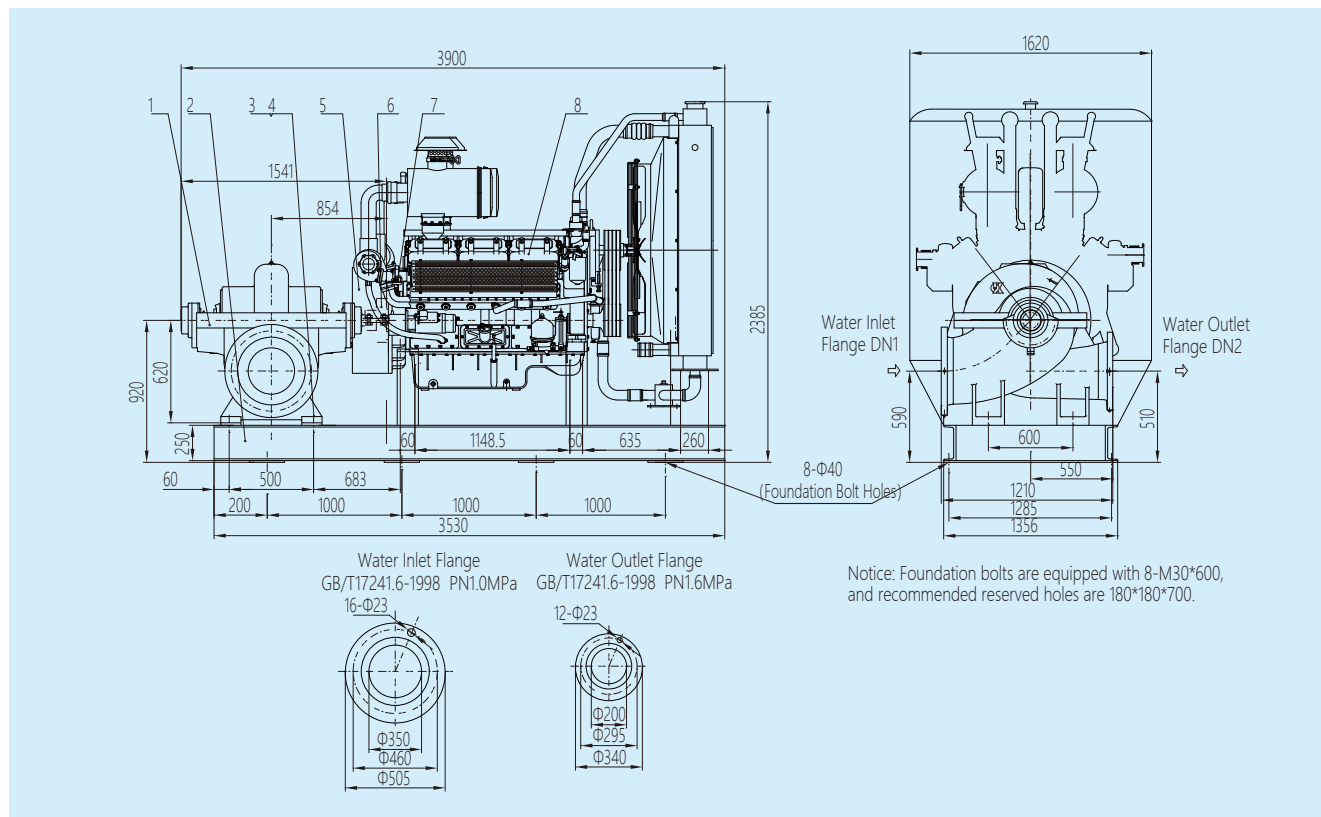


D2-31:XBC16.0/220G-350N4

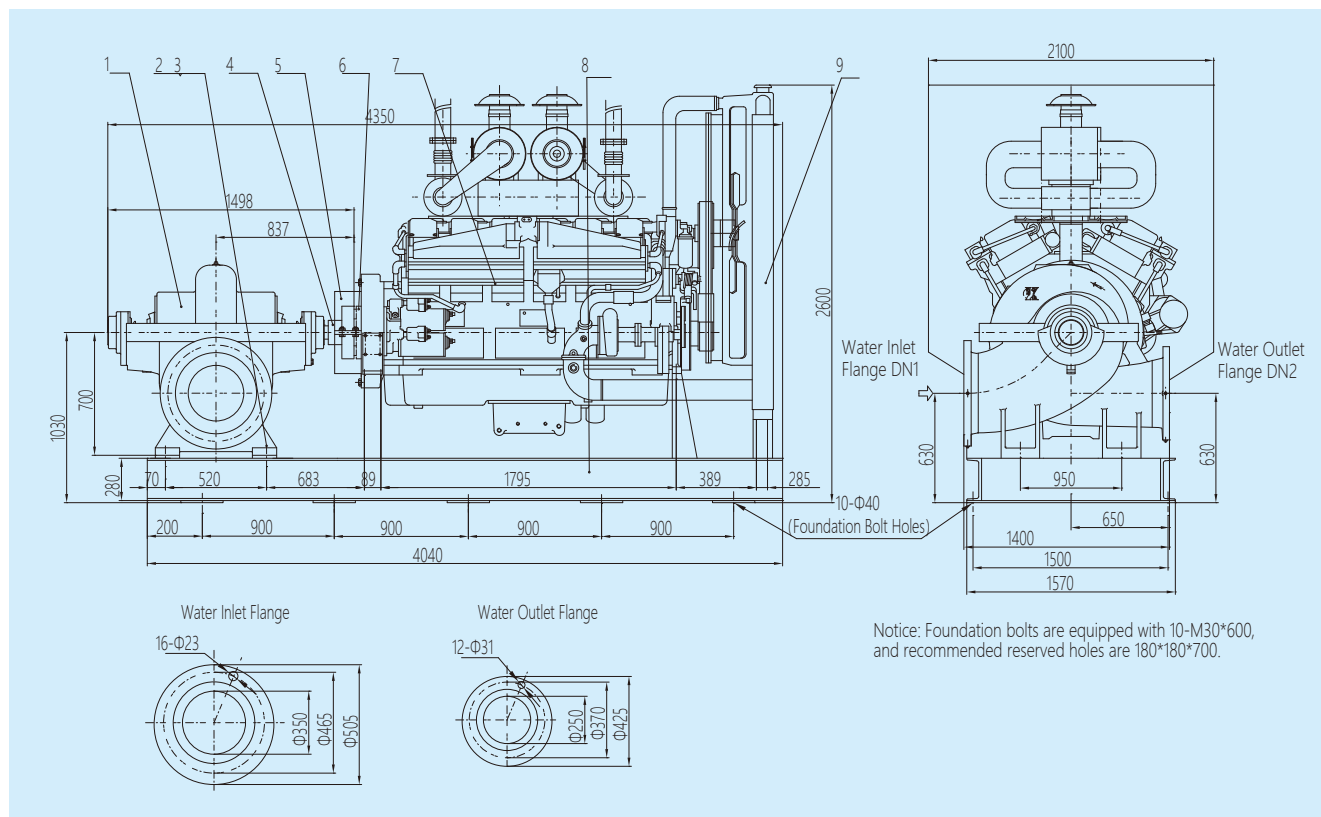


Installation Dimension Diagram

D2-32: XBC8.5/230-350N6

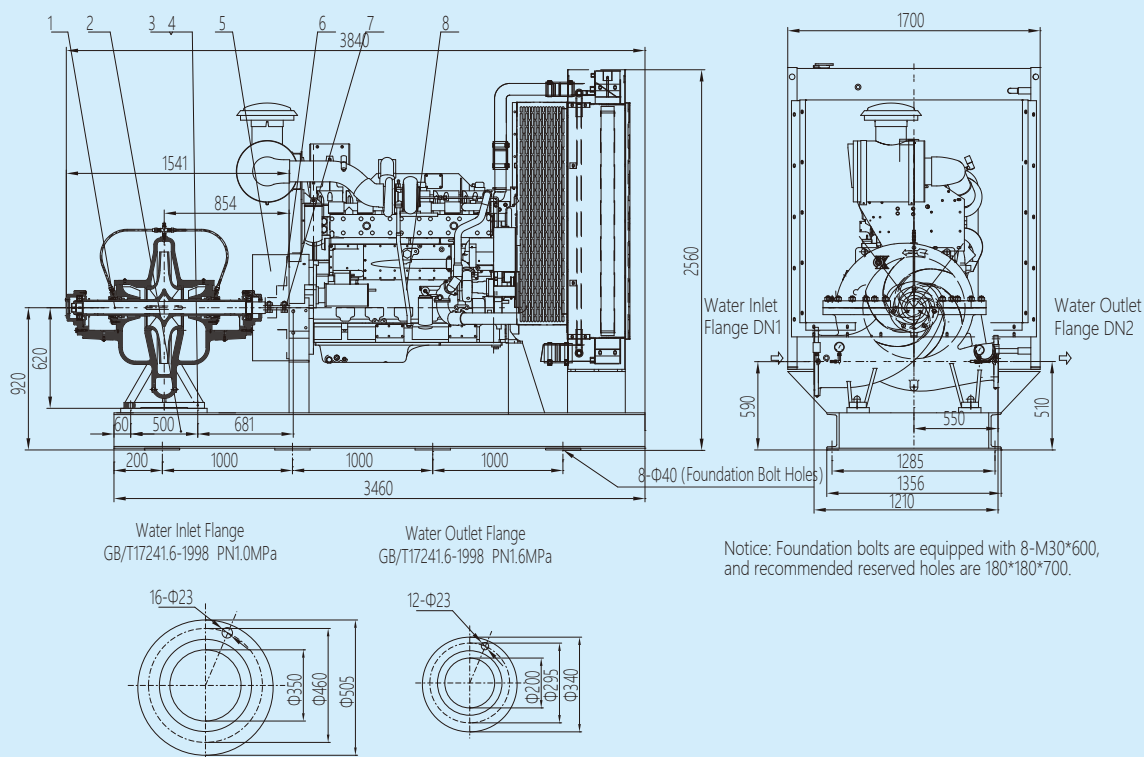


D2-33: XBC15/230-350N4

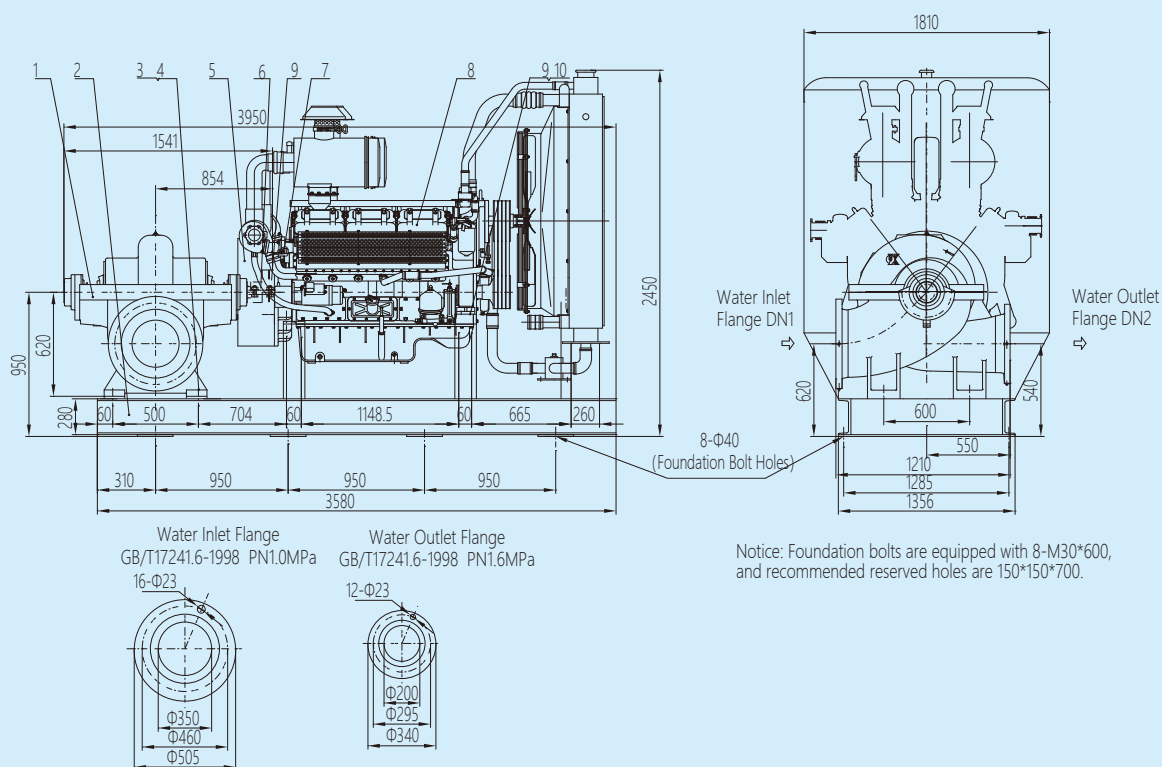


Installation Dimension Diagram

D2-34: XBC12/240G-350N6

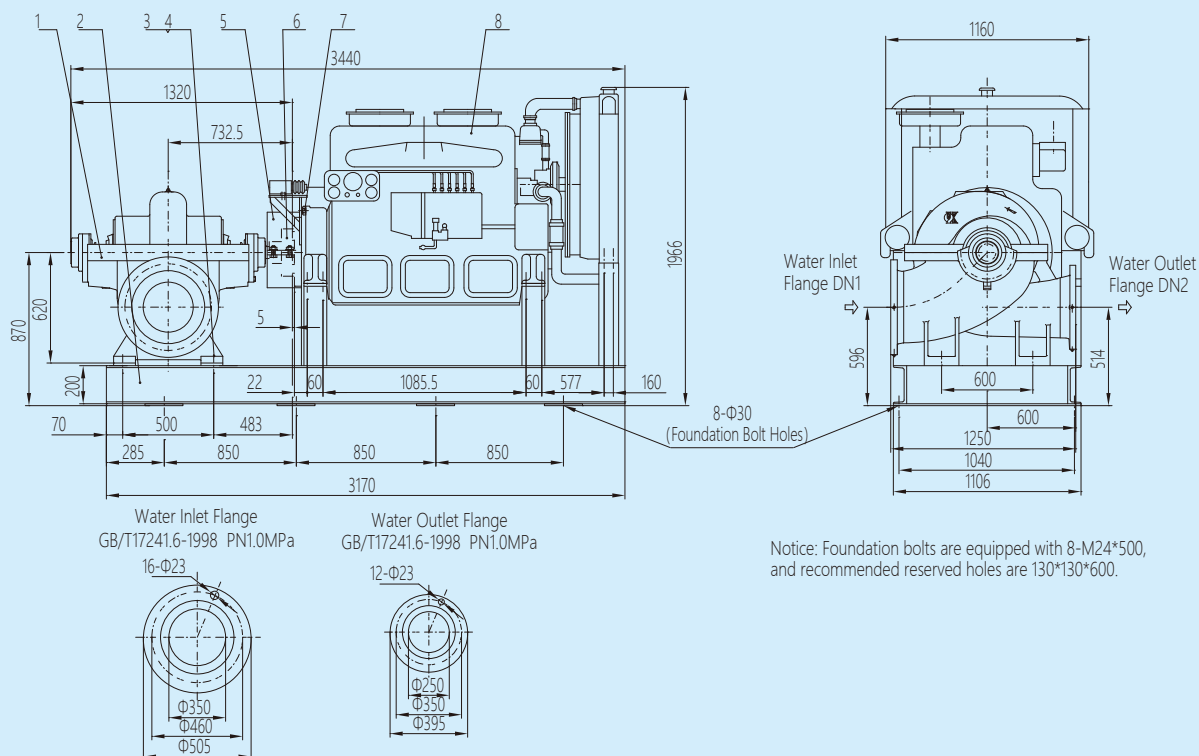


D2-35: XBC14.0/250G-350M6

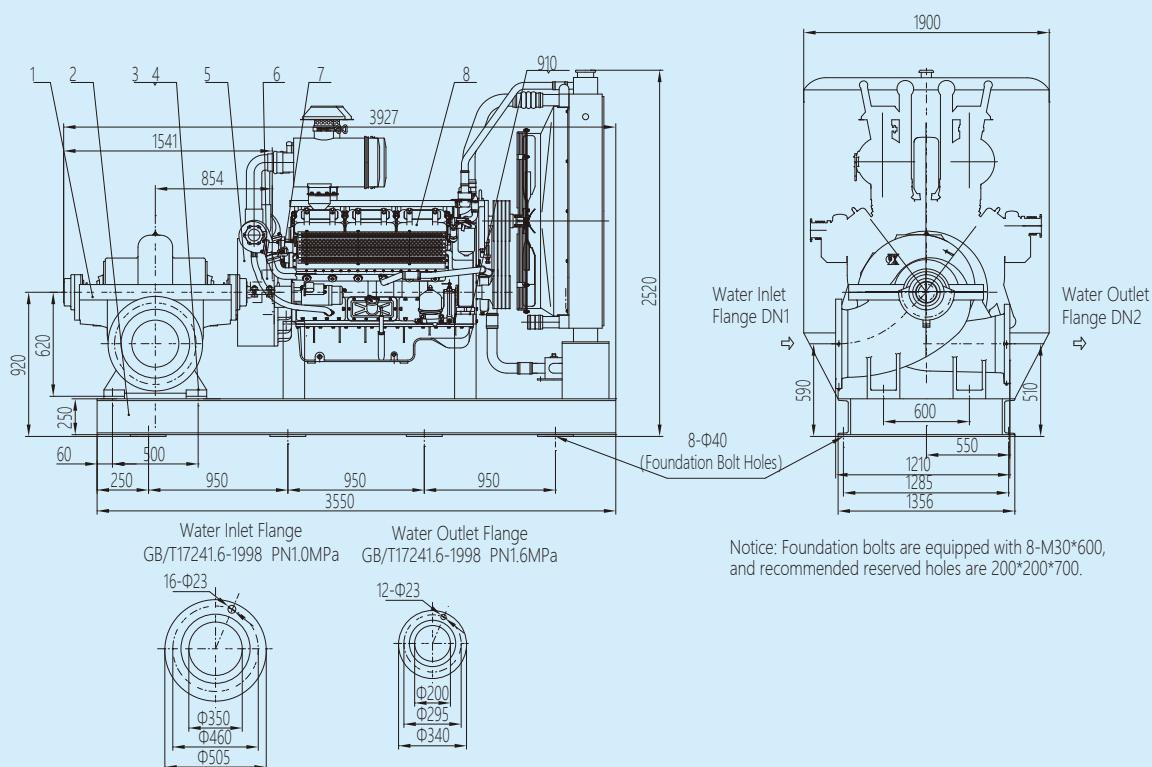


Installation Dimension Diagram

D2-36: XBC5.9/260-350N9

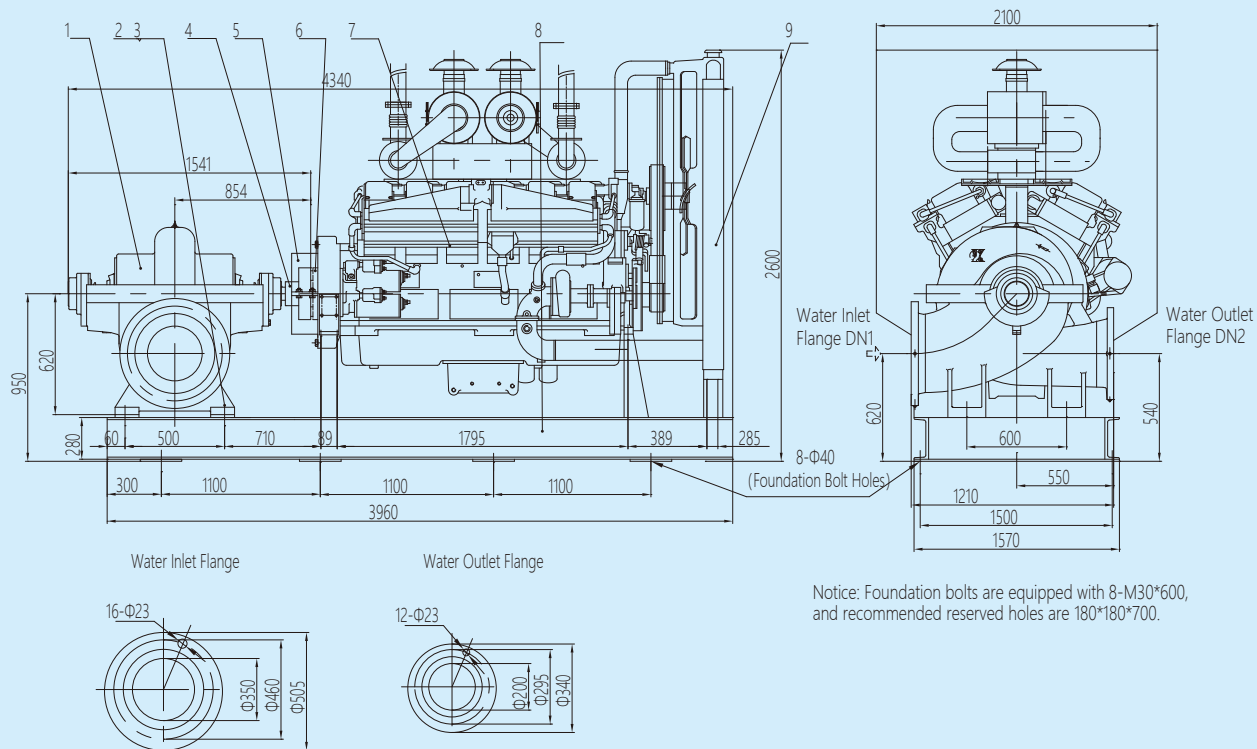


D2-37: XBC12/280-350N6

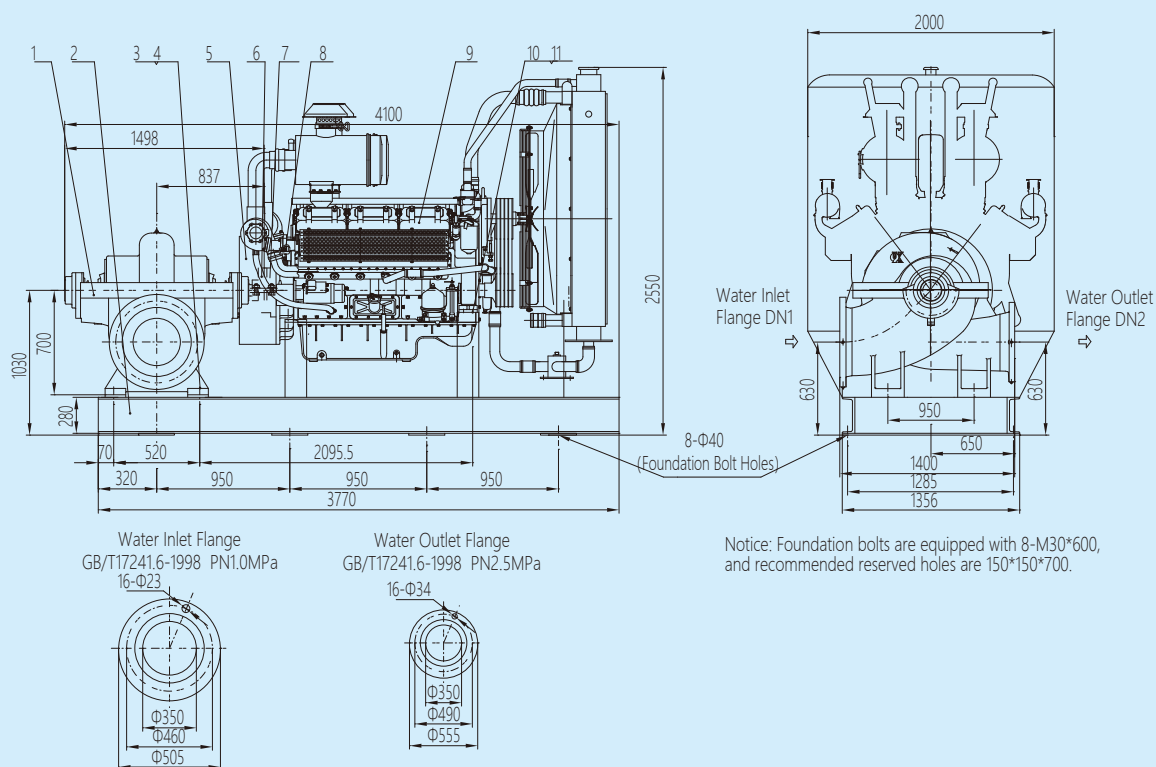


Installation Dimension Diagram

D2-38: XBC12/280-350N6\XBC14/300G-350M6

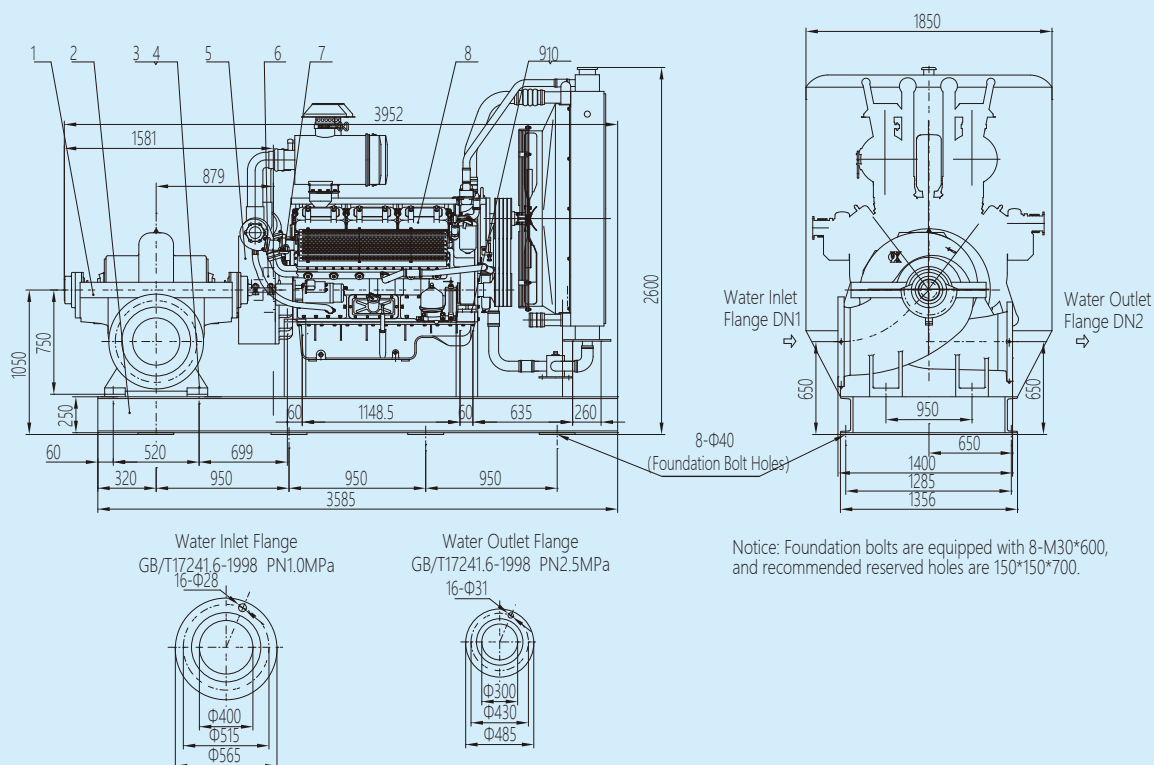


D2-39: XBC14/280-350M4

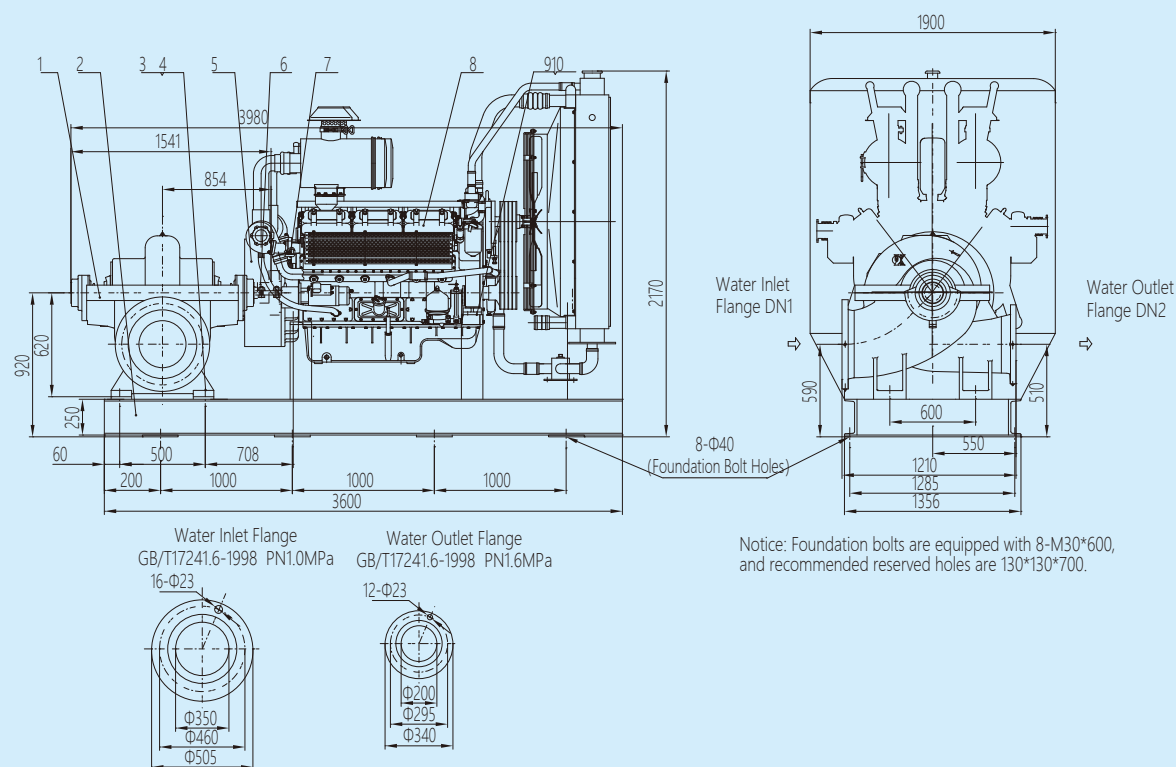


Installation Dimension Diagram

D2-40: XBC10/300-400N6

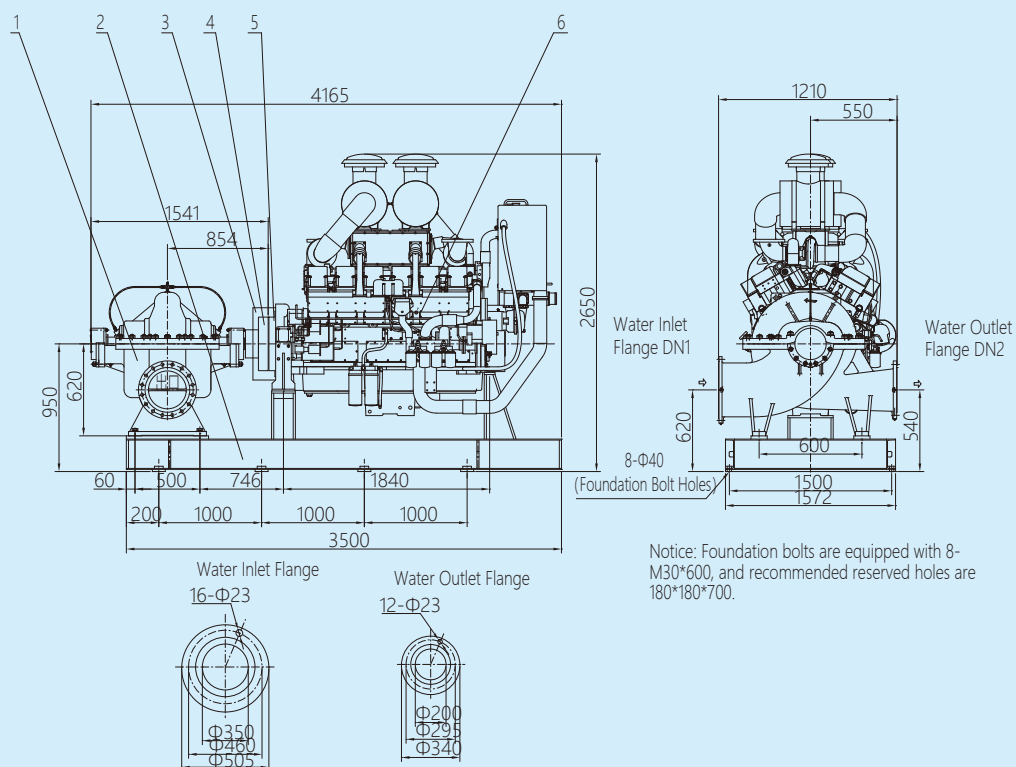


D2-41: XBC13/300-350M6

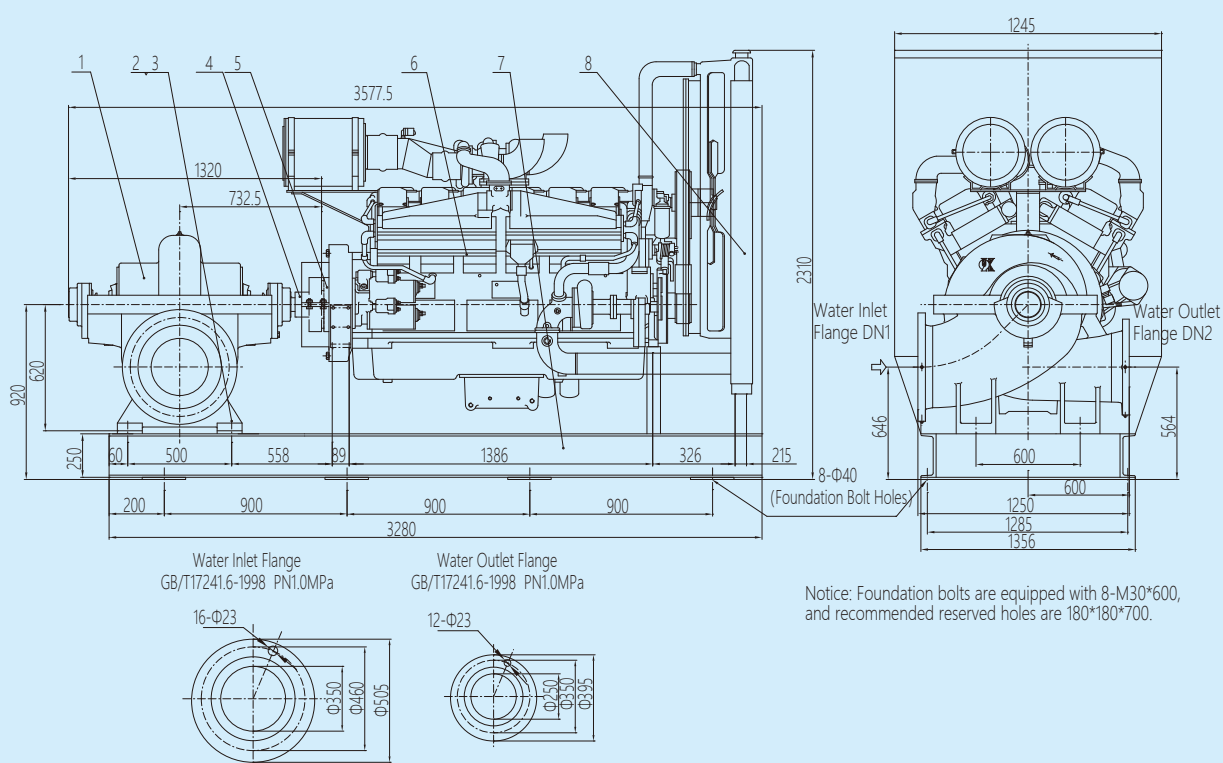


Installation Dimension Diagram

D2-42: XBC12/310-350M6\XBC12/320-350M6

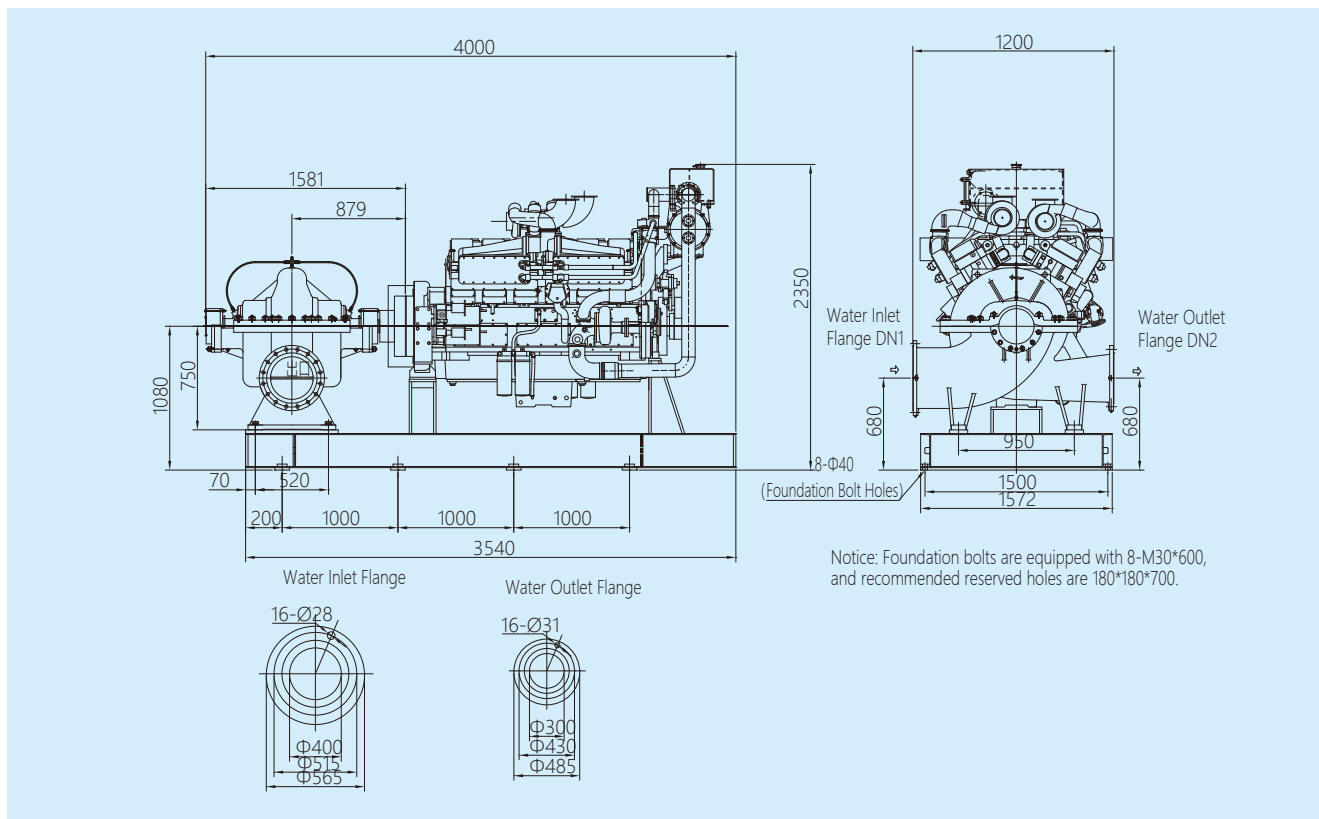


D2-43: XBC8.0/320-350M9

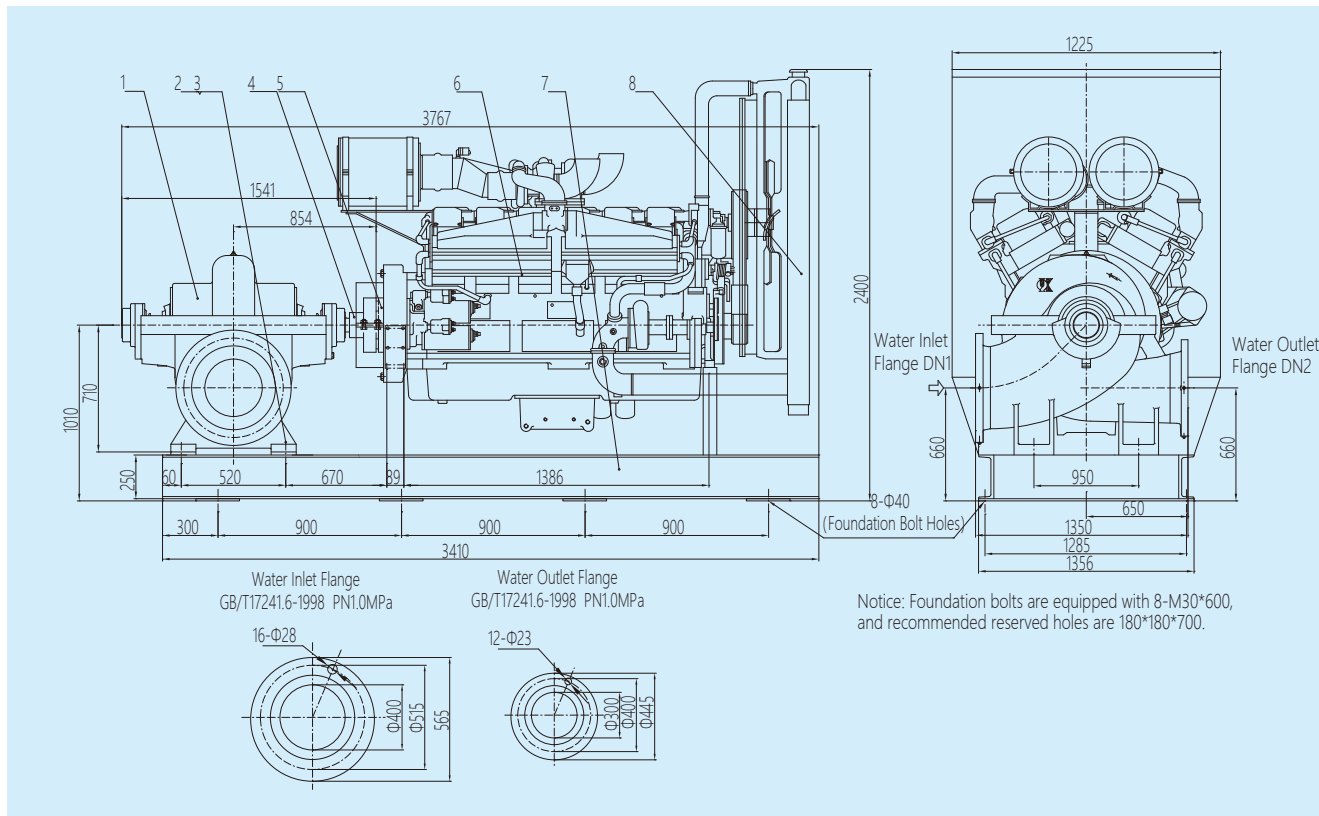


Installation Dimension Diagram

D2-44: XBC12/320G-400N6

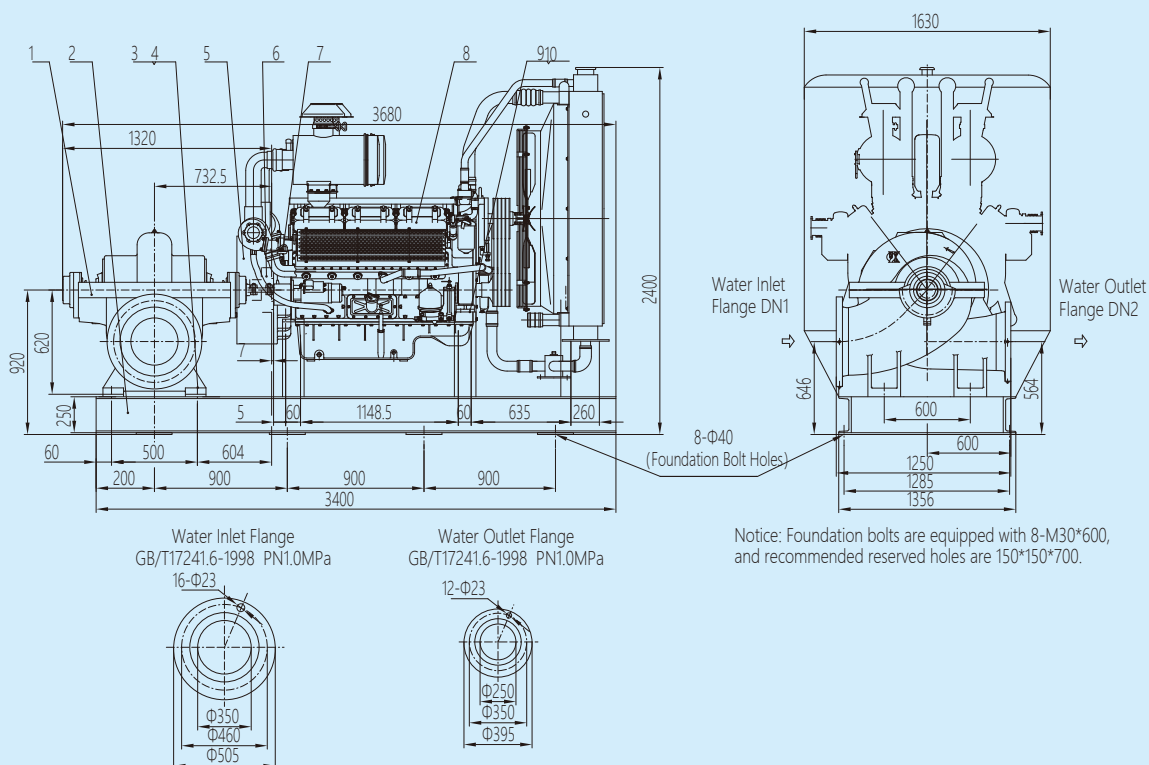


D2-45: XBC5.0/350-400N9

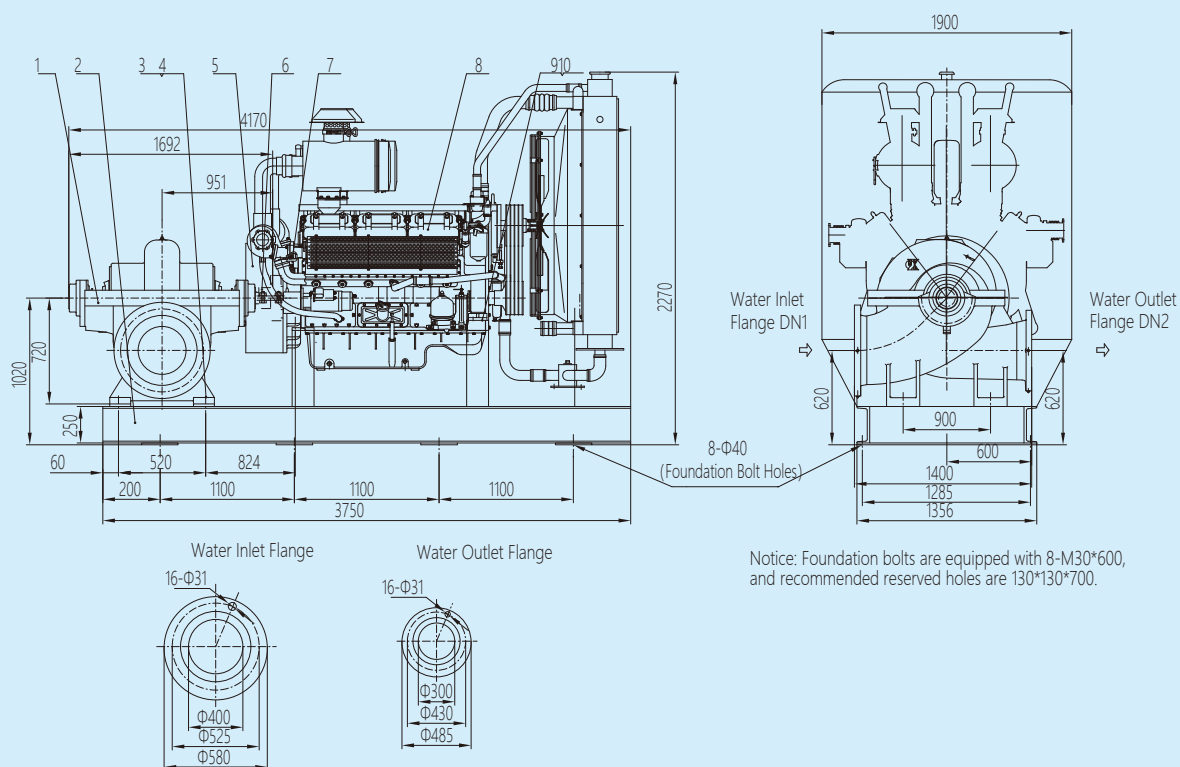


Installation Dimension Diagram

D2-46: XBC7.7/350-350M9



D2-47: XBC10/400-400M6W



Other Parts

✕Supporting Control System

The KQK900 series diesel engine fire pump control cabinet is a fully automatic electronic measurement and control system for the diesel engine pump set controlled by a programmable logic controller (PLC) or a single-chip microcomputer. The control panel and the diesel engine pump set together constitute a highly automated centralized control system for the fire pump set, which is reliable in work, high in measurement accuracy, and easy to operate. It can be widely used in various enterprises and institutions as the control (system) of the emergency diesel engine pump unit for fire fighting, production, and life.

The KQK900 series diesel engine fire pump control cabinet can be matched with various specifications and models of diesel engines. According to its core controller and other special requirements, it can be divided into three levels: economic type, standard type and special type. Economical type: The special controller developed by the single-chip microcomputer is used to realize the measurement and control, parameter display and setting. Standard type: PLC is used to realize the measurement and control function, and the text display is used as the man-machine interface. Special type: Based on the standard type, using touch screen, computer and other man-machine interfaces, and other special configurations.

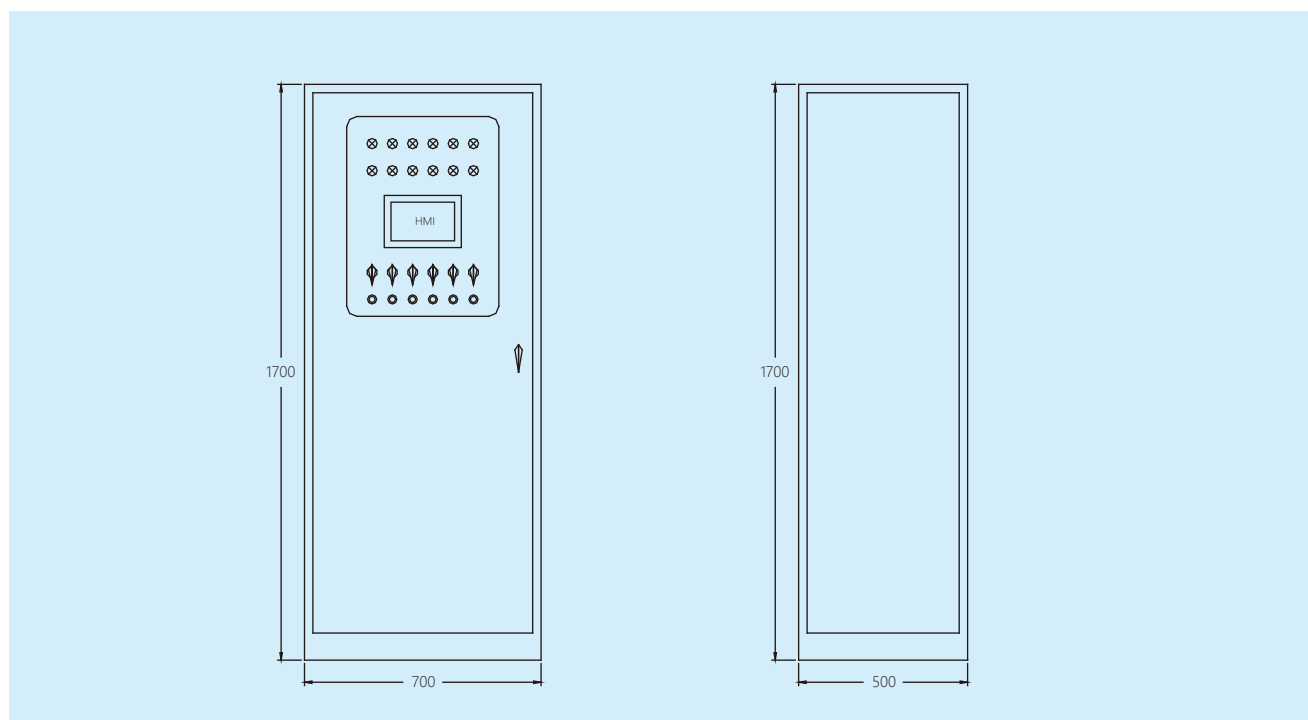
When the water pump unit receives a valid operation command, or the electric pump power supply system is powered off, or receives a remote control start signal, the unit can automatically start running. If a start is unsuccessful, the unit will automatically restart multiple times.

The control cabinet has the following multiple alarm functions: start failure alarm; low oil pressure alarm; high oil temperature alarm; high cooling water temperature alarm; overspeed alarm; battery low voltage alarm; fuel shortage indicator alarm. It has protection functions such as low oil pressure shutdown, overspeed shutdown, and emergency shutdown.

The control system provides a remote start-stop control interface, and provides passive status feedback contacts such as "running status", "start failure", "comprehensive alarm", and "control power on".

✕Control Cabinet

KQK91X Control Cabinet Size



✕Fuel Tank

Usually XBC equipment needs to be equipped with independent fuel tanks, and only a few low-power diesel engines are equipped with small-capacity fuel tanks. For example, the x95 series of Shanghai Jiading Internal Combustion Engine Factory is equipped with a 20L fuel tank. The volume of the fuel tank is usually calculated based on the fuel consumption during 4-6 hours of equipment operation. The calculation formula is as follows:

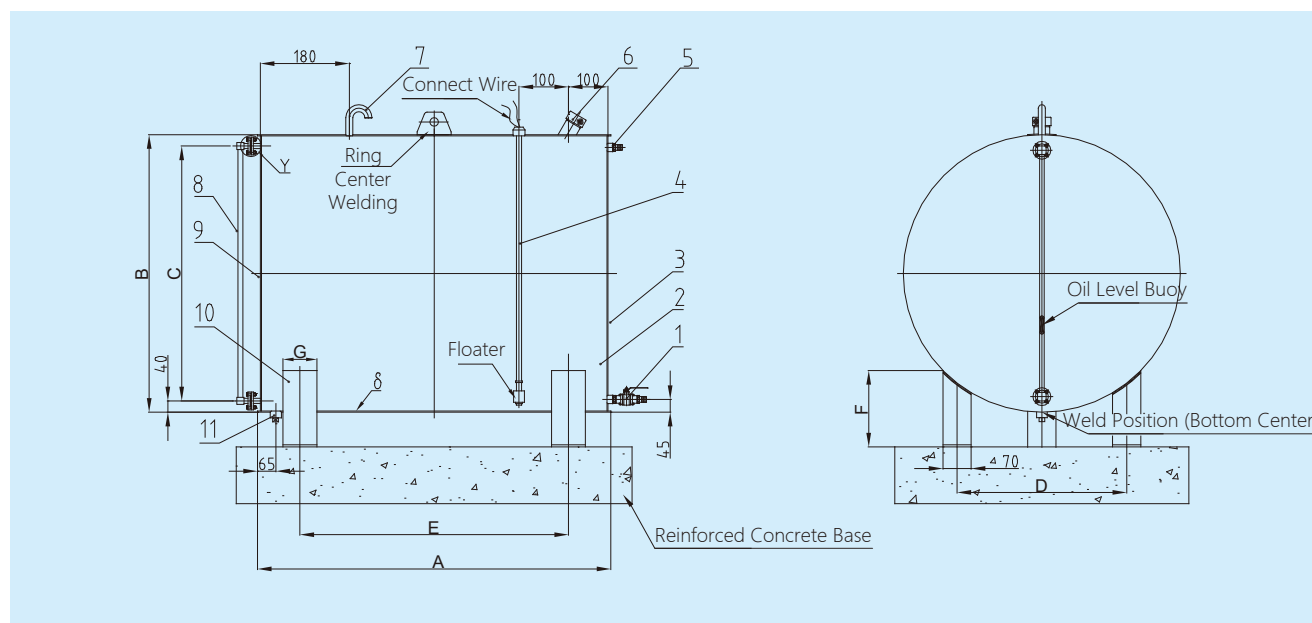
Fuel tank volume (L) $\geq$ fuel consumption rate (g * Kw/h) $\times$ diesel engine rated power $\times$ required continuous working hours /800

Fuel Tank Model Specifications

Unit: mm

Model	Fuel Tank Capacity	Oil Storage	A	ϕB	C	D	E	F	G	δ
CYX50	50L	52L	530	360	250	200	350	300	100	2
CYX100	100L	103L	665	450	350	250	450	300	100	2
CYX150	150L	155L	750	520	400	300	520	300	100	2
CYX200	200L	205L	850	560	450	350	570	300	120	2
CYX300	300L	308L	950	650	550	400	620	300	120	2
CYX500	500L	544L	1100	800	700	500	800	300	120	2
CYX700	700L	745L	1250	880	800	550	950	350	140	3
CYX900	900L	925L	1250	980	900	650	950	350	140	3
CYX1000	1000L	1036L	1350	1000	900	700	1050	400	140	3
CYX1500	1500L	1527L	1500	1150	1050	800	1100	400	140	3
CYX2000	2000L	2049L	1500	1400	1300	900	1100	400	140	3

Fuel Tank Installation Dimension Diagram



No.	Name
1	Fuel Outlet
2	Fuel Tank
3	Fuel Inlet End Blind Plate
4	Low Fuel Level Alarm Switch
5	Fuel Return Port
6	Diesel Fuel Port
7	Exhaust Pipe
8	Fuel Level Gauge
9	Fuel Level Gauge End Blind Plate
10	Bracket
11	Drain Outlet

✕Accumulator

The equipment is equipped with a maintenance-free battery, which usually requires a cold start performance of 800A. Generally, two 12V, 200AH batteries are used for power supply in series. The series connection of accumulators increases the voltage and the capacity remains unchanged, while the parallel connection of accumulators increases the capacity but keeps the voltage unchanged. For high-power diesel engines, because of the large power of the starter motor, it is even equipped with two starter motors. At this time, a larger capacity battery pack is required for power supply. Generally, four batteries are used, two in series and two in parallel. When using dual-battery starting circuit, in addition to doubling the number of batteries, a two-way mains charging system must be equipped in the control cabinet, and the two-way battery pack must be automatically switched.

Supply Scope

1. The normal scope of supply includes: pump set, fuel tank, battery, control cabinet;
2. Spare parts supplied with diesel engine;
3. Exhaust bellows and muffler;
4. Connection between control cabinet and terminal box next to the engine Cable bundle (10 meters in length).

Notice: The fuel supply and return pipelines between the diesel engine and the fuel tank are not included in the scope of supply. Except for the bellows, muffler, other pipelines, elbows, and reducers of the exhaust system are not included in the scope of supply.

Equipment Installation

✕Hoisting Requirement:

When hoisting the diesel engine water pump unit, the whole unit must be hoisted and moved horizontally, and it is strictly forbidden to tilt or drag the water pump unit.

✕Installation Requirements:

1. When installing the water pump unit, a thin iron sheet must be added between the metal public chassis of the unit and the foundation plane to level the foundation and the public chassis;
2. When the equipment is installed on site, the coaxiality should be adjusted, and the parallelism error should not be greater than 0.2mm, the radial circle runout error should not be greater than 0.3mm;
3. For open-circulation cooling units, flexible connection transitions such as hoses must be used between the diesel engine and the water inlet pipe, and it is strictly forbidden to use steel pipes to directly rigidly connect the diesel engine;
4. The control cabinet is required to be placed nearby, so that the pump set can be seen when operating the control cabinet, and the total extension length of the cable bundle connected to the terminal box next to the machine should not exceed 10 meters;
5. When installing the fuel tank, the fuel outlet should be slightly higher than The oil inlet of the diesel engine is appropriate;
6. The battery is placed near the starter motor;

✕Usage Requirements:

Please read the documentation provided with the water pump unit carefully, and use the machine in strict accordance with the operation and use specifications specified in the "Diesel Engine Operation and Maintenance Manual", "Diesel Engine Control Cabinet Operation Manual" and other materials to avoid damage to the machine due to human operating factors.

Please pay attention to the following points during equipment debugging and daily operation:

1. Selection of diesel, oil and coolant
 - a. Diesel: No. 0 or No. -10 diesel, choose according to the ambient temperature.
 - b. Engine oil: No. 15W/40 above CF-4 level, mixing of engine oils of different brands is not allowed.
 - c. Coolant: Tap water and clean river water should be used as the cooling water for cooling the diesel engine. Well water contains more impurities and is prone to scale, so it is not suitable for use. Corresponding antifreeze can also be selected according to the recommendation of the diesel engine operation and maintenance manual.
2. Preparation before starting the diesel engine pump
 - a. Check whether all parts of the diesel engine are normal and whether the attachments are connected reliably;
 - b. Check whether the coolant is full;
 - c. Check whether the oil level is at the specified oil level;
 - d. Check whether there is enough diesel in the fuel tank;
 - e. Check whether the connection of each line of the starting system is tight;

- f. Check whether the battery power is sufficient;
- g. Fully open the water inlet valve of the pump;
- h. Thoroughly exhaust the air in the pump cavity;

3. Precautions for the operation of the pump set

a. The pump unit should not be overloaded during operation. Pay attention to the indications of the inlet and outlet pressure gauges of the pump. The actual head after the outlet pressure minus the inlet pressure must be greater than or equal to the rated head marked on the pump nameplate. When the actual head is lower than the rated head of the pump, the water pump is in an over-flow working state, and the diesel engine is running over power at this time.

b. The ambient temperature for the operation of the pump set must be appropriate. When the ambient temperature is higher than the design temperature, power reduction should be considered.

4. Daily maintenance of diesel engine

a. Check the oil level in the oil pan. The oil level should reach the scale mark on the oil gauge. If it is insufficient, add to the specified amount.

b. Eliminate diesel oil leakage, water leakage and air leakage.

c. Check the installation of each accessory of the diesel engine, including the firmness of the installation of each accessory, anchor bolts, etc.

d. Check each instrument and observe whether the reading is normal, otherwise it should be repaired or replaced in time.

e. Clean the exterior of the diesel engine and ancillary equipment. Use a dry cloth or a rag soaked in diesel to wipe off the oil, water and dust on the surface of the fuselage, turbocharger, cylinder head cover, air filter, etc. Wipe or blow off the dust on the surface of the charging generator, radiator, intercooler, fan, etc. with compressed air.

f. Start and run once a week for about half an hour or until the water temperature and oil temperature reach above 60 degrees.

✕Basic Technical Requirements:

The foundation of the pump should have sufficient rigidity to support the pump and absorb vibration. The use of a concrete platform above the ground can prevent flooding of the unit and keep the site tidy. The unit is fixed with anchor bolts, and the length of the anchor bolts is 15 times the bolt diameter. In order to better position the unit, the reserved holes for anchor bolts should be more than 4 times the diameter of the anchor bolts, and secondary grouting is used. The sides of the foundation table should exceed the base of the unit by about 300mm, and a sump should be provided on the side of the foundation to collect the oil and water dripping from the diesel engine.