

### ■ Applications

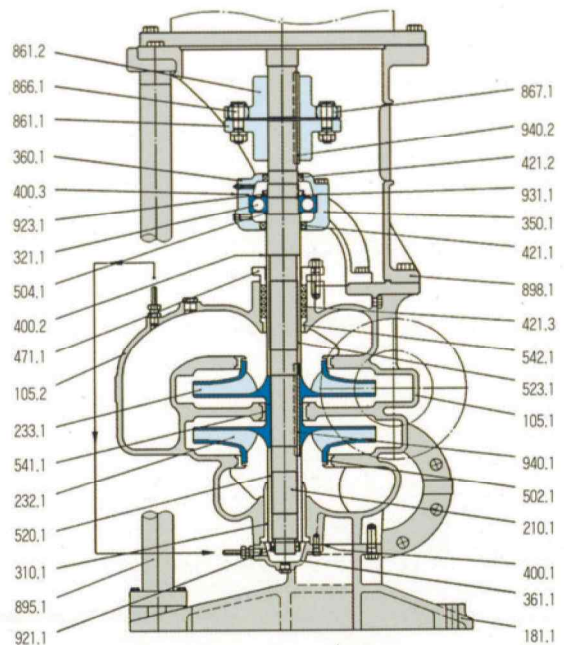
- Fire and general service pump
- Piston cooling fresh water pump
- Others

### ■ Principal Particulars

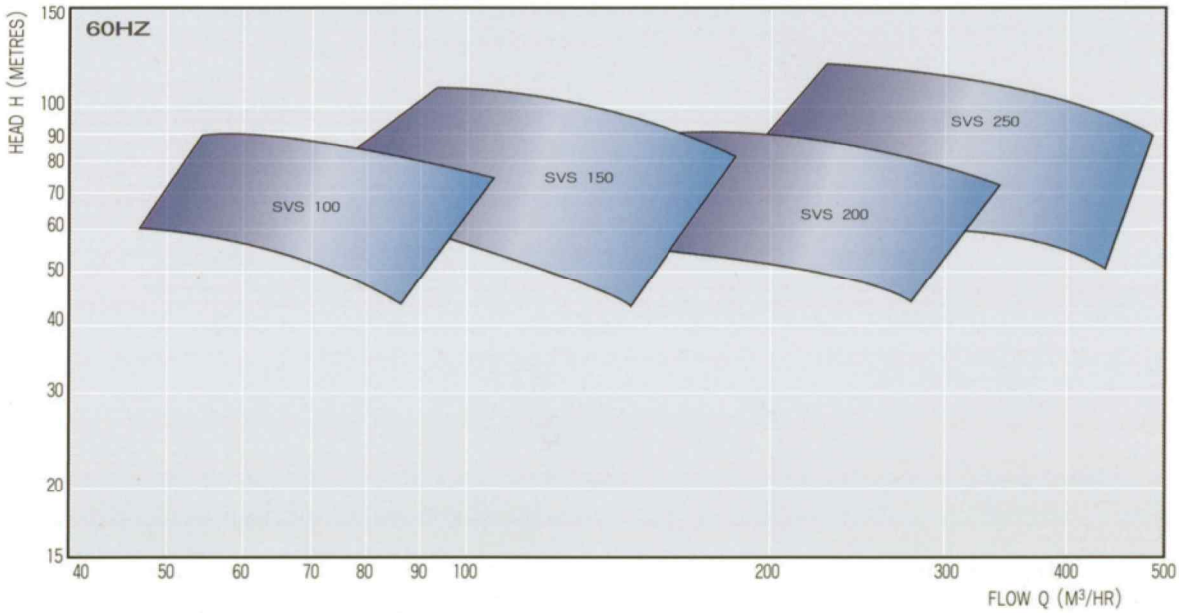
| Item              | Model       | SVS 100                          | SVS 150  | SVS 200  | SVS 200F | SVS 250  | SVS 250F |
|-------------------|-------------|----------------------------------|----------|----------|----------|----------|----------|
| Rotation          |             | Clockwise viewed from driver end |          |          |          |          |          |
| Suction bore      | (mm)        | 100                              | 150      | 200      | 200      | 250      | 250      |
| Discharge bore    | (mm)        | 100                              | 150      | 200      | 200      | 250      | 250      |
| Stuffing box seal |             | Gland packing or mechanical seal |          |          |          |          |          |
| Weight            | GC(BC) (kg) | 520(565)                         | 640(695) | 720(780) | 740(800) | 850(925) | 875(950) |

### ■ Standard Materials

| Part No. | Name Of Part                | REQ. NO. FOR 1PUMP | For Fresh Water   |        | For Sea Water     |        |
|----------|-----------------------------|--------------------|-------------------|--------|-------------------|--------|
|          |                             |                    | Name              | KS     | Name              | KS     |
| 105.1    | CASING HALF                 | 1                  | CAST IRON         | GC200  | BRONZE            | BC6    |
| 105.2    | CASING HALF                 | 1                  | CAST IRON         | GC200  | BRONZE            | BC6    |
| 181.1    | PUMP STOOL                  | 1                  | CAST IRON         | GC200  | CAST IRON         | GC200  |
| 210.1    | SHAFT                       | 1                  | STAINLESS STEEL   | STS304 | STAINLESS STEEL   | STS304 |
| 232.1    | CLOCKWISE IMPELLER          | 1                  | PHOSPHOR BRONZE   | PBC2   | PHOSPHOR BRONZE   | PBC2   |
| 233.1    | COUNTER CLOCKWISE IMPELLER  | 1                  | PHOSPHOR BRONZE   | PBC2   | PHOSPHOR BRONZE   | PBC2   |
| 310.1    | SLEEVE BEARING              | 1                  | LEADED TIN BRONZE | LBC4   | LEADED TIN BRONZE | LBC4   |
| 321.1    | BALL BEARING                | 1                  | BEARING STEEL     | STB2   | BEARING STEEL     | STB2   |
| 350.1    | BEARING HOUSING             | 1                  | CAST IRON         | GC200  | CAST IRON         | GC200  |
| 360.1    | BEARING COVER               | 1                  | CAST IRON         | GC200  | CAST IRON         | GC200  |
| 361.1    | BEARING END COVER           | 1                  | CAST IRON         | GC200  | BRONZE            | BC6    |
| 400.1    | GASKET                      | 1                  | NON ASBESTOS      |        | NON ASBESTOS      |        |
| 400.2    | GASKET                      | 1                  | NON ASBESTOS      |        | NON ASBESTOS      |        |
| 400.3    | GASKET                      | 1                  | OIL PAPER         |        | OIL PAPER         |        |
| 421.1    | OIL SEAL                    | 1                  | NBR               |        | NBR               |        |
| 421.2    | OIL SEAL                    | 1                  | NBR               |        | NBR               |        |
| 452.1    | PACKING GLAND               | 1                  | CAST IRON         | GC200  | BRONZE            | BC6    |
| 461.1    | PACKING                     | 5                  | NON METALLIC      |        | NON METALLIC      |        |
| 502.1    | CASING WEAR RING            | 2                  | BRONZE            |        | BRONZE            |        |
| 504.1    | SPACER RING                 | 1                  | CARBON STEEL      | SM45C  | CARBON STEEL      | SM45C  |
| 520.1    | SLEEVE                      | 1                  | STAINLESS STEEL   | STS304 | STAINLESS STEEL   | STS304 |
| 523.1    | SHAFT SLEEVE                | 1                  | STAINLESS STEEL   | STS304 | STAINLESS STEEL   | STS304 |
| 541.1    | INTERSTAGE BUSH             | 1                  | BRONZE            | BC6    | BRONZE            | BC6    |
| 542.1    | THROTTLING BUSH             | 1                  | BRONZE            | BC6    | BRONZE            | BC6    |
| 861.1    | COUPLING HALF               | 1                  | CAST IRON         | GC200  | CAST IRON         | GC200  |
| 861.2    | COUPLING HALF               | 1                  | CAST IRON         | GC200  | CAST IRON         | GC200  |
| 866.1    | COUPLING BOLT, NUT & WASHER | IST                | STEEL             | SS41   | STEEL             | SS41   |
| 867.1    | COUPLING RUBBER BUSH        | IST                | NBR               |        | NBR               |        |
| 895.1    | SUPPORT TRESTLE             | 2                  | STEEL             | SS41   | STEEL             | SS41   |
| 898.1    | MOTOR FRAME                 | 1                  | CAST IRON         | GC200  | CAST IRON         | GC200  |
| 921.1    | SHAFT NUT                   | 2                  | STAINLESS STEEL   | STS304 | STAINLESS STEEL   | STS304 |
| 923.1    | BEARING NUT                 | 1                  | STEEL             | SS41   | STEEL             | SS41   |
| 931.1    | BEARING LOCK WASHER         | 1                  | STEEL             | SS41   | STEEL             | SS41   |
| 940.1    | IMPELLER KEY                | 1                  | STAINLESS STEEL   | STS304 | STAINLESS STEEL   | STS304 |
| 940.2    | COUPLING KEY                | 1                  | CARBON STEEL      | SM45C  | CARBON STEEL      | SM45C  |



### ■ Selection Chart



### ■ Stuffing Box Seal

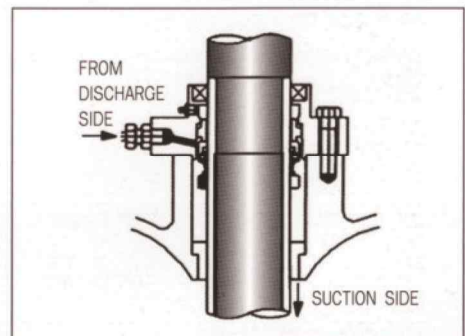
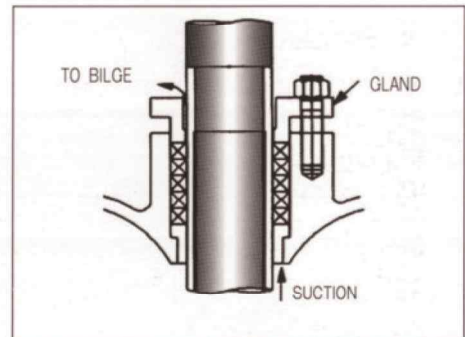
The stuffing box is fitted with gland packing but a mechanical seal can be fitted if customer requires it to eliminate gland adjustment

#### Fitted with gland packing

Sealing water is led to the stuffing box passing through throttle bush some of water is drained to bilge after sealing gland packing.

#### Fitted with mechanical seal

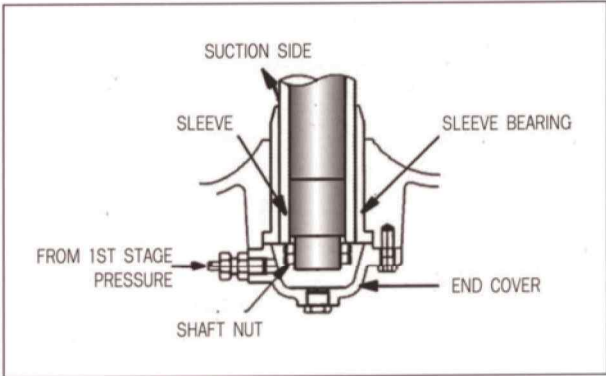
Flushing water is led to the stuffing box from the discharge side after removing foreign matter, and returned to the suction side through throttle bush after flushing mechanical seal.



**Sleeve bearing & lubrication**

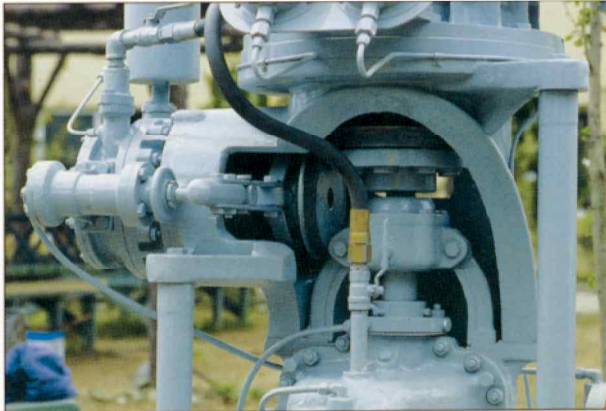
The submerged type sleeve bearing is fitted at the bottom of the pump and is lubricated by handling water.

The pressure water of 1st stage is led to sleeve bearing and returned to suction side after lubricating the sleeve bearing..



**Vacuum pump unit**

When a self priming system is required, a vacuum pump unit driven by pump motor through the provided clutch. During the pump operation, vacuum pump is stopped automatically by releasing the clutch in accordance with the handling water pressure.



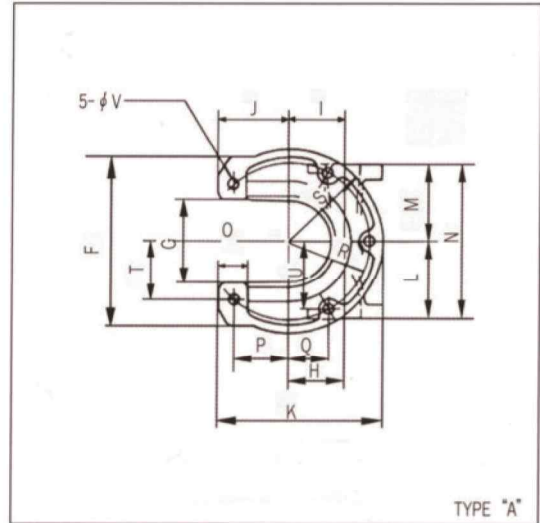
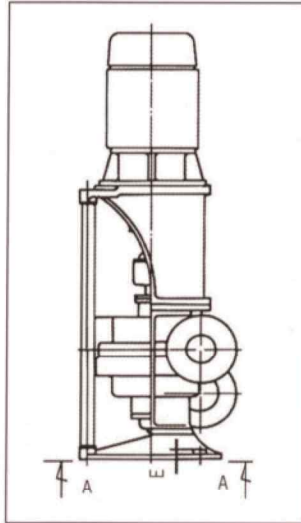
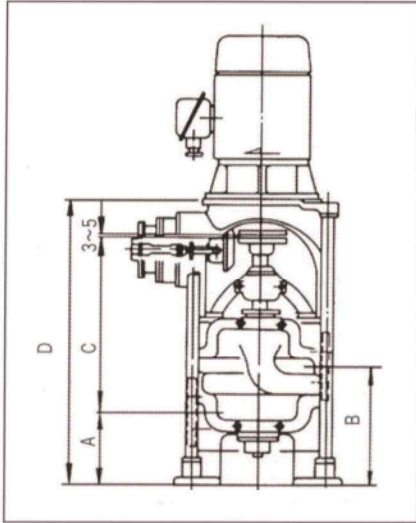
SVS

■ **Standard Accessories**

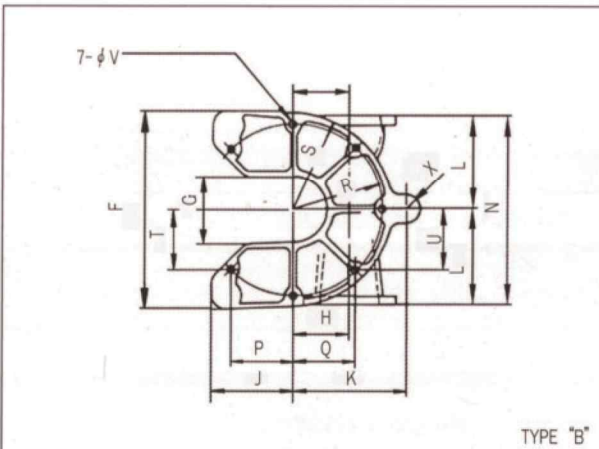
|   |       |
|---|-------|
| Discharge pressure gauge .....          | 1     |
| Suction compound gauge .....            | 1     |
| Gauge board .....                       | 1     |
| Gauge root valve .....                  | 2     |
| Sealing pipe .....                      | 1 set |
| Return pipe .....                       | 1     |
| Vacuum unit(for self priming pump)..... | 1 set |

■ **Standard Spare Parts**

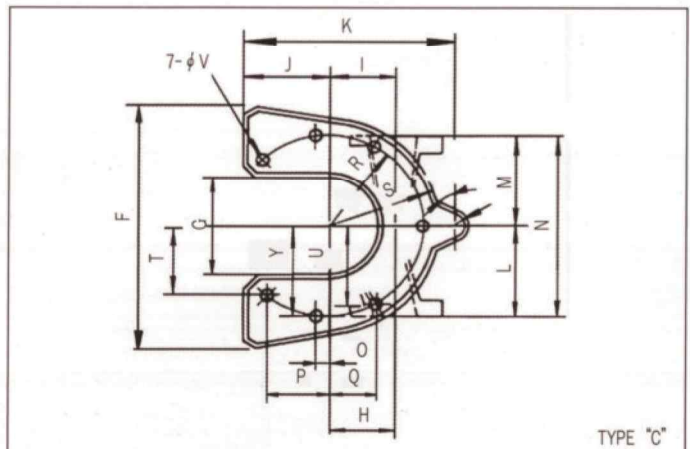
- 1 pump set of the following spare is supplied for 1 ship.
- Gland packing or mechanical seal
- Coupling bolt, nut & washer, rubber ring
- Complete set of rotating element(if required)



TYPE "A"



TYPE "B"



TYPE "C"

| Model    | Type | Bore |     | Size(mm) |     |      |      |     |      |     |     |     |     |     |     |     |     |
|----------|------|------|-----|----------|-----|------|------|-----|------|-----|-----|-----|-----|-----|-----|-----|-----|
|          |      | SUC  | DIS | A        | B   | C    | D    | E   | F    | G   | H   | I   | J   | K   | L   | M   | N   |
| SVS 100  | A    | 100  | 100 | 220      | 280 | 593  | 926  | 64  | 590  | 240 | 170 | 170 | 240 | 500 | 320 | 270 | 570 |
| SVS 150  | B    | 150  | 150 | 283      | 480 | 727  | 1154 | 50  | 780  | 260 | 180 | 210 | 300 | 410 | 400 | 350 | 750 |
| SVS 200  | C    | 200  | 200 | 332      | 594 | 848  | 1407 | 112 | 780  | 340 | 220 | 220 | 303 | 713 | 320 | 340 | 660 |
| SVS 200F | C    | 200  | 200 | 333      | 581 | 852  | 1355 | 60  | 760  | 372 | 245 | 220 | 300 | 710 | 350 | 350 | 700 |
| SVS 250  | B    | 250  | 250 | 380      | 670 | 989  | 1544 | 60  | 850  | 360 | 245 | 255 | 455 | 970 | 430 | 860 |     |
| SVS 250F | B    | 250  | 250 | 400      | 750 | 1030 | 1600 | 60  | 1080 | 430 | 255 | 245 | 520 | 550 | 450 | 450 | 900 |

| Model    | Type | Size(mm) |       |       |     |     |       |        |    |    |       | Sealing size      |        |
|----------|------|----------|-------|-------|-----|-----|-------|--------|----|----|-------|-------------------|--------|
|          |      | O        | P     | Q     | R   | S   | T     | U      | V  | X  | Y     | Gland Packing     | M/Seal |
| SVS 100  | A    | 80       | 184   | 130   | 260 | 310 | 184   | 225.17 | 23 | -  | -     | φ 52X φ 76X/1/2"  | 50     |
| SVS 150  | B    | -        | 229.8 | 229.8 | 325 | 360 | 229.8 | 229.8  | 28 | 55 | -     | φ 65X φ 90X/1/2"  | 65     |
| SVS 200  | C    | 55.5     | 226   | 183.6 | 320 | 360 | 226   | 262.1  | 28 | 60 | 315.1 | φ 70X φ 95X/3/4"  | 70     |
| SVS 200F | C    | 55.5     | 226   | 183.5 | 320 | 360 | 226   | 262    | 28 | 55 | 315   | φ 70X φ 95X/3/4"  | 70     |
| SVS 250  | B    | -        | 297   | 297   | 420 | 460 | 297   | 297    | 28 | 55 | -     | φ 80X φ 105X/1/2" | 80     |
| SVS 250F | B    | -        | 297   | 297   | 420 | 460 | 297   | 297    | 28 | 55 | -     | φ 80X φ 105X/1/2" | 80     |