

# VEP Series



## Standard specifications

### Structure

- Drive: Direct drive motor
- Gas seal: V-ring
- Pump body piping: G-PP
- Casing: Integrated molded volute type
- Impeller: Closed type (Shaft sleeve integrated)
- Operating temperature range: PP: 0 to 80°C
- Rotating direction: Clockwise  
(When viewed from the motor side)
- Flange: Equivalent to JIS 10K RF
- Motor: 2-pole induction motor with general-purpose flange, for outdoor use

## Model identification

**VEP - 040 3 F 02 A N N A**

① ② ③ ④ ⑤ ⑥ ⑦ ⑧ ⑨

### ① Name

### ② Nozzle diameter

- 025: 25A × 25A    040: 40A × 40A
- 050: 50A × 50A    065: 65A × 65A
- 080: 80A × 80A    100: 100A × 100A

### ③ Frame No.

### ④ O-ring material

- F: FPM    E: EPDM    Z: Other

### ⑤ Motor output

- 01: 0.75 kW    02: 1.5 kW
- 03: 2.2 kW    05: 3.7 kW
- 07: 5.5 kW    10: 7.5 kW

### ⑥ Body material: G-PP

### ⑦ Installation condition

- T: Outside of tank    N: Inside of tank (PVC)\*
- R: Inside of tank (Other than PVC)

\* Indicates materials of suction strainer, discharge pipe and bed plate.

### ⑧ Flange type

- F: Flange type    N: Tread type\*

\* If either the suction or discharge side is of flange type, it is indicated as "F".

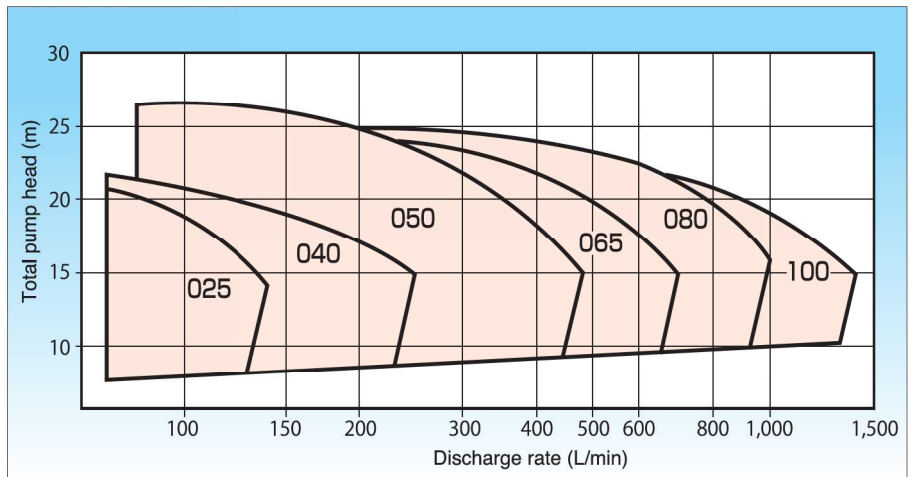
### ⑨ Connection bolt material

- A: PP    Blank: SUS304    Z: Other

## Applications

- For circulation of chemicals in etching machines, etc.
- For circulation of plating liquids such as nickel and copper
- For circulation of pickling liquids for wire drawing
- For circulation of waste gas absorbing liquids
- Applicable as circulation pump. Can be installed both inside and outside tank.
- Other than the above, applicable for liquid feed from pits

## 50 Hz model capacity chart



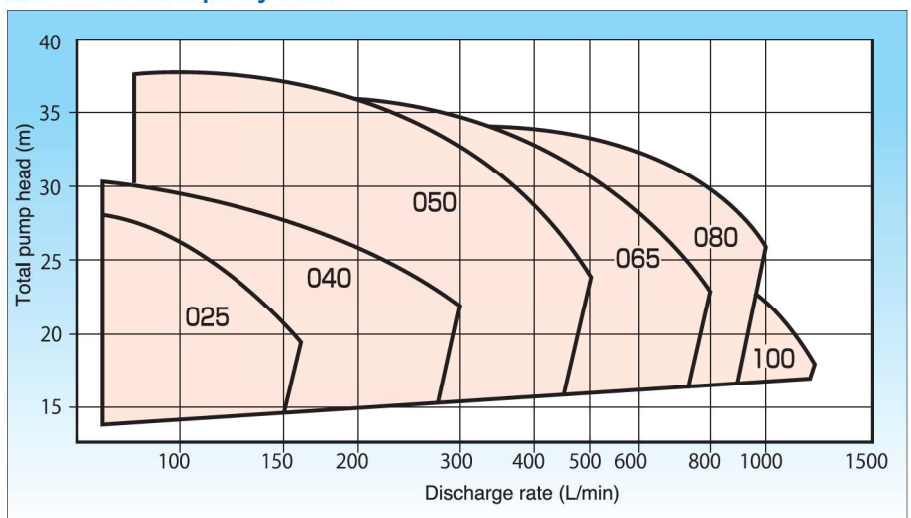
## 50 Hz model specifications table

Model	Nozzle diameter (mm)	Discharge rate (L/min)	Total pump head (m)
VEP-0251	25	60	10
VEP-0253		60	14
VEP-0255		90	15
VEP-0401	40	150	9
VEP-0403		200	15
VEP-0405		240	15
VEP-0501	50	290	10
VEP-0503		300	15
VEP-0505		350	20

Model	Nozzle diameter (mm)	Discharge rate (L/min)	Total pump head (m)
VEP-0651	65	400	12
VEP-0653		500	15
VEP-0655		500	18
VEP-0801	80	700	10
VEP-0803		800	15
VEP-0805		900	16
VEP-1001	100	1,000	10
VEP-1003		1,200	15

Motor output is given for liquids with a specific gravity of 1.0 at the target point.

## 60 Hz model capacity chart



## 60 Hz model specifications table

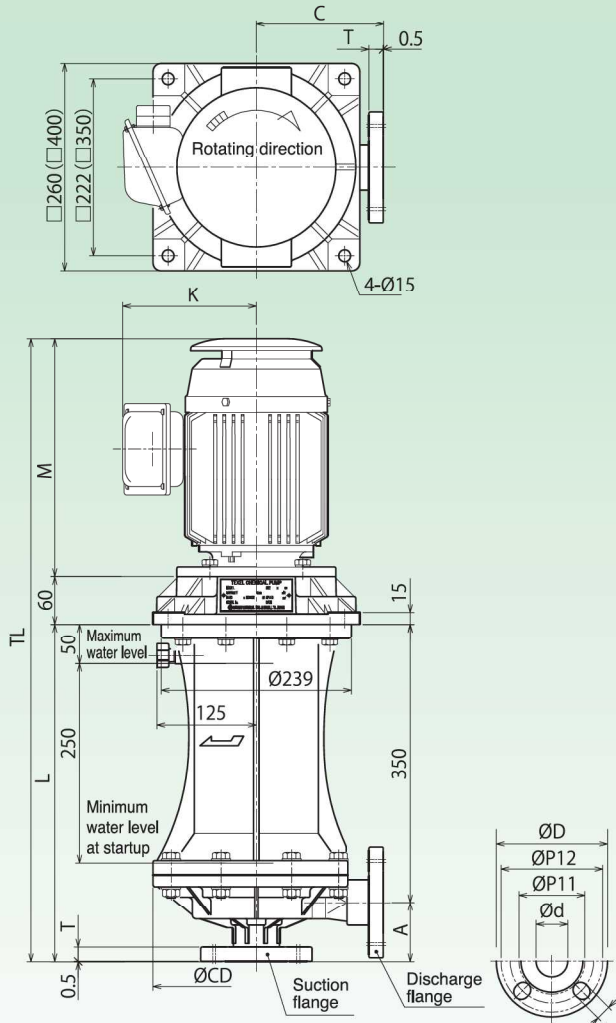
Model	Nozzle diameter (mm)	Discharge rate (L/min)	Total pump head (m)
VEP-0252	25	50	12
VEP-0254		70	23
VEP-0256		100	23
VEP-0402	40	200	15
VEP-0404		200	22
VEP-0406		240	23
VEP-0502	50	300	15
VEP-0504		350	22
VEP-0506		400	28

Model	Nozzle diameter (mm)	Discharge rate (L/min)	Total pump head (m)
VEP-0652	65	500	18
VEP-0654		600	20
VEP-0656		600	26
VEP-0802	80	800	15
VEP-0804		800	24
VEP-0806		800	29
VEP-1002	100	1,200	15

Motor output is given for liquids with a specific gravity of 1.0 at the target point.

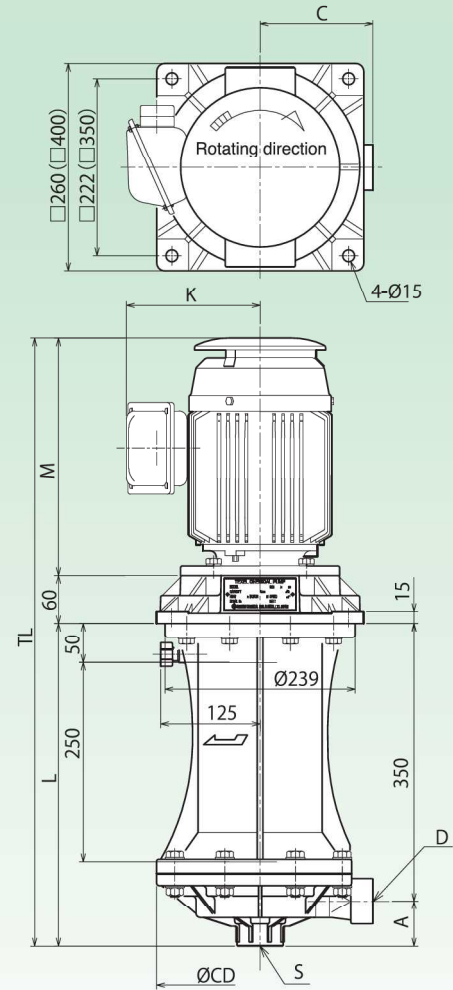
## Dimensional drawing for tank-outside installation type

### • Tank-outside installation, flange type



- In the drawing, ( ) indicates dimensions of the VEP-080/100.
- For nozzle diameters 25 to 65: 0.75 to 3.7 kW x 2P (TEFC)
- For nozzle diameters 80 to 100: 5.5 to 7.5 kW x 2P (TEFC)
- Dimensions of M, K and TL vary depending on motor manufacturer and type.
- The suction and discharge flanges have slots that meet ANSI/DIN/JIS standards.

### • Tank-outside installation, thread type



- In the drawing, ( ) indicates dimensions of the VEP-080/100.
- For nozzle diameters 25 to 65: 0.75 to 3.7 kW x 2P (TEFC)
- For nozzle diameters 80 to 100: 5.5 to 7.5 kW x 2P (TEFC)
- Dimensions of M, K and TL vary depending on motor manufacturer and type.
- The suction and discharge flanges have parallel internal threads for piping.

## Dimensions table for tank-outside installation type

Model	Flange type	Body				Suction/Discharge flange							Body weight (kg)	
		A	L	C	φCD	S	D	φd	φP11	φP12	φD	T		N-φZ
VEP-025	F	75	425	180	(260)	—	—	25	65	109	125	16	4-19	12
	N	57	407	142	(260)	G1"	G1"	—	—	—	—	—	—	
VEP-040	F	75	425	180	(260)	—	—	40	83	128	140	18	4-19	12
	N	57	407	142	(260)	G1" 1/2"	G1" 1/2"	—	—	—	—	—	—	
VEP-050	F	88	438	175	(280)	—	—	50	101	144	155	20	4-19	13
	N	64	414	151	(280)	G2"	G2"	—	—	—	—	—	—	
VEP-065	F	88	438	175	(280)	—	—	65	121	163	175	22	4-19	13
	N	64	414	151	(280)	G2" 1/2"	G2" 1/2"	—	—	—	—	—	—	
VEP-080	F	128	478	240	(336)	—	—	80	131	178	185	22	8-19	20
	N	104	454	216	(336)	G3"	G3"	—	—	—	—	—	—	
VEP-100	F	128	478	240	(336)	—	—	100	156	211	229	22	8-19	20
	N	104	454	216	(336)	G4"	G4"	—	—	—	—	—	—	

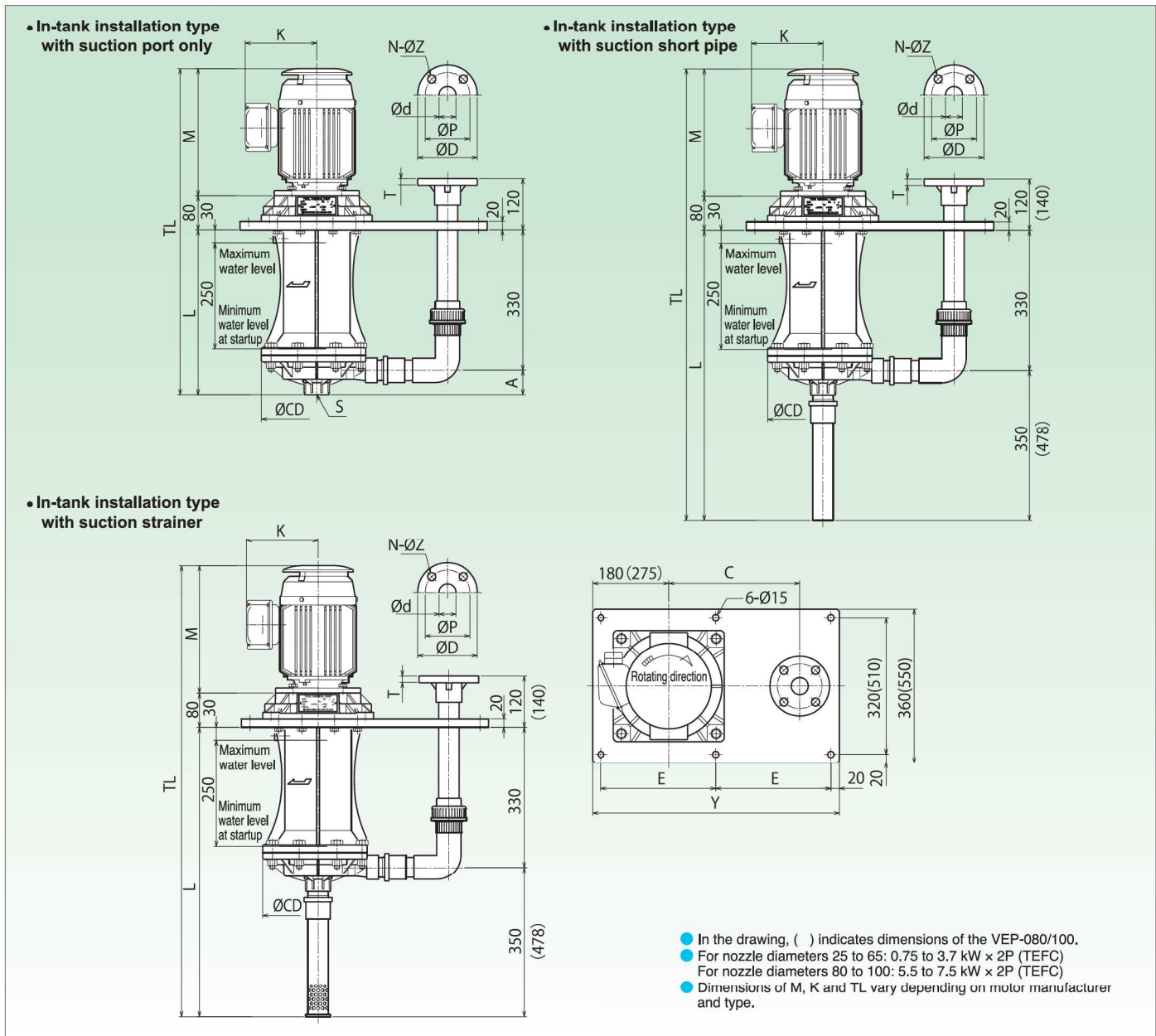
## Motor weight table

Motor output (kW)	0.75	1.5	2.2	3.7	5.5	7.5
Weight (kg)	19	27	27	51	73	73

The motor weight is not included in the body weight.

# VEP Series

## Dimensional drawing for in-tank installation type



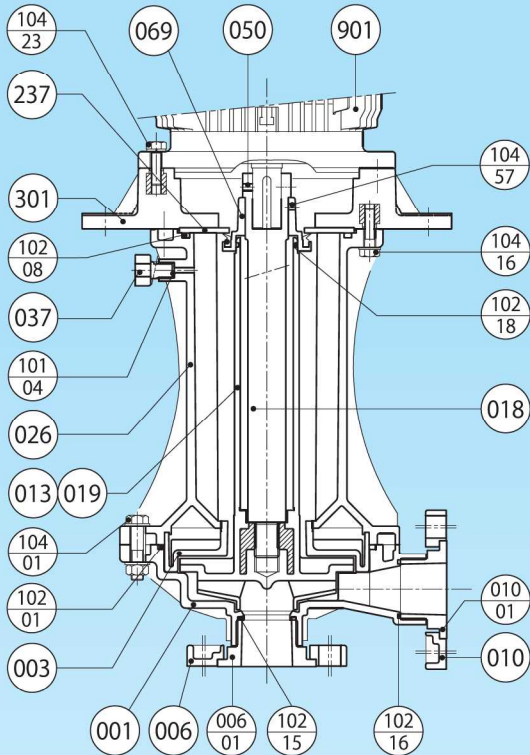
## Dimensions table for in-tank installation type

Model	Type	Body						Suction port	Discharge flange					Body weight (kg)
		A	L	C	φCD	E	Y	S	φd	φP	φD	T	N - φZ	
VEP-025	Suction port only	57	387	267	(260)	245	530	G1"	25	90	125	15	4 - 19	16
VEP-040		57	387	307	(260)	270	580	G1" 1/2"	40	105	140	16	4 - 19	18
VEP-050		64	398	345	(280)	295	630	G2"	50	120	155	20	4 - 19	19
VEP-065		64	398	359	(280)	305	650	G2" 1/2"	65	140	175	22	4 - 19	20
VEP-080		104	434	415	(336)	380	800	G3"	80	150	185	22	8 - 19	36
VEP-100		104	434	487	(336)	430	900	G4"	100	175	210	22	8 - 19	42
VEP-025	With suction short pipe	—	680	267	(260)	245	530	—	25	90	125	15	4 - 19	16
VEP-040		—	680	307	(260)	270	580	—	40	105	140	16	4 - 19	18
VEP-050		—	680	345	(280)	295	630	—	50	120	155	20	4 - 19	19
VEP-065		—	680	359	(280)	305	650	—	65	140	175	22	4 - 19	20
VEP-080		—	808	415	(336)	380	800	—	80	150	185	22	8 - 19	36
VEP-100		—	808	487	(336)	430	900	—	100	175	210	22	8 - 19	42
VEP-025	With suction strainer	—	680	267	(260)	245	530	—	25	90	125	15	4 - 19	16
VEP-040		—	680	307	(260)	270	580	—	40	105	140	16	4 - 19	18
VEP-050		—	680	345	(280)	295	630	—	50	120	155	20	4 - 19	19
VEP-065		—	680	359	(280)	305	650	—	65	140	175	22	4 - 19	20
VEP-080		—	808	415	(336)	380	800	—	80	150	185	22	8 - 19	36
VEP-100		—	808	487	(336)	430	900	—	100	175	210	22	8 - 19	42

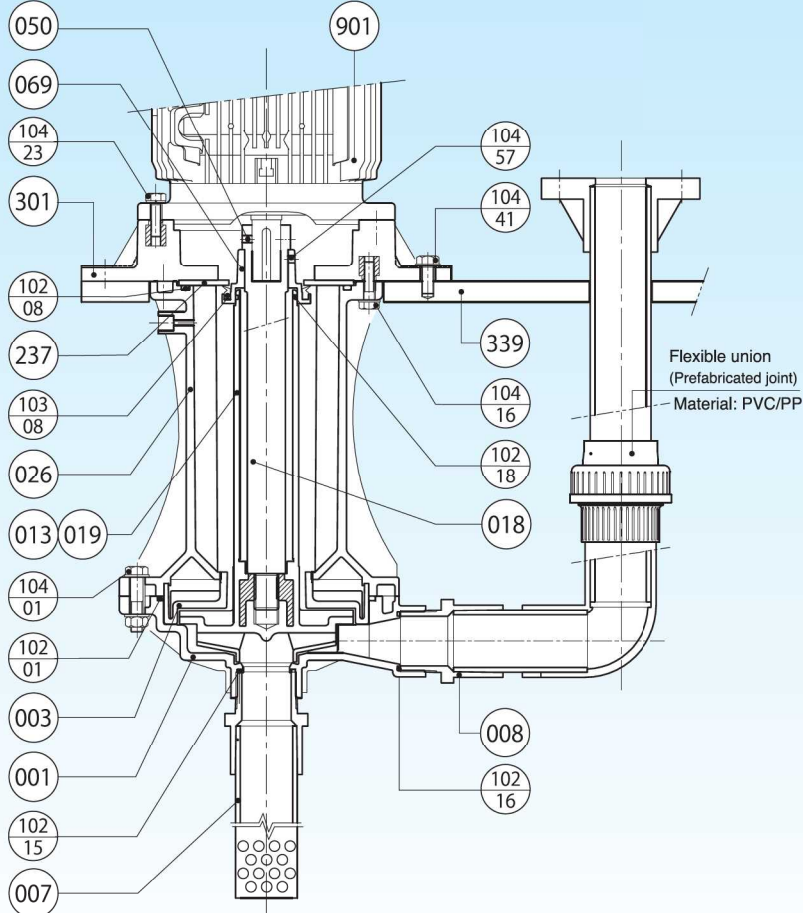
The motor weight is not included in the body weight.

■ Cross-section structural drawing

• Tank-outside installation type



• In-tank installation type



Part No.	Part name	Material	Q'ty
001	Casing	G-PP	1
003	Casing cover ring	G-PP	1
006	Suction flange	G-PP	1
006-01	Suction flange adaptor	G-PP	1
010	Discharge flange	G-PP	1
010-01	Discharge flange adaptor	G-PP	1
013	Impeller (Shaft sleeve integrated)	G-PP	1
018	Main shaft	S45C	1
019	Shaft sleeve	PP	1
026	Pump body piping	G-PP	1
037	Air vent plug	PP	1
050	Main shaft set screw	SCM	2
069	Gas seal support	G-PP	1
101-04	Gasket (Air vent plug)	FPM	1
102-01	O-ring (Casing)	FPM/EPDM	1
102-08	O-ring (Gas seal plate)	EPDM	1
102-15	O-ring (Suction flange)	FPM/EPDM	1
102-16	O-ring (Discharge flange)	FPM/EPDM	1
102-18	O-ring (Gas seal support)	EPDM	1
103-08	Gas seal (V-ring)	FPM	1
104-01	Casing bolt/nut	SUS304	1 set
104-16	Pump body piping bolt	SUS304	8
104-23	Motor bolt	SUS304	4
104-57	Gas seal support set screw	SCM	2
237	Gas seal plate	C-PTFE	1
301	Motor base	G-PP	1
901	Motor		1

Part No.	Part name	Material	Q'ty
001	Casing	G-PP	1
003	Casing cover ring	G-PP	1
007	Suction strainer	PVC/PP	1 set
008	Discharge pipe	PVC/PP	1 set
013	Impeller (Shaft sleeve integrated)	G-PP	1
018	Main shaft	S45C	1
019	Shaft sleeve	PP	1
026	Pump body piping	G-PP	1
050	Main shaft set screw	SCM	2
069	Gas seal support	G-PP	1
102-01	O-ring (Casing)	FPM/EPDM	1
102-08	O-ring (Gas seal plate)	EPDM	1
102-15	O-ring (Suction flange)	FPM/EPDM	1
102-16	O-ring (Discharge flange)	FPM/EPDM	1
102-18	O-ring (Gas seal support)	EPDM	1
103-08	Gas seal (V-ring)	FPM	1
104-01	Casing bolt/nut	PP	1 set
104-16	Pump body piping bolt	SUS304	8
104-23	Motor bolt	SUS304	4
104-41	Base plate bolt	SUS304	4
104-57	Gas seal support set screw	SCM	2
237	Gas seal plate	C-PTFE	1
301	Motor base	G-PP	1
339	Base plate	PVC	1
901	Motor		1