

**Innovation**  
Enthusiasm  
Integrity

Polar



**PSEF** series  
**SYNCHRONOUS** SERVO MOTOR  
同步伺服馬達

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Innovation  
Enthusiasm  
Integrity



# SYNCHRONOUS SERVO MOTOR

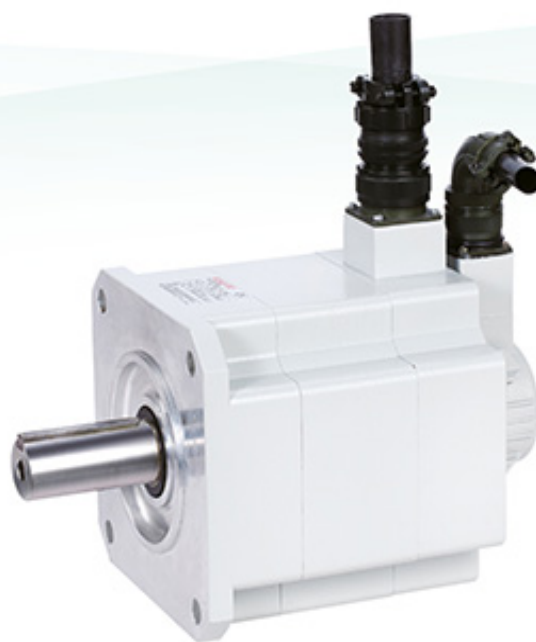
## 同步伺服馬達

### ► 一般條件 General Data

**PSEF series**  
SYNCHRONOUS SERVO MOTOR

|                            |                                                                                                                   |
|----------------------------|-------------------------------------------------------------------------------------------------------------------|
| 安裝方式 Mounting              | IM 2001(B35)                                                                                                      |
| 防護等級 Protection Level      | IP54                                                                                                              |
| 絕緣等級 Insulation H Class    | H 級                                                                                                               |
| 絕緣耐壓 Voltage Endurance     | 1500 Vrms/min                                                                                                     |
| 絕緣阻抗 Insulation Resistance | ABOVE 500 VDC 10MΩ                                                                                                |
| 冷卻方式 Cooling Method        | 強制通風 Forced Air Cooled                                                                                            |
| 溫度開關 Thermal Protection    | 溫度開關 120°C ± 5%( 常閉 ) Thermal Protector 120°C ± 5% (NC)                                                           |
| 噪 音 Noise                  | 80dBA                                                                                                             |
| 周 溫 Ambient Temp.          | -15°C ~ 40°C                                                                                                      |
| 高 度 Altitude               | 最高海拔 1000 米 Less than 1000 meter                                                                                  |
| 編 碼 器 Encoder              | 標準型: RESOLVER · 可選配 Push pull, Line-driver<br>Standard type: Resolver, optional for Push-pull or Line-driver type |
| 風 扇 Elec. Fan              | 1ø230V 50/60Hz 46/41W (F#112,132)                                                                                 |
| 驅 動 器 Driver               | 適用於任何同步馬達驅動器 Apply to any PMS motor drive                                                                         |





# PNVF-90

SYNCHRONOUS SERVO MOTOR

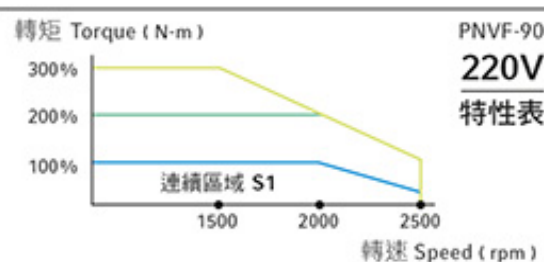
同步伺服馬達

220V

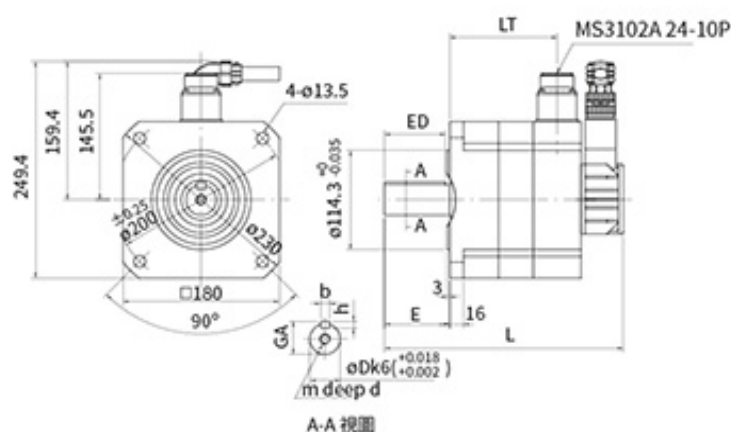
FUKUTA SYNCHRONOUS  
SERVO MOTOR

## 產品規格 Specification

| 框號 Frame No.                            | 90S    | 90M    | 90L    | 90X    |
|-----------------------------------------|--------|--------|--------|--------|
| 極數 Poles                                | 8      | 8      | 8      | 8      |
| 轉動慣量 Rotor Inertia (kg·m <sup>2</sup> ) | 0.0035 | 0.0061 | 0.0078 | 0.0096 |



| 框號<br>Fr. No. | 額定輸出<br>Rated Output<br>kw | 額定轉速<br>Rated Speed<br>RPM | 額定電流<br>Rated Current<br>A | 額定轉矩<br>Rated Torque<br>Nm | 最大轉矩<br>Max. Torque<br>Nm | 額定頻率<br>Rated Frequency<br>Hz | Ke(E.M.F)<br>vRMS/1000rpm | 轉矩常數<br>Kt<br>Nm/Arms | 最高轉速<br>Max Speed<br>rpm | 轉動慣量<br>Inertia<br>kg·m <sup>2</sup> | 重量<br>Weight<br>kg |
|---------------|----------------------------|----------------------------|----------------------------|----------------------------|---------------------------|-------------------------------|---------------------------|-----------------------|--------------------------|--------------------------------------|--------------------|
| 90S           | 1                          | 1000                       | 3.4                        | 9.6                        | 28.7                      | 66.7                          | 175.0                     | 2.8                   | 2000                     | 0.0035                               | 16                 |
|               | 1.5                        | 1500                       | 5.1                        | 9.6                        | 28.7                      | 100.0                         | 115.0                     | 1.9                   | 2500                     | 0.0035                               | 16                 |
|               | 2                          | 2000                       | 6.8                        | 9.6                        | 28.7                      | 133.3                         | 85.0                      | 1.4                   | 3000                     | 0.0035                               | 16                 |
|               | 3                          | 3000                       | 10.2                       | 9.6                        | 28.7                      | 200.0                         | 55.0                      | 0.9                   | 4000                     | 0.0035                               | 16                 |
| 90M           | 1.9                        | 1000                       | 6.3                        | 17.8                       | 53.5                      | 66.7                          | 175.0                     | 2.8                   | 2000                     | 0.0061                               | 29                 |
|               | 2.8                        | 1500                       | 9.5                        | 17.8                       | 53.5                      | 100.0                         | 115.0                     | 1.9                   | 2500                     | 0.0061                               | 29                 |
|               | 3.7                        | 2000                       | 12.5                       | 17.8                       | 53.5                      | 133.3                         | 85.0                      | 1.4                   | 3000                     | 0.0061                               | 29                 |
|               | 5.6                        | 3000                       | 19.0                       | 17.8                       | 53.5                      | 200.0                         | 55.0                      | 0.9                   | 4000                     | 0.0061                               | 29                 |
| 90L           | 2.3                        | 1000                       | 7.7                        | 21.7                       | 65.1                      | 66.7                          | 175.0                     | 2.8                   | 2000                     | 0.0078                               | 37                 |
|               | 3.4                        | 1500                       | 11.5                       | 21.7                       | 65.1                      | 100.0                         | 115.0                     | 1.9                   | 2500                     | 0.0078                               | 37                 |
|               | 4.5                        | 2000                       | 15.2                       | 21.7                       | 65.1                      | 133.3                         | 85.0                      | 1.4                   | 3000                     | 0.0078                               | 37                 |
|               | 6.8                        | 3000                       | 23.0                       | 21.7                       | 65.1                      | 200.0                         | 55.0                      | 0.9                   | 4000                     | 0.0078                               | 37                 |
| 90X           | 2.8                        | 1000                       | 9.2                        | 26.3                       | 78.9                      | 66.7                          | 175.0                     | 2.9                   | 2000                     | 0.0096                               | 45                 |
|               | 4.1                        | 1500                       | 13.8                       | 26.3                       | 78.9                      | 100.0                         | 115.0                     | 1.9                   | 2500                     | 0.0096                               | 45                 |
|               | 5.5                        | 2000                       | 18.5                       | 26.3                       | 78.9                      | 133.3                         | 85.0                      | 1.4                   | 3000                     | 0.0096                               | 45                 |
|               | 8.3                        | 3000                       | 27.6                       | 26.3                       | 78.9                      | 200.0                         | 55.0                      | 1.0                   | 4000                     | 0.0096                               | 45                 |



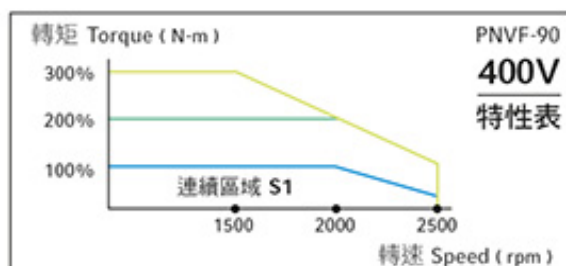
| ▼   | D  | bxh  | mxh    | GA | E   | ED  | L     | LT    |
|-----|----|------|--------|----|-----|-----|-------|-------|
| 90S | 35 | 10x8 | M12x28 | 38 | 75  | 70  | 274.5 | 123.5 |
| 90M | 35 | 10x8 | M12x28 | 38 | 75  | 70  | 304.5 | 153.5 |
| 90L | 35 | 10x8 | M12x28 | 38 | 75  | 70  | 324.5 | 173.5 |
| 90X | 42 | 12x8 | M16x36 | 45 | 110 | 105 | 379.5 | 193.5 |

400V

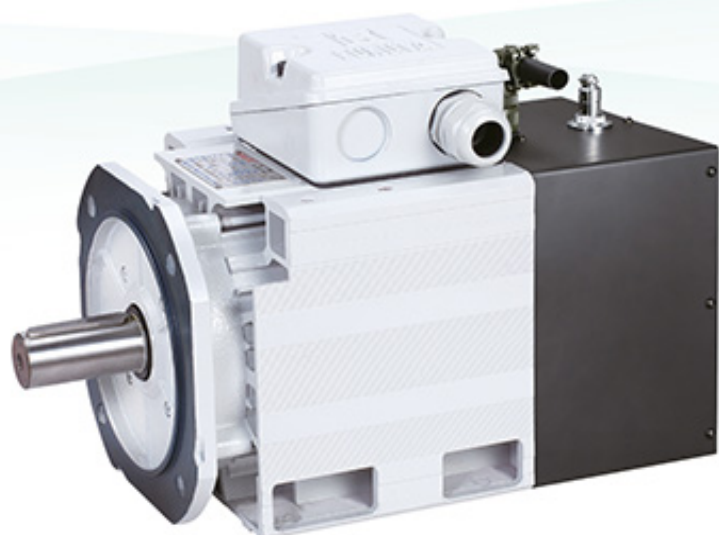
FUKUTA SYNCHRONOUS  
SERVO MOTOR

## ▶ 產品規格 Specification

| 框號   | Frame No.                          | 90S    | 90M    | 90L    | 90X    |
|------|------------------------------------|--------|--------|--------|--------|
| 極數   | Poles                              | 8      | 8      | 8      | 8      |
| 轉動慣量 | Rotor Inertia (kg·m <sup>2</sup> ) | 0.0035 | 0.0061 | 0.0078 | 0.0096 |



| 框號<br>Fr. No. | 額定輸出<br>Rated Output | 額定轉速<br>Rated Speed | 額定電流<br>Rated Current | 額定轉矩<br>Rated Torque | 最大轉矩<br>Max. Torque | 額定頻率<br>Rated Frequency | Ke(E.M.F)<br>vRMS/1000rpm | 轉矩常數<br>Kt | 最高轉速<br>Max Speed | 轉動慣量<br>Inertia   | 重量<br>Weight |
|---------------|----------------------|---------------------|-----------------------|----------------------|---------------------|-------------------------|---------------------------|------------|-------------------|-------------------|--------------|
|               | kw                   | RPM                 | A                     | Nm                   | Nm                  | Hz                      | Vrms                      | Nm/Arms    | rpm               | kg·m <sup>2</sup> | kg           |
| 90S           | 1                    | 1000                | 2.1                   | 9.6                  | 28.7                | 66.7                    | 300.0                     | 4.5        | 2000              | 0.0035            | 16           |
|               | 1.5                  | 1500                | 3.2                   | 9.6                  | 28.7                | 100.0                   | 200.0                     | 3.0        | 2500              | 0.0035            | 16           |
|               | 2                    | 2000                | 4.1                   | 9.6                  | 28.7                | 133.3                   | 150.0                     | 2.3        | 3000              | 0.0035            | 16           |
|               | 3                    | 3000                | 6.4                   | 9.6                  | 28.7                | 200.0                   | 100.0                     | 1.5        | 4000              | 0.0035            | 16           |
| 90M           | 1.9                  | 1000                | 3.7                   | 17.8                 | 53.5                | 66.7                    | 300.0                     | 4.8        | 2000              | 0.0061            | 29           |
|               | 2.8                  | 1500                | 5.6                   | 17.8                 | 53.5                | 100.0                   | 200.0                     | 3.2        | 2500              | 0.0061            | 29           |
|               | 3.7                  | 2000                | 7.5                   | 17.8                 | 53.5                | 133.3                   | 150.0                     | 2.4        | 3000              | 0.0061            | 29           |
|               | 5.6                  | 3000                | 11.2                  | 17.8                 | 53.5                | 200.0                   | 100.0                     | 1.6        | 4000              | 0.0061            | 29           |
| 90L           | 2.3                  | 1000                | 4.7                   | 21.7                 | 65.1                | 66.7                    | 300.0                     | 4.6        | 2000              | 0.0078            | 37           |
|               | 3.4                  | 1500                | 7.0                   | 21.7                 | 65.1                | 100.0                   | 200.0                     | 3.1        | 2500              | 0.0078            | 37           |
|               | 4.5                  | 2000                | 9.3                   | 21.7                 | 65.1                | 133.3                   | 150.0                     | 2.3        | 3000              | 0.0078            | 37           |
|               | 6.8                  | 3000                | 14.1                  | 21.7                 | 65.1                | 200.0                   | 100.0                     | 1.5        | 4000              | 0.0078            | 37           |
| 90X           | 2.8                  | 1000                | 5.6                   | 26.3                 | 78.9                | 66.7                    | 300.0                     | 4.7        | 2000              | 0.0096            | 45           |
|               | 4.1                  | 1500                | 8.4                   | 26.3                 | 78.9                | 100.0                   | 200.0                     | 3.1        | 2500              | 0.0096            | 45           |
|               | 5.5                  | 2000                | 11.0                  | 26.3                 | 78.9                | 133.3                   | 150.0                     | 2.4        | 3000              | 0.0096            | 45           |
|               | 8.3                  | 3000                | 16.8                  | 26.3                 | 78.9                | 200.0                   | 100.0                     | 1.6        | 4000              | 0.0096            | 45           |



# PSEF-112

SYNCHRONOUS SERVO MOTOR

同步伺服馬達

220V

FUKUTA SYNCHRONOUS  
SERVO MOTOR

## ▶ 產品規格 Specification

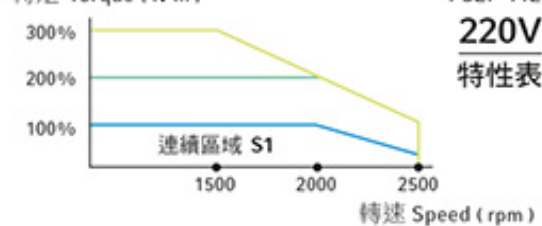
| 框 號 Frame No.                           | 112SA  | 112SB  | 112M  | 112L  | 112X  |
|-----------------------------------------|--------|--------|-------|-------|-------|
| 極 數 Poles                               | 8      | 8      | 8     | 8     | 8     |
| 轉動慣量 Rotor Inertia (kg·m <sup>2</sup> ) | 0.0062 | 0.0074 | 0.009 | 0.012 | 0.014 |

轉矩 Torque (N·m)

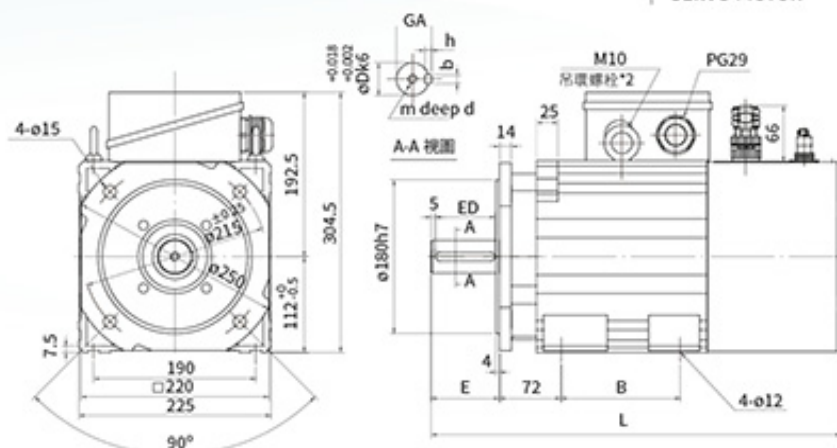
PSEF-112

220V

特性表



| 框號<br>Fr. No. | 額定輸出<br>Rated Output<br>kw | 額定轉速<br>Rated Speed<br>RPM | 額定電流<br>Rated Current<br>A | 額定轉矩<br>Rated Torque<br>Nm | 最大轉矩<br>Max. Torque<br>Nm | 額定頻率<br>Rated Frequency<br>Hz | Ke(E.M.F)<br>vRMS/1000rpm | 轉矩常數<br>Kt<br>Nm/Arms | 最高轉速<br>Max Speed<br>rpm | 轉動慣量<br>Inertia<br>kg·m <sup>2</sup> | 重量<br>Weight<br>kg |
|---------------|----------------------------|----------------------------|----------------------------|----------------------------|---------------------------|-------------------------------|---------------------------|-----------------------|--------------------------|--------------------------------------|--------------------|
| 112SA         | 4.4                        | 1000                       | 15.0                       | 42.0                       | 126.1                     | 66.7                          | 175.0                     | 2.8                   | 2000                     | 0.0062                               | 40                 |
|               | 6.6                        | 1500                       | 22.5                       | 42.0                       | 126.1                     | 100.0                         | 115.0                     | 1.9                   | 2500                     | 0.0062                               | 40                 |
|               | 8.8                        | 2000                       | 30.0                       | 42.0                       | 126.1                     | 133.3                         | 85.0                      | 1.4                   | 3000                     | 0.0062                               | 40                 |
|               | 13.2                       | 3000                       | 45.0                       | 42.0                       | 126.1                     | 200.0                         | 55.0                      | 0.9                   | 4000                     | 0.0062                               | 40                 |
| 112SB         | 5.7                        | 1000                       | 19.3                       | 54.0                       | 162.0                     | 66.7                          | 175.0                     | 2.8                   | 2000                     | 0.0074                               | 45                 |
|               | 8.5                        | 1500                       | 29.0                       | 54.0                       | 162.0                     | 100.0                         | 115.0                     | 1.9                   | 2500                     | 0.0074                               | 45                 |
|               | 11.3                       | 2000                       | 38.7                       | 54.0                       | 162.0                     | 133.3                         | 85.0                      | 1.4                   | 3000                     | 0.0074                               | 45                 |
|               | 17                         | 3000                       | 58.0                       | 54.0                       | 162.0                     | 200.0                         | 55.0                      | 0.9                   | 4000                     | 0.0074                               | 45                 |
| 112M          | 7.8                        | 1000                       | 26.5                       | 74.0                       | 222.0                     | 66.7                          | 175.0                     | 2.8                   | 2000                     | 0.009                                | 51                 |
|               | 11.6                       | 1500                       | 39.7                       | 74.0                       | 222.0                     | 100.0                         | 115.0                     | 1.9                   | 2500                     | 0.009                                | 51                 |
|               | 15.5                       | 2000                       | 52.9                       | 74.0                       | 222.0                     | 133.3                         | 85.0                      | 1.4                   | 3000                     | 0.009                                | 51                 |
|               | 23.3                       | 3000                       | 79.4                       | 74.0                       | 222.0                     | 200.0                         | 55.0                      | 0.9                   | 4000                     | 0.009                                | 51                 |
| 112L          | 9.4                        | 1000                       | 32.1                       | 89.8                       | 269.3                     | 66.7                          | 175.0                     | 2.8                   | 2000                     | 0.012                                | 56                 |
|               | 14.1                       | 1500                       | 48.2                       | 89.8                       | 269.3                     | 100.0                         | 115.0                     | 1.9                   | 2500                     | 0.012                                | 56                 |
|               | 18.8                       | 2000                       | 64.3                       | 89.8                       | 269.3                     | 133.3                         | 85.0                      | 1.4                   | 3000                     | 0.012                                | 56                 |
|               | 28.2                       | 3000                       | 96.4                       | 89.8                       | 269.3                     | 200.0                         | 55.0                      | 0.9                   | 4000                     | 0.012                                | 56                 |
| 112X          | 11.3                       | 1000                       | 38.5                       | 107.6                      | 322.8                     | 66.7                          | 175.0                     | 2.8                   | 2000                     | 0.014                                | 66                 |
|               | 16.9                       | 1500                       | 57.8                       | 107.6                      | 322.8                     | 100.0                         | 115.0                     | 1.9                   | 2500                     | 0.014                                | 66                 |
|               | 22.5                       | 2000                       | 77.1                       | 107.6                      | 322.8                     | 133.3                         | 85.0                      | 1.4                   | 3000                     | 0.014                                | 66                 |
|               | 33.8                       | 3000                       | 115.6                      | 107.6                      | 322.8                     | 200.0                         | 55.0                      | 0.9                   | 4000                     | 0.014                                | 66                 |



|       | D  | bxh  | mxh    | GA | E   | ED  | L   | B   |
|-------|----|------|--------|----|-----|-----|-----|-----|
| 112SA | 38 | 10x8 | M10x20 | 41 | 80  | 70  | 480 | 140 |
| 112SB | 38 | 10x8 | M10x20 | 41 | 80  | 70  | 480 | 140 |
| 112M  | 38 | 10x8 | M10x20 | 41 | 80  | 70  | 520 | 140 |
| 112L  | 38 | 10x8 | M10x20 | 41 | 80  | 70  | 560 | 140 |
| 112X  | 42 | 12x8 | M10x20 | 45 | 110 | 100 | 620 | 210 |

400V

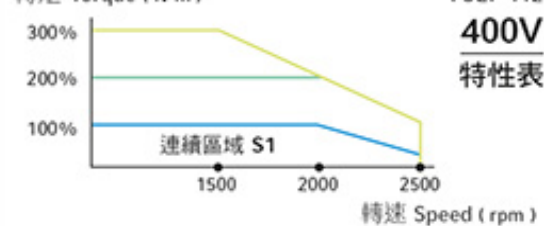
FUKUTA SYNCHRONOUS  
SERVO MOTOR

## ► 產品規格 Specification

| 框號 Frame No.                            | 112SA  | 112SB  | 112M  | 112L  | 112X  |
|-----------------------------------------|--------|--------|-------|-------|-------|
| 極數 Poles                                | 8      | 8      | 8     | 8     | 8     |
| 轉動慣量 Rotor Inertia (kg·m <sup>2</sup> ) | 0.0062 | 0.0074 | 0.009 | 0.012 | 0.014 |

轉矩 Torque (N·m)

PSEF-112

400V  
特性表

| 框號 Fr. No. | 額定輸出 Rated Output | 額定轉速 Rated Speed | 額定電流 Rated Current | 額定轉矩 Rated Torque | 最大轉矩 Max. Torque | 額定頻率 Rated Frequency | Ke(E.M.F) vRMS/1000rpm | 轉矩常數 Kt | 最高轉速 Max Speed | 轉動慣量 Inertia      | 重量 Weight |
|------------|-------------------|------------------|--------------------|-------------------|------------------|----------------------|------------------------|---------|----------------|-------------------|-----------|
|            | kw                | RPM              | A                  | Nm                | Nm               | Hz                   | Vrms                   | Nm/Arms | rpm            | kg·m <sup>2</sup> | kg        |
| 112SA      | 4.4               | 1000             | 8.7                | 42.0              | 126.1            | 66.7                 | 300.0                  | 4.8     | 2000           | 0.0062            | 40        |
|            | 6.6               | 1500             | 13.1               | 42.0              | 126.1            | 100.0                | 200.0                  | 3.2     | 2500           | 0.0062            | 40        |
|            | 8.8               | 2000             | 17.5               | 42.0              | 126.1            | 133.3                | 150.0                  | 2.4     | 3000           | 0.0062            | 40        |
|            | 13.2              | 3000             | 26.2               | 42.0              | 126.1            | 200.0                | 100.0                  | 1.6     | 4000           | 0.0062            | 40        |
| 112SB      | 5.7               | 1000             | 11.3               | 54.0              | 162.0            | 66.7                 | 300.0                  | 4.8     | 2000           | 0.0074            | 45        |
|            | 8.5               | 1500             | 16.9               | 54.0              | 162.0            | 100.0                | 200.0                  | 3.2     | 2500           | 0.0074            | 45        |
|            | 11.3              | 2000             | 22.5               | 54.0              | 162.0            | 133.3                | 150.0                  | 2.4     | 3000           | 0.0074            | 45        |
|            | 17                | 3000             | 33.8               | 54.0              | 162.0            | 200.0                | 100.0                  | 1.6     | 4000           | 0.0074            | 45        |
| 112M       | 7.8               | 1000             | 15.1               | 74.0              | 222.0            | 66.7                 | 300.0                  | 4.9     | 2000           | 0.009             | 51        |
|            | 11.6              | 1500             | 22.7               | 74.0              | 222.0            | 100.0                | 200.0                  | 3.3     | 2500           | 0.009             | 51        |
|            | 15.5              | 2000             | 30.3               | 74.0              | 222.0            | 133.3                | 150.0                  | 2.4     | 3000           | 0.009             | 51        |
|            | 23.3              | 3000             | 45.4               | 74.0              | 222.0            | 200.0                | 100.0                  | 1.6     | 4000           | 0.009             | 51        |
| 112L       | 9.4               | 1000             | 18.5               | 89.8              | 269.3            | 66.7                 | 300.0                  | 4.9     | 2000           | 0.012             | 56        |
|            | 14.1              | 1500             | 27.7               | 89.8              | 269.3            | 100.0                | 200.0                  | 3.2     | 2500           | 0.012             | 56        |
|            | 18.8              | 2000             | 36.9               | 89.8              | 269.3            | 133.3                | 150.0                  | 2.4     | 3000           | 0.012             | 56        |
|            | 28.2              | 3000             | 55.4               | 89.8              | 269.3            | 200.0                | 100.0                  | 1.6     | 4000           | 0.012             | 56        |
| 112X       | 11.3              | 1000             | 22.1               | 107.6             | 322.8            | 66.7                 | 300.0                  | 4.9     | 2000           | 0.014             | 66        |
|            | 16.9              | 1500             | 33.2               | 107.6             | 322.8            | 100.0                | 200.0                  | 3.2     | 2500           | 0.014             | 66        |
|            | 22.5              | 2000             | 44.3               | 107.6             | 322.8            | 133.3                | 150.0                  | 2.4     | 3000           | 0.014             | 66        |
|            | 33.8              | 3000             | 66.4               | 107.6             | 322.8            | 200.0                | 100.0                  | 1.6     | 4000           | 0.014             | 66        |

※ 本型錄僅供參考，本公司保有修改之權利。



# PSEF-132

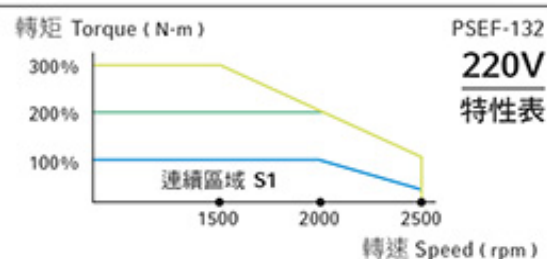
## SYNCHRONOUS SERVO MOTOR 同步伺服馬達

220V

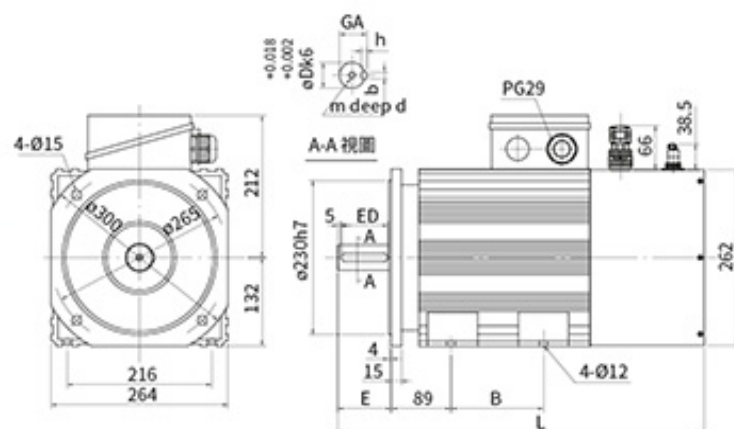
FUKUTA SYNCHRONOUS  
SERVO MOTOR

### ▶ 產品規格 Specification

| 框 號 Frame No.                           | 132S   | 132M   | 132L   |
|-----------------------------------------|--------|--------|--------|
| 極 數 Poles                               | 8      | 8      | 8      |
| 轉動慣量 Rotor Inertia (kg·m <sup>2</sup> ) | 0.0231 | 0.0309 | 0.0400 |



| 框號<br>Fr. No. | 額定輸出<br>Rated Output<br>kw | 額定轉速<br>Rated Speed<br>RPM | 額定電流<br>Rated Current<br>A | 額定轉矩<br>Rated Torque<br>Nm | 最大轉矩<br>Max. Torque<br>Nm | 額定頻率<br>Rated Frequency<br>Hz | Ke(E.M.F)<br>vRMS/1000rpm<br>Vrms | 轉矩常數<br>Kt<br>Nm/Arms | 最高轉速<br>Max Speed<br>rpm | 轉動慣量<br>Inertia<br>kg·m <sup>2</sup> | 重量<br>Weight<br>kg |
|---------------|----------------------------|----------------------------|----------------------------|----------------------------|---------------------------|-------------------------------|-----------------------------------|-----------------------|--------------------------|--------------------------------------|--------------------|
| 132S          | 12.4                       | 1000                       | 41.8                       | 117.4                      | 352.3                     | 66.7                          | 175.0                             | 2.8                   | 1500.0                   | 0.0231                               | 70                 |
|               | 18.5                       | 1500                       | 62.4                       | 117.5                      | 352.6                     | 100.0                         | 115.0                             | 1.9                   | 2000.0                   | 0.0231                               | 70                 |
|               | 22                         | 2000                       | 74.2                       | 105.1                      | 315.2                     | 133.3                         | 85.0                              | 1.4                   | 2500.0                   | 0.0231                               | 70                 |
|               | 32                         | 3000                       | 108.0                      | 101.9                      | 305.6                     | 200.0                         | 55.0                              | 0.9                   | 3500.0                   | 0.0231                               | 70                 |
| 132M          | 15                         | 1000                       | 50.6                       | 142.4                      | 427.1                     | 66.7                          | 175.0                             | 2.8                   | 1500.0                   | 0.0309                               | 82                 |
|               | 22                         | 1500                       | 74.2                       | 140.4                      | 421.1                     | 100.0                         | 115.0                             | 1.9                   | 2000.0                   | 0.0309                               | 82                 |
|               | 30                         | 2000                       | 101.3                      | 143.3                      | 429.8                     | 133.3                         | 85.0                              | 1.4                   | 2500.0                   | 0.0309                               | 82                 |
|               | 45                         | 3000                       | 152.0                      | 143.3                      | 429.8                     | 200.0                         | 55.0                              | 0.9                   | 3500.0                   | 0.0309                               | 82                 |
| 132L          | 20                         | 1000                       | 67.5                       | 191.0                      | 573.0                     | 66.7                          | 175.0                             | 2.8                   | 1500.0                   | 0.0400                               | 98                 |
|               | 30                         | 1500                       | 101.3                      | 191.0                      | 573.0                     | 100.0                         | 115.0                             | 1.9                   | 2000.0                   | 0.0400                               | 98                 |
|               | 37                         | 2000                       | 118.3                      | 176.7                      | 530.0                     | 133.3                         | 85.0                              | 1.5                   | 2500.0                   | 0.0400                               | 98                 |
|               | 55                         | 3000                       | 185.7                      | 175.1                      | 525.3                     | 200.0                         | 55.0                              | 0.9                   | 3500.0                   | 0.0400                               | 98                 |



| ▼    | D  | bxh  | mxh    | GA | E   | ED  | L     | B   |
|------|----|------|--------|----|-----|-----|-------|-----|
| 132S | 38 | 10x8 | M10x25 | 41 | 80  | 70  | 546.5 | 138 |
| 132M | 42 | 12x8 | M10x25 | 45 | 110 | 100 | 631.5 | 178 |
| 132L | 42 | 12x8 | M10x25 | 45 | 110 | 100 | 701.5 | 287 |

400V

FUKUTA SYNCHRONOUS  
SERVO MOTOR

## ► 產品規格 Specification

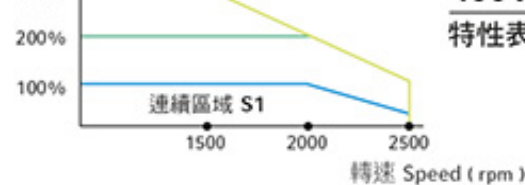
| 框號 Frame No.                            | 132S   | 132M   | 132L   |
|-----------------------------------------|--------|--------|--------|
| 極數 Poles                                | 8      | 8      | 8      |
| 轉動慣量 Rotor Inertia (kg·m <sup>2</sup> ) | 0.0231 | 0.0309 | 0.0400 |

轉矩 Torque (N·m)

PSEF-132

400V

特性表



| 框號<br>Fr. No. | 額定輸出<br>Rated Output<br>kw | 額定轉速<br>Rated Speed<br>RPM | 額定電流<br>Rated Current<br>A | 額定轉矩<br>Rated Torque<br>Nm | 最大轉矩<br>Max. Torque<br>Nm | 額定頻率<br>Rated Frequency<br>Hz | Ke(E.M.F)<br>vRMS/1000rpm<br>Vrms | 轉矩常數<br>Kt<br>Nm/Arms | 最高轉速<br>Max Speed<br>rpm | 轉動慣量<br>Inertia<br>kg·m <sup>2</sup> | 重量<br>Weight<br>kg |
|---------------|----------------------------|----------------------------|----------------------------|----------------------------|---------------------------|-------------------------------|-----------------------------------|-----------------------|--------------------------|--------------------------------------|--------------------|
| 132S          | 12.4                       | 1000                       | 24.6                       | 117.4                      | 352.3                     | 66.7                          | 300.0                             | 4.8                   | 1500.0                   | 0.0231                               | 70                 |
|               | 18.5                       | 1500                       | 36.7                       | 117.5                      | 352.6                     | 100.0                         | 200.0                             | 3.2                   | 2000.0                   | 0.0231                               | 70                 |
|               | 22                         | 2000                       | 43.7                       | 105.1                      | 315.2                     | 133.3                         | 150.0                             | 2.4                   | 2500.0                   | 0.0231                               | 70                 |
|               | 32                         | 3000                       | 67.5                       | 101.9                      | 305.6                     | 200.0                         | 100.0                             | 1.5                   | 3500.0                   | 0.0231                               | 70                 |
| 132M          | 15                         | 1000                       | 29.8                       | 142.4                      | 427.1                     | 66.7                          | 300.0                             | 4.8                   | 1500.0                   | 0.0309                               | 82                 |
|               | 22                         | 1500                       | 43.7                       | 140.4                      | 421.1                     | 100.0                         | 200.0                             | 3.2                   | 2000.0                   | 0.0309                               | 82                 |
|               | 30                         | 2000                       | 59.6                       | 143.3                      | 429.8                     | 133.3                         | 150.0                             | 2.4                   | 2500.0                   | 0.0309                               | 82                 |
|               | 45                         | 3000                       | 95.0                       | 143.3                      | 429.8                     | 200.0                         | 100.0                             | 1.5                   | 3500.0                   | 0.0309                               | 82                 |
| 132L          | 20                         | 1000                       | 43.5                       | 191.0                      | 573.0                     | 66.7                          | 300.0                             | 4.4                   | 1500.0                   | 0.0400                               | 98                 |
|               | 30                         | 1500                       | 65.3                       | 191.0                      | 573.0                     | 100.0                         | 200.0                             | 2.9                   | 2000.0                   | 0.0400                               | 98                 |
|               | 37                         | 2000                       | 80.5                       | 176.7                      | 530.0                     | 133.3                         | 150.0                             | 2.2                   | 2500.0                   | 0.0400                               | 98                 |
|               | 55                         | 3000                       | 119.5                      | 175.1                      | 525.3                     | 200.0                         | 100.0                             | 1.5                   | 3500.0                   | 0.0400                               | 98                 |

※ 本型錄僅供參考，本公司保有修改之權利。



# PSEF-145

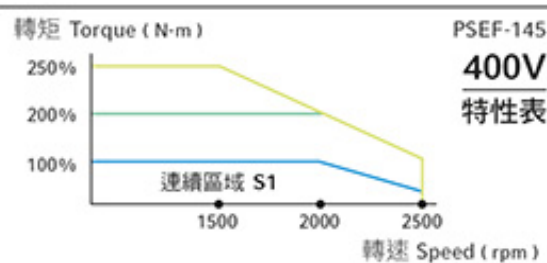
## SYNCHRONOUS SERVO MOTOR 同步伺服馬達

400V

FUKUTA SYNCHRONOUS  
SERVO MOTOR

### ▶ 產品規格 Specification

| 框號 Frame No.                            | 145S  | 145M  | 145L  |
|-----------------------------------------|-------|-------|-------|
| 極數 Poles                                | 8     | 8     | 8     |
| 轉動慣量 Rotor Inertia (kg·m <sup>2</sup> ) | 0.048 | 0.064 | 0.069 |



| 框號<br>Fr. No. | 額定輸出<br>Rated Output<br>kw | 額定轉速<br>Rated Speed<br>RPM | 額定電流<br>Rated Current<br>A | 額定轉矩<br>Rated Torque<br>Nm | 最大轉矩<br>Max. Torque<br>Nm | 額定頻率<br>Rated Frequency<br>Hz | Ke(E.M.F)<br>vRMS/1000rpm | 轉矩常數<br>Kt<br>Nm/Arms | 最高轉速<br>Max Speed<br>rpm | 轉動慣量<br>Inertia<br>kg·m <sup>2</sup> | 重量<br>Weight<br>kg |
|---------------|----------------------------|----------------------------|----------------------------|----------------------------|---------------------------|-------------------------------|---------------------------|-----------------------|--------------------------|--------------------------------------|--------------------|
| 145S          | 20                         | 1000                       | 40.9                       | 191.0                      | 477.5                     | 66.7                          | 300.0                     | 4.7                   | 1500.0                   | 0.048                                | 112                |
|               | 30                         | 1500                       | 63.3                       | 191.0                      | 477.5                     | 100.0                         | 200.0                     | 3.0                   | 2000.0                   | 0.048                                | 112                |
|               | 37                         | 2000                       | 75.7                       | 176.7                      | 441.7                     | 133.3                         | 150.0                     | 2.3                   | 2500.0                   | 0.048                                | 112                |
|               | 55                         | 3000                       | 116.0                      | 175.1                      | 437.7                     | 200.0                         | 100.0                     | 1.5                   | 3500.0                   | 0.048                                | 112                |
| 145M          | 25                         | 1000                       | 51.1                       | 238.8                      | 596.9                     | 66.7                          | 300.0                     | 4.7                   | 1500.0                   | 0.064                                | 130                |
|               | 37                         | 1500                       | 75.7                       | 235.6                      | 588.9                     | 100.0                         | 200.0                     | 3.1                   | 2000.0                   | 0.064                                | 130                |
|               | 45                         | 2000                       | 92.1                       | 214.9                      | 537.2                     | 133.3                         | 150.0                     | 2.3                   | 2500.0                   | 0.064                                | 130                |
|               | 75                         | 3000                       | 153.4                      | 238.8                      | 596.9                     | 200.0                         | 100.0                     | 1.6                   | 3500.0                   | 0.064                                | 130                |
| 145L          | 30                         | 1000                       | 61.4                       | 286.5                      | 716.3                     | 66.7                          | 300.0                     | 4.7                   | 1500.0                   | 0.069                                | 150                |
|               | 45                         | 1500                       | 92.1                       | 286.5                      | 716.3                     | 100.0                         | 200.0                     | 3.1                   | 2000.0                   | 0.069                                | 150                |
|               | 55                         | 2000                       | 112.5                      | 262.6                      | 656.6                     | 133.3                         | 150.0                     | 2.3                   | 2500.0                   | 0.069                                | 150                |
|               | 85                         | 3000                       | 173.9                      | 270.6                      | 676.5                     | 200.0                         | 100.0                     | 1.6                   | 3500.0                   | 0.069                                | 150                |



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