

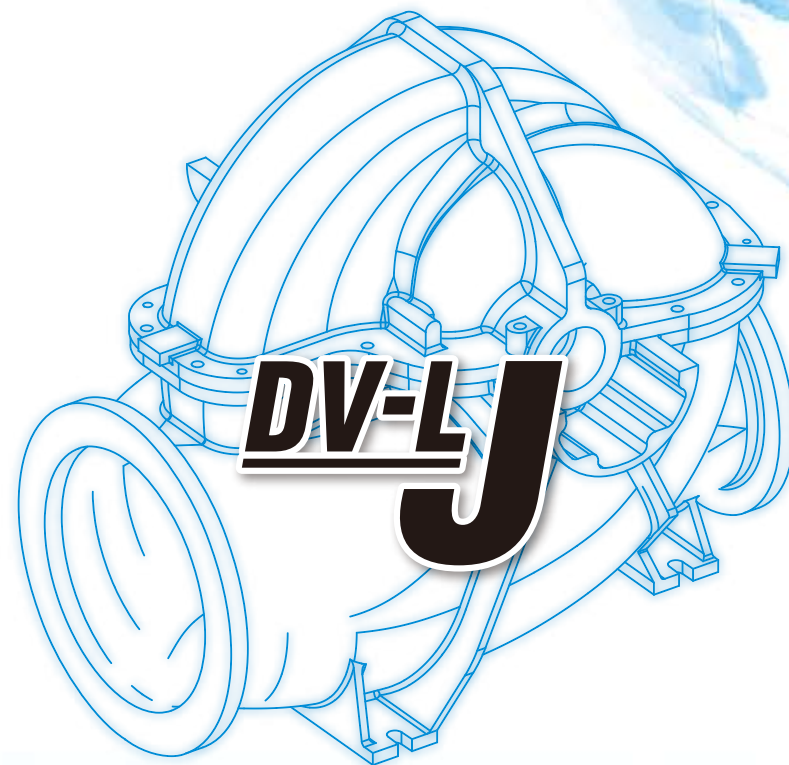


KUBOTA

Double suction volute pump

DV-L type J series

~Bore size 800mm to 1350mm~



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KUBOTA Double suction volute pump

DV-L type J series ~Bore size 800mm to 1350mm~

The double suction volute pump with higher efficiency and enhanced suction performance.

The double suction volute pump DV-LJ is the latest pump series developed by KUBOTA, following an extensive feedback from major customers. As an advanced pump, the DV-LJ provides a total reliability and better cost-performance.
The DV-LJ series is available in rich line-up and can be useful in various applications.

Features

1

High efficiency

Higher efficiency has been achieved using the latest hydraulic analysis. This unique design provides power saving and CO₂ reduction.

2

Enhanced suction performance

DV-LJ is operated with enhanced suction performance. Stable operation is made possible, even at lower water level.

3

Easy maintenance

Easily replaceable string-shaped rubber gasket is employed for the upper and lower seal face, and the shaft seal water piping is incorporated into the casing. Maintenance time is shorter since a number of parts have been reduced.

4

Increased durability and reliability

This pump has been developed through optimum design using the FEM structural analysis. Furthermore, standard stainless steel impeller and shaft offers better durability and better corrosion protection.

5

Light weight and compact

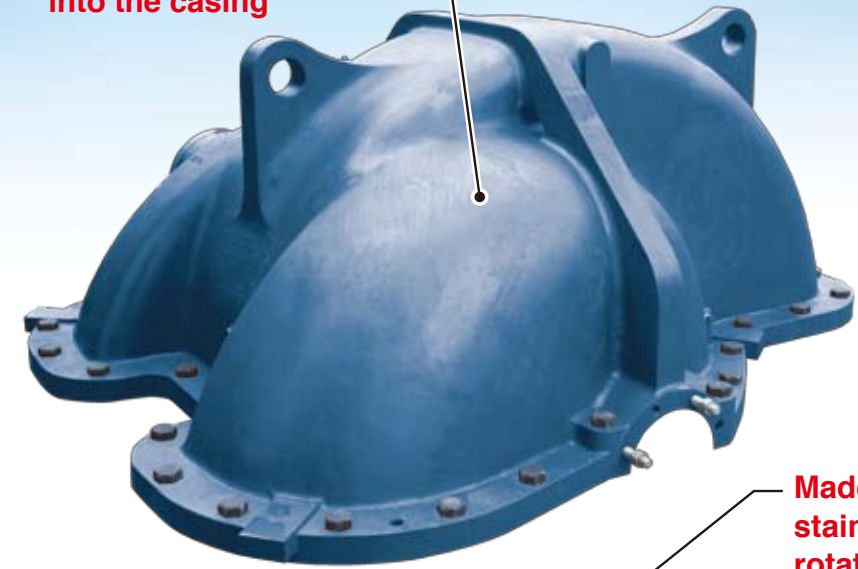
Achieved reduction in weight and size by full model change. Thus installation space is saved and easy to handle.

6

Custom design

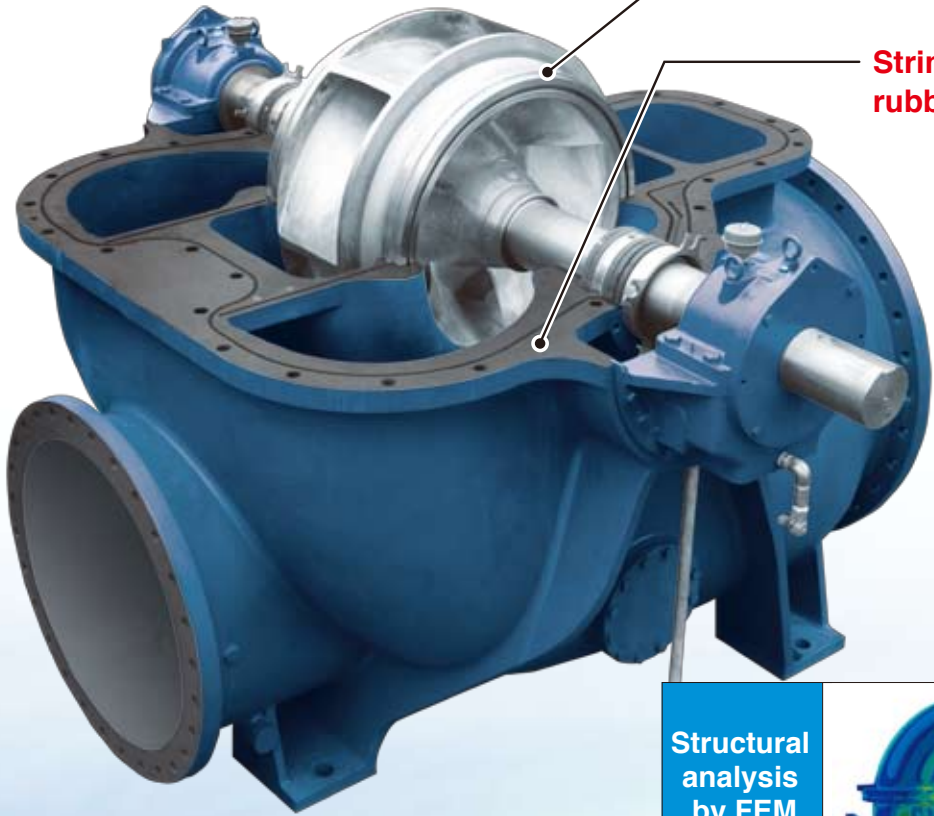
Large capacity DV-LJ pumps are custom-design to suite with the required specification for optimum performance.

Incorporated shaft seal water piping into the casing



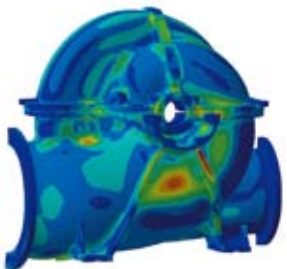
Made of stainless steel rotation body

String shaped rubber packing



Structural analysis by FEM

FEM...
Finite Element
Method



Application

1

City

For water intake, water conveyance, pressurization, water distribution, front and back wash etc.

2

Industry

For water supply, cooling water circulation etc.

3

Irrigation

For agriculture, drainage etc.

Specification scope

- Suction bore : $\Phi 800 \sim \Phi 1350$
- Capacity : $70 \text{ m}^3/\text{min} \sim 415 \text{ m}^3/\text{min}$
- Total head : $12 \text{ m} \sim 88 \text{ m}$
- Number of poles : 8P, 10P, 12P, 14P, (See the selection chart.)

Material

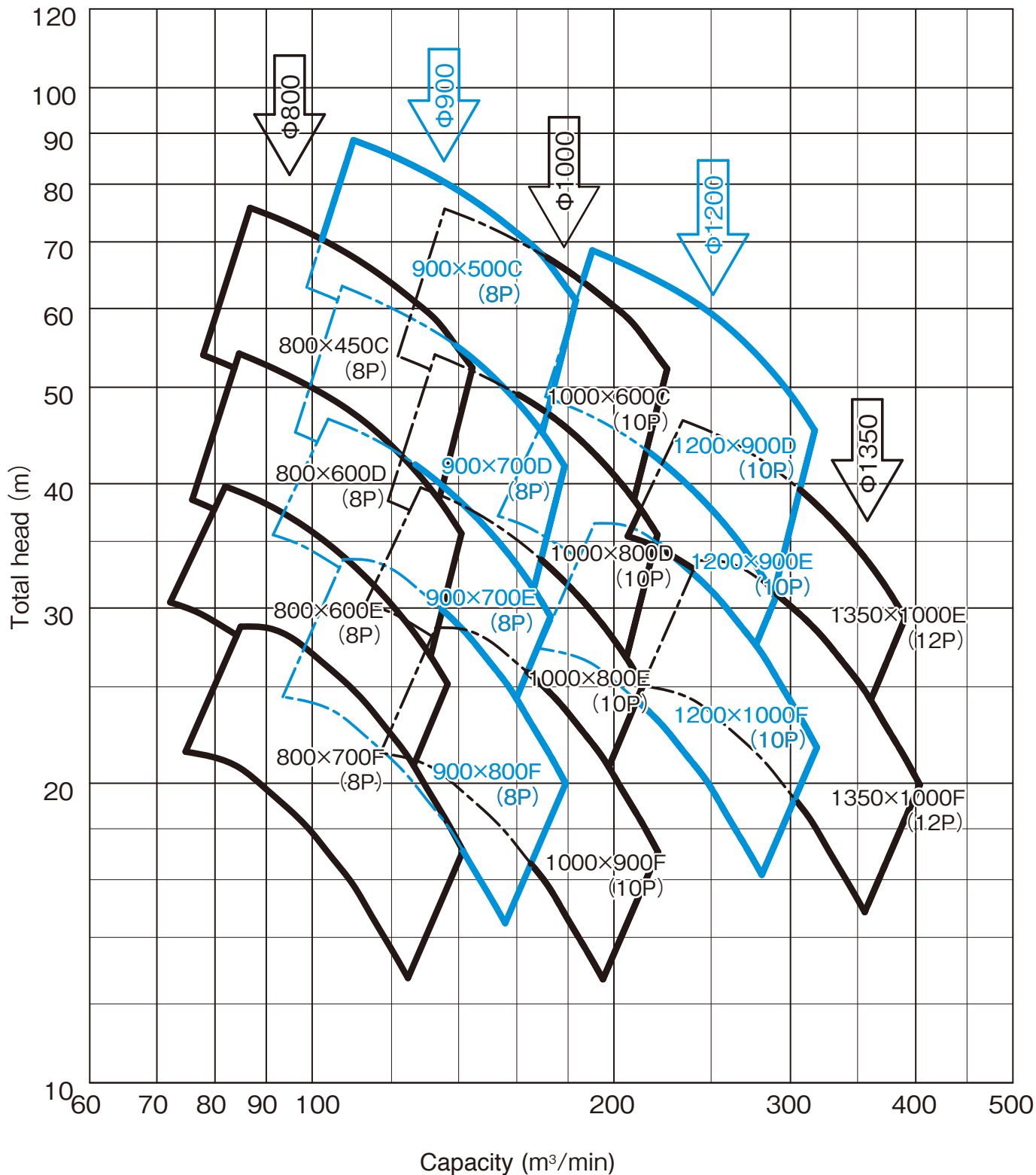
Parts name	Standard Material / Eq.JIS grade	Optional
Casing	Gray iron casting / FC250	Steel casting, Duplex SS casting
Impeller	Stainless steel casting / SCS13	Steel casting, Duplex SS casting
Shaft	Stainless steel / SUS403	Carbon Steel, Duplex SS
Casing ring	Stainless steel / SUS304	Any other materials
Packing sleeve	Stainless steel / SUS304	Any other materials

Pump specification

	Standard	Optional
Liquid	Fresh water, river water, industrial water	Sea water
Liquid temperature	0°C to 80°C	N.A
Suction pressure	<0.1MPa	
Flange	JIS	ISO, ANSI, BS
Bearing	Ball / Roller	
Bearing lubrication	Grease, Oil	
Impeller ring	Not provided	Adaptable
Shaft seal	Gland packing	Mechanical seal
Sleeve	Only gland packing section	Shaft sleeves are adaptable
Painting	Casing internal : Epoxy resin painting for water service Outside surface : Epoxy resin painting	Specified painting
Finish color	Munsell 10B 6/6	Specified color
Driving machine ^{Note1)}	Electric motor	
Rotating direction	Clockwise (viewed from drive machine)	Counter-clockwise
Suction, discharge direction	horizontal-horizontal	—
Accessory	Base, foundation bolts, coupling, coupling cover	Priming detector, pressure gauge, temperature detector

Note 1) Contact us for any specification other than the above.

50Hz×8P~12P(speed 750min⁻¹~500min⁻¹)



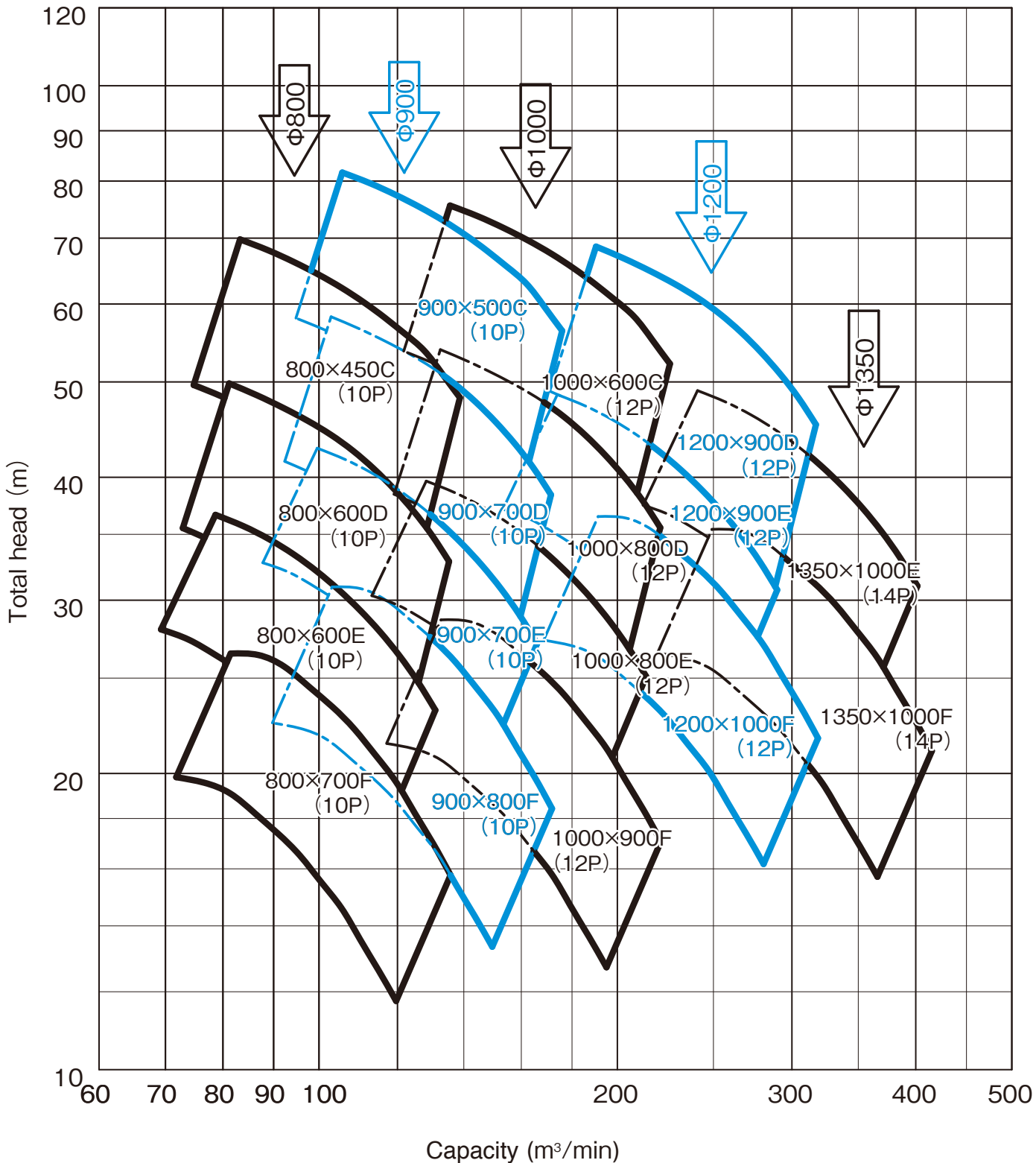
Description of symbol

800×450C

Suction bore
Discharge bore
Frame No.

Note) Frames indicated here are for standard guidance.

60Hz×10P~14P(speed 720min⁻¹~514min⁻¹)



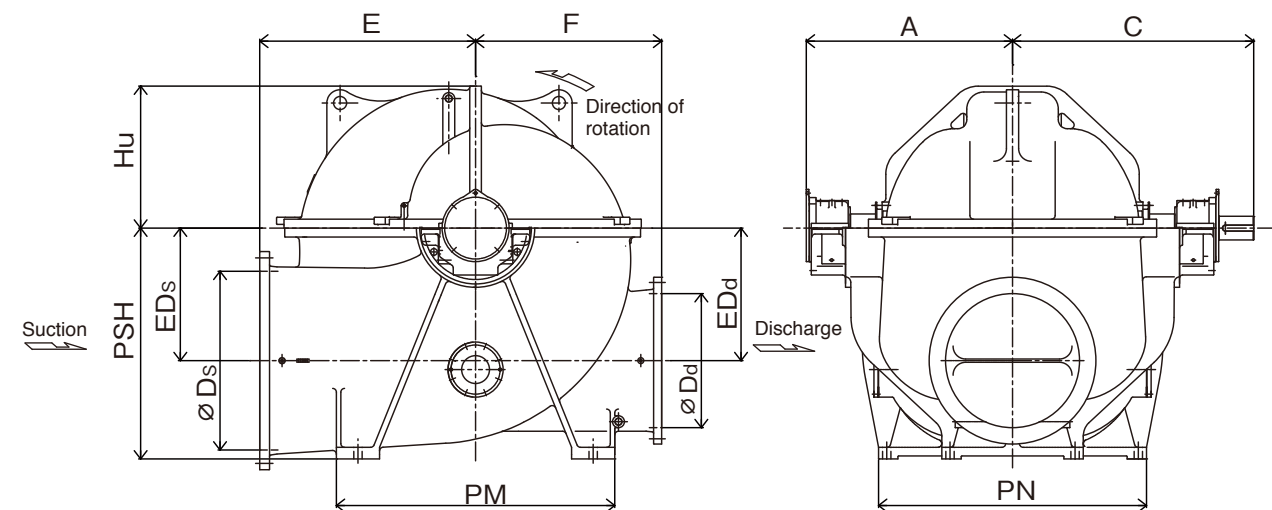
Description of symbol

800×450C

Suction bore
Discharge bore
Frame No.

Note) Frames indicated here are for standard guidance.

Outline dimension for standard frame (Suction bore 800 to 1350)



50Hz

Frame No.	Motor output (kW)	Poles	Ds	Dd	A	C	E	F	EDs	EDd	PSH	Hu	PM	PN	Mass (kg)
800×450C	1600	8	800	450	1150	1380	1100	935	700	700	1160	804	1330	1278	6200
800×600D	1100	8	800	600	965	1165	1060	870	665	665	1120	723	1330	1278	4500
800×600E	750	8	800	600	925	1085	1025	880	645	645	1095	676	1330	1278	3900
800×700F	560	8	800	700	930	1090	1025	880	630	630	1080	686	1330	1278	3700
900×500C	2400	8	900	500	1255	1535	1185	1010	760	760	1280	874	1440	1382	8400
900×700D	1600	8	900	700	1195	1425	1145	940	720	720	1235	786	1440	1382	6600
900×700E	1100	8	900	700	995	1195	1110	950	695	695	1200	733	1440	1382	5000
900×800F	850	8	900	800	1025	1215	1110	950	680	680	1185	745	1440	1382	5000
1000×600C	2500	10	1000	600	1380	1660	1370	1165	875	875	1450	1003	1660	1596	11500
1000×800D	1700	10	1000	800	1295	1575	1325	1085	835	835	1405	902	1660	1596	8800
1000×800E	1200	10	1000	800	1235	1455	1280	1100	805	805	1365	843	1660	1596	7400
1000×900F	900	10	1000	900	1110	1330	1280	1095	785	785	1340	855	1660	1596	6800
1200×900D	3100	10	1200	900	1485	1795	1495	1225	940	940	1620	1029	1870	1800	13600
1200×900E	2000	10	1200	900	1365	1675	1415	1215	890	890	1560	937	1870	1800	10500
1200×1000F	1600	10	1200	1000	1405	1660	1415	1215	885	885	1555	971	1870	1800	10900
1350×1000E	2500	12	1350	1000	1580	1890	1660	1425	1040	1040	1795	1097	2195	2110	16200
1350×1000F	1900	12	1350	1000	1605	1885	1660	1420	1020	1020	1770	1116	2195	2110	15900

Unit (mm)

60Hz

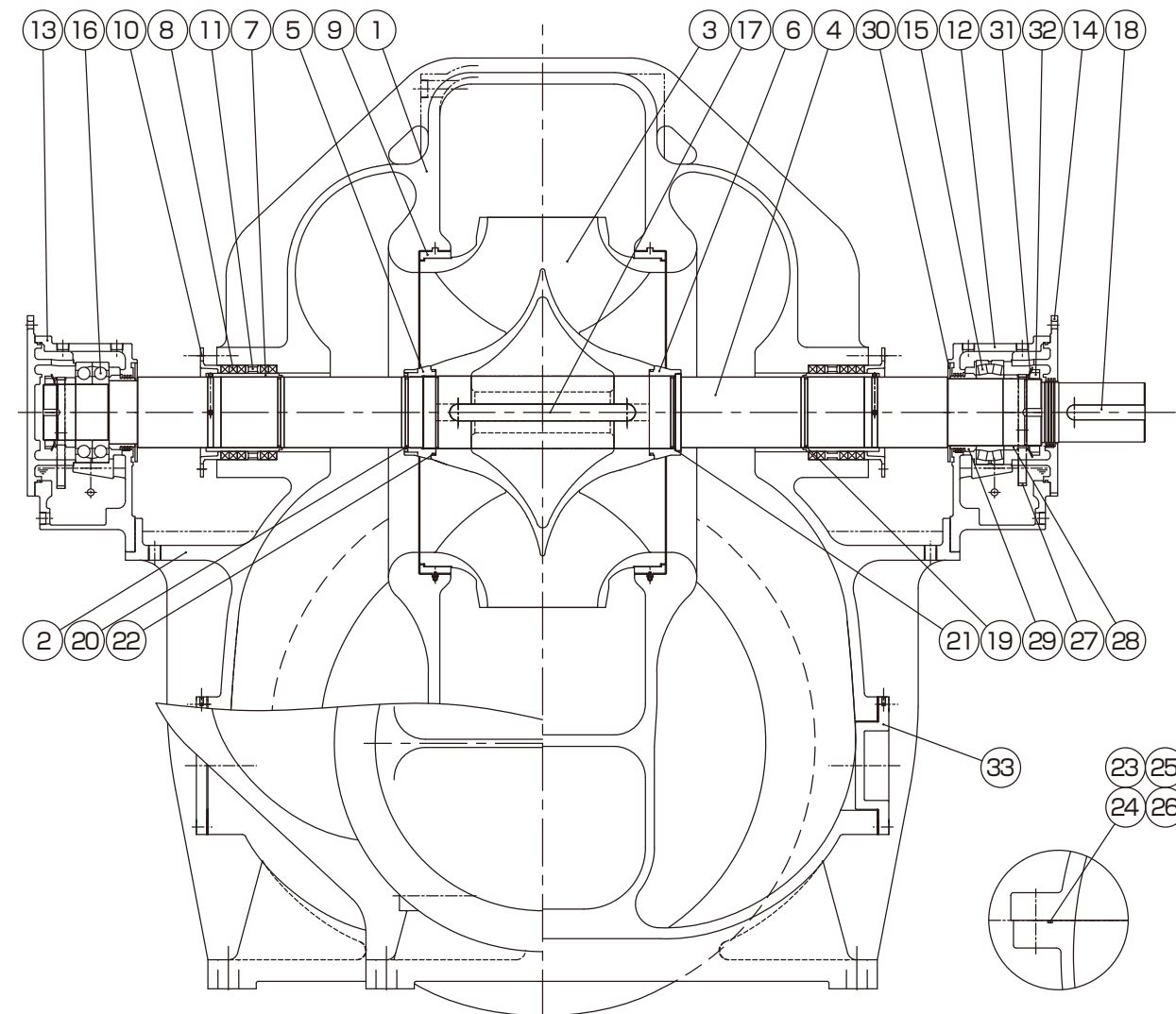
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800×450C	1400	10	800	450	1150	1380	1100	935	700	700	1160	804	1330	1278	6200
800×600D	950	10	800	600	965	1165	1060	870	665	665	1120	723	1330	1278	4500
800×600E	670	10	800	600	925	1085	1025	880	645	645	1095	676	1330	1278	3900
800×700F	500	10	800	700	930	1090	1025	880	630	630	1080	686	1330	1278	3700
900×500C	2100	10	900	500	1255	1535	1185	1010	760	760	1280	874	1440	1382	8400
900×700D	1400	10	900	700	1195	1425	1145	940	720	720	1235	786	1440	1382	6600
900×700E	1000	10	900	700	995	1195	1110	950	695	695	1200	733	1440	1382	5000
900×800F	750	10	900	800	1025	1215	1110	950	680	680	1185	745	1440	1382	5000
1000×600C	2500	12	1000	600	1380	1660	1370	1165	875	875	1450	1003	1660	1596	11500
1000×800D	1700	12	1000	800	1295	1575	1325	1085	835	835	1405	902	1660	1596	8800
1000×800E	1200	12	1000	800	1235	1455	1280	1100	805	805	1365	843	1660	1596	7400
1000×900F	900	12	1000	900	1110	1330	1280	1095	785	785	1340	855	1660	1596	6800
1200×900D	3100	12	1200	900	1485	1795	1495	1225	940	940	1620	1029	1870	1800	13600
1200×900E	2000	12	1200	900	1365	1675	1415	1215	890	890	1560	937	1870	1800	10500
1200×1000F	1600	12	1200	1000	1405	1660	1415	1215	885	885	1555	971	1870	1800	10900
1350×1000E	2700	14	1350	1000	1580	1890	1660	1425	1040	1040	1795	1097	2195	2110	16200
1350×1000F	2100	14	1350	1000	1605	1885	1660	1420	1020	1020	1770	1116	2195	2110	15900

Unit (mm)

Note) All dimensions and weights are reference only not to be use for construction. Frames indicated here are for standard guidance.

Typical construction drawing

Suction bore 800 to 1350



No.	Parts name	No.	Parts name	No.	Parts name
①	Upper casing	⑫	Bearing support (1)	②③	String shaped rubber packing (1)
②	Lower casing	⑬	Bearing support (2)	②④	String shaped rubber packing (2)
③	Impeller	⑭	Bearing cover	②⑤	String shaped rubber packing (3)
④	Shaft	⑮	Bearing (1)	②⑥	String shaped rubber packing (4)
⑤	Impeller nut	⑯	Bearing (2)	②⑦	Oil ring
⑥	Impeller set ring	⑰	Key (for Impeller)	②⑧	Oil ring guide
⑦	Packing sleeve	⑱	Key (for Coupling)	②⑨	Distance ring
⑧	Gland packing	⑲	O-ring (1)	③⑩	Deflector
⑨	Casing ring	⑲	O-ring (2)	③⑪	Bearing washer
⑩	Gland	⑲	O-ring (3)	③⑫	Bearing nut
⑪	Lantern ring	⑲	O-ring (4)	③⑬	Inspection cover

Note) Above drawing shows typical construction drawing. Bearing arrangement depends on the type of lubricant or type of bearing.