

# Horizontal single/two-stage single-suction CONDENSATE PUMPS

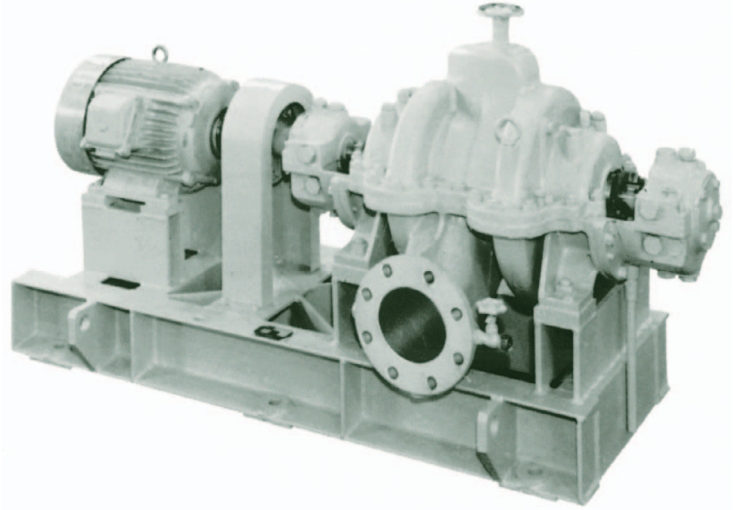


**■ APPLICATIONS**

- Condensate pumps
- Hot well pumps
- Drain transfer pumps

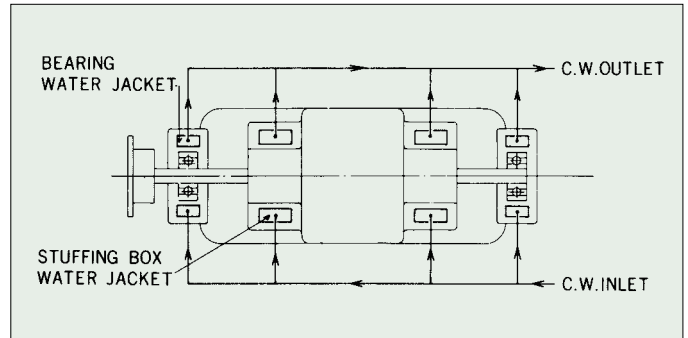
**■ SPECIFICATIONS**

- Total head ..... 15 to 110m
- Temperatures ..... Below 100°C



**Simple Maintenance**

Exception for the single-stage pumps with small capacity and low head, all other pumps have a horizontally-split casing and the suction and discharge nozzles are cast as a single integrated unit along with the lower casing. So, interior inspection can be done without removing the piping and maintenance can be carried out easily.

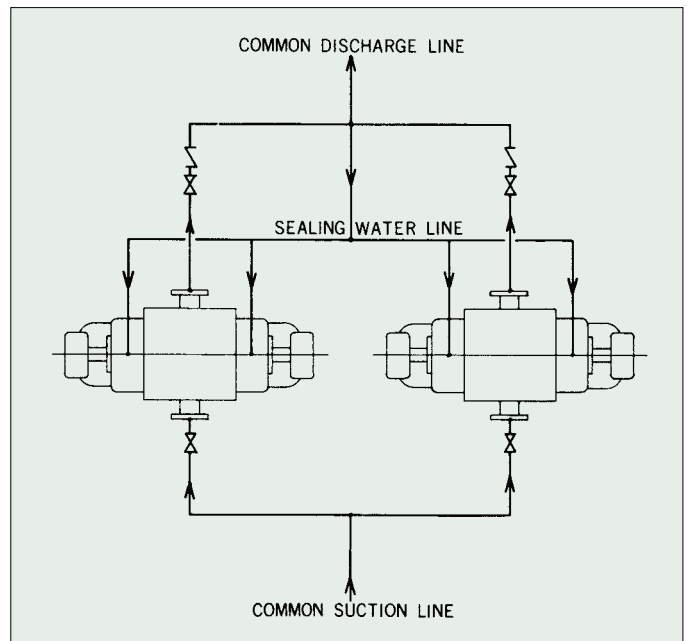


**Handling High Temperature Water**

The pumps are designed to handle high temperature water above 100°C. They have a jacket around the stuffing box and bearing housing to extend the service life of the gland packing and ball bearings.

**Sealing Water**

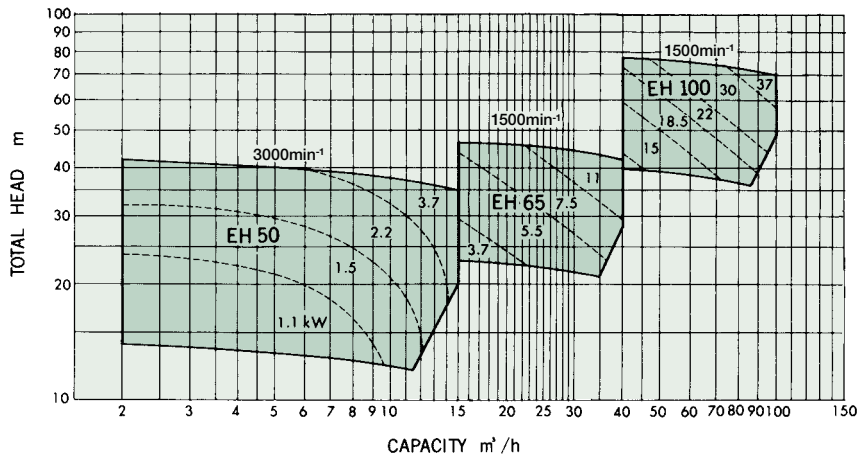
When 2 pumps are installed, and one is used as a working pump and the other as a stand-by pump, air will enter the stand-by pump through the stuffing box, impairing the performance of the working pump. In order to prevent this, sealing water pressure is fed from the common discharge line to the pump's stuffing box.



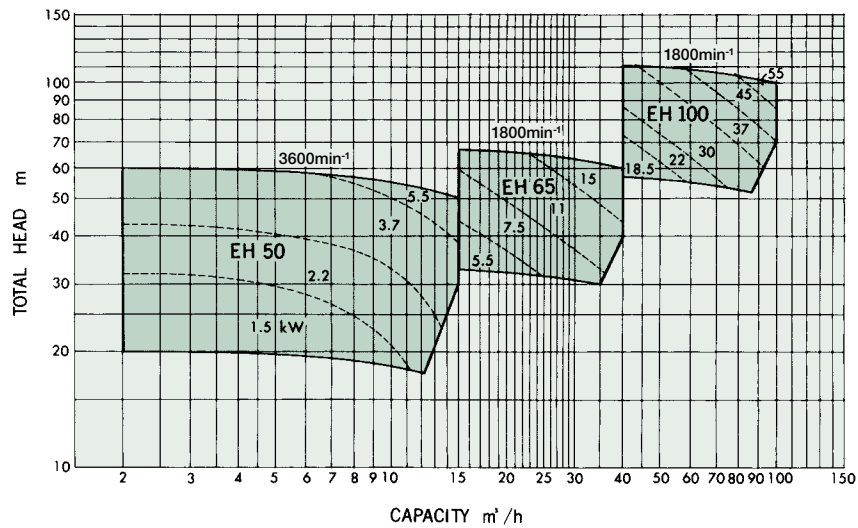
## GENERAL CHARACTERISTICS

Item	Model	EH 50	EH 65	EH 100
Number of stages		1	2	2
Rotation		Clockwise when viewed from the driver		
Suction bore (mm)		65	125	200
Discharge bore (mm)		50	65	100
Ball bearings		6306VV + 6307VV	6307	6309
Service life (hr)		20000	60000	60000
Amount of LO filled (ℓ)		Not necessary	0.6	1.0
Cooling water required (m <sup>3</sup> /h)		Not required	1.0	1.4
Stuffing box seal		Gland packing or mechanical seal		
Weight with baseplate (kg)		90	380	690

### 50Hz



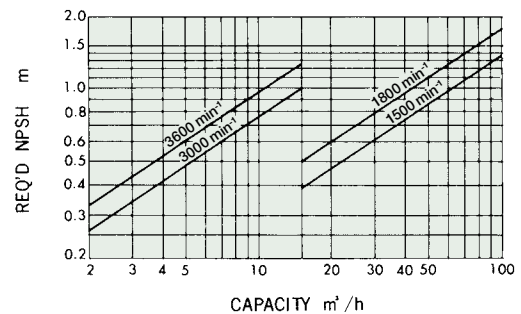
### 60Hz



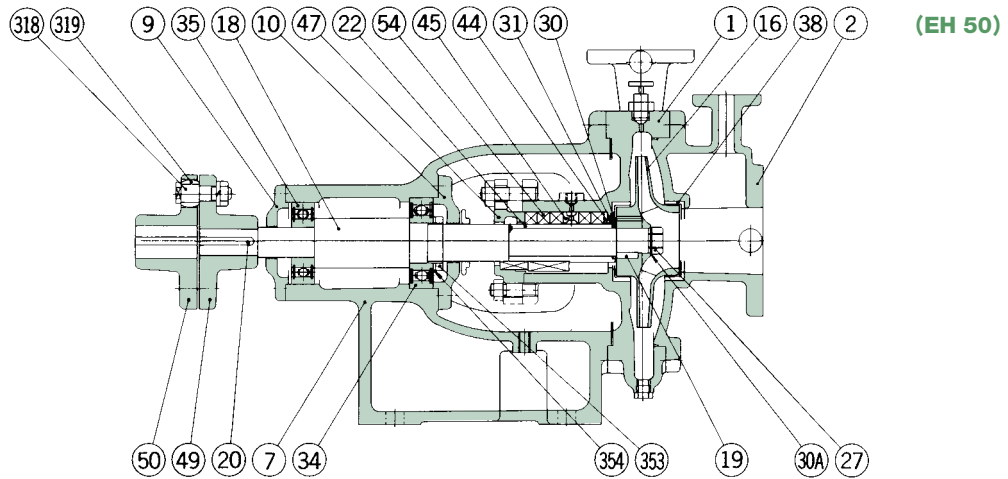
### NPSH

In order for the pump to be operated safely without causing cavitation, the available NPSH must be greater than the required NPSH of the pump. The required NPSH at the design point is shown on the right chart.

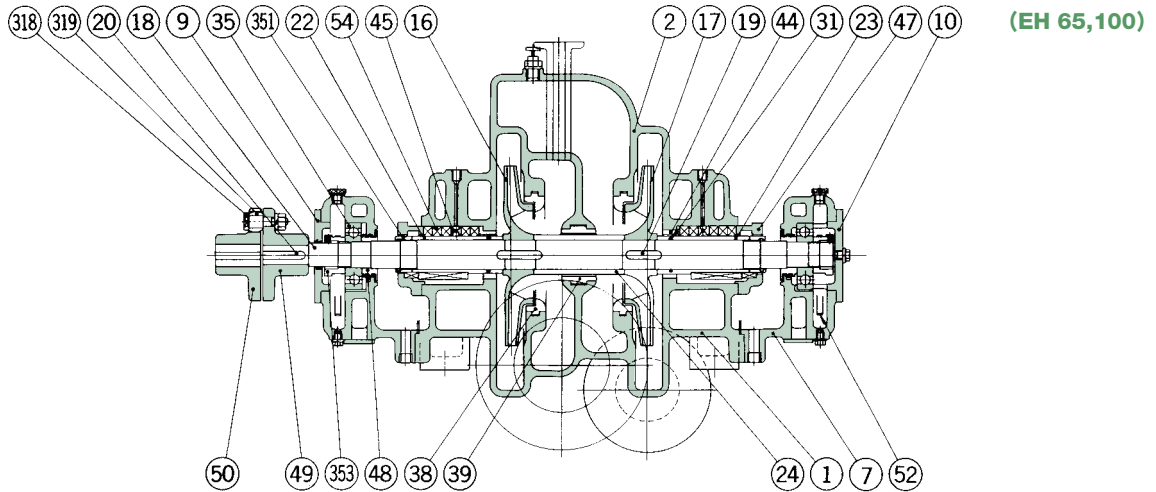
The available NPSH must be set giving a sufficient margin for the required NPSH.



DESIGN & STANDARD MATERIALS

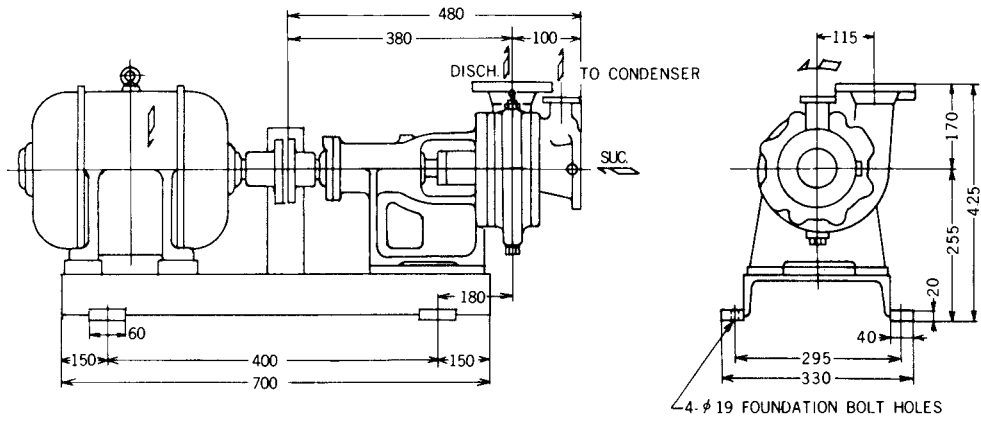


PART NO.	NAME OF PART	MATERIAL		REQ.NO. FOR 1 PUMP	PART NO.	NAME OF PART	MATERIAL		REQ.NO. FOR 1 PUMP
		NAME	JIS				NAME	JIS	
1	VOLUTE CASING	CAST IRON	FC200	1	34, 35	BALL BEARING	SPECIAL STEEL		1
2	VOLUTE COVER	"	"	1	38	MOUTH RING	BRONZE	CAC403	2
7	BEARING HOUSING	"	"	1	44	NECK BUSH	"	CAC406	1
9, 10	BEARING COVER	"	"	2	45	SEALING RING	SYNTHETIC RESIN		1
16	IMPELLER	PHOSPHOR BRONZE	CAC502A	1	47	GLAND	BRONZE	CAC406	1
18	IMPELLER SHAFT	STAINLESS STEEL	SUS403	1	49, 50	COUPLING	DUCTILE CAST IRON	FCD400	2
22	SLEEVE	"	"	1	54	GLAND PACKING	CARBONIZED FIBER		1 SET
27	IMPELLER NUT	"	SUS304	1	318	COUPLING BOLT & NUT	STEEL	SS400	1 SET
30	WASHER	"	"	1	319	COUPLING RING	RUBBER		1 SET

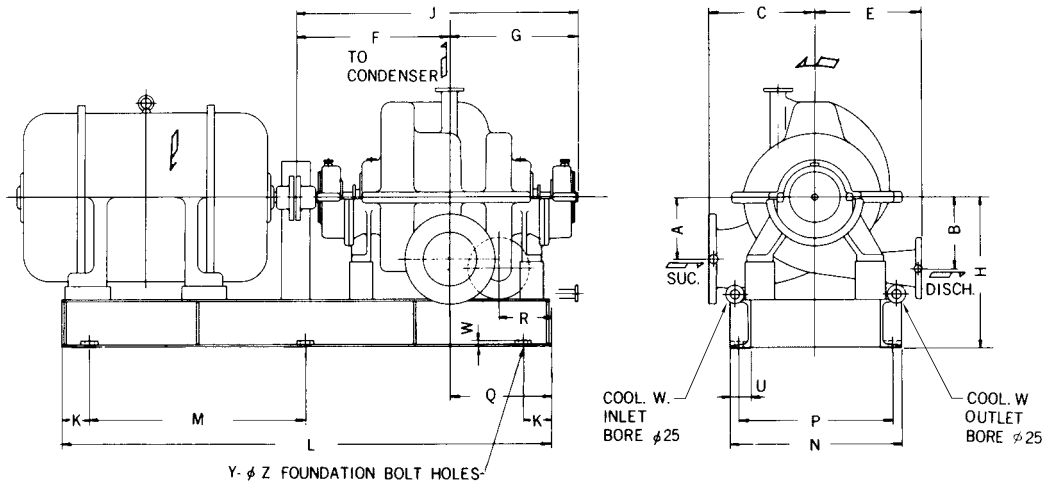


PART NO.	NAME OF PART	MATERIAL		REQ.NO. FOR 1 PUMP	PART NO.	NAME OF PART	MATERIAL		REQ.NO. FOR 1 PUMP
		NAME	JIS				NAME	JIS	
1	VOLUTE CASING	CAST IRON	FC200	1	39	CASING RING	BRONZE	CAC406	1
2	VOLUTE COVER	"	"	1	44	NECK BUSH	"	"	2
7	BEARING HOUSING	"	"	2 SETS	45	SEALING RING	SYNTHETIC RESIN		2
9, 10	BEARING COVER	"	"	2	47	GLAND	BRONZE	CAC406	2
16, 17	IMPELLER	PHOSPHOR BRONZE	CAC502A	2	49, 50	COUPLING	DUCTILE CAST IRON	FCD400	2
18	IMPELLER SHAFT	STAINLESS STEEL	SUS403	1	52	OIL RING	BRONZE	CAC406	2
22, 23	SLEEVE	"	"	2	54	GLAND PACKING	CARBONIZED FIBER		2 SETS
24	SLEEVE	"	"	1	318	COUPLING BOLT & NUT	STEEL	SS400	1 SET
35	BALL BEARING	SPECIAL STEEL		2	319	COUPLING RING	RUBBER		1 SET
38	MOUTH RING	BRONZE	CAC403	2					

EH 50



EH 65,100



	mm																			
Model	A	B	C	E	F	G	H	J	K	L	M	N	P	Q	R	U	W	Y	Z	
EH 65	180	180	300	300	500	450	450	950	110	1320	550	480	420	300	165	75	25	6	27	
EH 100	200	230	330	330	615	505	510	1120	150	1750	725	580	520	380	235	75	25	6	27	