

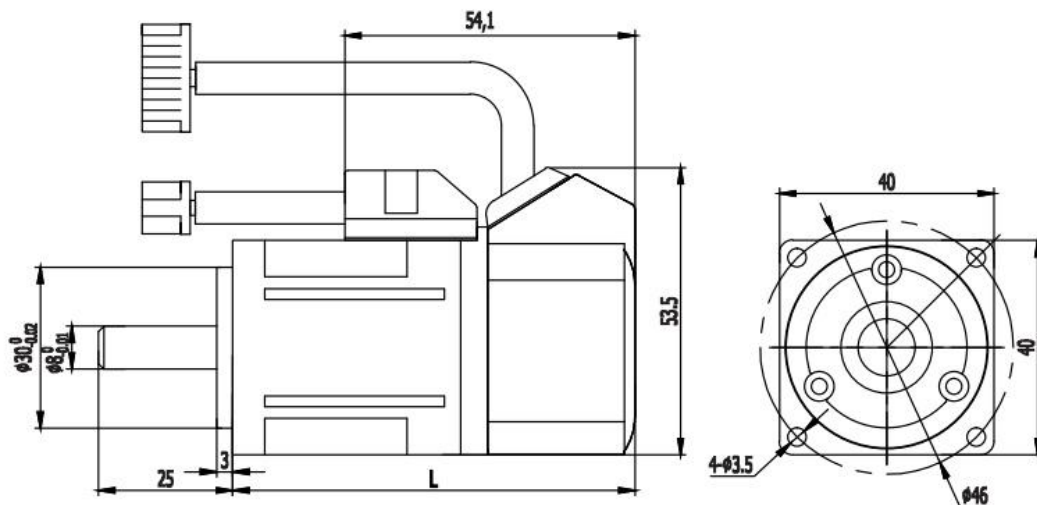
## 50W/100W AC Servo Motor

AC brushless servo motor with 50W/ 100W are optional, 1-phase or 3-phase 220V AC voltage, 3000 rpm high speed, 0.16 Nm/ 0.64 Nm rated torque can be choose and equipped with a 2,500 PPR incremental encoder. Due to the brushless design, they need less maintenance and have a longer service life.

### AC servo motor



### Dimension (mm)



| Model        | Power | L (without brake) | L (with brake) |
|--------------|-------|-------------------|----------------|
| SERVO-40S50  | 50 W  | 75 mm             | 109 mm         |
| SERVO-40S100 | 100 W | 90 mm             | 124 mm         |

## Specification

| Model            | Rated Power | Rated Current | Rated Torque | Peak Torque | Length | Torque coefficient | Torque Inertia                           | Line-Line Resistance | Line-Line Inductance | Electrical Time-Constant |
|------------------|-------------|---------------|--------------|-------------|--------|--------------------|------------------------------------------|----------------------|----------------------|--------------------------|
| SERV<br>O-40S50  | 50W         | 0.4 A         | 0.16 Nm      | 0.32 Nm     | 75 mm  | 0.4 N.m/<br>A      | $0.025 \times 10^{-4}$ Kg.M <sup>2</sup> | 108 Ω                | 108 mH               | 1ms                      |
| SERV<br>O-40S100 | 100W        | 0.6 A         | 0.32 Nm      | 0.64 Nm     | 290 mm | 0.53 N.m/<br>A     | $0.051 \times 10^{-4}$ Kg.M <sup>2</sup> | 34 Ω                 | 40 mH                | 1.18s                    |

| Technical Parameters     |                                     |
|--------------------------|-------------------------------------|
| Square Flange Size       | 40 mm                               |
| Rated Voltage            | Single phase or three phase 220V AC |
| Rated Speed              | 3000 rpm                            |
| Voltage Constant         | 36.8V/ 1000r/ min                   |
| Incremental Encoder Line | 2500 PPR                            |
| Absolute Encoder         | 17 bit, 23 bit                      |
| Insulation Class         | Class B                             |
| Safety Class             | IP 65                               |
| Temperature              | -20℃~ +40℃                          |
| Humidity                 | <90%RH, (no dewing)                 |

## Winding and Encoder Connection

### 1. For servo motor winding

| Motor Winding Plug | Incremental Encoder Line | U ( Red )  | V (Brown) | W (Green) | PE (White) |
|--------------------|--------------------------|------------|-----------|-----------|------------|
|                    | Absolute Encoder Line    | PE (White) | U (Red)   | V (Green) | W (Brown)  |
|                    | Socket Number            | 1          | 2         | 3         | 4          |

## 2. For incremental encoder

| Incremental Encoder Socket (15 Pin) | Signal Definition | 5V | 0V | B | Z- | U | Z | U- | A | V  | W  | V- | A- | B- | W- | PE |
|-------------------------------------|-------------------|----|----|---|----|---|---|----|---|----|----|----|----|----|----|----|
|                                     | Socket Number     | 2  | 3  | 4 | 5  | 6 | 7 | 8  | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 1  |

## 3. For absolute encoder

| Absolute Encoder Socket (7 Pin) | Signal Definition | E- | E+ | SD- | 0V | SD+ | 5V | PE |
|---------------------------------|-------------------|----|----|-----|----|-----|----|----|
|                                 | Socket Number     | 2  | 3  | 4   | 5  | 6   | 7  | 1  |