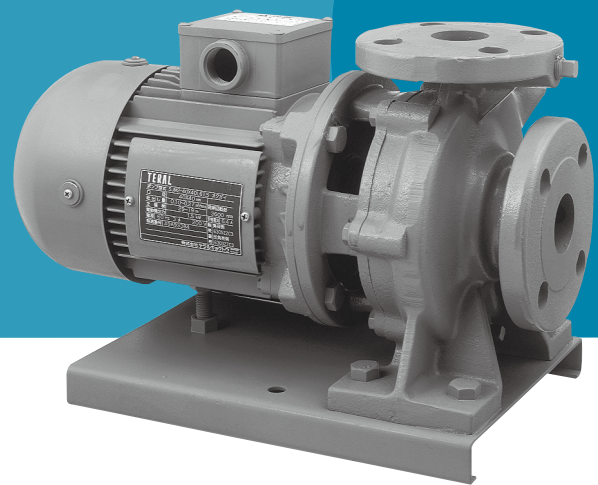


Motor pumps

# SJM2/SJM3

**TERAL**

50Hz



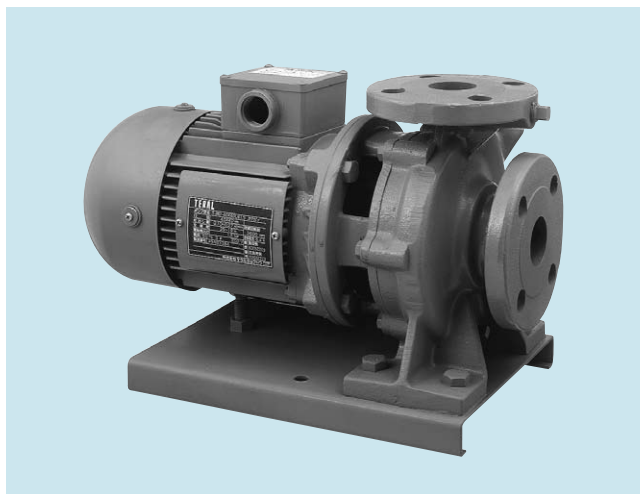
**TERAL INC.**

## ■ Uses

- General water supply for buildings, condominiums, etc.
- Circulation of cold/warm water
- Conveyance of industrial water
- Conveyance and distribution of tap water
- Irrigation of paddies and fields
- Water sprinkling

## ■ Features

- ① Compact and lightweight through the adoption of 2-pole motor.
- ② Large-type-level performance covering a wide range of uses.
- ③ Easy to install, and does not require a large space.
- ④ Easy to perform maintenance and inspection as disassembly and reassembly can be performed without removing piping due to the B.P.O (back pull out) structure.
- ⑤ Advantageous to piping load by stable installation due to straight-up discharge.
- ⑥ Compliant with JIMS (The Japan Society of Industrial Machinery Manufacturers) 10BAR class.



\* Keep in mind that some of the devices in the photo may differ from actual devices in coating color, etc.

## ■ Model type description

**SJM2 - 32 × 32 L 5 .75**

①                      ②                      ③                      ④                      ⑤

- ① Model
- ② Nominal suction diameter (32mm)
- ③ Nominal discharge diameter (32mm)
- ④ Frequency (50Hz)
- ⑤ Output (0.75kW)

## ■ Standard specifications

Pumping liquid	Liquid quality...Fresh water
	Liquid temperature...0 – 80°C
Total suction head	-6m (20°C)
Allowable push-in pressure	See the specifications table.
Structure	Impeller...Closed
	Bearing...Sealed ball bearing
	Shaft seal...Mechanical seal
Material	Impeller...CAC406 or SCS13*1
	Shaft...SUS304
	Casing...FC200 or FCD450*1
Motor	Type...SJM2...Totally-enclosed-fan-cooled outdoor type
	SJM3...Totally-enclosed-fan-cooled outdoor type
	Power supply...Three-phase, 200V
	Synchronous rotation speed...3000min <sup>-1</sup>
Flange spec	JIS 10K (normal) (special dimensions for nominal diameter 32)
Coating color	7.5BG5/1.5

※1 Differs with types.

## ■ Standard accessories

Motor	1
Common base	1
Companion flange (packing, bolt, and nut included) (nominal diameter 32mm only)	2 sets
Priming plug	1

\* Keep in mind that outline drawings, etc., differ from standard drawings in the case of change to special specifications.

## ■ Special specifications

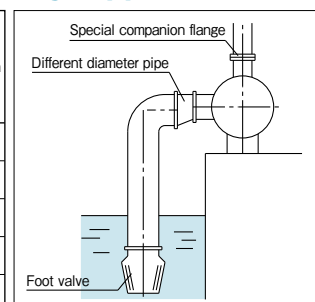
Material change	Total-iron
Motor change	Voltage change

## ■ Special accessories

Foot valve  
Suction cover  
Sluice valve, check valve .....Packing, bolt, and nut included  
Companion flange .....Packing, bolt, and nut included  
\* Standard accessory for 32mm in nominal diameter.  
Special companion flange (for making the discharge diameter identical to the suction diameter)  
.....Nut and bolt included  
Different diameter pipe .....See the illustration below.  
Anti-vibration mount  
Pressure gauge, vacuum gauge, compound gauge .....Cock and pipe included  
Anti-vibration joint

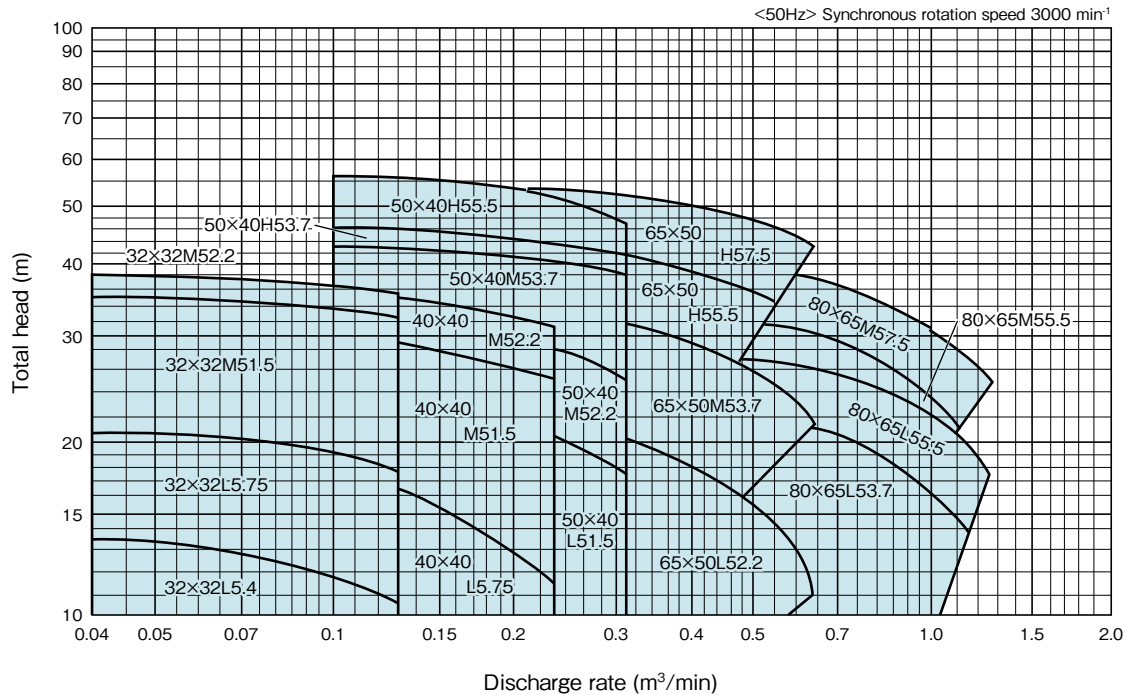
## ■ Foot valve, different diameter pipe, and special companion flange application table

Suction diameter	Discharge diameter	Foot valve nominal diameter mm	Different diameter pipe	Special companion flange
32	32	32	–	–
40	40	40	–	–
50	40	50	–	40/50
65	50	65	–	50/65
80	65	100	80×100	65/80



\* Use the special companion flange for making the discharge diameter identical to the suction diameter.

Performance drawing



Specifications table

Nominal diameter mm		Model	Output kW	Specifications						Allowable push-in pressure MPa
Suction	Discharge			Discharge rate m³/min	Total head m	Discharge rate m³/min	Total head m	Discharge rate m³/min	Total head m	
32	32	SJM2-32x32L5.4	0.4	0.04	13.5	0.09	12	0.13	10.5	0.59
		SJM2-32x32L5.75	0.75	0.04	20.5	0.09	19.5	0.13	18	0.59
		SJM2-32x32M51.5	1.5	0.04	35	0.09	34	0.13	33	0.59
		SJM2-32x32M52.2	2.2	0.04	38	0.09	36.5	0.13	35.5	0.57
40	40	SJM2-40x40L5.75	0.75	0.09	18	0.15	15.5	0.23	11.5	0.59
		SJM2-40x40M51.5	1.5	0.09	30	0.15	28	0.23	25	0.59
		SJM2-40x40M52.2	2.2	0.09	36.5	0.15	34	0.23	31	0.57
50	40	SJM2-50x40L51.5	1.5	0.10	22.5	0.21	21	0.31	17.5	0.59
		SJM2-50x40M52.2	2.2	0.10	32	0.21	29	0.31	25	0.59
		SJM2-50x40M53.7	3.7	0.10	43	0.21	41	0.31	38	0.52
		SJM2-50x40H53.7	3.7	0.10	46.5	0.21	44.5	0.31	41.5	0.49
65	50	SJM3-50x40H55.5	5.5	0.10	56	0.21	53	0.31	47	0.44
		SJM3-65x50L52.2	2.2	0.21	22	0.42	18	0.63	11	0.59
		SJM3-65x50M53.7	3.7	0.21	33	0.42	28.5	0.63	21.5	0.59
		SJM3-65x50H55.5	5.5	0.21	42.5	0.42	38.8	0.55	34	0.56
80	65	SJM3-65x50H57.5	7.5	0.21	53.5	0.42	50.5	0.63	43	0.46
		SJM3-80x65L53.7	3.7	0.42	22.2	0.84	18.3	1.15	14	0.59
		SJM3-80x65L55.5	5.5	0.42	27.5	0.84	23.8	1.25	17.8	0.59
		SJM3-80x65M55.5	5.5	0.42	31.5	0.84	26.5	1.11	20.6	0.59
		SJM3-80x65M57.5	7.5	0.42	39	0.84	33.5	1.25	24.5	0.59

Motor specifications table

Classification		Output kW	Rating			Starting			Heat-resistance class	Bearing	
Phase	Protection method		Voltage V	Current A	Rotation speed min⁻¹	Torque %	Current A	Method		Load side (D.S)	Anti-load side (O.S)
Three-phase	Totally-enclosed-fan-cooled outdoor type	0.4	200	2.0	2880	461	15.9	Direct-on-Line start	F	6204ZCC3	6203ZCC3
		0.75	200	3.3	2880	372	25.2	Direct-on-Line start	F	6205ZCC3	6204ZCC3
		1.5	200	6.4	2830	262	39	Direct-on-Line start	F	6306ZCC3	6205ZCC3
		2.2	200	8.7	2820	313	61.7	Direct-on-Line start	F	6306ZCC3	6205ZCC3
		3.7	200	14.5	2830	336	111	Direct-on-Line start	F	6307ZCC3	6306ZCC3
		5.5	200	21.5	2930	262	154	Direct-on-Line start	F	6308ZCC3	6306ZCC3
		7.5	200	28.5	2920	284	211	Direct-on-Line start	F	6308ZCC3	6306ZCC3

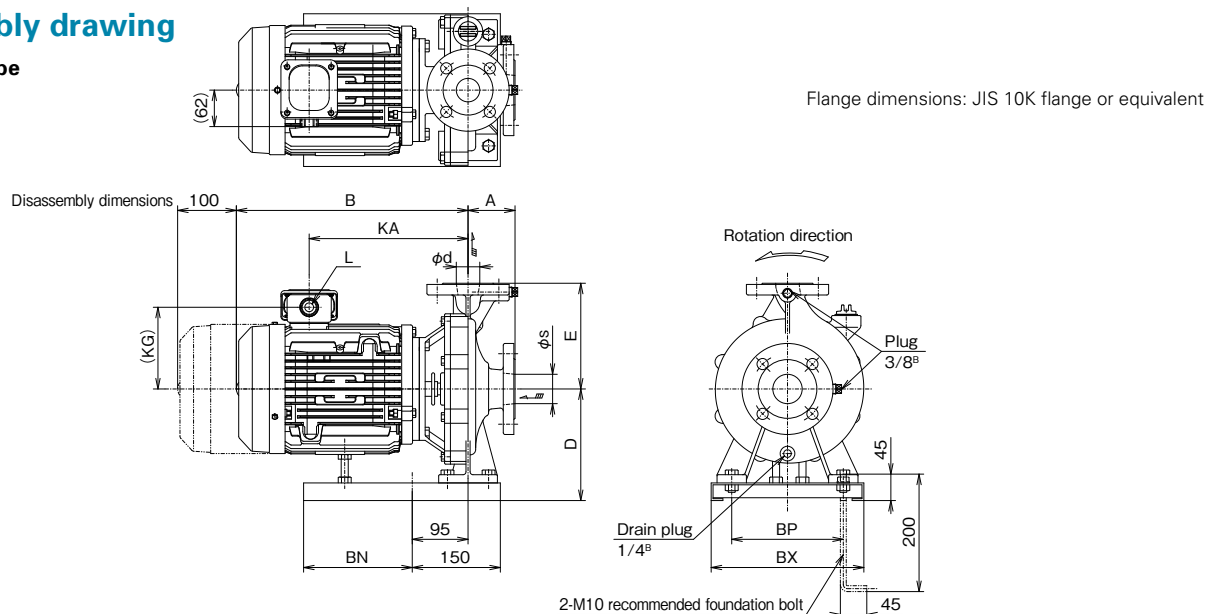
Parts list

Pump type	Mechanical seal type	O-ring (for casing)	O-ring (for priming plug)
SJM2-32x32L5.4	H-16	G140	P22
SJM2-32x32L5.75	H-16	G140	P22
SJM2-32x32M51.5	H-20H	K184	P22
SJM2-32x32M52.2	H-20H	K184	P22
SJM2-40x40L5.75	H-16	G140	P22
SJM2-40x40M51.5	H-20H	K184	P22
SJM2-40x40M52.2	H-20H	K184	P22
SJM2-50x40L51.5	H-20H	G140	P22
SJM2-50x40M52.2	H-20H	K184	P22
SJM2-50x40M53.7	H-20H	K184	P22

Pump type	Mechanical seal type	O-ring (for casing)	O-ring (for priming plug)
SJM2-50x40H53.7	H-20H	K223	P22
SJM3-50x40H55.5	H-25H-1	K223	P22
SJM3-65x50L52.2	H-20H	G140	P22
SJM3-65x50M53.7	H-20H	K184	P22
SJM3-65x50H55.5	H-25H-1	K223	P22
SJM3-65x50H57.5	H-25H-1	K223	P22
SJM3-80x65L53.7	H-20H	K160	P22
SJM3-80x65L55.5	H-25H-1	K160	P22
SJM3-80x65M55.5	H-25H-1	K184	P22
SJM3-80x65M57.5	H-25H-1	K184	P22

Assembly drawing

●SJM2 type



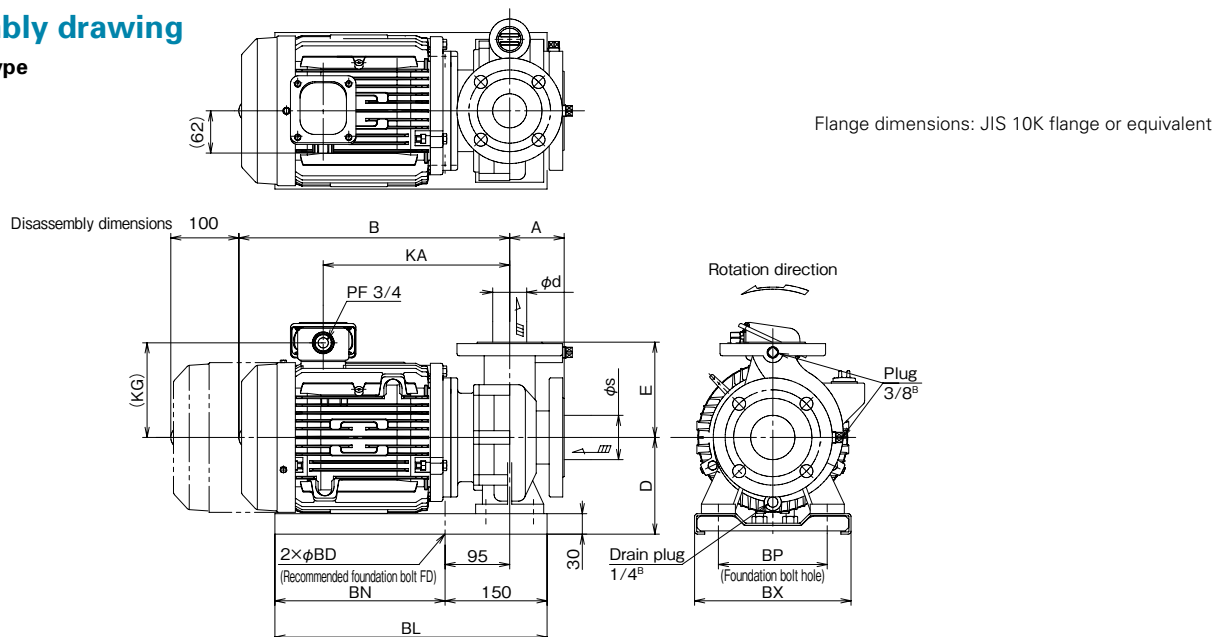
Size table

Nominal diameter		Model	Output kW	Pump and motor							Common base			Approx. mass kg
Suction s	Discharge d			A	B	D	E	KA	KG	L	BN	BX	BP	
32	32	※SJM2-32×32L5.4	0.4	75	295	142	120	217	103	PF $\frac{1}{2}$	150	210	160	28
		※SJM2-32×32L5.75	0.75	75	314	142	120	224	111	PF $\frac{1}{2}$	150	210	160	32
		※SJM2-32×32M51.5	1.5	75	351	162	160	233	118	PF $\frac{3}{4}$	185	260	190	37
		※SJM2-32×32M52.2	2.2	75	351	162	160	233	118	PF $\frac{3}{4}$	185	260	190	38
40	40	SJM2-40×40L5.75	0.75	75	314	142	120	224	111	PF $\frac{1}{2}$	150	210	160	32
		SJM2-40×40M51.5	1.5	75	351	162	160	233	118	PF $\frac{3}{4}$	185	260	190	37
		SJM2-40×40M52.2	2.2	75	351	162	160	233	118	PF $\frac{3}{4}$	185	260	190	39
50	40	SJM2-50×40L51.5	1.5	80	356	142	140	233	118	PF $\frac{3}{4}$	150	210	160	37
		SJM2-50×40M52.2	2.2	80	351	162	160	233	118	PF $\frac{3}{4}$	185	260	190	45
		SJM2-50×40M53.7	3.7	80	390	162	160	233	139	PF $\frac{3}{4}$	185	260	190	58
		SJM2-50×40H53.7	3.7	80	395	190	180	266	139	PF $\frac{3}{4}$	185	260	190	61

※The pump flange nominal diameter of SJM2-32x32 is 40. (The pump nominal diameter is called 32mm according to special companion flange.)

Assembly drawing

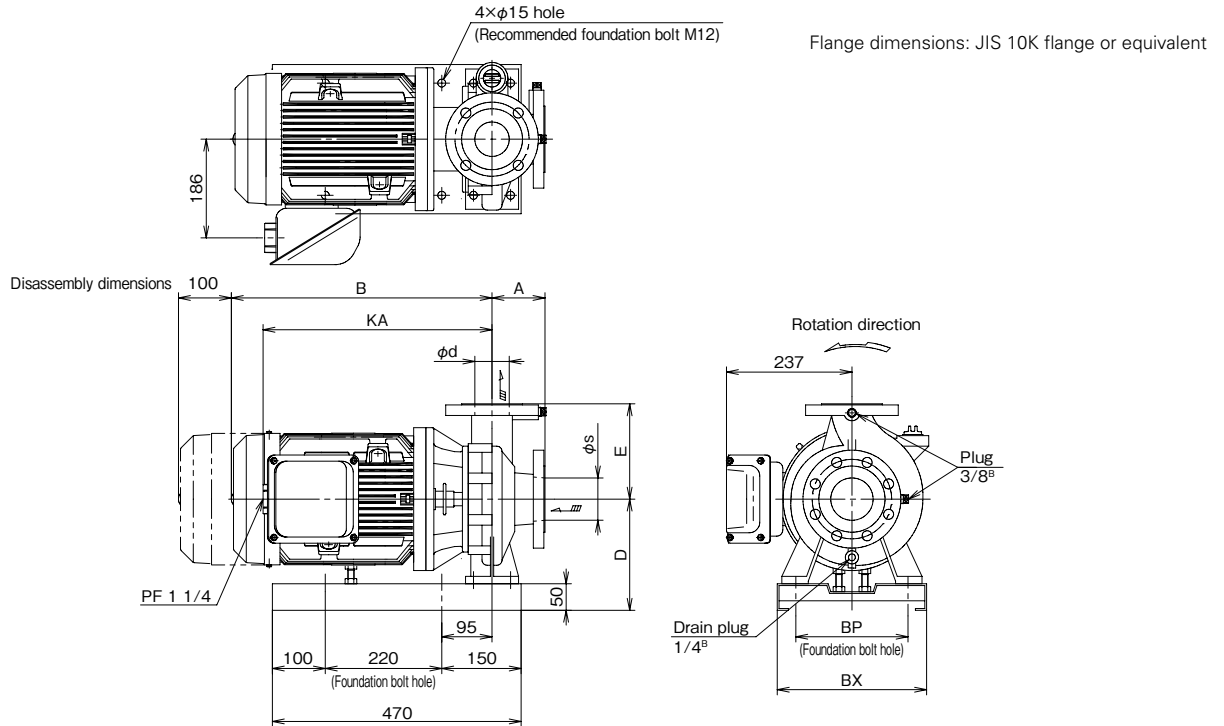
●SJM3 type



Size table

Nominal diameter		Model	Output kW	Pump and motor							Common base					Foundation bolt	Approx. mass kg
Suction s	Discharge d			A	B	D	E	KA	KG	BD	BL	BN	BP	BX	FD		
65	50	SJM3-65×50L52.2	2.2	80	360	142	140	242	118	15	400	250	160	230	M12	32	
		SJM3-65×50M53.7	3.7	80	399	162	160	275	139	12	335	185	190	260	M10	59	
80	65	SJM3-80×65L53.7	3.7	100	399	162	160	275	139	12	335	185	190	260	M10	56	

■ Assembly drawing



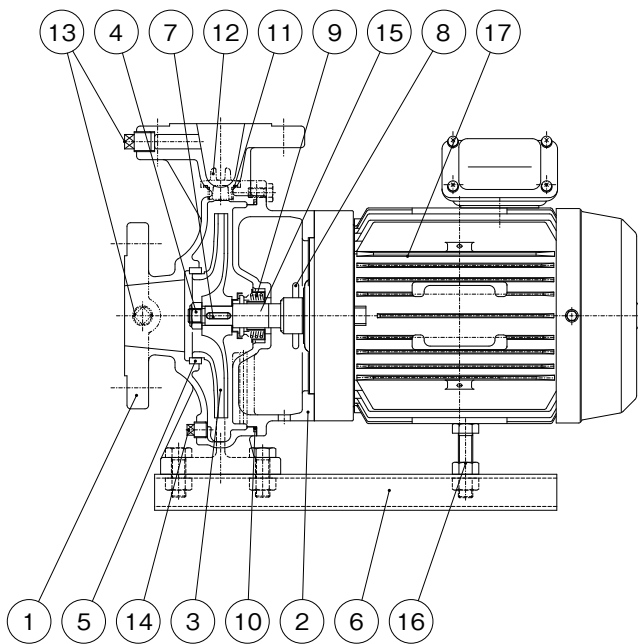
■ Size table

(Unit: mm)

Nominal diameter		Model	Output kW	Pump and motor					Common base		Approx. mass kg
Suction s	Discharge d			A	B	D	E	KA	BP	BX	
50	40	SJM3-50×40H55.5	5.5	80	456	210	180	396	190	260	79
		SJM3-65×50H55.5	5.5	100	456	210	180	396	212	282	82
65	50	SJM3-65×50H57.5	7.5	100	493	210	180	433	212	282	88
		SJM3-80×65L55.5	5.5	100	456	207	160	396	190	260	78
80	65	SJM3-80×65M55.5	5.5	100	456	210	180	396	212	282	80
		SJM3-80×65M57.5	7.5	100	493	210	180	433	212	282	86

Example of internal structure diagram

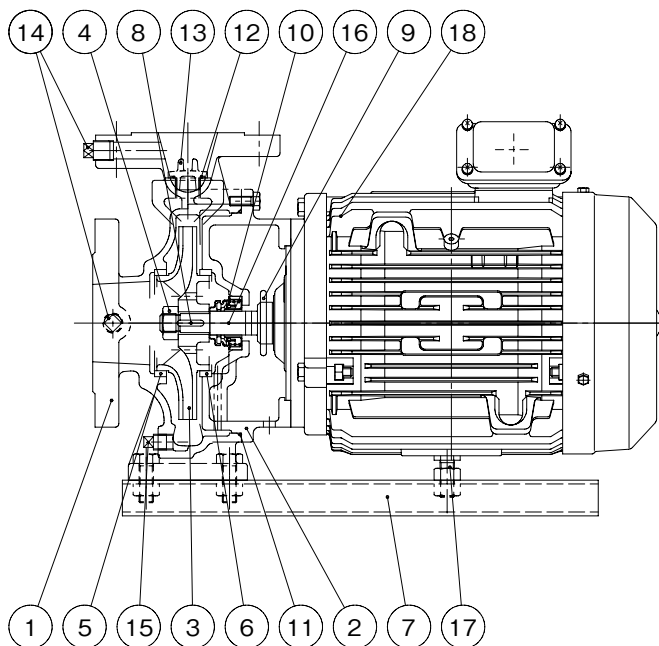
● SJM2 type



Parts list

No.	Part name	Qty	Material
1	Casing	1	FC200
2	Frame	1	FC200
3	Impeller	1	CAC406
4	Impeller nut	1	SUS304
5	Wearing ring	1	CAC406
6	Common bed	1	SS400
7	Key	1	SUS304
8	Deflector	1	CR
9	Mechanical seal	1	CERAMICS~CARBON
10	O-ring	1	NBR
11	O-ring	1	NBR
12	Wearing ring	1	CAC202
13	Plug	1	SS400
14	Plug	1	SS400
15	Motor shaft	1	Wetted part SUS 304
16	Support bolt	2	SS400
17	Motor	1	—

● SJM3 type



No.	Part name	Qty	Material
1	Casing	1	FC200 or FCD450 <sup>※1</sup>
2	Frame	1	FC200
3	Impeller	1	CAC406 or SCS13 <sup>※1</sup>
4	Impeller nut	1	SUS304
5	Wearing ring	1	CAC406
6	Wearing ring	1	CAC406
7	Common base	1	SS400
8	Key	1	SUS304
9	Deflector	1	CR
10	Mechanical seal	1	CERAMICS~CARBON
11	O-ring	1	NBR
12	O-ring	1	NBR
13	Priming plug	1	CAC202
14	Plug	2	SUS304
15	Plug	1	SUS304
16	Motor shaft	1	Wetted part SUS 304
17	Support bolt	2	SS400
18	Motor	1	—

※1 Differs with types.