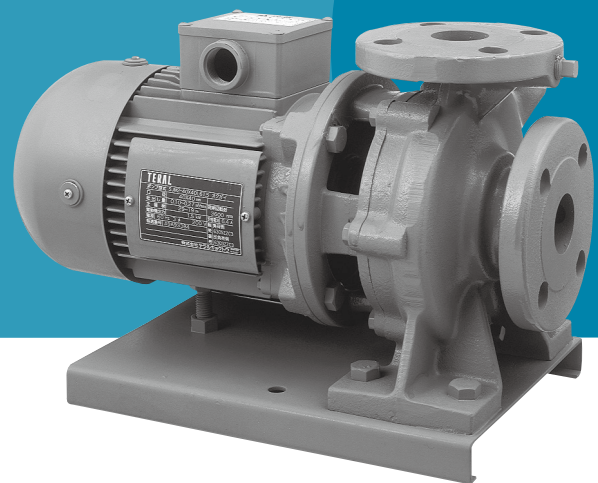


Motor pumps

# SJM2/SJM3

***TERAL***

60Hz



**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.

## ■ Model type description

**SJM2 - 32 × 32 L 6 .75**

①

②

③

④

⑤

① Model

② Nominal suction diameter (32mm)

③ Nominal discharge diameter (32mm)

④ Frequency (60Hz)

⑤ Output (0.75kW)

## ■ Standard specifications

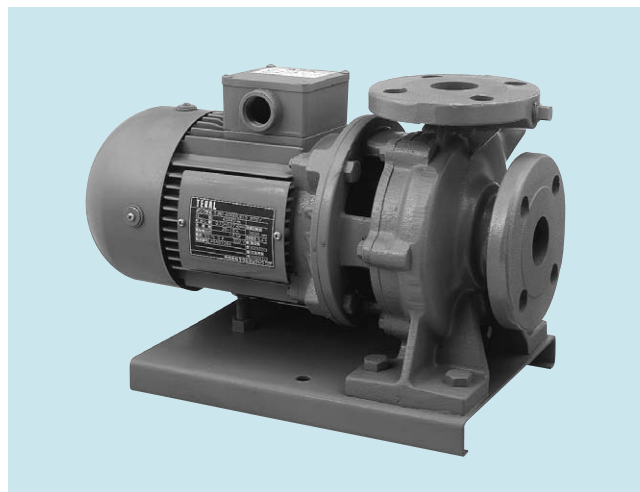
|                            |                                                               |
|----------------------------|---------------------------------------------------------------|
| Pumping liquid             | Liquid quality...Fresh water                                  |
|                            | 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* <sup>1</sup>                      |
|                            | Shaft...SUS304                                                |
|                            | Casing...FC200 or FCD450* <sup>1</sup>                        |
| Motor                      | Type...SJM2...Totally-enclosed-fan-cooled outdoor type        |
|                            | SJM3...Totally-enclosed-fan-cooled outdoor type               |
|                            | Power supply...Three-phase, 200/220V                          |
|                            | Synchronous rotation speed...3600min <sup>-1</sup>            |
| Flange spec                | JIS 10K (normal) (special dimensions for nominal diameter 32) |
| Coating color              | 7.5BG5/1.5                                                    |

\*<sup>1</sup> 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.



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

## ■ Special specifications

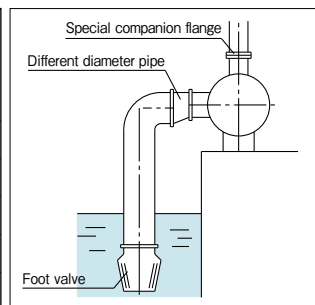
|                 |                |
|-----------------|----------------|
| Material change | Total-iron     |
| Motor change    | Voltage change |

## ■ 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

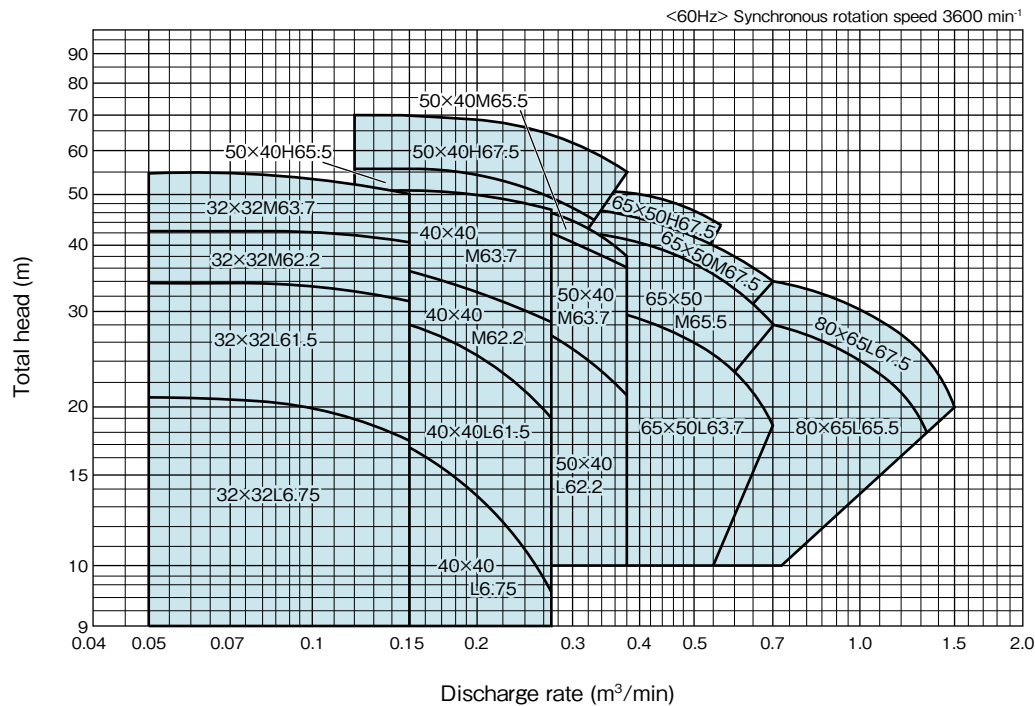
## ■ Foot valve, different diameter pipe, and special companion flange application table

| Nominal diameter mm |           | Foot valve nominal diameter mm | Different diameter pipe | Special companion flange |
|---------------------|-----------|--------------------------------|-------------------------|--------------------------|
| Suction             | Discharge |                                |                         |                          |
| 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        | SJM2-32×32L6.75 | 0.75      | 0.05                  | 21           | 0.1                   | 20           | 0.15                  | 17.5         | 0.59                           |
|                     |           | SJM2-32×32L61.5 | 1.5       | 0.05                  | 34.5         | 0.1                   | 33.5         | 0.15                  | 31.5         | 0.59                           |
|                     |           | SJM2-32×32M62.2 | 2.2       | 0.05                  | 43           | 0.1                   | 42.5         | 0.15                  | 41           | 0.52                           |
|                     |           | SJM2-32×32M63.7 | 3.7       | 0.05                  | 55           | 0.1                   | 53           | 0.15                  | 51.5         | 0.40                           |
| 40                  | 40        | SJM2-40×40L6.75 | 0.75      | 0.1                   | 19           | 0.18                  | 15           | 0.27                  | 9.5          | 0.59                           |
|                     |           | SJM2-40×40L61.5 | 1.5       | 0.1                   | 29           | 0.18                  | 26           | 0.27                  | 19           | 0.59                           |
|                     |           | SJM2-40×40M62.2 | 2.2       | 0.1                   | 38           | 0.18                  | 33.5         | 0.27                  | 28.5         | 0.59                           |
|                     |           | SJM2-40×40M63.7 | 3.7       | 0.1                   | 53           | 0.18                  | 50.5         | 0.27                  | 47           | 0.40                           |
| 50                  | 40        | SJM2-50×40L62.2 | 2.2       | 0.12                  | 31           | 0.25                  | 28           | 0.38                  | 22           | 0.59                           |
|                     |           | SJM2-50×40M63.7 | 3.7       | 0.12                  | 47           | 0.25                  | 43           | 0.38                  | 36           | 0.50                           |
|                     |           | SJM3-50×40M65.5 | 5.5       | 0.12                  | 51           | 0.25                  | 46.5         | 0.38                  | 38.5         | 0.45                           |
|                     |           | SJM3-50×40H65.5 | 5.5       | 0.12                  | 56           | 0.25                  | 51           | 0.33                  | 44.5         | 0.44                           |
| 65                  | 50        | SJM3-50×40H67.5 | 7.5       | 0.12                  | 69.5         | 0.25                  | 65           | 0.38                  | 54.5         | 0.29                           |
|                     |           | SJM3-65×50L63.7 | 3.7       | 0.25                  | 31.5         | 0.5                   | 26           | 0.7                   | 18.5         | 0.59                           |
|                     |           | SJM3-65×50M65.5 | 5.5       | 0.25                  | 43           | 0.5                   | 36.8         | 0.7                   | 28           | 0.55                           |
|                     |           | SJM3-65×50M67.5 | 7.5       | 0.25                  | 47.8         | 0.5                   | 41.5         | 0.7                   | 34           | 0.49                           |
| 80                  | 65        | SJM3-65×50H67.5 | 7.5       | 0.25                  | 52.2         | 0.5                   | 46.5         | 0.57                  | 43.7         | 0.46                           |
|                     |           | SJM3-80×65L65.5 | 5.5       | 0.5                   | 29.2         | 1.0                   | 24           | 1.32                  | 18           | 0.59                           |
|                     |           | SJM3-80×65L67.5 | 7.5       | 0.5                   | 35           | 1.0                   | 30           | 1.5                   | 20           | 0.59                           |

## Motor specifications table

| Classification |                                          | Output kW | Rating    |           |                                  | Starting |           |                      | Heat-resistance class | Bearing         |                      |
|----------------|------------------------------------------|-----------|-----------|-----------|----------------------------------|----------|-----------|----------------------|-----------------------|-----------------|----------------------|
| Phase          | Protection method                        |           | Voltage V | Current A | Rotation speed min <sup>-1</sup> | Torque % | Current A | Method               |                       | Load side (D.S) | Anti-load side (O.S) |
| Three-phase    | Totally-enclosed-fan-cooled outdoor type | 0.75      | 200/220   | 3.1/3.0   | 3450/3480                        | 307/372  | 23.9/26.3 | Direct-on-Line start | F                     | 6205ZZC3        | 6204ZZC3             |
|                |                                          | 1.5       | 200/220   | 6.2/5.8   | 3370/3420                        | 241/291  | 37.5/41.5 | Direct-on-Line start | F                     | 6306ZZC3        | 6205ZZC3             |
|                |                                          | 2.2       | 200/220   | 8.6/7.8   | 3360/3410                        | 255/309  | 54.6/60.0 | Direct-on-Line start | F                     | 6306ZZC3        | 6205ZZC3             |
|                |                                          | 3.7       | 200/220   | 14.0/13.0 | 3380/3420                        | 245/295  | 96/105    | Direct-on-Line start | F                     | 6307ZZC3        | 6306ZZC3             |
|                |                                          | 5.5       | 200/220   | 21.0/19.5 | 3520/3530                        | 215/260  | 132/145   | Direct-on-Line start | F                     | 6308ZZC3        | 6306ZZC3             |
|                |                                          | 7.5       | 200/220   | 27.5/25.0 | 3510/3520                        | 232/281  | 178/196   | Direct-on-Line start | F                     | 6308ZZC3        | 6306ZZC3             |

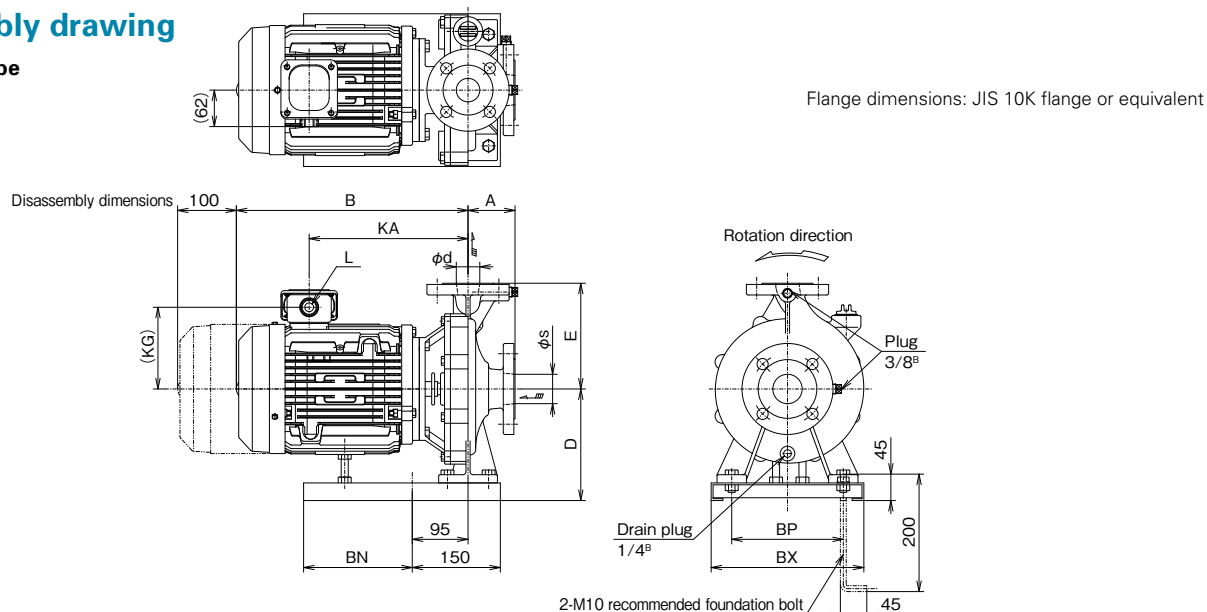
## Parts list

| Pump type       | Mechanical seal type | O-ring (for casing) | O-ring (for priming plug) |
|-----------------|----------------------|---------------------|---------------------------|
| SJM2-32×32L6.75 | H-16                 | G140                | P22                       |
| SJM2-32×32L61.5 | H-20H                | G140                | P22                       |
| SJM2-32×32M62.2 | H-20H                | K184                | P22                       |
| SJM2-32×32M63.7 | H-20H                | K184                | P22                       |
| SJM2-40×40L6.75 | H-16                 | G140                | P22                       |
| SJM2-40×40L61.5 | H-20H                | G140                | P22                       |
| SJM2-40×40M62.2 | H-20H                | K184                | P22                       |
| SJM2-40×40M63.7 | H-20H                | K184                | P22                       |
| SJM2-50×40L62.2 | H-20H                | G140                | P22                       |
| SJM2-50×40M63.7 | H-20H                | K184                | P22                       |

| Pump type       | Mechanical seal type | O-ring (for casing) | O-ring (for priming plug) |
|-----------------|----------------------|---------------------|---------------------------|
| SJM3-50×40M65.5 | H-25H-1              | K184                | P22                       |
| SJM3-50×40H65.5 | H-25H-1              | K223                | P22                       |
| SJM3-50×40H67.5 | H-25H-1              | K223                | P22                       |
| SJM3-65×50L63.7 | H-20H                | G140                | P22                       |
| SJM3-65×50M65.5 | H-25H-1              | K184                | P22                       |
| SJM3-65×50M67.5 | H-25H-1              | K184                | P22                       |
| SJM3-65×50H67.5 | H-25H-1              | K223                | P22                       |
| SJM3-80×65L65.5 | H-25H-1              | K160                | P22                       |
| SJM3-80×65L67.5 | H-25H-1              | K160                | P22                       |

## Assembly drawing

### ●SJM2 type



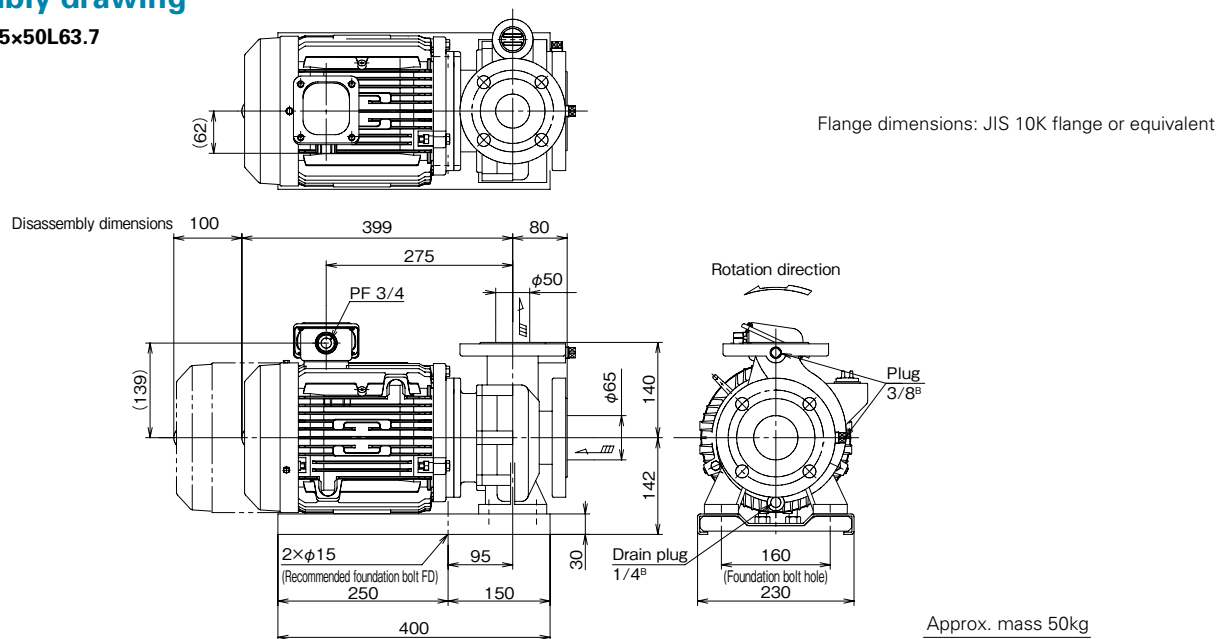
## Size table

| Nominal diameter |                | Model            | Output<br>kW | Pump and motor |     |     |     |     |     |                  | Common base |     |     | Approx.<br>mass<br>kg |
|------------------|----------------|------------------|--------------|----------------|-----|-----|-----|-----|-----|------------------|-------------|-----|-----|-----------------------|
| Suction<br>s     | Discharge<br>d |                  |              | A              | B   | D   | E   | KA  | KG  | L                | BN          | BX  | BP  |                       |
| 32               | 32             | ※SJM2-32×32L6.75 | 0.75         | 75             | 314 | 142 | 120 | 224 | 111 | PF $\frac{1}{2}$ | 150         | 210 | 160 | 32                    |
|                  |                | ※SJM2-32×32L61.5 | 1.5          | 75             | 356 | 142 | 120 | 233 | 118 | PF $\frac{3}{4}$ | 150         | 210 | 160 | 36                    |
|                  |                | ※SJM2-32×32M62.2 | 2.2          | 75             | 351 | 162 | 160 | 233 | 118 | PF $\frac{3}{4}$ | 185         | 260 | 190 | 41                    |
|                  |                | ※SJM2-32×32M63.7 | 3.7          | 75             | 390 | 162 | 160 | 266 | 139 | PF $\frac{3}{4}$ | 185         | 260 | 190 | 54                    |
| 40               | 40             | SJM2-40×40L6.75  | 0.75         | 75             | 314 | 142 | 120 | 224 | 111 | PF $\frac{1}{2}$ | 150         | 210 | 160 | 32                    |
|                  |                | SJM2-40×40L61.5  | 1.5          | 75             | 356 | 142 | 120 | 224 | 118 | PF $\frac{3}{4}$ | 150         | 210 | 160 | 36                    |
|                  |                | SJM2-40×40M62.2  | 2.2          | 75             | 351 | 162 | 160 | 233 | 118 | PF $\frac{3}{4}$ | 185         | 260 | 190 | 42                    |
|                  |                | SJM2-40×40M63.7  | 3.7          | 75             | 390 | 162 | 160 | 266 | 139 | PF $\frac{3}{4}$ | 185         | 260 | 190 | 55                    |
| 50               | 40             | SJM2-50×40L62.2  | 2.2          | 80             | 356 | 142 | 140 | 233 | 118 | PF $\frac{3}{4}$ | 150         | 210 | 160 | 40                    |
|                  |                | SJM2-50×40M63.7  | 3.7          | 80             | 390 | 162 | 160 | 266 | 139 | PF $\frac{3}{4}$ | 185         | 260 | 190 | 58                    |

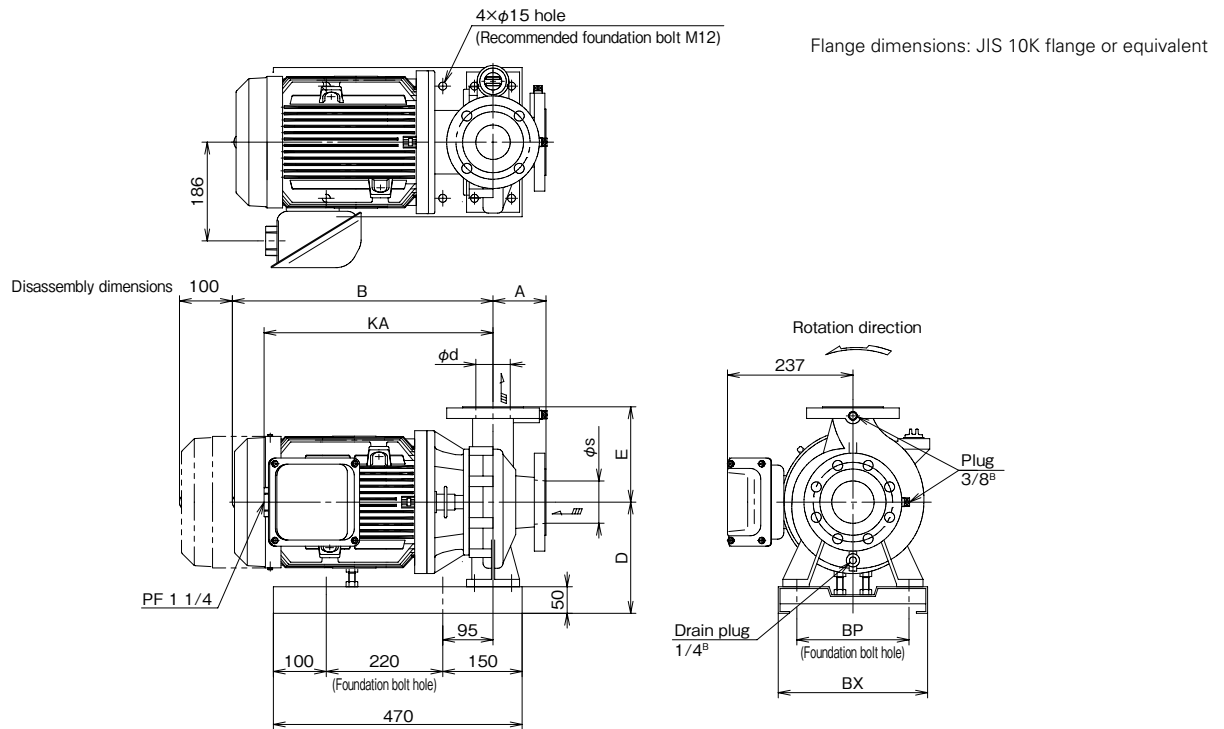
※The pump flange nominal diameter of SJM2-32×32 is 40. (The pump nominal diameter is called 32mm according to special companion flange.)

## Assembly drawing

### ●SJM3-65×50L63.7



## Assembly drawing



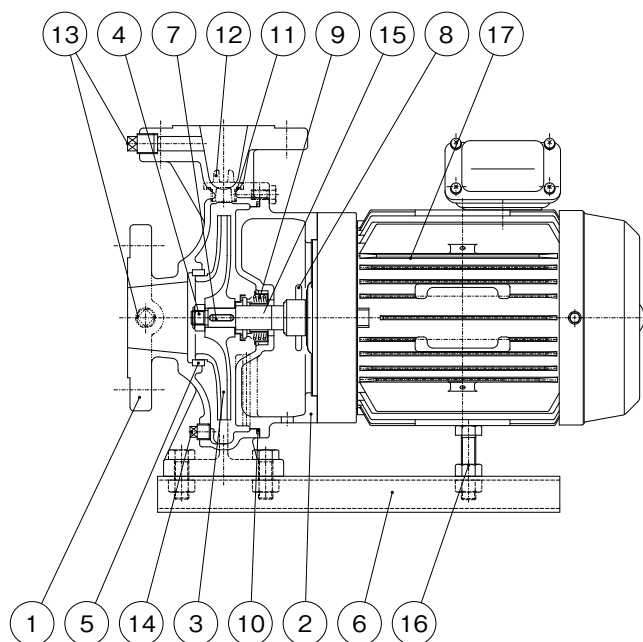
## Size table

(Unit: mm)

| Nominal diameter |                | Model           | Output<br>kW | Pump and motor |     |     |     |     | Common base |     | Approx.<br>mass<br>kg |
|------------------|----------------|-----------------|--------------|----------------|-----|-----|-----|-----|-------------|-----|-----------------------|
| Suction<br>s     | Discharge<br>d |                 |              | A              | B   | D   | E   | KA  | BP          | BX  |                       |
| 50               | 40             | SJM3-50×40M65.5 | 5.5          | 80             | 456 | 207 | 160 | 396 | 190         | 260 | 76                    |
|                  |                | SJM3-50×40H65.5 | 5.5          | 80             | 456 | 210 | 180 | 396 | 190         | 260 | 79                    |
|                  |                | SJM3-50×40H67.5 | 7.5          | 80             | 493 | 210 | 180 | 433 | 190         | 260 | 85                    |
| 65               | 50             | SJM3-65×50M65.5 | 5.5          | 80             | 456 | 207 | 160 | 396 | 190         | 260 | 78                    |
|                  |                | SJM3-65×50M67.5 | 7.5          | 80             | 493 | 207 | 160 | 433 | 190         | 260 | 84                    |
|                  |                | SJM3-65×50H67.5 | 7.5          | 100            | 493 | 210 | 180 | 433 | 212         | 282 | 88                    |
| 80               | 65             | SJM3-80×65L65.5 | 5.5          | 100            | 456 | 207 | 160 | 396 | 190         | 260 | 78                    |
|                  |                | SJM3-80×65L67.5 | 7.5          | 100            | 493 | 207 | 160 | 433 | 190         | 260 | 84                    |

## Example of internal structure diagram

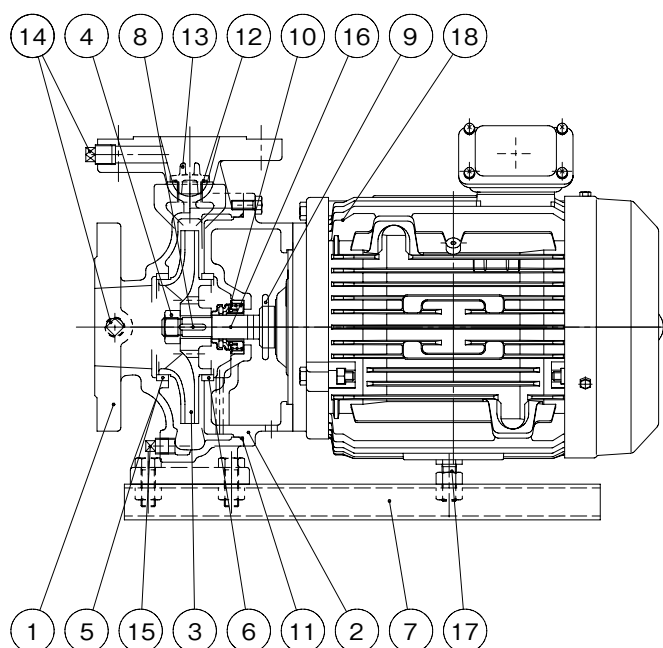
### ● SJM2 type



## 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※1   |
| 2   | Frame           | 1   | FC200               |
| 3   | Impeller        | 1   | CAC406 or SCS13※1   |
| 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.

[illegible]

Your Dealer

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