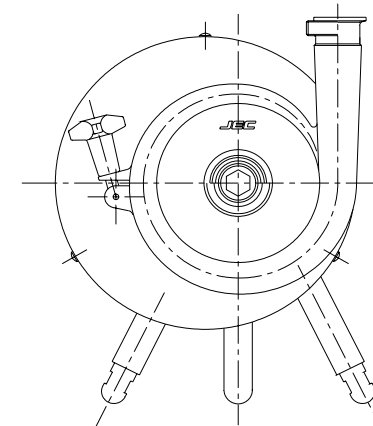
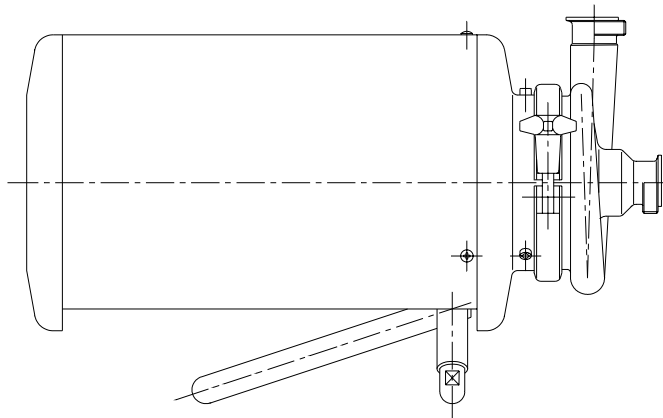
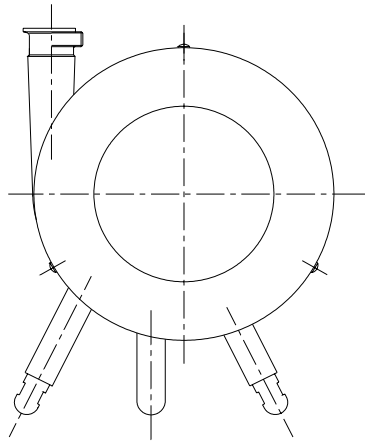
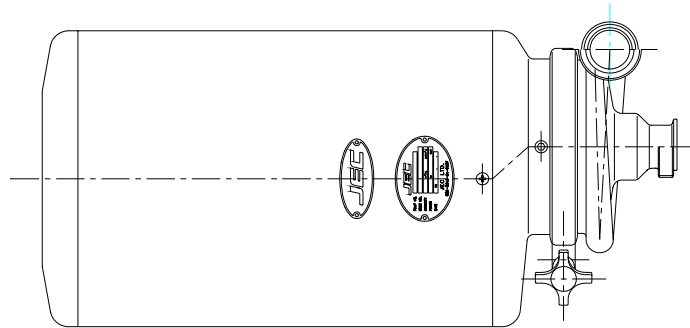


DWG. NO.



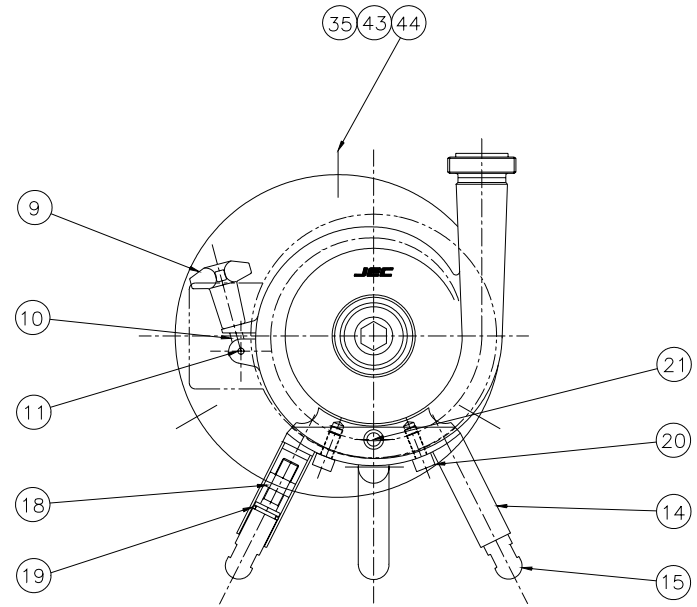
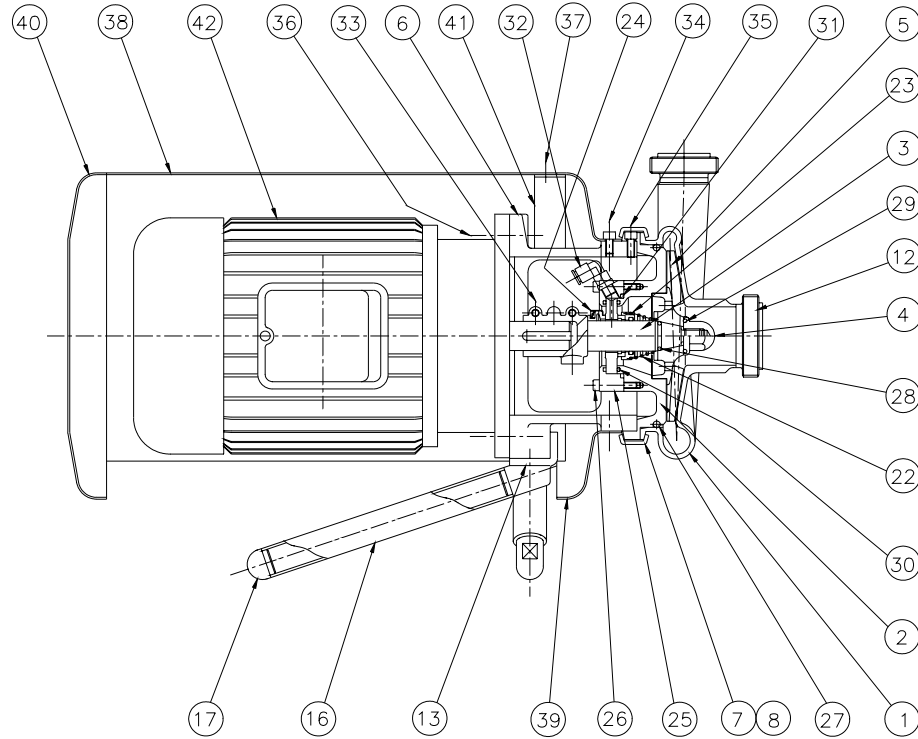
**JEC**

**JEC LTD.**

TITLE : STANDARD VERSION  
**OUTLINE DRAWING**

| DWG.   | CHK.   | DATE      | SCALE | DWG. NO. |
|--------|--------|-----------|-------|----------|
| Yongmi | gmSong | APR.15 96 | NONE  |          |

DWG. NO. CJ - JPO01 - 0

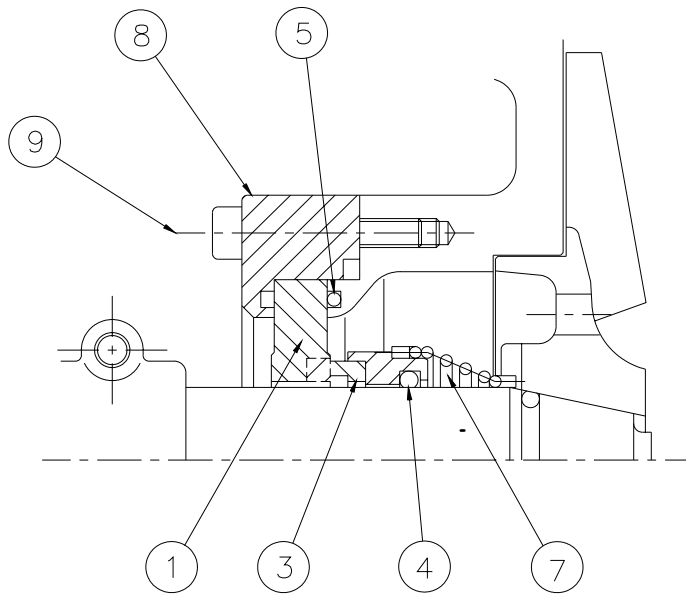


|     |              |             |          |     |      |                 |          |             |          |     |      |                   |          |             |          |     |      |
|-----|--------------|-------------|----------|-----|------|-----------------|----------|-------------|----------|-----|------|-------------------|----------|-------------|----------|-----|------|
| 15  | BALL FEET    | SCS13       |          | 2   | 30   | SEAL O-RING     | NBR      | AN137       | 2        | 45  |      |                   |          |             |          |     |      |
| 14  | LEG PIPE     | SUS304      |          | 2   | 29   | CAP NUT O-RING  | NBR      | AN118       | 1        | 44  |      | LOGO              | SUS304   | 1           |          |     |      |
| 13  | LEG BRACKET  | SCS13       |          | 1   | 28   | SHAFT O-RING    | NBR      | AN116       | 1        | 43  |      | NAME PLATE        | SUS304   | 1           |          |     |      |
| 12  | NOZZLE       | SUS316      |          | 2   | 27   | CASE O-RING     | NBR      | P140        | 1        | 42  |      | MOTOR             |          | 1           |          |     |      |
| 11  | CLAMP PIN    | SUS304      | ø5x20    | 2   | 26   | WRCNCH BOLT     | SUS304   |             | 4        | 41  |      | COVER BRACKET     | SUS304   | 1           |          |     |      |
| 10  | CLAMP BOLT   | SUS304      | M10x35   | 1   | 25   | SEAL COVER      | SUS304   |             | 1        | 40  |      | REAR COVER        | SUS304   | 1           |          |     |      |
| 9   | HANDLE       | SCS13       |          | 1   | 24   | SEAL WATER SEAL | SUS304   |             | 1        | 39  |      | FRONT COVER       | SUS304   | 1           |          |     |      |
| 8   | CLAMP TOP    | SCS13       |          | 1   | 23   | DOUBLE M.SEAL   | SUS316   |             | 1        | 38  |      | MOTOR COVER       | SUS304   | 1           |          |     |      |
| 7   | CLAMP BOTTOM | SCS13       |          | 1   | 22   | SINGLE M.SEAL   | SUS316   |             | 1        | 37  |      | R.HEAD SCREW      | SUS304   | 3           |          |     |      |
| 6   | FRAME        | AC2B        |          | 1   | 21   | WRENCH BOLT     | SUS304   |             | 1        | 36  |      | HEX BOLT          | S25C     | 4           |          |     |      |
| 5   | IMPELLER     | SCS14       |          | 1   | 20   | WRENCH BOLT     | SUS304   |             | 2        | 35  |      | WRENCH BOLT       | SUS304   | 3           |          |     |      |
| 4   | CAP NUT      | SCS14       | M12      | 1   | 19   | O-RING          | NBR      | AN116       | 2        | 34  |      | WRENCH BOLT       | SUS304   | 3           |          |     |      |
| 3   | SHAFT        | SCS14       |          | 1   | 18   | NUT             | SUS304   |             | 2        | 33  |      | WRENCH BOLT       | SUS304   | 3           |          |     |      |
| 2   | BACK PLATE   | SCS14       |          | 1   | 17   | PLUG            | SUS304   |             | 1        | 32  |      | SEAL WATER CONN.  |          | 2           |          |     |      |
| 1   | CASE         | SCS14       |          | 1   | 16   | LEG PIPE        | SUS304   |             | 1        | 31  |      | SEAL COVER O-RING | NBR      | AN143       | 1        |     |      |
| NO. | CODE NO.     | DESCRIPTION | MATERIAL | DIM | Q'TY | NO.             | CODE NO. | DESCRIPTION | MATERIAL | DIM | Q'TY | NO.               | CODE NO. | DESCRIPTION | MATERIAL | DIM | Q'TY |

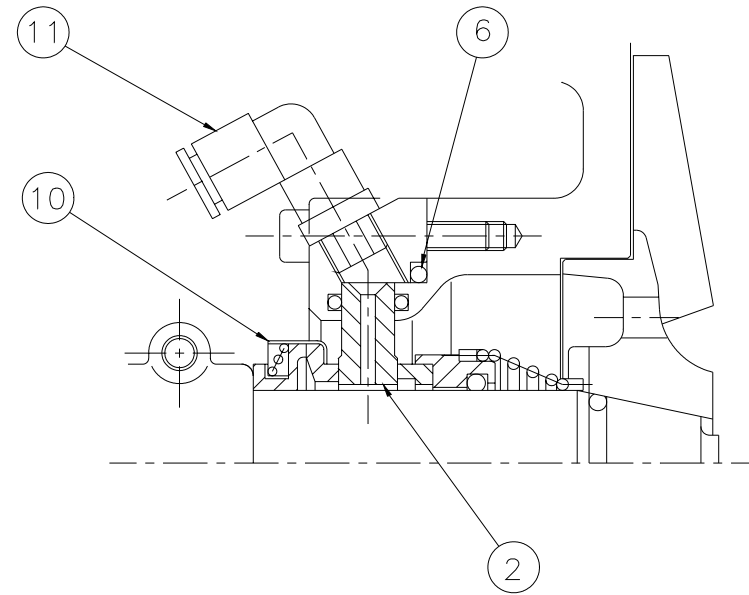
**JEC** JEC LTD.

TITLE : SECTION DRAWING FOR STANDARD VERSION  
CENTRIFUGAL PUMP

|        |        |         |       |            |
|--------|--------|---------|-------|------------|
| DWG.   | CHK.   | DATE    | SCALE | DWG. NO.   |
| Yongmi | gmSong | MAY '96 | NONE  | CJ-JPO01-0 |



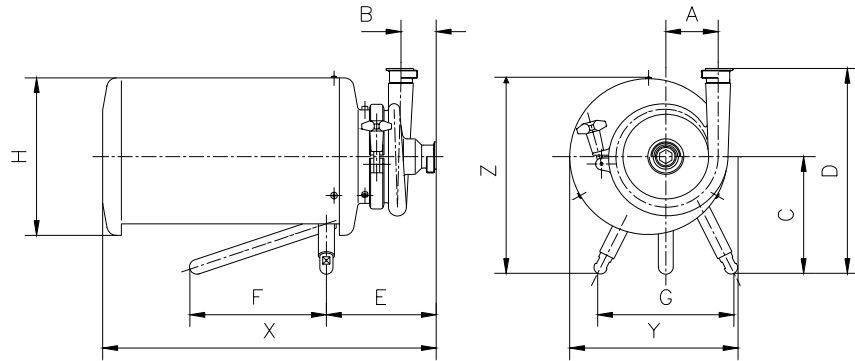
Standard version



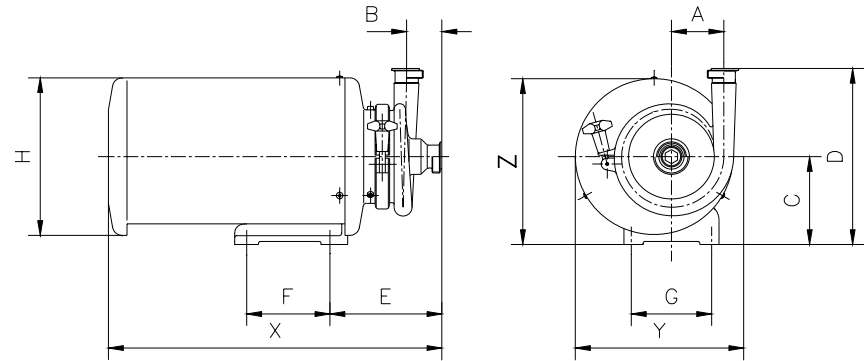
Water flushed version

|  |          |                 |          |      |     |          |                  |          |      |
|--|----------|-----------------|----------|------|-----|----------|------------------|----------|------|
| -2   |          | O-RING (ROTARY) | VITON    | 1    | 11  |          | NIPPLE           |          | 2    |
| -1   |          | O-RING (ROTARY) | EPDM     | 1    | 10  |          | F. WATER SEAL    | CARBON   | 1    |
| 4  |          | O-RING (ROTARY) | NBR      | 1    | 9   |          | WRENCH BOLT      | SUS304   | 4    |
| -1   |          | ROTARY RING     | SiC RING | 1    | -1  |          | SEAL COVER (WFV) | SUS304   | 1    |
| 3  |          | ROTARY RING     | CARBON   | 1    | 8   |          | SEAL COVER (SV)  | SUS304   | 1    |
| -1   |          | SEAT RING       | SiC      | 1    | 7   |          | SPRING           | SUS316   | 1    |
| 2  |          | SEAT RING       | CERAMIC  | 1    | 6   |          | O-RING (SEAT)    | NBR      | 1    |
| -2   |          | SEAT RING       | SiC      | 1    | -2  |          | O-RING (SEAT)    | VITON    | 1    |
| -1   |          | SEAT RING       | CERAMIC  | 1    | -1  |          | O-RING (SEAT)    | EPDM     | 1    |
| 1  |          | SEAT RING       | SiC RING | 1    | 5   |          | O-RING (SEAT)    | NBR      | 1    |
| NO.  | CODE NO. | DESCRIPTION     | MATERIAL | Q'TY | NO. | CODE NO. | DESCRIPTION      | MATERIAL | Q'TY |
| <b>JEC</b> <b>JEC LTD.</b><br>TITLE : FOR JP SERIES<br>MECHANICAL SEAL DETAIL DWG. |          |                 |          |      |     |          |                  |          |      |
| DWG.    CHK.    DATE    SCALE    DWG. NO.<br>'97 1.18    1/1                       |          |                 |          |      |     |          |                  |          |      |

STANDARD VERSION



BASE MOUNTING VERSION



STANDARD VERSION

| MODEL NO.  | MOTOR |      |          | CONNECTION |        | DIMENSION |     |     |     |     |     |     |     |     |     |     | WEIGHT VOLUME |                |
|------------|-------|------|----------|------------|--------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------|
|            | RPM   | KW   | FRM. NO. | SUCT.      | DISCH. | A         | B   | C   | D   | E   | F   | G   | H   | X   | Y   | Z   | KG            | M <sup>3</sup> |
| JP405-236  | 3600  | 1.5  | 90L      | 51         | 38     | 88        | 60  | 200 | 350 | 185 | 230 | 230 | 270 | 560 | 290 | 335 | 38            | 0.05           |
| JP405-336  | ↑     | 2.2  | 90L      | 51         | 38     | 88        | 60  | 200 | 350 | 185 | 230 | 230 | 270 | 560 | 290 | 335 | 40            | 0.05           |
| JP408-536  |       | 3.7  | 112M     | 51         | 38     | 88        | 60  | 220 | 370 | 195 | 260 | 260 | 325 | 620 | 325 | 380 | 56            | 0.08           |
| JP609-736  | ↓     | 5.5  | 132S     | 63         | 51     | 100       | 55  | 260 | 410 | 220 | 315 | 300 | 390 | 740 | 390 | 454 | 90            | 0.13           |
| JP609-1036 |       | 3600 | 7.5      | 132M       | 63     | 51        | 100 | 55  | 260 | 410 | 220 | 315 | 300 | 390 | 740 | 390 | 454           | 96             |
| JP910-218  | 1800  | 1.5  | 90L      | 63         | 51     | 118       | 65  | 200 | 370 | 190 | 230 | 230 | 270 | 560 | 290 | 350 | 48            | 0.06           |
| JP910-318  | 1800  | 2.2  | 90L      | 63         | 51     | 118       | 65  | 200 | 370 | 190 | 230 | 230 | 270 | 560 | 290 | 350 | 50            | 0.06           |
| JP915-518  | 1800  | 3.7  | 112M     | 63         | 51     | 118       | 65  | 220 | 390 | 190 | 230 | 230 | 270 | 560 | 290 | 350 | 66            | 0.06           |

BASE MOUNTING VERSION

| MODEL NO.  | MOTOR |      |          | CONNECTION |        | DIMENSION |     |     |     |     |     |     |     |     |     |     | WEIGHT VOLUME |                |
|------------|-------|------|----------|------------|--------|-----------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|----------------|
|            | RPM   | KW   | FRM. NO. | SUCT.      | DISCH. | A         | B   | C   | D   | E   | F   | G   | H   | X   | Y   | Z   | KG            | M <sup>3</sup> |
| JP405-236  | 3600  | 1.5  | 90L      | 51         | 38     | 88        | 60  | 150 | 300 | 185 | 140 | 135 | 270 | 560 | 290 | 285 | 38            | 0.05           |
| JP405-336  | ↑     | 2.2  | 90L      | 51         | 38     | 88        | 60  | 150 | 300 | 185 | 140 | 135 | 270 | 560 | 290 | 285 | 40            | 0.05           |
| JP408-536  |       | 3.7  | 112M     | 51         | 38     | 88        | 60  | 180 | 330 | 195 | 170 | 170 | 325 | 620 | 325 | 340 | 56            | 0.07           |
| JP609-736  | ↓     | 5.5  | 132S     | 63         | 51     | 100       | 55  | 220 | 370 | 220 | 215 | 190 | 390 | 740 | 390 | 415 | 90            | 0.12           |
| JP609-1036 |       | 3600 | 7.5      | 132M       | 63     | 51        | 100 | 55  | 220 | 370 | 220 | 215 | 190 | 390 | 740 | 390 | 415           | 96             |
| JP910-218  | 1800  | 1.5  | 90L      | 63         | 51     | 118       | 65  | 150 | 320 | 190 | 140 | 135 | 270 | 560 | 290 | 285 | 48            | 0.05           |
| JP910-318  | 1800  | 2.2  | 90L      | 63         | 51     | 118       | 65  | 150 | 320 | 190 | 140 | 135 | 270 | 560 | 290 | 285 | 50            | 0.05           |
| JP915-518  | 1800  | 3.7  | 112M     | 63         | 51     | 118       | 65  | 150 | 320 | 190 | 140 | 135 | 270 | 560 | 290 | 285 | 66            | 0.05           |

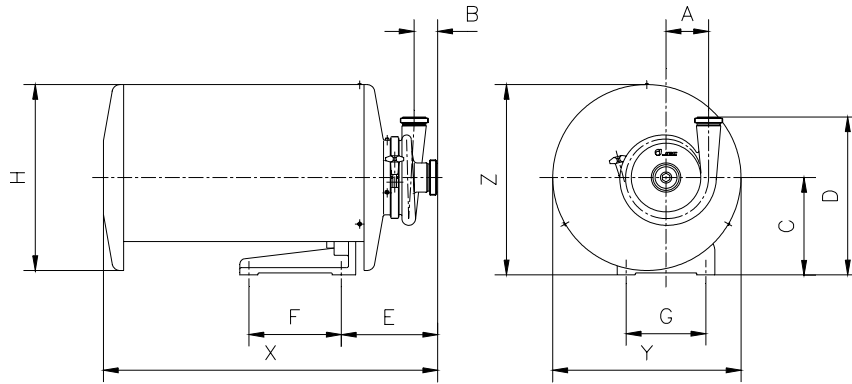
**JEC JEC LTD.**

TITLE : FOR JP SERIES/FRAME NO. 90 - 132

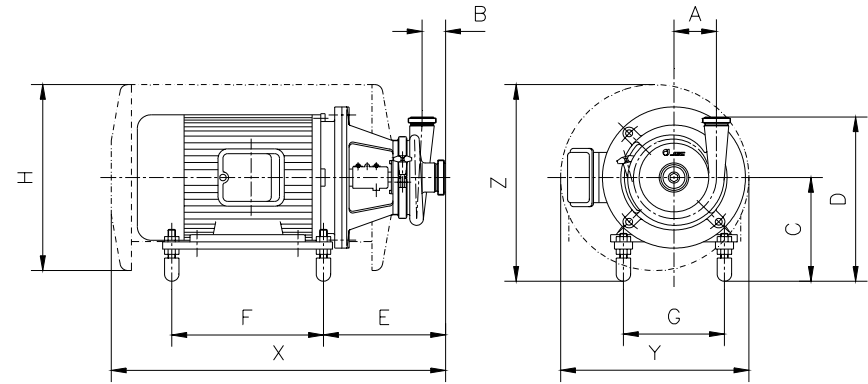
DIMENSIONAL DRAWING

| DWG.   | CHK.   | DATE      | SCALE | DWG. NO.   |
|--------|--------|-----------|-------|------------|
| Yongmi | gmSong | NOV.5 '96 | NONE  | DJ-P002-01 |

BASE MOUNTING VERSION



FRAME MOUNTING VERSION



BASE MOUNTING VERSION

| MODEL NO.  | MOTOR |      |          | CONNECTION |        | DIMENSION |    |     |     |     |     |     |     |     |     |     | WEIGHT VOLUME |     |
|------------|-------|------|----------|------------|--------|-----------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|-----|
|            | RPM   | KW   | FRM. NO. | SUCT.      | DISCH. | A         | B  | C   | D   | E   | F   | G   | H   | X   | Y   | Z   | KG            | M3  |
| JP910-1536 | 3600  | 11   | 160M     | 76         | 63     | 118       | 65 | 250 | 420 | 270 | 255 | 220 | 470 | 840 | 470 | 485 | 150           | 0.2 |
| JP910-2036 | 3600  | 15   | 160M     | 76         | 63     | 118       | 65 | 250 | 420 | 270 | 255 | 220 | 470 | 840 | 470 | 485 | 157           | 0.2 |
| JP910-2536 | 3600  | 18.5 | 160L     | 76         | 63     | 118       | 65 | 250 | 420 | 270 | 255 | 220 | 470 | 880 | 470 | 485 | 172           | 0.2 |

FRAME MOUNTING VERSION

| MODEL NO.   | MOTOR |      |          | CONNECTION |        | DIMENSION |    |     |     |     |     |     |     |     |     |     | WEIGHT VOLUME |     |
|-------------|-------|------|----------|------------|--------|-----------|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------------|-----|
|             | RPM   | KW   | FRM. NO. | SUCT.      | DISCH. | A         | B  | C   | D   | E   | F   | G   | H   | X   | Y   | Z   | KG            | M3  |
| JP910-F1536 | 3600  | 11   | 160M     | 76         | 63     | 118       | 65 | 270 | 440 | 327 | 420 | 254 | 470 | 840 | 470 | 505 | 163           | 0.2 |
| JP910-F2036 | 3600  | 15   | 160M     | 76         | 63     | 118       | 65 | 270 | 440 | 327 | 420 | 254 | 470 | 840 | 470 | 505 | 170           | 0.2 |
| JP910-F2536 | 3600  | 18.5 | 160L     | 76         | 63     | 118       | 65 | 270 | 440 | 327 | 420 | 254 | 470 | 880 | 470 | 505 | 185           | 0.2 |
| JP915-F3036 | 3600  | 22   | 180M     | 76         | 63     | 118       | 65 | 290 | 460 | 340 | 420 | 279 | 520 | 920 | 520 | 550 | 235           | 0.2 |
| JP915-F4036 | 3600  | 30   | 180L     | 76         | 63     | 118       | 65 | 290 | 460 | 340 | 420 | 279 | 520 | 920 | 520 | 550 | 295           | 0.2 |

**JEC**

**JEC LTD.**

TITLE : FOR JP SERIES/FRAME NO. 160, 180  
DIMENSIONAL DRAWING

| DWG.   | CHK.   | DATE      | SCALE | DWG. NO.   |
|--------|--------|-----------|-------|------------|
| Yongmi | gmsong | NOV.5 '96 | NONE  | DJ-P002-02 |