

**FUKUTA®**

FUKUTA ELEC. & MACH. CO., LTD.

Innovation  
Sincerity  
Credibility



**SW** *series*

LIQUID COOLING SERVO MOTOR

液冷式伺服馬達



## SW-112 S.F.:1.2

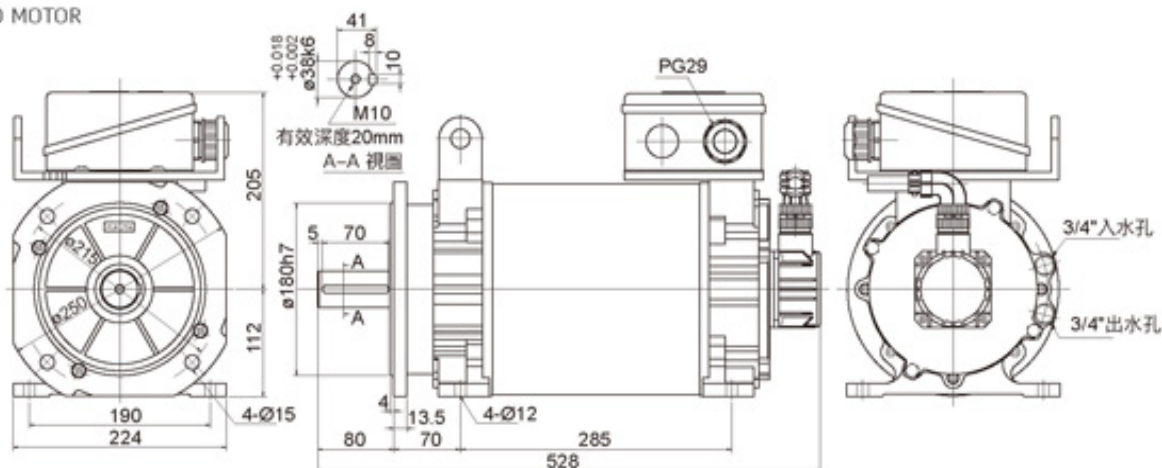
### 液冷式伺服馬達

LIQUID COOLING SERVO MOTOR SW-112L / SW-112XA / SW-112XB

| 框號<br>Fr. No. | 額定轉速        | 最大轉矩        | 額定轉矩         | 額定輸出         | 額定電流          |      |      |      | 額定頻率            | 轉動慣量          |
|---------------|-------------|-------------|--------------|--------------|---------------|------|------|------|-----------------|---------------|
|               | Rated Speed | Max. Torque | Rated Torque | Rated Output | Rated Current |      |      |      | Rated Frequency | Rotor Inertia |
|               | RPM         | kg-m        | kg-m         | kw           | 190V          | 220V | 330V | 380V | Hz              | Kg-m2         |
| 112L          | 1500        | 10.02       | 3.58         | 5.5          | 22.6          | 19.6 | 13.0 | 11.3 | 52.1            | 0.0153        |
|               | 2000        | 10.25       | 3.66         | 7.5          | 28.0          | 25.2 | 16.2 | 14.6 | 69.0            |               |
|               | 3000        | 9.11        | 3.25         | 10.0         | 38.0          | 33.0 | 22.0 | 19.1 | 102.1           |               |
|               | 4000        | 8.2         | 2.93         | 12.0         | 45.1          | 39.1 | 26.0 | 22.6 | 135.5           |               |
| 112XA         | 1500        | 14.8        | 5.3          | 8.2          | 32.3          | 27.9 | 18.7 | 16.1 | 52.0            | 0.0212        |
|               | 2000        | 15.02       | 5.37         | 11.0         | 41.2          | 39.0 | 23.8 | 22.5 | 69.0            |               |
|               | 3000        | 13.3        | 4.7          | 15.0         | 57.9          | 50.4 | 33.4 | 29.1 | 102.0           |               |
|               | 4000        | 10.8        | 3.8          | 16.5         | 62.5          | 54.0 | 36.1 | 32.1 | 133.3           |               |
| 112XB         | 1500        | 20.37       | 7.27         | 11.0         | 43.6          | 37.9 | 25.2 | 21.9 | 52.4            | 0.0282        |
|               | 2000        | 20.48       | 7.31         | 15.0         | 55.5          | 48.5 | 32.0 | 28.0 | 69.0            |               |
|               | 3000        | 18.1        | 6.5          | 20.0         | 77.6          | 67.0 | 44.8 | 38.7 | 102.2           |               |
|               | 4000        | 17.1        | 6.1          | 25.0         | 93.2          | 80.5 | 53.8 | 46.5 | 133.3           |               |

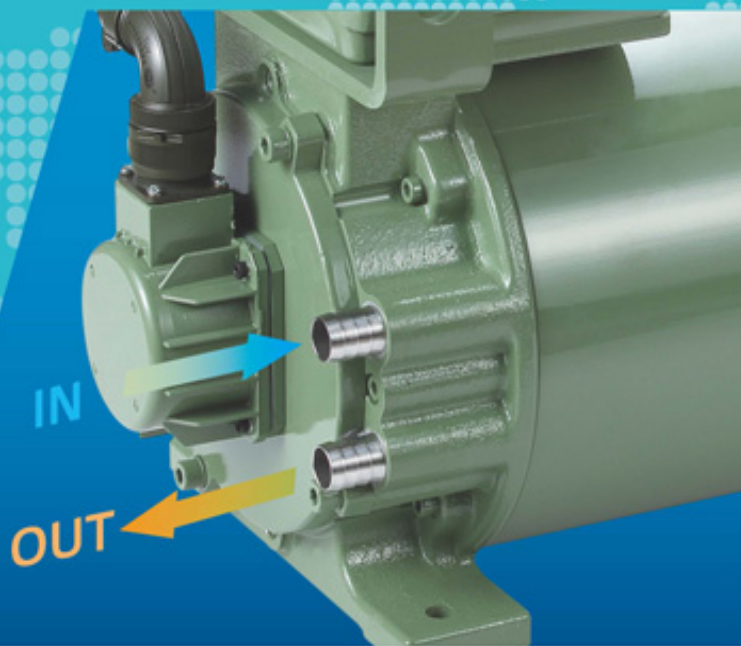
## SW-112L

FUKUTA SERVO MOTOR





## LIQUID COOLING SERVO MOTOR

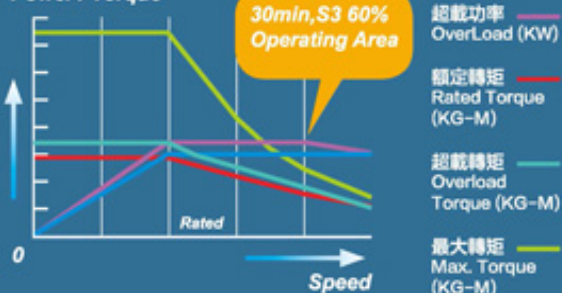


## 馬達冷卻條件 Motor Cooling Conditions:

|                        |                                |
|------------------------|--------------------------------|
| 冷卻型式 Cooling Type      | 液冷 Liquid                      |
| 冷卻介質 Cooling Media     | 車用水箱冷卻液 Car's radiator coolant |
| 冷卻液流量 Coolant Flow     | 25-35 LPM                      |
| 冷卻液壓力 Coolant Pressure | 10.8 psi                       |
| 冷卻液入溫 Coolant Temp.    | 35° C                          |

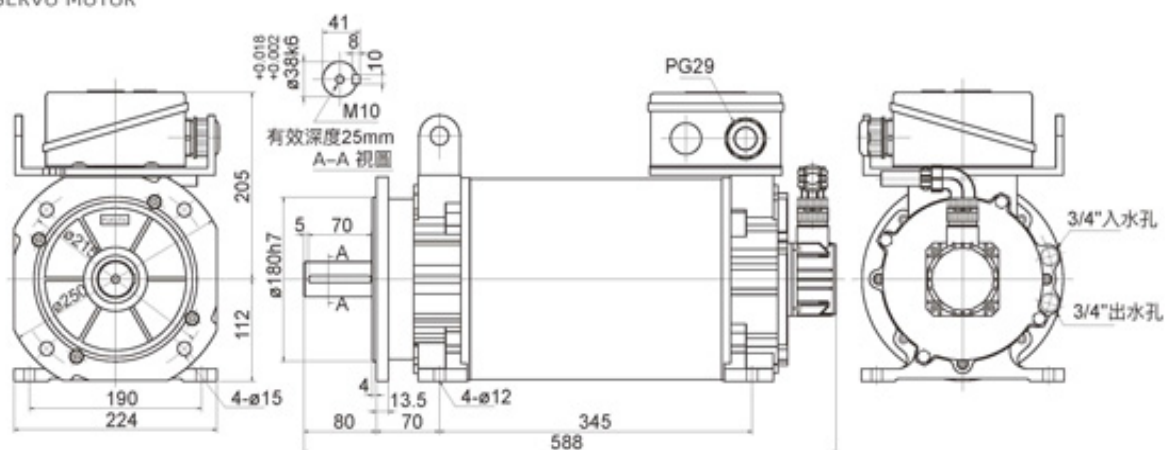
### 特性表 Characteristic Curves

### Power / Torque



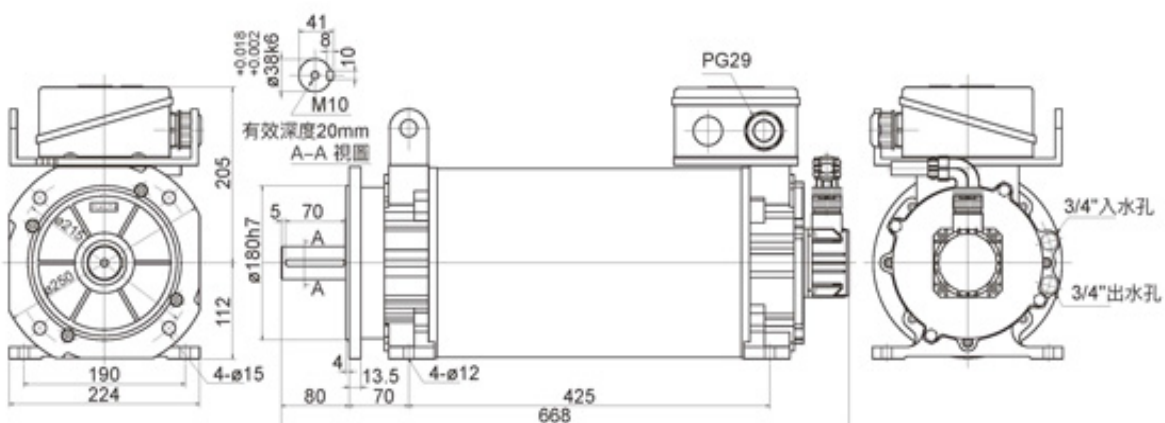
## SW-112XA

FUKUTA SERVO MOTOR



## SW-112XB

FUKUTA SERVO MOTOR



SW-112

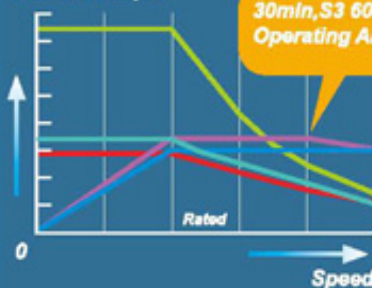
# SW-132 S.F.:1.2

## 液冷式伺服馬達

LIQUID COOLING SERVO MOTOR SW-132MA / SW-132MB / SW-132L / SW-132LA

特性表 Characteristic Curves

Power / Torque



輸出功率  
Output KW

超載功率  
OverLoad (KW)

額定轉矩  
Rated Torque (KG-M)

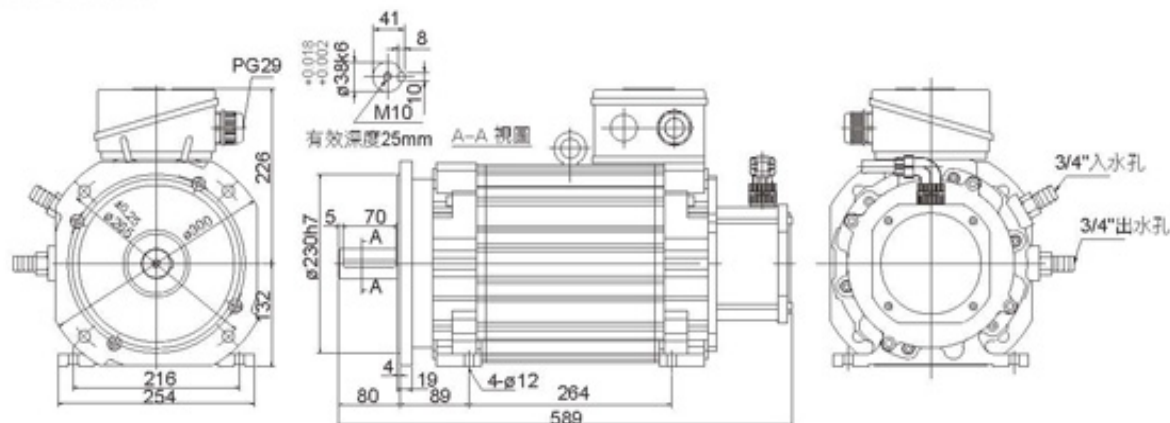
超載轉矩  
Overload Torque (KG-M)

最大轉矩  
Max. Torque (KG-M)

| 型號<br>Fr. No. | 額定轉速        | 最大轉矩        | 額定轉矩         | 額定輸出         | 額定電流          |       |       |      | 額定頻率            | 轉動慣量           |
|---------------|-------------|-------------|--------------|--------------|---------------|-------|-------|------|-----------------|----------------|
|               | Rated Speed | Max. Torque | Rated Torque | Rated Output | Rated Current |       |       |      | Rated Frequency | Rotor Inertial |
|               | RPM         | kg-m        | kg-m         | kw           | 190V          | 220V  | 330V  | 380V | Hz              | Kg-m2          |
| 132MA         | 1500        | 20          | 7.14         | 11.0         | 42.0          | 36.3  | 24.3  | 21.0 | 51.7            | 0.404          |
|               | 2000        | 20.48       | 7.31         | 15.0         | 54.6          | 48.3  | 31.5  | 27.9 | 68.7            |                |
|               | 3000        | 18.21       | 6.5          | 20.0         | 76.9          | 63.5  | 44.4  | 36.6 | 101.7           |                |
|               | 4000        | 17.6        | 6.2          | 25.0         | 92.5          | 79.8  | 53.4  | 46.1 | 133.3           |                |
| 132MB         | 1500        | 25.13       | 8.97         | 13.8         | 52.9          | 45.2  | 30.5  | 26.1 | 51.6            | 0.0498         |
|               | 2000        | 25.25       | 9.02         | 18.5         | 67.4          | 60.0  | 38.9  | 34.6 | 68.4            |                |
|               | 3000        | 23.66       | 8.45         | 26.0         | 98.3          | 85.1  | 56.7  | 47.4 | 101.7           |                |
|               | 4000        | 23          | 8.2          | 33.3         | 121.5         | 104.9 | 70.1  | 60.6 | 133.3           |                |
| 132L          | 1500        | 30.3        | 10.72        | 16.5         | 63.2          | 54.6  | 36.5  | 31.5 | 51.5            | 0.608          |
|               | 2000        | 30.03       | 10.72        | 22.0         | 80.6          | 71.1  | 46.5  | 41.1 | 68.2            |                |
|               | 3000        | 28.2        | 10.07        | 31.0         | 117.6         | 99.1  | 67.9  | 57.2 | 101.5           |                |
|               | 4000        | 25.7        | 9.1          | 37.4         | 136.0         | 117.4 | 78.5  | 67.8 | 133.3           |                |
| 132LA         | 1500        | 40          | 14.2         | 22.0         | 84.6          | 73.1  | 48.9  | 42.2 | 50.0            | 0.735          |
|               | 2000        | 40.94       | 14.62        | 30.0         | 108.7         | 103.6 | 62.8  | 59.8 | 68.5            |                |
|               | 3000        | 37.8        | 13           | 40.0         | 153.8         | 132.9 | 88.8  | 76.7 | 100.0           |                |
|               | 4000        | 35.2        | 12.4         | 50.0         | 184.9         | 159.7 | 106.8 | 92.2 | 133.3           |                |

## SW-132MA

FUKUTA SERVO MOTOR





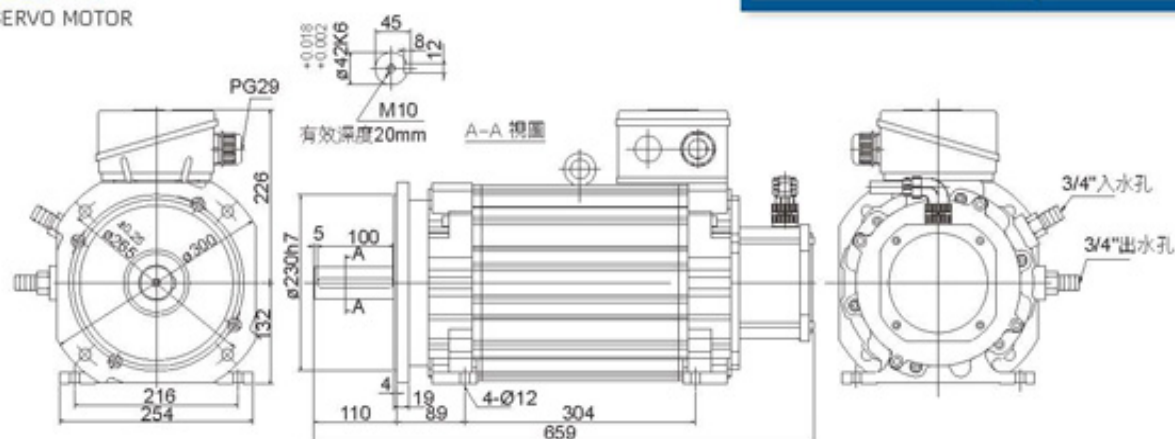
## LIQUID COOLING SERVO MOTOR

### 馬達冷卻條件 Motor Cooling Conditions:

|                        |                                |
|------------------------|--------------------------------|
| 冷卻型式 Cooling Type      | 液冷 Liquid                      |
| 冷卻介質 Cooling Media     | 車用水箱冷卻液 Car's radiator coolant |
| 冷卻液流量 Coolant Flow     | 25~35 LPM                      |
| 冷卻液壓力 Coolant Pressure | 10.8 psi                       |
| 冷卻液入溫 Coolant Temp.    | 35° C                          |

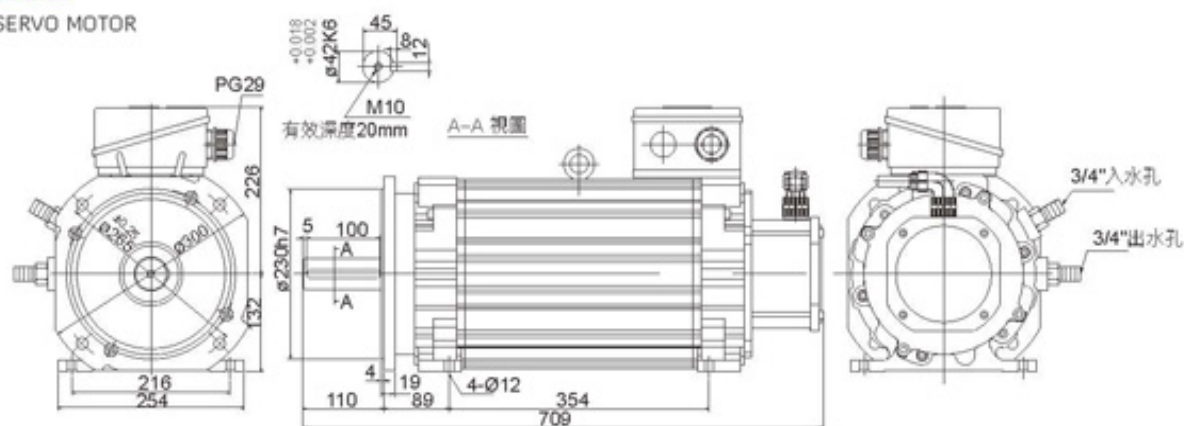
### SW-132MB

FUKUTA SERVO MOTOR



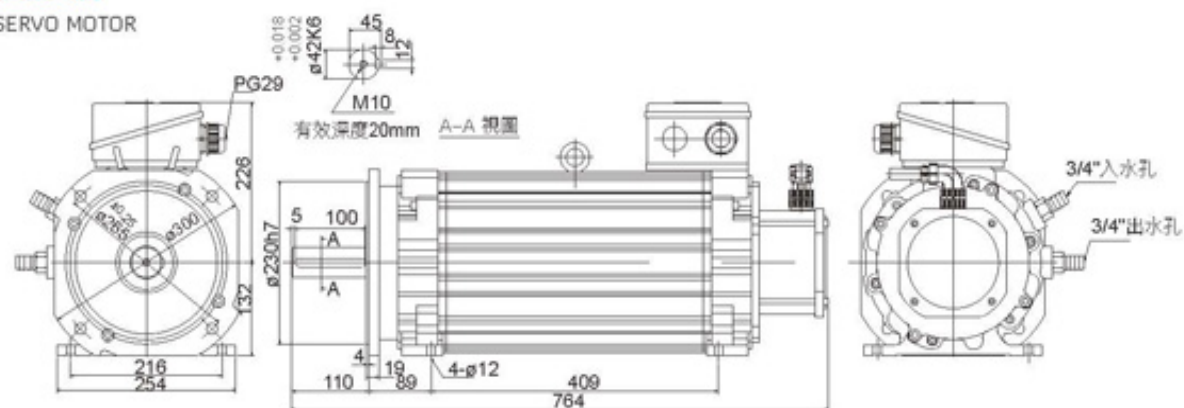
### SW-132L

FUKUTA SERVO MOTOR



### SW-132LA

FUKUTA SERVO MOTOR





# SW-180 S.F.:1.2

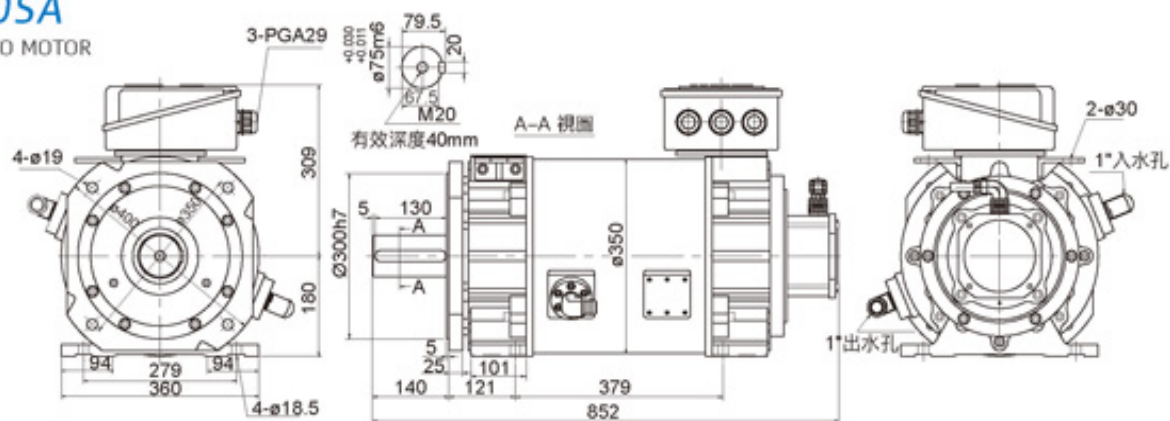
## 液冷式伺服馬達

LIQUID COOLING SERVO MOTOR **SW-180SA / SW-180SB**

| 機號<br>Fr. No. | 額定轉速        | 最大轉矩        | 額定轉矩         | 額定輸出         | 額定電流          |       | 額定頻率            | 轉動慣量           |
|---------------|-------------|-------------|--------------|--------------|---------------|-------|-----------------|----------------|
|               | Rated Speed | Max. Torque | Rated Torque | Rated Output | Rated Current |       | Rated Frequency | Rotor Inertial |
|               | RPM         | kg-m        | kg-m         | kw           | 220V          | 380V  | Hz              | Kg-m2          |
| 180SA         | 500         | 53.3        | 21.3         | 11           | 43.1          | 24.9  | 26.5            | 0.1759         |
|               | 1000        | 53.5        | 21.4         | 22           | 79.7          | 46.0  | 51.5            |                |
|               | 1500        | 48.7        | 19.5         | 30           | 102.5         | 59.2  | 76.4            |                |
|               | 2000        | 54.8        | 21.9         | 45           | 147.2         | 85.0  | 101.7           |                |
| 180SB         | 500         | 72.9        | 29.2         | 15           | 56.1          | 32.4  | 26.4            | 0.2541         |
|               | 1000        | 73.1        | 29.2         | 30           | 107.2         | 61.9  | 51.4            |                |
|               | 1500        | 73.0        | 29.2         | 45           | 150.7         | 87.0  | 76.5            |                |
|               | 2000        | 73.1        | 29.2         | 60           | 191.6         | 110.6 | 101.6           |                |

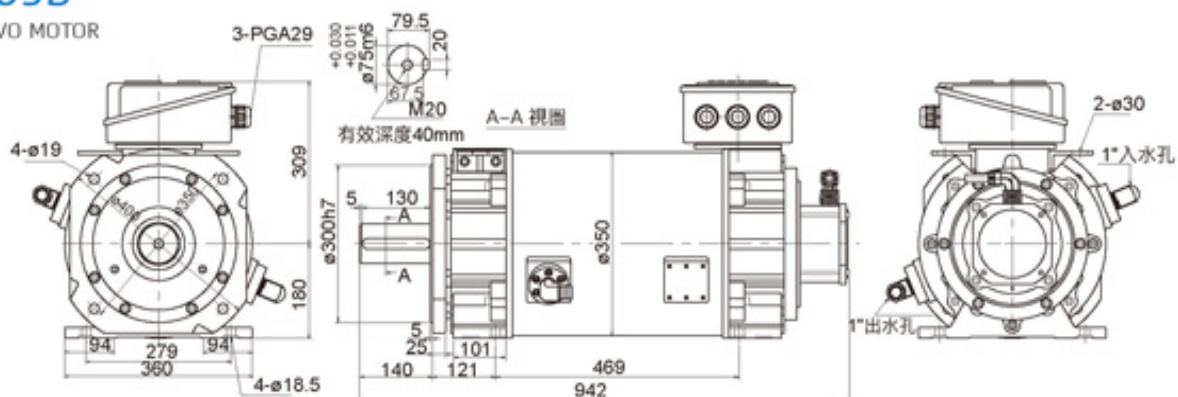
### SW-180SA

FUKUTA SERVO MOTOR

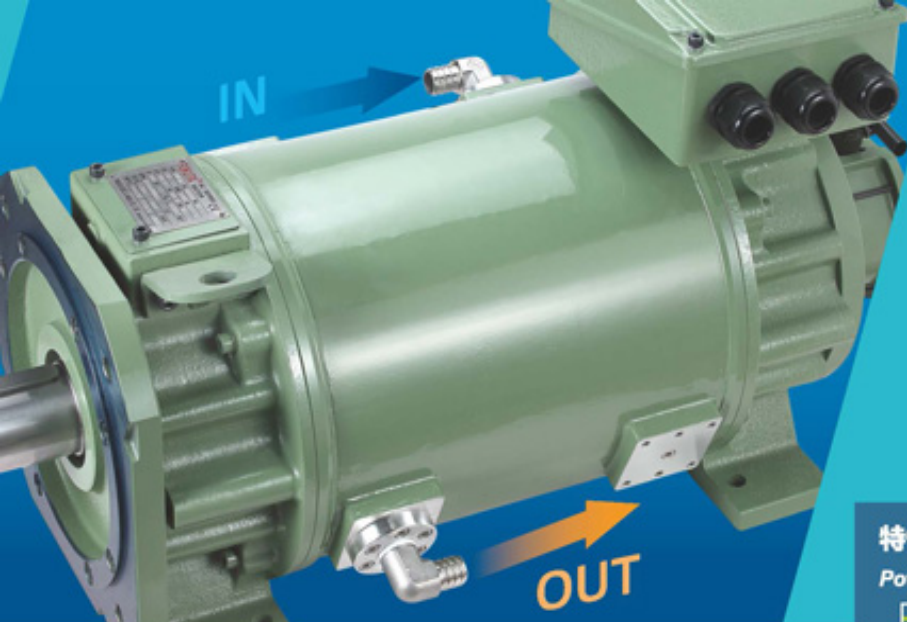


### SW-180SB

FUKUTA SERVO MOTOR







#### 馬達冷卻條件 Motor Cooling Conditions:

|                        |                                |
|------------------------|--------------------------------|
| 冷卻型式 Cooling Type      | 液冷 Liquid                      |
| 冷卻介質 Cooling Media     | 車用水箱冷卻液 Car's radiator coolant |
| 冷卻液流量 Coolant Flow     | 25-35 LPM                      |
| 冷卻液壓力 Coolant Pressure | 10.8 psi                       |
| 冷卻液入溫 Coolant Temp.    | 35° C                          |

#### 特性表 Characteristic Curves

Power / Torque



## SW-250 S.F.:1.2

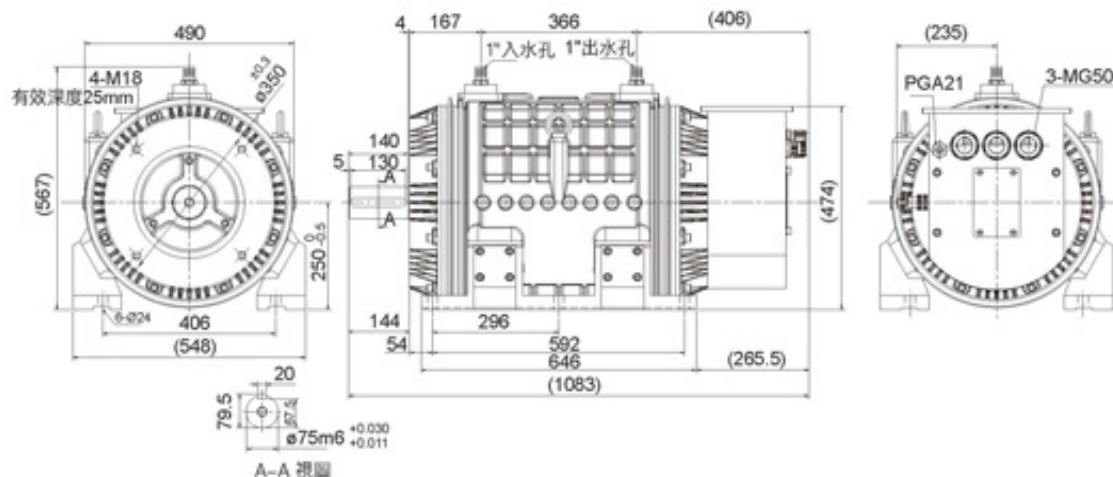
### 液冷式伺服馬達

LIQUID COOLING SERVO MOTOR SW-250MA / SW-250MB / SW-250MC

| 機號<br>Fr. No. | 額定轉速        | 最大轉矩        | 額定轉矩         | 額定輸出         | 額定電流          |       | 額定頻率            | 轉動慣量           |
|---------------|-------------|-------------|--------------|--------------|---------------|-------|-----------------|----------------|
|               | Rated Speed | Max. Torque | Rated Torque | Rated Output | Rated Current |       | Rated Frequency | Rotor Inertial |
|               | RPM         | kg-m        | kg-m         | kw           | 220V          | 380V  | Hz              | Kg-m2          |
| 250MA         | 500         | 146.0       | 58.4         | 30           | 105.5         | 60.9  | 25.6            | 1.1986         |
|               | 1000        | 146.0       | 58.4         | 60           | 195.9         | 113.1 | 50.7            |                |
|               | 1500        | 151.0       | 60.4         | 93           | 310.9         | 179.5 | 75.7            |                |
|               | 2000        | 146.3       | 58.5         | 120          | 393.2         | 227.0 | 100.7           |                |
| 250MB         | 500         | 182.6       | 73.0         | 38           | 131.3         | 75.8  | 25.6            | 1.4752         |
|               | 1000        | 182.6       | 73.1         | 75           | 256.2         | 147.9 | 50.6            |                |
|               | 1500        | 178.6       | 71.5         | 110          | 347.1         | 200.4 | 75.7            |                |
|               | 2000        | 182.7       | 73.1         | 150          | 481.7         | 278.1 | 100.7           |                |
| 250MC         | 500         | 218.9       | 87.6         | 45           | 153.5         | 88.6  | 25.6            | 1.7518         |
|               | 1000        | 201.6       | 80.6         | 93           | 320.1         | 184.8 | 50.6            |                |
|               | 1500        | 227.3       | 90.9         | 140          | 453.3         | 261.7 | 75.7            |                |
|               | 2000        | 219.3       | 87.7         | 180          | 577.1         | 333.2 | 100.7           |                |

## SW-250MA / SW-250MB / SW-250MC

FUKUTA SERVO MOTOR



SW-250

[www.fukuta-motor.com.tw](http://www.fukuta-motor.com.tw)

Innovation  
Sincerity  
Credibility



**FUKUTA®**

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