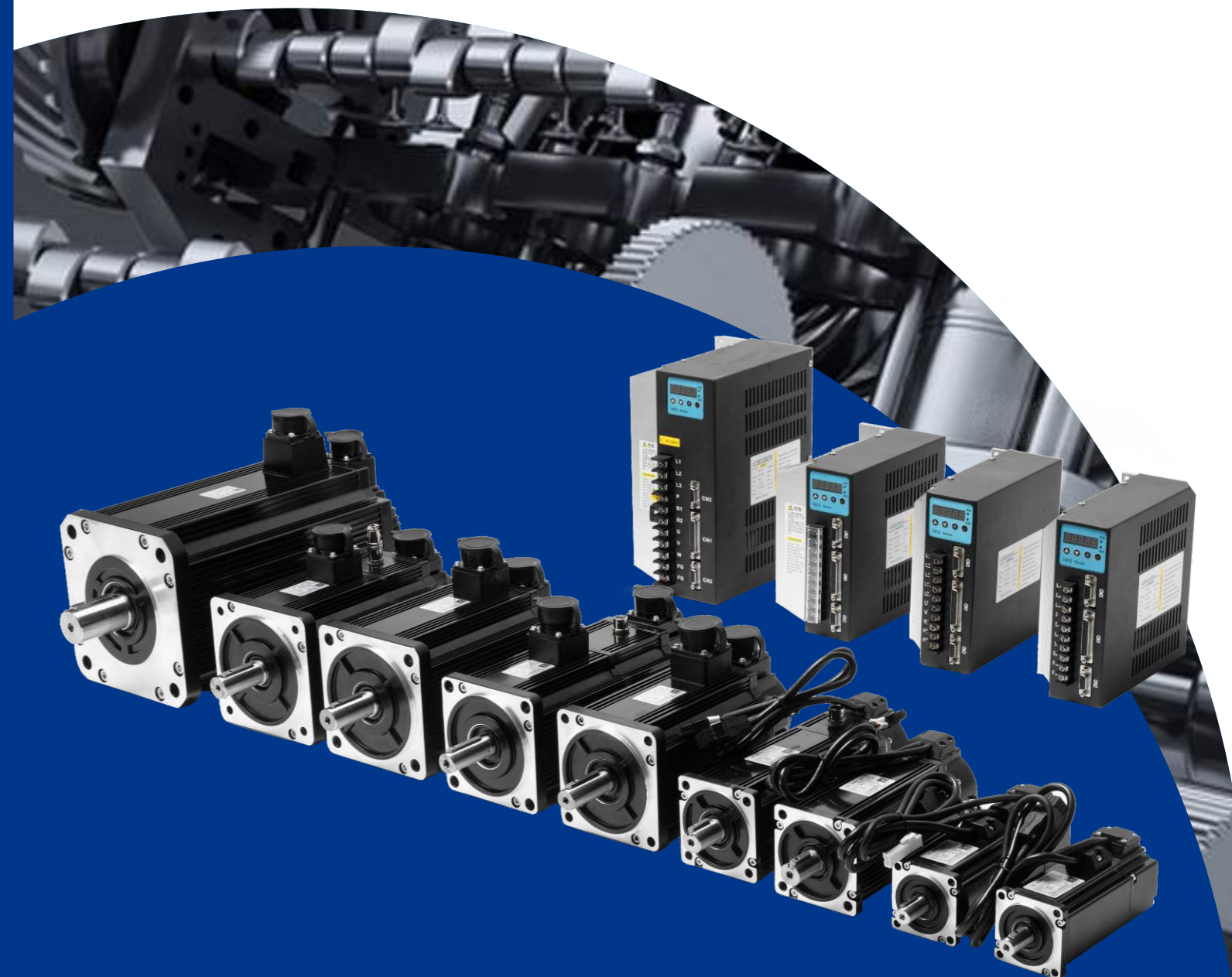


SERVO MOTOR SELECTION GUIDE FOR AUTOMATION



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TorqueBank

NAMING RULES

The motor model naming method is as follows:

| | | | | | | | | | |
|-----|----|----|---|---|-----|----|----|---|---|
| 180 | A6 | ST | — | M | 480 | 15 | LB | Z | F |
| ① | ② | ③ | ④ | ⑤ | ⑥ | ⑦ | ⑧ | ⑨ | ⑩ |

| ① | | ② | | ③ | | ④ | | ⑤ | |
|--------|---------------|--------|--------------------------------|--------|-----------------|--------|---------------|--------|---------------------------------------|
| Symbol | Specification | Symbol | Specification | Symbol | Specification | Symbol | Specification | Symbol | Specification |
| 60 | 60Flange | A5 | General series Omitted here | ST | Sine wave drive | — | Connectors | M | Incremental photoelectric encoder |
| 80 | 80Flange | | | | | | | C | Incremental magnetic encoder |
| 130 | 130Flange | X6 | X6Series | | | | | S | Wire-saving encoder |
| 180 | 180Flange | A6 | A6Series | | | | | J | 17-bit photoelectric absolute encoder |
| | | H6 | H6Series | | | | | J2 | 23-bit photoelectric absolute encoder |
| | | | | | | | | JC | 17-bit absolute magnetic encoder |
| | | | | | | | | X | Revolving transformer |

| ⑥ | | ⑦ | | ⑧ | | ⑨ | | ⑩ | |
|--------|---------------|--------|---------------|--------|---------------|--------|---------------|--------|---------------|
| Symbol | Specification | Symbol | Specification | Symbol | Specification | Symbol | Specification | Symbol | Specification |
| 024 | 2.4N · m | 10 | 1000rpm | LB | 250V | Z | With brakes | F | With fan |
| 040 | 4N · m | 15 | 1500rpm | HB | 380V | Omit | No brakes | Omit | No fan |
| 100 | 10N · m | 20 | 2000rpm | | | | | | |
| 480 | 48N · m | 25 | 2500rpm | | | | | | |
| 955 | 95.5N · m | 30 | 3000rpm | | | | | | |
| A20 | 120N · m | | | | | | | | |
| B50 | 250N · m | | | | | | | | |

APPLICATION AREA



Security Monitoring



Electric Forklift



Textile Machinery

The Machine Hand



Numerical Control



Automated Guided Vehicle



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APPLICATION AREA



PRODUCT CONTENTS

AC A5 Family

| | | |
|-------|----------|----|
| 04-15 | 60A5 ST | 04 |
| | 80A5 ST | 05 |
| | 90A5 ST | 06 |
| | 110A5 ST | 07 |
| | 130A5 ST | 08 |
| | 180A5 ST | 10 |
| | 200A5 ST | 12 |
| | 220A5 ST | 14 |
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AC A6 Family

| | | |
|-------|----------|----|
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| | 130A6 ST | 18 |
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AC Direct Drive Family

| | | |
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| | 260 ZQ | 28 |
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AC H6 Family

| | | |
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AC X6 Family

| | | |
|-------|----------|----|
| 23-25 | 60X6 ST | 23 |
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| | 130X6 ST | 25 |

DC 24V Family

| | | |
|-------|--------|----|
| 30-32 | 40A ST | 30 |
| | 60A ST | 31 |
| | 80 ST | 32 |

AC G6 Family

| | | |
|----|----------|----|
| 26 | 130G6 ST | 26 |
|----|----------|----|

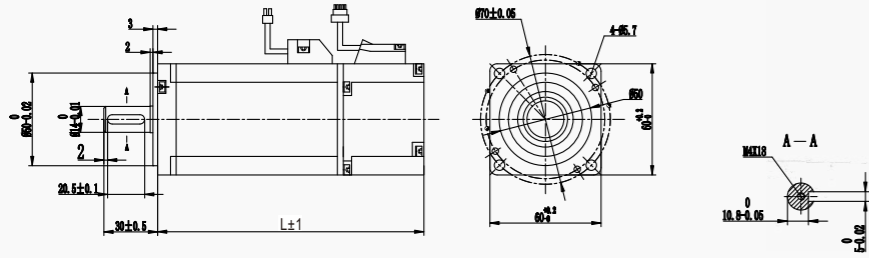
DC 48V Family

| | | |
|-------|--------|----|
| 33-36 | 40A ST | 33 |
| | 60A ST | 34 |
| | 80 ST | 35 |
| | 130 ST | 36 |

SERIES SERVO MOTORS

60A5 ST

DIMENSION:UNIT=mm



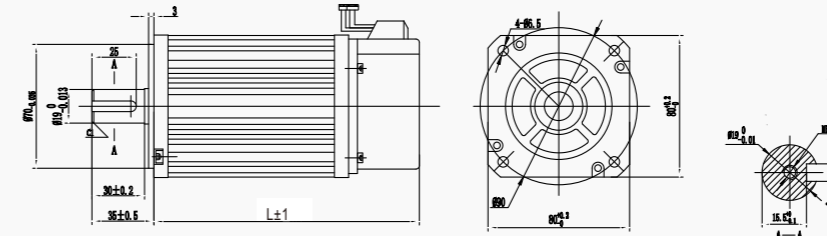
SPECIFICATIONS

| MOTER MODEL | 60AST-M00630 | 60AST-M01330 | 60AST-M01930 | | | | | | | | | | | | | |
|--------------------------------------|---|-----------------------|-----------------------|---------|------------------|-----|-----|----|---|----|----|----|----|----|----|----|
| Rated Power(kW) | 0.2 | 0.4 | 0.6 | | | | | | | | | | | | | |
| Rated Voltage(V) | 220 | 220 | 220 | | | | | | | | | | | | | |
| Rated Current(A) | 1.2 | 2.8 | 3.5 | | | | | | | | | | | | | |
| Rated Speed(rpm) | 3000 | 3000 | 3000 | | | | | | | | | | | | | |
| Rated Torque(N.m) | 0.637 | 1.27 | 1.91 | | | | | | | | | | | | | |
| Peak Torque(N.m) | 1.91 | 3.9 | 5.73 | | | | | | | | | | | | | |
| Voltage Constant (V/1000r / min) | 30.9 | 29.6 | 34 | | | | | | | | | | | | | |
| Torque Coefficient(N.m /A) | 0.53 | 0.45 | 0.55 | | | | | | | | | | | | | |
| Rotor Inertia(kg.m ²) | 0.175x10 ⁻⁴ | 0.29x10 ⁻⁴ | 0.39x10 ⁻⁴ | | | | | | | | | | | | | |
| Line-line Resistance(Ω) | 6.18 | 2.35 | 1.93 | | | | | | | | | | | | | |
| Line-line Inductance(mH) | 29.3 | 14.5 | 10.7 | | | | | | | | | | | | | |
| Electrical Time-constant(ms) | 4.74 | 6.17 | 5.5 | | | | | | | | | | | | | |
| Weight(kg) | 1.16 | 1.6 | 2.07 | | | | | | | | | | | | | |
| Encord Line Number(PPR) | 2500ppr/17bit/23bit/rotary | | | | | | | | | | | | | | | |
| Insulation Class | ClassF | | | | | | | | | | | | | | | |
| Safety Class | IP65 | | | | | | | | | | | | | | | |
| L Without Electric Brake | 116 | 141 | 169 | | | | | | | | | | | | | |
| L With Electromagnetic Brake | 154 | 179 | 207 | | | | | | | | | | | | | |
| Environment | TEMPERATURE:-20°C~+40°C HUMIDITY BELOW 90 %RH NO DEWING | | | | | | | | | | | | | | | |
| Motor Winding Plug | Incremental Encoder Motor Winding Leads | U(red) | V(yellow) | W(blue) | Pe(yellow green) | | | | | | | | | | | |
| | Absolute Encoder Motor Winding Leads | Pe(yellow green) | U(red) | V(blue) | W(yellow) | | | | | | | | | | | |
| | Socket Number | 1 | 2 | 3 | 4 | | | | | | | | | | | |
| Photoelectric Encoder Socket (15Pin) | Winding Leads | 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 |
| Absolute Encoder Socket (7Pin) | Winding Leads | E- | E+ | SD- | 0V | SD+ | +5V | PE | | | | | | | | |
| | Socket Number | 2 | 3 | 4 | 5 | 6 | 7 | 1 | | | | | | | | |

SERIES SERVO MOTORS

80A5 ST

DIMENSION:UNIT=mm



SPECIFICATIONS

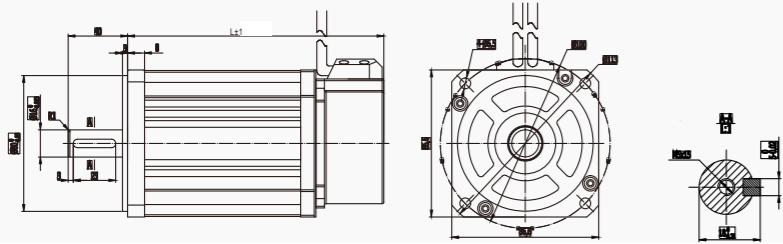
| MOTER MODEL | 80ST-M01330 | 80ST-M02430 | 80ST-M03520 | 80ST-M04025 | | | | | | | | | | | | |
|--------------------------------------|--|-----------------------|-----------------------|-----------------------|------------------|-----|-----|----|---|----|----|----|----|----|----|----|
| Rated Power(kW) | 0.4 | 0.75 | 0.73 | 1.0 | | | | | | | | | | | | |
| Rated Voltage(V) | 220 | 220 | 220 | 220 | | | | | | | | | | | | |
| Rated Current(A) | 2 | 3 | 3 | 4.4 | | | | | | | | | | | | |
| Rated Speed(rpm) | 3000 | 3000 | 2000 | 2500 | | | | | | | | | | | | |
| Rated Torque(N.m) | 1.27 | 2.39 | 3.5 | 4 | | | | | | | | | | | | |
| Peak Torque(N.m) | 3.8 | 7.1 | 10.5 | 12 | | | | | | | | | | | | |
| Voltage Constant (V/1000r / min) | 40 | 48 | 71 | 56 | | | | | | | | | | | | |
| Torque Coefficient(N.m /A) | 0.64 | 0.8 | 1.17 | 0.9 | | | | | | | | | | | | |
| Rotor Inertia(kg.m ²) | 1.05x10 ⁻⁴ | 1.82x10 ⁻⁴ | 2.63x10 ⁻⁴ | 2.97x10 ⁻⁴ | | | | | | | | | | | | |
| Line-line Resistance(Ω) | 4.44 | 2.88 | 3.65 | 1.83 | | | | | | | | | | | | |
| Line-line Inductance(mH) | 7.93 | 6.4 | 8.8 | 4.72 | | | | | | | | | | | | |
| Electrical Time-constant(ms) | 1.66 | 2.22 | 2.4 | 2.58 | | | | | | | | | | | | |
| Weight(kg) | 1.78 | 2.9 | 3.9 | 4.1 | | | | | | | | | | | | |
| Encord Line Number(PPR) | 2500ppr/17bit/23bit/rotary | | | | | | | | | | | | | | | |
| Insulation Class | ClassF | | | | | | | | | | | | | | | |
| Safety Class | IP65 | | | | | | | | | | | | | | | |
| L Without Electric Brake | 124 | 151 | 179 | 191 | | | | | | | | | | | | |
| L With Electromagnetic Brake | 164 | 191 | 291 | 231 | | | | | | | | | | | | |
| Environment | TEMPERATURE:-20°C~+40°C HUMIDITY BELOW 90%RH NO DEWING | | | | | | | | | | | | | | | |
| Motor Winding Plug | Incremental Encoder Motor Winding Leads | U(red) | V(yellow) | W(blue) | Pe(yellow green) | | | | | | | | | | | |
| | Absolute Encoder Motor Winding Leads | Pe(yellow green) | U(red) | V(blue) | W(yellow) | | | | | | | | | | | |
| | Socket Number | 1 | 2 | 3 | 4 | | | | | | | | | | | |
| Photoelectric Encoder Socket (15Pin) | Winding Leads | 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 |
| Absolute Encoder Socket (7Pin) | Winding Leads | E- | E+ | SD- | 0V | SD+ | +5V | PE | | | | | | | | |
| | Socket Number | 2 | 3 | 4 | 5 | 6 | 7 | 1 | | | | | | | | |

SERIES SERVO MOTORS

90A5 ST

伺服电机

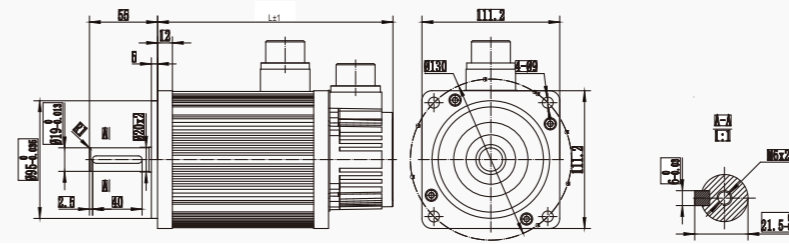
DIMENSION:UNIT=mm



SERIES SERVO MOTORS

110A5 ST

DIMENSION:UNIT=mm



SPECIFICATIONS

| MOTER MODEL | 90ST-M02430 | 90ST-M03520 | 90ST-M04025 |
|--------------------------------------|--|----------------------|---|
| Rated Power(kW) | 0.75 | 0.73 | 1.0 |
| Rated Voltage(V) | 220 | 220 | 220 |
| Rated Current(A) | 3 | 3 | 4 |
| Rated Speed(rpm) | 3000 | 2000 | 2500 |
| Rated Torque(N.m) | 2.4 | 3.5 | 4 |
| Peak Torque(N.m) | 7.1 | 10.5 | 12 |
| Peak Current(A) | 9 | 9 | 12 |
| Voltage Constant (V/1000r / min) | 51 | 67 | 60 |
| Torque Coefficient(N.m /A) | 0.8 | 1.2 | 1.0 |
| Rotor Inertia(kg.m ²) | 2.45x10 ⁻⁴ | 3.4x10 ⁻⁴ | 3.7x10 ⁻⁴ |
| Line-line Resistance(Ω) | 3.2 | 4.06 | 2.69 |
| Line-line Inductance(mH) | 7.0 | 9.7 | 6.21 |
| Electrical Time-constant(ms) | 2.2 | 2.93 | 2.3 |
| Weight(kg) | 3.1 | 3.9 | 4.2 |
| Encord Line Number(PPR) | 2500ppr/17bit/23bit/rotary | | |
| Insulation Class | ClassF | | |
| Safety Class | IP65 | | |
| L Without Electric Brake | 150 | 172 | 182 |
| L With Electromagnetic Brake | 198 | 220 | 230 |
| Environment | TEMPERATURE:-20℃~+40℃ HUMIDITY BELOW 90%RH NO DEWING | | |
| Motor Winding Plue | Incremental Encoder Motor Winding Leads | | U(red) V(yellow) W(blue) Pe(yellow green) |
| | Absolute Encoder Motor Winding Leads | | Pe(yellow green) U(red) V(blue) W(yellow) |
| Photoelectric Encoder Socket (15Pin) | Winding Leads | | 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 |
| Absolute Encoder Socket (7Pin) | Winding Leads | | E- E+ SD- 0V SD+ +5V PE |
| | Socket Number | | 2 3 4 5 6 7 1 |

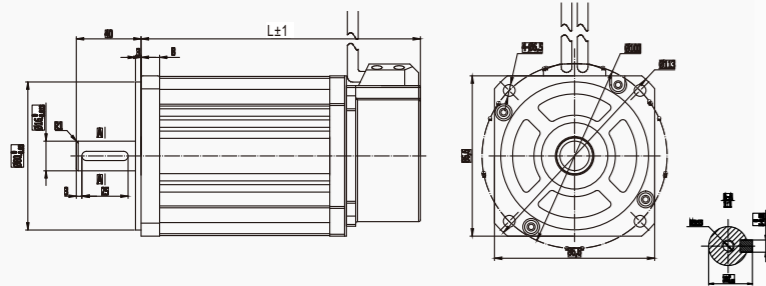
SPECIFICATIONS

| MOTER MODEL | 110ST-M02030 | 110ST-M04020 | 110ST-M04030 | 110ST-M05030 | 110ST-M06020 | 110ST-M06030 |
|--------------------------------------|--|-----------------------|--|-----------------------|-----------------------|-----------------------|
| Rated Power(kW) | 0.6 | 0.8 | 1.2 | 1.5 | 1.2 | 1.8 |
| Rated Voltage(V) | 220 | 220 | 220 | 220 | 220 | 220 |
| Rated Current(A) | 2.5 | 3.5 | 5.0 | 6.0 | 4.5 | 6.0 |
| Rated Speed(rpm) | 3000 | 2000 | 3000 | 3000 | 2000 | 3000 |
| Rated Torque(N.m) | 2 | 4 | 4 | 5 | 6 | 6 |
| Peak Torque(N.m) | 6 | 12 | 12 | 15 | 12 | 18 |
| Voltage Constant (V/1000r / min) | 56 | 79 | 54 | 62 | 83 | 60 |
| Torque Coefficient(N.m /A) | 0.8 | 1.14 | 0.8 | 0.83 | 1.3 | 1.0 |
| Rotor Inertia(kg.m ²) | 0.31x10 ⁻³ | 0.54x10 ⁻³ | 0.54x10 ⁻³ | 0.63x10 ⁻³ | 0.76x10 ⁻³ | 0.76x10 ⁻³ |
| Line-line Resistance(Ω) | 3.6 | 2.41 | 1.09 | 1.03 | 1.46 | 0.81 |
| Line-line Inductance(mH) | 8.32 | 7.3 | 3.3 | 3.43 | 4.7 | 2.59 |
| Electrical Time-constant(ms) | 2.3 | 3 | 3 | 3.33 | 3.2 | 3.2 |
| Weight(kg) | 4.5 | 6 | 6 | 6.8 | 7.9 | 7.9 |
| Encord Line Number(PPR) | 2500ppr/17bit/23bit/rotary | | | | | |
| Insulation Class | ClassF | | | | | |
| Safety Class | Ip65 | | | | | |
| Rated Torque (N·m) | 2 | 4 | 5 | 6 | | |
| L Without Electric Brake | 159 | 189 | 204 | 219 | | |
| L With Electromagnetic Brake | 233 | 263 | 278 | 293 | | |
| Environment | TEMPERATURE:-20℃~+40℃ HUMIDITY BELOW 90%RH NO DEWING | | | | | |
| Motor Winding Plue | Winding Leads | | U | V | W | PE |
| | Socket Number | | 2 | 3 | 4 | 1 |
| Photoelectric Encoder Socket (15Pin) | Winding Leads | | 5V 0V A+ B+ Z+ A- B- Z- U+ V+ W+ U- V- W- PE | | | |
| | Socket Number | | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 1 | | | |
| Absolute Encoder Socket (7Pin) | Winding Leads | | E- E+ SD- 0V SD+ +5V PE | | | |
| | Socket Number | | 2 3 4 5 6 7 1 | | | |

SERIES SERVO MOTORS

130A5 ST

DIMENSION:UNIT=mm



SPECIFICATIONS

| MOTER MODEL | 130ST-M04025 | 130ST-M05025 | 130ST-M06025 | 130ST-M07725 | 130ST-M10010 | | | | | | | | | | | |
|--------------------------------------|--|-----------------------|-----------------------|-----------------------|-----------------------|----------|----------|---------|---------|----------|----------|----------|----------|----------|----------|---------|
| Rated Power(kW) | 1.0 | 1.3 | 1.5 | 2.0 | 1.0 | | | | | | | | | | | |
| Rated Voltage(V) | 220 | 220 | 220 | 220 | 220 | | | | | | | | | | | |
| Rated Current(A) | 4.0 | 5.0 | 6.0 | 7.5 | 4.5 | | | | | | | | | | | |
| Rated Speed(rpm) | 2500 | 2500 | 2500 | 2500 | 1000 | | | | | | | | | | | |
| Rated Torque(N.m) | 4 | 5 | 6 | 7.7 | 10 | | | | | | | | | | | |
| Peak Torque(N.m) | 12 | 15 | 18 | 22 | 20 | | | | | | | | | | | |
| Voltage Constant (V/1000r / min) | 72 | 68 | 65 | 68 | 140 | | | | | | | | | | | |
| Torque Coefficient(N.m /A) | 1.0 | 1.0 | 1.0 | 1.03 | 2.2 | | | | | | | | | | | |
| Rotor Inertia(kg.m ²) | 0.85x10 ⁻³ | 1.06x10 ⁻³ | 1.26x10 ⁻³ | 1.53x10 ⁻³ | 1.94x10 ⁻³ | | | | | | | | | | | |
| Line-line Resistance(Ω) | 2.76 | 1.84 | 1.21 | 1.01 | 2.7 | | | | | | | | | | | |
| Line-line Inductance(mH) | 6.42 | 4.9 | 3.78 | 2.94 | 8.8 | | | | | | | | | | | |
| Electrical Time-constant(ms) | 2.32 | 2.66 | 3.26 | 2.91 | 3.26 | | | | | | | | | | | |
| Weight(kg) | 6.2 | 6.6 | 7.4 | 8.3 | 10.2 | | | | | | | | | | | |
| Encord Line Number(PPR) | 2500ppr/17bit/23bit/rotary | | | | | | | | | | | | | | | |
| Insulation Class | ClassF | | | | | | | | | | | | | | | |
| Safety Class | Ip65 | | | | | | | | | | | | | | | |
| Environment | TEMPERATURE:-20°C~+40°C HUMIDITY BELOW 90%RH NO DEWING | | | | | | | | | | | | | | | |
| Motor Winding Plue | Winding Leads Socket Number | U 2 | V 3 | W 4 | PE 1 | | | | | | | | | | | |
| Photoelectric Encoder Socket (15Pin) | Winding Leads Socket Number | 5V 2 | 0V 3 | A+ 4 | B+ 5 | Z+ 6 | A- 7 | B- 8 | Z- 9 | U+ 10 | V+ 11 | W+ 12 | U- 13 | V- 14 | W- 15 | PE 1 |
| Absolute Encoder Socket (7Pin) | Winding Leads Socket Number | E- 2 | E+ 3 | SD- 4 | 0V 5 | SD+ 6 | +5V 7 | PE 1 | | | | | | | | |

SERIES SERVO MOTORS

130A5 ST

SPECIFICATIONS

| MOTER MODEL | 130ST-M10015 | 130ST-M10025 | 130ST-M15015 | 130ST-M15025 | | | | | | | | | | | | |
|--------------------------------------|--|-----------------------|-----------------------|-----------------------|---------|----------|----------|---------|---------|----------|----------|----------|----------|----------|----------|---------|
| Rated Power(kW) | 1.5 | 2.6 | 2.3 | 3.8 | | | | | | | | | | | | |
| Rated Voltage(V) | 220 | 220 | 220 | 220 | | | | | | | | | | | | |
| Rated Current(A) | 6 | 10 | 9.5 | 13.5 | | | | | | | | | | | | |
| Rated Speed(rpm) | 1500 | 2500 | 1500 | 2500 | | | | | | | | | | | | |
| Rated Torque(N.m) | 10 | 10 | 15 | 15 | | | | | | | | | | | | |
| Peak Torque(N.m) | 25 | 25 | 30 | 30 | | | | | | | | | | | | |
| Voltage Constant (V/1000r / min) | 103 | 70 | 114 | 67 | | | | | | | | | | | | |
| Torque Coefficient(N.m /A) | 1.67 | 1.0 | 1.58 | 1.11 | | | | | | | | | | | | |
| Rotor Inertia(kg.m ²) | 1.94x10 ⁻³ | 1.94x10 ⁻³ | 2.77x10 ⁻³ | 2.77x10 ⁻³ | | | | | | | | | | | | |
| Line-line Resistance(Ω) | 1.5 | 0.73 | 1.1 | 0.49 | | | | | | | | | | | | |
| Line-line Inductance(mH) | 4.37 | 2.45 | 4.45 | 1.68 | | | | | | | | | | | | |
| Electrical Time-constant(ms) | 2.91 | 3.36 | 4.05 | 3.43 | | | | | | | | | | | | |
| Weight(kg) | 10.2 | 10.2 | 12.6 | 11.7 | | | | | | | | | | | | |
| Encord Line Number(PPR) | 2500ppr/17bit/23bit/rotary | | | | | | | | | | | | | | | |
| Insulation Class | ClassF | | | | | | | | | | | | | | | |
| Safety Class | Ip65 | | | | | | | | | | | | | | | |
| Environment | TEMPERATURE:-20°C~+40°C HUMIDITY BELOW 90%RH NO DEWING | | | | | | | | | | | | | | | |
| Motor Winding Plue | Winding Leads Socket Number | U 2 | V 3 | W 4 | PE 1 | | | | | | | | | | | |
| Photoelectric Encoder Socket (15Pin) | Winding Leads Socket Number | 5V 2 | 0V 3 | A+ 4 | B+ 5 | Z+ 6 | A- 7 | B- 8 | Z- 9 | U+ 10 | V+ 11 | W+ 12 | U- 13 | V- 14 | W- 15 | PE 1 |
| Absolute Encoder Socket (7Pin) | Winding Leads Socket Number | E- 2 | E+ 3 | SD- 4 | 0V 5 | SD+ 6 | +5V 7 | PE 1 | | | | | | | | |

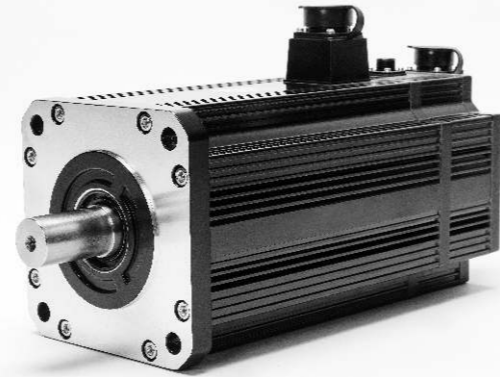
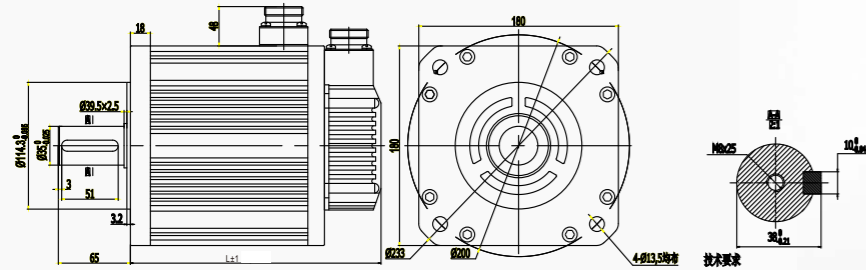
103A5 series servo motor body length

| Rated Torque (N·m) | 4 | 5 | 6 | 7.7 | 10 | 15 |
|------------------------------|-----|-----|-----|-----|-----|-----------------|
| | | | | | | 1500rpm 2500rpm |
| L Without Electric Brake | 166 | 171 | 179 | 192 | 213 | 241 231 |
| L With Electromagnetic Brake | 223 | 228 | 236 | 249 | 294 | 322 312 |

SERIES SERVO MOTORS

180A5 ST

DIMENSION:UNIT=mm



SPECIFICATIONS

| MOTER MODEL | 180ST-M17215 | 180AST-M19015 | 180ST-M21520 | 180ST-M27010 | |
|--------------------------------------|--|--|-------------------------------------|-----------------------|---------|
| Rated Power(kW) | 2.7 | 3.0 | 4.5 | 2.9 | |
| Rated Voltage(V) | 220 380 | 220 380 | 220 380 | 220 380 | |
| Rated Current(A) | 10.5 6.5 | 12 7.5 | 16 9.5 | 12 7.5 | |
| Rated Speed(rpm) | 1500 | 1500 | 2000 | 1000 | |
| Rated Torque(N.m) | 17.2 | 19 | 21.5 | 27 | |
| Peak Torque(N.m) | 43 | 47 | 53 | 67 | |
| Voltage Constant (V/1000r / min) | 112 167 | 97 170 | 84 140 | 138 224 | |
| Torque Coefficient(N.m /A) | 1.64 2.65 | 1.58 2.5 | 1.34 2.26 | 2.25 3.6 | |
| Rotor Inertia(kg.m ²) | 6.5x10 ⁻³ | 7.0x10 ⁻³ | 7.69x10 ⁻³ | 9.64x10 ⁻³ | |
| Line-line Resistance(Ω) | 0.7 1.47 | 0.4 1.23 | 0.24 0.71 | 0.48 1.37 | |
| Line-line Inductance(mH) | 3.5 7.8 | 2.42 7.3 | 1.45 4 | 3.26 8.6 | |
| Electrical Time-constant(ms) | 5 5.3 | 6 5.93 | 6 5.6 | 6.79 6.27 | |
| Weight(kg) | 19.5 | 20.5 | 22.2 | 25.5 | |
| Encord Line Number(PPR) | 2500ppr/17bit/23bit/rotary | | | | |
| Insulation Class | ClassF | | | | |
| Safety Class | IP65 | | | | |
| Environment | TEMPERATURE:-20℃~+40℃ HUMIDITY BELOW 90%RH NO DEWING | | | | |
| Motor Winding Plue | Winding Leads Socket Number | U 2 | V 3 | W 4 | PE 1 |
| Photoelectric Encoder Socket (15Pin) | Winding Leads Socket Number | 5V 0V A+ B+ Z+ A- B- Z- U+ V+ W+ U- V- W- PE | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 1 | | |
| Absolute Encoder Socket (7Pin) | Winding Leads Socket Number | E- E+ SD- 0V SD+ +5V PE | 2 3 4 5 6 7 1 | | |

SERIES SERVO MOTORS

180A5 ST

SPECIFICATIONS

| MOTER MODEL | 180ST-M27015 | 180ST-M35010 | 180ST-M35015 | 180ST-M48015 | |
|--------------------------------------|--|--|-------------------------------------|------------------------|---------|
| Rated Power(kW) | 4.3 | 3.7 | 5.5 | 7.5 | |
| Rated Voltage(V) | 220 380 | 220 380 | 220 380 | 220 380 | |
| Rated Current(A) | 16 10 | 16 10 | 24 12 | 32 20 | |
| Rated Speed(rpm) | 1500 | 1000 | 1500 | 1500 | |
| Rated Torque(N.m) | 27 | 35 | 35 | 48 | |
| Peak Torque(N.m) | 67 | 87.5 | 87.5 | 120 | |
| Voltage Constant (V/1000r / min) | 103 172 | 134 223 | 90 181 | 94 156 | |
| Torque Coefficient(N.m /A) | 1.69 2.7 | 2.2 3.5 | 1.45 2.9 | 1.5 2.4 | |
| Rotor Inertia(kg.m ²) | 9.64x10 ⁻³ | 12.25x10 ⁻³ | 12.25x10 ⁻³ | 16.72x10 ⁻³ | |
| Line-line Resistance(Ω) | 0.28 0.796 | 0.31 0.93 | 0.14 0.62 | 0.104 0.273 | |
| Line-line Inductance(mH) | 1.74 4.83 | 2.11 5.86 | 1.0 4 | 0.77 2.14 | |
| Electrical Time-constant(ms) | 6.2 6 | 6.8 6.3 | 7.14 6.45 | 7.4 7.8 | |
| Weight(kg) | 25.5 | 30.5 | 30.5 | 40 | |
| Encord Line Number(PPR) | 2500ppr/17bit/23bit/rotary | | | | |
| Insulation Class | ClassF | | | | |
| Safety Class | Ip65 | | | | |
| Environment | TEMPERATURE:-20℃~+40℃ HUMIDITY BELOW 90%RH NO DEWING | | | | |
| Motor Winding Plue | Winding Leads Socket Number | U 2 | V 3 | W 4 | PE 1 |
| Photoelectric Encoder Socket (15Pin) | Winding Leads Socket Number | 5V 0V A+ B+ Z+ A- B- Z- U+ V+ W+ U- V- W- PE | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 1 | | |
| Absolute Encoder Socket (7Pin) | Winding Leads Socket Number | E- E+ SD- 0V SD+ +5V PE | 2 3 4 5 6 7 1 | | |

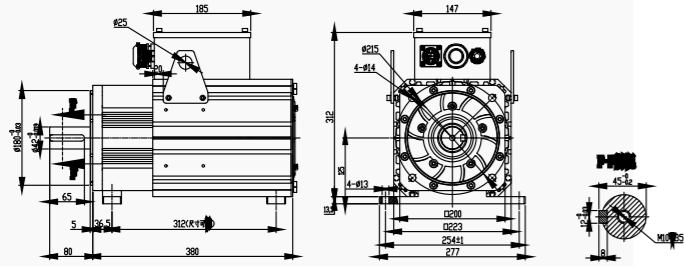
180A5 series servo motor body length

| Rated Torque (N-m) | 17.2 | 19 | 21.5 | 27 | 35 | 48 |
|------------------------------|------|-----|------|-----|-----|-----|
| L Without Electric Brake | 226 | 232 | 243 | 262 | 292 | 346 |
| L With Electromagnetic Brake | 308 | 304 | 315 | 334 | 364 | 418 |

SERIES SERVO MOTORS

200A5 ST

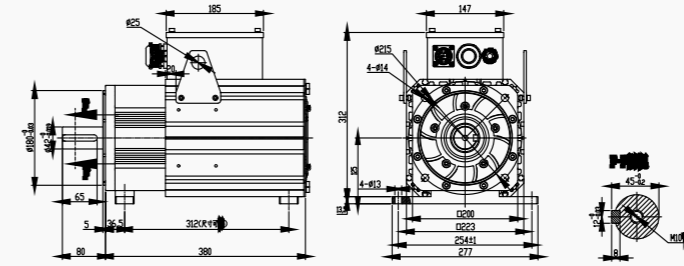
DIMENSION:UNIT=mm



SERIES SERVO MOTORS

200A5 ST

DIMENSION:UNIT=mm



SPECIFICATIONS

| MOTER MODEL | 200ST-M43017 | 200ST-M62017 | 200ST-M86017 | 200ST-MA0517 | | | | | | | | | | | | |
|--------------------------------------|--|----------------------|----------------------|-----------------------|----|-----|-----|----|----|----|----|----|----|----|----|----|
| Rated Power(kW) | 7.6 | 11 | 15.3 | 18.7 | | | | | | | | | | | | |
| Rated Speed(rpm) | 1700 | 1700 | 1700 | 1700 | | | | | | | | | | | | |
| Rated Torque(N.m) | 43 | 62 | 86 | 105 | | | | | | | | | | | | |
| Rated Voltage(V) | 380 | 380 | 380 | 380 | | | | | | | | | | | | |
| Rated Current(A) | 15 | 22 | 30 | 37 | | | | | | | | | | | | |
| Frequence(HZ) | 113.3 | 113.3 | 113.3 | 113.3 | | | | | | | | | | | | |
| Voltage Constant(V/1000r/min) | 310/1700 | 306/1700 | 307/1700 | 295/1700 | | | | | | | | | | | | |
| Torque Coefficient(N.m/A) | 2.87 | 2.82 | 2.87 | 2.84 | | | | | | | | | | | | |
| Rotor Inertia(kg.m ²) | 5.8x10 ⁻³ | 7.5x10 ⁻³ | 9.8x10 ⁻³ | 11.4x10 ⁻³ | | | | | | | | | | | | |
| Line-line Resistance(Ω) | 1.12 | 0.58 | 0.34 | 0.31 | | | | | | | | | | | | |
| Line-line Inductance(mH) | 12.1 | 7.9 | 5.1 | 4.8 | | | | | | | | | | | | |
| L1(mm) | 312 | 312 | 312 | 312 | | | | | | | | | | | | |
| L2(mm) | 344 | 380 | 416 | 452 | | | | | | | | | | | | |
| Encord Line Number(PPR) | Absolute Value / Rotary | | | | | | | | | | | | | | | |
| Insulation Class | ClassF | | | | | | | | | | | | | | | |
| Safety Class | Ip54 | | | | | | | | | | | | | | | |
| Environment | TEMPERATURE:-20°C~+40°C HUMIDITY BELOW 90%RH NO DEWING | | | | | | | | | | | | | | | |
| Motor Winding Plue | Motor Winding Leads | U | V | W | PE | | | | | | | | | | | |
| Photoelectric Encoder Socket (15Pin) | Signal Leads | 5V | 0V | A+ | B+ | Z+ | A- | B- | Z- | U+ | V+ | W+ | U- | V- | W- | PE |
| | Socket Number | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 1 |
| Absolute Encoder Socket (7Pin) | Signal Leads | E- | E+ | SD- | 0V | SD+ | +5V | PE | | | | | | | | |
| | Socket Number | 2 | 3 | 4 | 5 | 6 | 7 | 1 | | | | | | | | |

SPECIFICATIONS

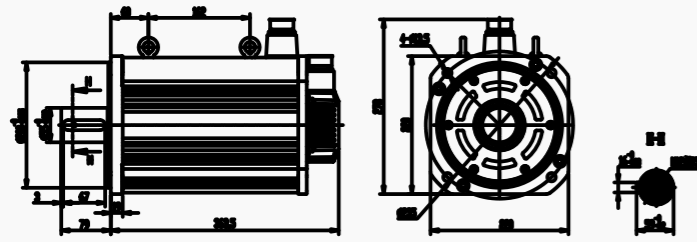
| MOTER MODEL | 200ST-MA2917 | 200ST-MA4917 | 200ST-MA7717 | 200ST-MA9617 | | | | | | | | | | | | |
|--------------------------------------|--|-----------------------|-----------------------|-----------------------|----|-----|-----|----|----|----|----|----|----|----|----|----|
| Rated Power(kW) | 23 | 26.5 | 31.5 | 35 | | | | | | | | | | | | |
| Rated Speed(rpm) | 1700 | 1700 | 1700 | 1700 | | | | | | | | | | | | |
| Rated Torque(N.m) | 129 | 149 | 177 | 196 | | | | | | | | | | | | |
| Rated Voltage(V) | 380 | 380 | 380 | 380 | | | | | | | | | | | | |
| Rated Current(A) | 45 | 54 | 57 | 70 | | | | | | | | | | | | |
| Frequence(HZ) | 113.3 | 113.3 | 113.3 | 113.3 | | | | | | | | | | | | |
| Voltage Constant(V/1000r/min) | 304/1700 | 298/1700 | 330/1700 | 315/1700 | | | | | | | | | | | | |
| Torque Coefficient(N.m/A) | 2.87 | 2.76 | 3.11 | 2.8 | | | | | | | | | | | | |
| Rotor Inertia(kg.m ²) | 13.1x10 ⁻³ | 14.5x10 ⁻³ | 15.9x10 ⁻³ | 17.4x10 ⁻³ | | | | | | | | | | | | |
| Line-line Resistance(Ω) | 0.22 | 0.15 | 0.15 | 0.27 | | | | | | | | | | | | |
| Line-line Inductance(mH) | 3.9 | 2.8 | 2.5 | 2.2 | | | | | | | | | | | | |
| L1(mm) | 312 | 396 | 396 | 396 | | | | | | | | | | | | |
| L2(mm) | 488 | 524 | 560 | 596 | | | | | | | | | | | | |
| Encord Line Number(PPR) | Absolute Value / rotary | | | | | | | | | | | | | | | |
| Insulation Class | ClassF | | | | | | | | | | | | | | | |
| Safety Class | Ip54 | | | | | | | | | | | | | | | |
| Environment | TEMPERATURE:-20°C~+40°C HUMIDITY BELOW 90%RH NO DEWING | | | | | | | | | | | | | | | |
| Motor Winding Plue | Motor Winding Leads | U | V | W | PE | | | | | | | | | | | |
| Photoelectric Encoder Socket (15Pin) | Signal Leads | 5V | 0V | A+ | B+ | Z+ | A- | B- | Z- | U+ | V+ | W+ | U- | V- | W- | PE |
| | Socket Number | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 1 |
| Absolute Encoder Socket (7Pin) | Signal Leads | E- | E+ | SD- | 0V | SD+ | +5V | PE | | | | | | | | |
| | Socket Number | 2 | 3 | 4 | 5 | 6 | 7 | 1 | | | | | | | | |

SERIES SERVO MOTORS

220A5 ST

DIMENSION:UNIT=mm

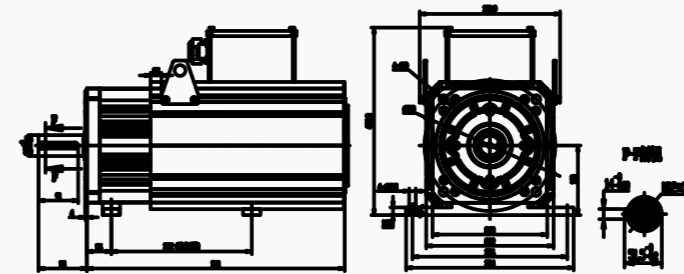
| MOTOR MODEL | 67N | 95.5N |
|-------------|-----|-------|
| L | 301 | 363 |
| L1 | 100 | 162 |



SERIES SERVO MOTORS

263A5 ST

DIMENSION:UNIT=mm



SPECIFICATIONS

| MOTER MODEL | 220ST-M67010 | 220ST-M95515 | 220ST-M67015 | 220ST-M95515 |
|--------------------------------------|--|----------------------|----------------------|----------------------|
| Rated Power(kW) | 7.0 | 15 | 10.5 | 15 |
| Rated Voltage(V) | 220 | 220 | 380 | 380 |
| Rated Current(A) | 31.3 | 67 | 26 | 38 |
| Rated Speed(rpm) | 1000 | 1500 | 1500 | 1500 |
| Rated Torque(N.m) | 67 | 95.5 | 67 | 95.5 |
| Peak Torque(N.m) | 150 | 240 | 150 | 240 |
| Voltage Constant(V/1000r/min) | 140 | 95 | 175 | 169 |
| Torque Coefficient(N.m/A) | 2.1 | 1.42 | 2.58 | 2.51 |
| Rotor Inertia(kg.m ²) | 177x10 ⁻⁴ | 248x10 ⁻⁴ | 177x10 ⁻⁴ | 248x10 ⁻⁴ |
| Line-line Resistance(Ω) | 0.133 | 0.05 | 0.2 | 0.14 |
| Line-line Inductance(mH) | 3.8 | 1.2 | 5.81 | 3.79 |
| Electrical Time-constant(ms) | 28.5 | 24 | 29.05 | 27.09 |
| Weight(kg) | 50 | 73 | 50 | 73 |
| Encord Line Number(PPR) | Absolute Value / rotary | | | |
| Insulation Class | ClassF | | | |
| Safety Class | IP65 | | | |
| L Without electric brake | 124 | 151 | 179 | 191 |
| L With Permanent Magnet Brake | 178 | 205 | 233 | 245 |
| L With Electromagnetic Brake | 164 | 191 | 291 | 231 |
| Environment | TEMPERATURE:-20°C~+40°C HUMIDITY BELOW 90%RH NO DEWING | | | |
| Motor Winding Plug | Absolute Encoder Motor Winding Leads | | V | W |
| | Socket Number | 2 | 3 | 4 |
| Photoelectric Encoder Socket (15Pin) | Winding Leads 5V 0V A+ B+ Z+ A- B- Z- U+ V+ W+ U- V- W- PE | | | |
| | Socket Number | 2 | 3 | 4 |
| Absolute Encoder Socket (7Pin) | Winding Leads E- E+ SD- 0V SD+ +5V PE | | | |
| | Socket Number | 2 | 3 | 4 |

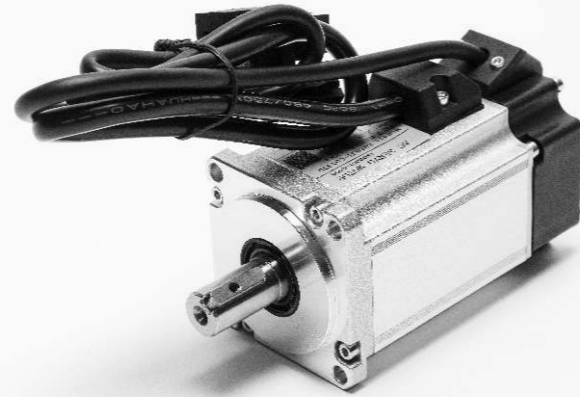
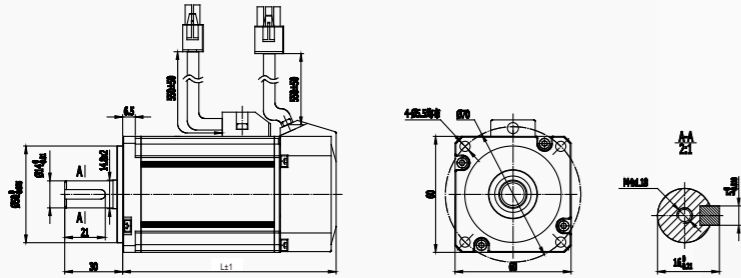
SPECIFICATIONS

| MOTER MODEL | 263ST-MA3217 | 263ST-MA7517 | 263ST-MB0817 | 263ST-MB5517 | 263ST-MC2517 |
|--------------------------------------|---|---------------------|---------------------|---------------------|---------------------|
| Rated Power(kW) | 23.5 | 31 | 37 | 45.4 | 57.6 |
| Rated Speed(rpm) | 1700 | 1700 | 1700 | 1700 | 1700 |
| Rated Torque(N.m) | 132 | 175 | 208 | 255 | 325 |
| Rated Voltage(V) | 380 | 380 | 380 | 380 | 380 |
| Rated Current(A) | 45.4 | 64 | 74 | 87 | 116 |
| Frequence(HZ) | 113.3 | 113.3 | 113.3 | 113.3 | 113.3 |
| Voltage Constant(V/1000r/min) | 316/1700 | 310/1700 | 305/1700 | 328/1700 | 306/1700 |
| Torque Coefficient(N.m/A) | 2.91 | 2.73 | 2.81 | 2.93 | 2.8 |
| Rotor Inertia(kg.m ²) | 28x10 ⁻³ | 35x10 ⁻³ | 42x10 ⁻³ | 50x10 ⁻³ | 58x10 ⁻³ |
| Line-line Resistance(Ω) | 0.13 | 0.15 | 0.11 | 0.05 | 0.041 |
| Line-line Inductance(mH) | 2.17 | 6.51 | 3.21 | 1.18 | 1.02 |
| L1(mm) | 322 | 322 | 322 | 322 | 322 |
| L2(mm) | 470 | 510 | 550 | 590 | 630 |
| Encord Line Number(PPR) | Absolute Value / rotary | | | | |
| Insulation Class | ClassF | | | | |
| Safety Class | Ip54 | | | | |
| Environment | TEMPERATURE:-20°C~+40°C HUMIDITY BELOW 90%RH NO DEWING | | | | |
| Motor Winding Plug | Motor Winding Leads U | | V | W | PE |
| Photoelectric Encoder Socket (15Pin) | Signal Leads 5V 0V A+ B+ Z+ A- B- Z- U+ V+ W+ U- V- W- PE | | | | |
| | Socket Number | 2 | 3 | 4 | 5 |
| Absolute Encoder Socket (7Pin) | Signal Leads E- E+ SD- 0V SD+ +5V PE | | | | |
| | Socket Number | 2 | 3 | 4 | 5 |

SERIES SERVO MOTORS

60A6 ST

DIMENSION:UNIT=mm



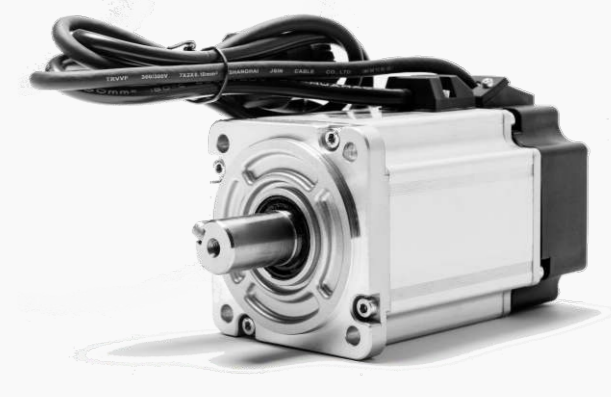
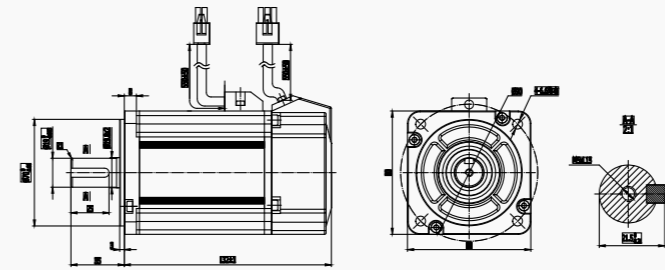
SPECIFICATIONS

| MOTER MODEL | 60A6ST-M00630 | 60A6ST-M01330 | 60A6ST-M01930 | | | | | | | | | | | | | |
|--------------------------------------|--|-----------------------|-----------------------|----------|------------------|---|---|----|---|----|----|----|----|----|----|----|
| Rated Power(kW) | 0.2 | 0.4 | 0.6 | | | | | | | | | | | | | |
| Rated Voltage(V) | 220 | 220 | 220 | | | | | | | | | | | | | |
| Rated Current(A) | 1.70 | 2.50 | 4.10 | | | | | | | | | | | | | |
| Rated Speed(rpm) | 3000 | 3000 | 3000 | | | | | | | | | | | | | |
| Rated Torque(N.m) | 0.64 | 1.27 | 1.91 | | | | | | | | | | | | | |
| Peak Torque(N.m) | 1.92 | 3.81 | 5.73 | | | | | | | | | | | | | |
| Voltage Constant(V/1000r/min) | 30.2 | 30.2 | 32.5 | | | | | | | | | | | | | |
| Torque Coefficient(N.m/A) | 0.376 | 0.438 | 0.465 | | | | | | | | | | | | | |
| Rotor Inertia(kg.m ²) | 0.28x10 ⁻⁴ | 0.52x10 ⁻⁴ | 0.78x10 ⁻⁴ | | | | | | | | | | | | | |
| Line-line Resistance(Ω) | 4.5 | 3.3 | 2.5 | | | | | | | | | | | | | |
| Line-line Inductance(mH) | 10.8 | 6.9 | 4.5 | | | | | | | | | | | | | |
| Electrical Time-constant(ms) | 2.4 | 2.09 | 1.8 | | | | | | | | | | | | | |
| Weight(kg) | 0.88 | 1.06 | 1.3 | | | | | | | | | | | | | |
| L (magnetic encoder) | 91 | 109 | 127 | | | | | | | | | | | | | |
| L (optical encoder) | 103 | 121 | 139 | | | | | | | | | | | | | |
| L (magnetic encoder brake) | 127 | 145 | 163 | | | | | | | | | | | | | |
| L (optical encoder brake) | 139 | 157 | 175 | | | | | | | | | | | | | |
| Insulation Class | ClassF | | | | | | | | | | | | | | | |
| Safety Class | IP65 | | | | | | | | | | | | | | | |
| Environment | TEMPERATURE:-20°C~+40°C HUMIDITY BELOW 90%RH NO DEWING | | | | | | | | | | | | | | | |
| Motor Winding Plug | Incremental Encoder Motor Winding Leads | U(red) | V(white) | W(black) | Pe(yellow green) | | | | | | | | | | | |
| | Absolute Encoder Motor Winding Leads | Pe(yellow green) | U(red) | V(white) | W(black) | | | | | | | | | | | |
| Photoelectric Encoder Socket (15Pin) | Socket Number | 1 | 2 | 3 | 4 | | | | | | | | | | | |
| Absolute Encoder Socket (7Pin) | Winding Leads | 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 |

SERIES SERVO MOTORS

80A6 ST

DIMENSION:UNIT=mm



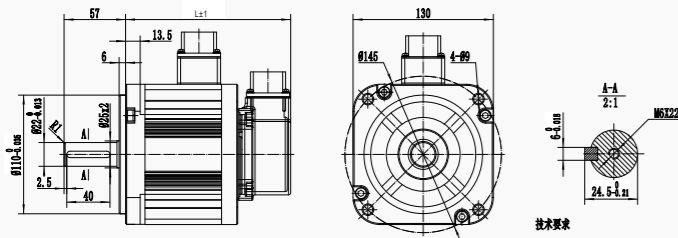
SPECIFICATIONS

| MOTER MODEL | 80A6ST-M01330 | 80A6ST-M02430 | 80A6ST-M03330 | 80A6ST-M04030 | | | | | | | | | | | |
|--------------------------------------|--|-----------------------|-----------------------|-----------------------|------------------|---|----|---|---|----|----|----|----|----|----|
| Rated Power(kW) | 0.4 | 0.75 | 1.0 | 1.2 | | | | | | | | | | | |
| Rated Voltage(V) | 220 | 220 | 220 | 220 | | | | | | | | | | | |
| Rated Current(A) | 2.7 | 5.0 | 5.4 | 6.7 | | | | | | | | | | | |
| Rated Speed(rpm) | 3000 | 3000 | 3000 | 3000 | | | | | | | | | | | |
| Rated Torque(N.m) | 1.27 | 2.39 | 3.3 | 4.0 | | | | | | | | | | | |
| Peak Torque(N.m) | 3.8 | 7.1 | 9.9 | 12.0 | | | | | | | | | | | |
| Voltage Constant(V/1000r/min) | 33.5 | 33.3 | 41.0 | 40.0 | | | | | | | | | | | |
| Torque Coefficient(N.m/A) | 0.47 | 0.48 | 0.6 | 0.6 | | | | | | | | | | | |
| Rotor Inertia(kg.m ²) | 0.82x10 ⁻⁴ | 1.41x10 ⁻⁴ | 1.81x10 ⁻⁴ | 2.21x10 ⁻⁴ | | | | | | | | | | | |
| Line-line Resistance(Ω) | 3.4 | 1.58 | 1.63 | 1.2 | | | | | | | | | | | |
| Line-line Inductance(mH) | 14.3 | 6.8 | 7.0 | 5.4 | | | | | | | | | | | |
| Electrical Time-constant(ms) | 4.2 | 4.3 | 4.3 | 4.5 | | | | | | | | | | | |
| Weight(kg) | 1.5 | 2.8 | 3.7 | 4.6 | | | | | | | | | | | |
| L (magnetic encoder) | 97 | 119 | 134 | 149 | | | | | | | | | | | |
| L (optical encoder) | 114 | 136 | 151 | 166 | | | | | | | | | | | |
| L (magnetic encoder brake) | 142 | 164 | 179 | 194 | | | | | | | | | | | |
| L (optical encoder brake) | 159 | 181 | 196 | 211 | | | | | | | | | | | |
| Insulation Class | ClassF | | | | | | | | | | | | | | |
| Safety Class | IP65 | | | | | | | | | | | | | | |
| Environment | TEMPERATURE:-20°C~+40°C HUMIDITY BELOW 90%RH NO DEWING | | | | | | | | | | | | | | |
| Motor Winding Plug | Incremental Encoder Motor Winding Leads | U(red) | V(yellow) | W(blue) | Pe(yellow green) | | | | | | | | | | |
| | Absolute Encoder Motor Winding Leads | Pe(yellow green) | U(red) | V(blue) | W(yellow) | | | | | | | | | | |
| Photoelectric Encoder Socket (15Pin) | Socket Number | 1 | 2 | 3 | 4 | | | | | | | | | | |
| Absolute Encoder Socket (7Pin) | Winding Leads | 5V | 0V | 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 |

SERIES SERVO MOTORS

130A6 ST

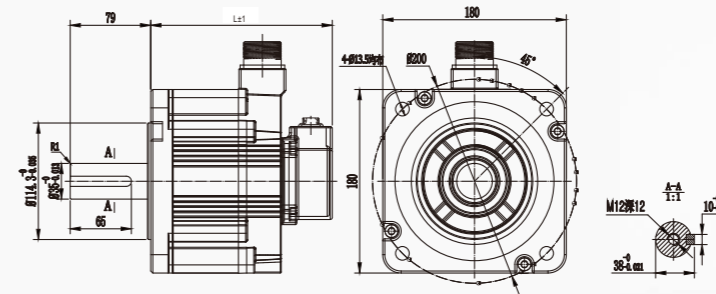
DIMENSION:UNIT=mm



SERIES SERVO MOTORS

180A6 ST

DIMENSION:UNIT=mm



SPECIFICATIONS

| MOTER MODEL | 130A6ST-M05415 | 130A6ST-M08315 | 130A6ST-M11515 | 130A6ST-M14615 | 130A6ST-M17815 |
|--|---|-----------------------|--|-------------------------------------|-----------------------|
| Rated Power(kW) | 0.85 | 1.3 | 1.8 | 2.3 | 2.8 |
| Rated Voltage(V) | 220 | 220 | 220 | 220 | 220 |
| Rated Current(A) | 6.9 | 10.7 | 15 | 12.5 | 15.5 |
| Instantaneous Maximum Current(A) | 17 | 28 | 42 | 37.5 | 46.5 |
| Rated Speed(rpm) | 1500 | 1500 | 1500 | 1500 | 1500 |
| Rated Speed(rpm) | 3000 | 3000 | 3000 | 2000 | 2000 |
| Rated Torque(N.m) | 5.39 | 8.34 | 11.5 | 14.6 | 17.8 |
| Peak Torque(N.m) | 14.2 | 23.3 | 28.7 | 43.8 | 53.4 |
| Voltage Constant(V/1000r/min) | 50.2 | 52 | 52.2 | 76.5 | 76 |
| Torque Coefficient(N.m/A) | 0.78 | 0.78 | 0.76 | 0.91 | 1.14 |
| Rotor Inertia(kg.m ²) | 13.9x10 ⁻⁴ | 19.9x10 ⁻⁴ | 26x10 ⁻⁴ | 40.7x10 ⁻⁴ | 45.4x10 ⁻⁴ |
| With Brake Rotor Inertia(kg.m ²) | 16x10 ⁻⁴ | 22x10 ⁻⁴ | 28.1x10 ⁻⁴ | 42.3x10 ⁻⁴ | 47.1x10 ⁻⁴ |
| Line-line Resistance(Ω) | 0.98 | 0.54 | 0.42 | 0.69 | 0.46 |
| Line-line Resistance(mH) | 12.32 | 8.5 | 6.2 | 10.25 | 10 |
| Electrical Time-constant(ms) | 12.57 | 15.74 | 14.76 | 14.85 | 21.73 |
| Lock Rated Voltage(PPR) | 24.0 | 24.0 | 24.0 | 24.0 | 24.0 |
| Encord Type | Photoelectric encorder/Absolute encorder/Rotary transformer.... | | | | |
| Insulation Class | ClassF | | | | |
| Safety Class | Ip65 | | | | |
| Environment | TEMPERATURE:-20°C~+40°C HUMIDITY BELOW 90%RH NO DEWING | | | | |
| L without electric brake | 153 | 169 | 187 | 208.5 | 237.5 |
| L with electromagnetic brake | 181 | 197 | 215 | 236.5 | 265.5 |
| Motor Winding Plue | Winding Leads U Aviation Plug Socket Number A | | V B | | W C PE D |
| Photoelectric Encoder Socket (15Pin) | Winding Leads Socket Number | | 5V 0V A+ B+ Z+ A- B- Z- U+ V+ W+ U- V- W- PE | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 1 | |
| Absolute Encoder Socket (7Pin) | Winding Leads Socket Number | | E- E+ SD- 0V SD+ +5V PE | 2 3 4 5 6 7 1 | |

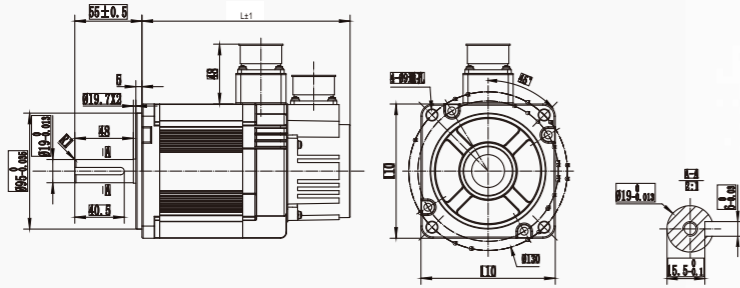
SPECIFICATIONS

| MOTER MODEL | 180A6ST-M18615 | 180A6ST-M28415 | 180A6ST-M35015 | 180A6ST-M48015 | |
|--------------------------------------|---|----------------------|--|-------------------------------------|--|
| Rated Power(kW) | 2.9 | 4.4 | 5.5 | 7.5 | |
| Rated Voltage(V) | 380 | 380 | 380 | 380 | |
| Rated Current(A) | 10 | 14.5 | 17.6 | 23.0 | |
| Rated Speed(rpm) | 1500 | 1500 | 1500 | 1500 | |
| Rated Torque(N.m) | 18.6 | 28.4 | 35 | 48 | |
| Peak Torque(N.m) | 54 | 71 | 87.5 | 96 | |
| Voltage Constant (V/1000r/min) | 137.5 | 153 | 172 | 170 | |
| Torque Coefficient(N.m/A) | 1.86 | 1.95 | 1.98 | 2.09 | |
| Rotor Inertia(kg.m ²) | 5.9x10 ⁻³ | 6.6x10 ⁻³ | 10.2x10 ⁻³ | 14.6x10 ⁻³ | |
| Rotor Inertia(kg.m ²) | 1.1 | 8.0x10 ⁻³ | 11.0x10 ⁻³ | 15.6x10 ⁻³ | |
| Line-line Resistance(Ω) | 4.4x10 ⁻³ | 0.9 | 0.62 | 0.42 | |
| Line-line Inductance(mH) | 15.2 | 13.9 | 10.9 | 6.7 | |
| Electrical Time-constant(ms) | 13.8 | 15.4 | 17.5 | 15.9 | |
| Maximum Sceed(rpm) | 2500 | 2000 | 2000 | 2000 | |
| Encord Type | Photoelectric encorder/Absolute encorder/Rotary transformer.... | | | | |
| Insulation Class | ClassF | | | | |
| Safety Class | IP65 | | | | |
| Environment | TEMPERATURE:-20°C~+40°C HUMIDITY BELOW 90%RH NO DEWING | | | | |
| Weight(kg) | 13 | 17 | 21 | 29 | |
| L without electric brake | 176 | 200 | 237 | 283 | |
| L with electromagnetic brake | 224 | 248 | 285 | 331 | |
| Shaft Extension LR | 79 | 79 | 113 | 113 | |
| Shaft Diameter S | 35(+0.01~0) | 35(+0.01~0) | 42(0~-0.016) | 42(0~-0.016) | |
| Key Length QK | 60 | 60 | 90 | 90 | |
| Key Width W | 10 | 10 | 12 | 12 | |
| Center Hole M | M12 Depth 25 | M12 Depth 25 | M16 Depth 32 | M16 Depth 32 | |
| Motor Winding Plue | Winding Leads U Aviation Plug Socket Number A | | V B W C PE D | | |
| Photoelectric Encoder Socket (15Pin) | Winding Leads Socket Number | | 5V 0V A+ B+ Z+ A- B- Z- U+ V+ W+ U- V- W- PE | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 1 | |
| Absolute Encoder Socket (7Pin) | Winding Leads Socket Number | | E- E+ SD- 0V SD+ +5V PE | 2 3 4 5 6 7 1 | |

SERIES SERVO MOTORS

110H6 ST

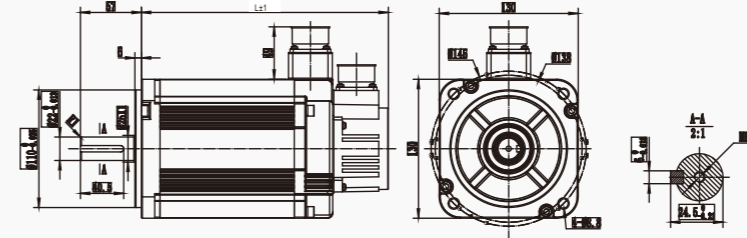
DIMENSION:UNIT=mm



SERIES SERVO MOTORS

130H6 ST

DIMENSION:UNIT=mm



SPECIFICATIONS

| MOTER MODEL | 110H6ST-J04220LB | 110H6ST-J05420LB | 110H6ST-J06420LB | 110H6ST-J07520LB | | | | | | | | | | | | |
|---|--|-----------------------|-----------------------|-----------------------|----|-----|-----|----|----|----|----|----|----|----|----|----|
| Rated Power(kW) | 0.88 | 1.1 | 1.3 | 1.5 | | | | | | | | | | | | |
| Rated Voltage(V) | 220 | 220 | 220 | 220 | | | | | | | | | | | | |
| Rated Current(A) | 4.5 | 5.4 | 6.5 | 7.5 | | | | | | | | | | | | |
| Peak Current(A) | 13.5 | 16.2 | 19.5 | 22.5 | | | | | | | | | | | | |
| Rated Torque(N.m) | 4.2 | 5.4 | 6.4 | 7.5 | | | | | | | | | | | | |
| Peak Torque(N.m) | 12.6 | 16.2 | 19.2 | 22.5 | | | | | | | | | | | | |
| Rated Speed(rpm) | 2000 | 2000 | 2000 | 2000 | | | | | | | | | | | | |
| Peak Speed(rpm) | 3000 | 3000 | 3000 | 3000 | | | | | | | | | | | | |
| Line to line resistance (20°C) Ω | 1.6 | 1.3 | 1.0 | 0.8 | | | | | | | | | | | | |
| Inter-line inductance l _q (20°C) | 7.4 | 6.4 | 5.4 | 4.5 | | | | | | | | | | | | |
| Voltage Constant(V/1000r/min) | 65 | 66 | 66 | 65 | | | | | | | | | | | | |
| Polar Number | 5 | 5 | 5 | 5 | | | | | | | | | | | | |
| Rotor Inertia(kg.m ²) | 0.79x10 ⁻³ | 0.92x10 ⁻³ | 1.06x10 ⁻³ | 1.24x10 ⁻³ | | | | | | | | | | | | |
| Torque Coefficient(N.m/A) | 0.93 | 1.0 | 0.98 | 1.0 | | | | | | | | | | | | |
| Encoder Specifications | Tamagawa 23-bit Absolute Encoder | | | | | | | | | | | | | | | |
| Insulation Class | ClassF | | | | | | | | | | | | | | | |
| Safety Class | IP65 | | | | | | | | | | | | | | | |
| Environment | TEMPERATURE:-20°C~+40°C HUMIDITY BELOW 90%RH NO DEWING | | | | | | | | | | | | | | | |
| Motor Winding Plue | Motor Winding Leads | U | V | W | PE | | | | | | | | | | | |
| | Socket Number | 2 | 3 | 4 | 1 | | | | | | | | | | | |
| Photoelectric Encoder Socket (15Pin) | Winding Leads | 5V | 0V | A+ | B+ | Z+ | A- | B- | Z- | U+ | V+ | W+ | U- | V- | W- | PE |
| | Socket Number | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 1 |
| Absolute Encoder Socket (7Pin) | Winding Leads | E- | E+ | SD- | 0V | SD+ | +5V | PE | | | | | | | | |
| | Socket Number | 2 | 3 | 4 | 5 | 6 | 7 | 1 | | | | | | | | |

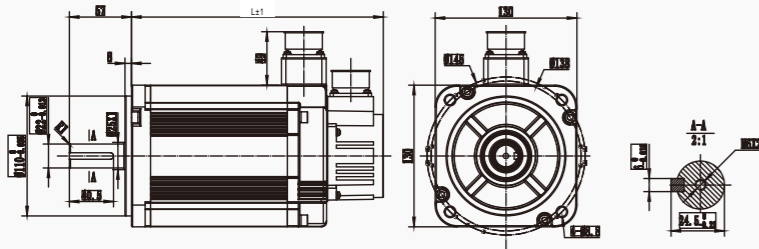
SPECIFICATIONS

| MOTER MODEL | 130H6ST-M05415 | 130H6ST-M06415 | 130H6ST-M07515 | 130H6ST-M08315 | | | | | | | | | | | | |
|--------------------------------------|--|------------------------|------------------------|------------------------|----|-----|-----|----|----|----|----|----|----|----|----|----|
| Rated Power(kW) | 0.85 | 1 | 1.2 | 1.3 | | | | | | | | | | | | |
| Rated Voltage(V) | 220 | 220 | 220 | 220 | | | | | | | | | | | | |
| Rated Current(A) | 6.5 | 6.5 | 9 | 9.5 | | | | | | | | | | | | |
| Peak Current(A) | 19.5 | 19.5 | 27 | 28.5 | | | | | | | | | | | | |
| Rated Torque(N.m) | 5.4 | 6.4 | 7.5 | 8.4 | | | | | | | | | | | | |
| Peak Torque(N.m) | 16.2 | 19.2 | 22.5 | 25.2 | | | | | | | | | | | | |
| Rated Speed(rpm) | 1500 | 1500 | 1500 | 1500 | | | | | | | | | | | | |
| Peak Speed(rpm) | 3000 | 3000 | 3000 | 3000 | | | | | | | | | | | | |
| Line-line Resistance(Ω) | 1.0 | 0.98 | 0.52 | 0.56 | | | | | | | | | | | | |
| Line-line Inductance(mH) | 5.2 | 4.2 | 2.84 | 3.4 | | | | | | | | | | | | |
| Voltage Constant(V/1000r/min) | 57.2 | 69 | 51.5 | 62.5 | | | | | | | | | | | | |
| Polar Number | 5 | 5 | 5 | 5 | | | | | | | | | | | | |
| Rotor Inertia(kg.m ²) | 1.388x10 ⁻³ | 1.604x10 ⁻³ | 1.857x10 ⁻³ | 2.059x10 ⁻³ | | | | | | | | | | | | |
| Torque Coefficient(N.m/A) | 0.83 | 0.80 | 0.83 | 0.88 | | | | | | | | | | | | |
| Body Length | 153 | 161 | 168 | 173 | | | | | | | | | | | | |
| Body Length | 177 | 184 | 191 | 197 | | | | | | | | | | | | |
| Electrical Time-constant(ms) | 5.2 | 4.29 | 5.46 | 6.07 | | | | | | | | | | | | |
| Encord Line Number(PPR) | 2500ppr/17bit/23bit/rotary | | | | | | | | | | | | | | | |
| Insulation Class | ClassF | | | | | | | | | | | | | | | |
| Safety Class | IP65 | | | | | | | | | | | | | | | |
| Environment | TEMPERATURE:-20°C~+40°C HUMIDITY BELOW 90%RH NO DEWING | | | | | | | | | | | | | | | |
| Motor Winding Plue | Motor Winding Leads | U | V | W | PE | | | | | | | | | | | |
| | Socket Number | 2 | 3 | 4 | 1 | | | | | | | | | | | |
| Photoelectric Encoder Socket (15Pin) | Winding Leads | 5V | 0V | A+ | B+ | Z+ | A- | B- | Z- | U+ | V+ | W+ | U- | V- | W- | PE |
| | Socket Number | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 1 |
| Absolute Encoder Socket (7Pin) | Winding Leads | E- | E+ | SD- | 0V | SD+ | +5V | PE | | | | | | | | |
| | Socket Number | 2 | 3 | 4 | 5 | 6 | 7 | 1 | | | | | | | | |

SERIES SERVO MOTORS

130H6 ST

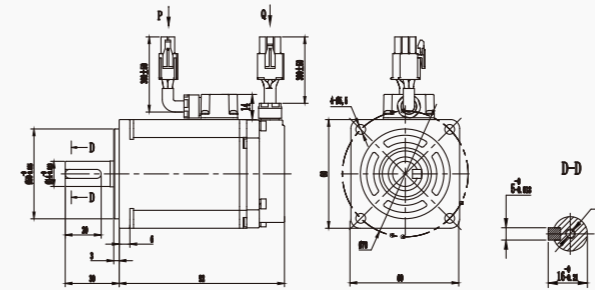
DIMENSION:UNIT=mm



SERIES SERVO MOTORS

60X6 ST

DIMENSION:UNIT=mm



SPECIFICATIONS

| MOTER MODEL | 130H6ST-M09615 | 130H6ST-M11515 | 130H6ST-M14615 | | |
|--------------------------------------|--|--|-------------------------------------|--------|---------|
| Rated Power(kW) | 1.5 | 1.8 | 2.3 | | |
| Rated Voltage(V) | 220 | 220 | 220 | | |
| Rated Current(A) | 10 | 14 | 16 | | |
| Peak Current(A) | 30 | 42 | 48 | | |
| Rated Torque(N.m) | 9.6 | 11.5 | 14.6 | | |
| Peak Torque(N.m) | 28.8 | 34.5 | 43.8 | | |
| Rated Speed(rpm) | 1500 | 1500 | 1500 | | |
| Peak Speed(rpm) | 3000 | 3000 | 3000 | | |
| Line-line Resistance(Ω) | 0.55 | 0.4 | 0.24 | | |
| Line-line Inductance(mH) | 3.7 | 2.8 | 1.9 | | |
| Voltage Constant(V/1000r/min) | 61 | 67 | 60 | | |
| Polar Number | 5 | 5 | 5 | | |
| Rotor Inertia(kg.m ²) | 2,369x10 ⁻³ | 3,015x10 ⁻³ | 4,07x10 ⁻³ | | |
| Torque Coefficient(N.m/A) | 0.96 | 0.82 | 0.91 | | |
| Body Length | 182 | 200 | 232 | | |
| Body Length | 205 | 224 | 256 | | |
| Electrical Time-constant(ms) | 6.73 | 7.00 | 7.92 | | |
| Encord Line Number(PPR) | 2500ppr/17bit/23bit/rotary | | | | |
| Insulation Class | ClassF | | | | |
| Safety Class | IP65 | | | | |
| Environment | TEMPERATURE:-20℃~+40℃ HUMIDITY BELOW 90%RH NO DEWING | | | | |
| Motor Winding Plue | Motor Winding Leads Socket Number | U 2 | V 3 | W 4 | PE 1 |
| Photoelectric Encoder Socket (15Pin) | Winding Leads Socket Number | 5V 0V A+ B+ Z+ A- B- Z- U+ V+ W+ U- V- W- PE | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 1 | | |
| Absolute Encoder Socket (7Pin) | Winding Leads Socket Number | E- E+ SD- 0V SD+ +5V PE | 2 3 4 5 6 7 1 | | |

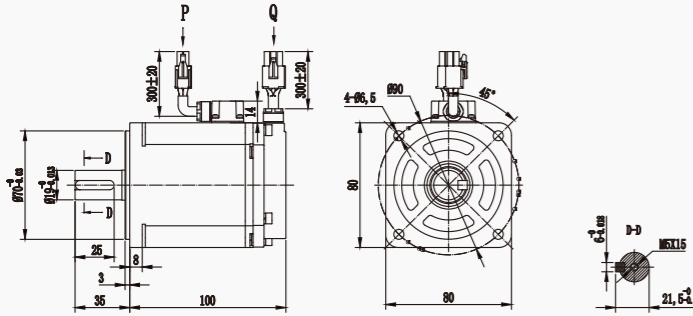
SPECIFICATIONS

| MOTER MODEL | 60X6ST-M00630 | 60X6ST-M01330 | 60X6ST-M01930 | | |
|--------------------------------------|--|--|-------------------------------------|--------|---------|
| Rated Power(kW) | 0.2 | 0.4 | 0.6 | | |
| Rated Voltage(V) | 220 | 220 | 220 | | |
| Rated Current(A) | 1.7 | 2.5 | 4.1 | | |
| Peak Current(A) | 5.1 | 7.5 | 12.3 | | |
| Rated Torque(N.m) | 0.64 | 12.7 | 1.91 | | |
| Peak Torque(N.m) | 1.91 | 3.81 | 5.73 | | |
| Rated Speed(rpm) | 3000 | 3000 | 3000 | | |
| Peak Speed(rpm) | 6000 | 6000 | 6000 | | |
| Line-line Resistance(Ω) | 4.5 | 3.3 | 2.5 | | |
| Line-line Inductance(mH) | 10.8 | 6.9 | 4.5 | | |
| Voltage Constant(V/1000r/min) | 23 | 30.7 | 30 | | |
| Polar Number | 5 | 5 | 5 | | |
| Rotor Inertia(kg.m ²) | 0,028x10 ⁻³ | 0,052x10 ⁻³ | 0,078x10 ⁻³ | | |
| Torque Coefficient(N.m/A) | 0.38 | 0.51 | 0.47 | | |
| Body Length | 75 | 92 | 109 | | |
| Body Length | 105 | 122 | 139 | | |
| Electrical Time-constant(ms) | 2.40 | 2.09 | 1.8 | | |
| Encord Line Number(PPR) | 2500ppr/17bit/23bit/rotary | | | | |
| Insulation Class | ClassF | | | | |
| Safety Class | IP65 | | | | |
| Environment | TEMPERATURE:-20℃~+40℃ HUMIDITY BELOW 90%RH NO DEWING | | | | |
| Motor Winding Plue | Motor Winding Leads Socket Number | U 1 | V 2 | W 3 | PE 4 |
| Photoelectric Encoder Socket (15Pin) | Winding Leads Socket Number | 5V 0V B Z- U Z U- A V W V- A- B- W- PE | 2 3 4 5 6 7 8 9 10 11 12 13 14 15 1 | | |
| Absolute Encoder Socket (7Pin) | Winding Leads Socket Number | E- E+ SD- 0V SD+ +5V PE | 2 3 4 5 6 7 1 | | |

SERIES SERVO MOTORS

80X6 ST

DIMENSION:UNIT=mm



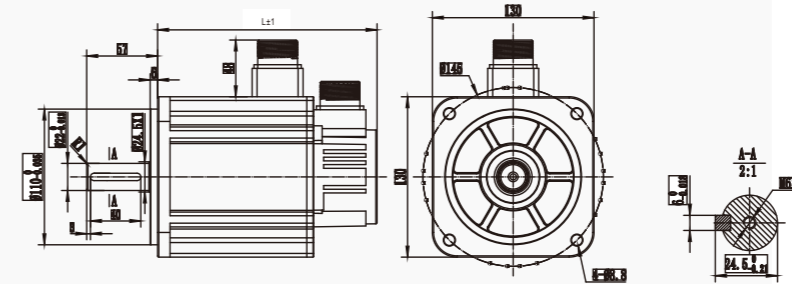
SPECIFICATIONS

| MOTER MODEL | 80X6ST-C02430 | 80X6ST-C03330 | | | | | | | | | | | | | | |
|--------------------------------------|---|------------------------|---------|----------|---------|----------|----------|---------|--------|---------|---------|----------|----------|----------|----------|---------|
| Rated Power(kW) | 0.75 | 1 | | | | | | | | | | | | | | |
| Rated Voltage(V) | 220 | 220 | | | | | | | | | | | | | | |
| Rated Current(A) | 4.4 | 5.8 | | | | | | | | | | | | | | |
| Peak Current(A) | 13.2 | 17.4 | | | | | | | | | | | | | | |
| Rated Torque(N.m) | 2.39 | 3.3 | | | | | | | | | | | | | | |
| Peak Torque(N.m) | 7.17 | 9.9 | | | | | | | | | | | | | | |
| Rated Speed(rpm) | 3000 | 3000 | | | | | | | | | | | | | | |
| Peak Speed(rpm) | 6000 | 6000 | | | | | | | | | | | | | | |
| Line-line Resistance(Ω) | 1.15 | 0.78 | | | | | | | | | | | | | | |
| Line-line Inductance(mH) | 4.9 | 3.2 | | | | | | | | | | | | | | |
| Voltage Constant(V/1000r/min) | 33 | 32 | | | | | | | | | | | | | | |
| Polar Number | 5 | 5 | | | | | | | | | | | | | | |
| Rotor Inertia(kg.m ²) | 0.148x10 ⁻³ | 0.227x10 ⁻³ | | | | | | | | | | | | | | |
| Torque Coefficient(N.m/A) | 0.54 | 0.57 | | | | | | | | | | | | | | |
| Body Length | 100 | 113 | | | | | | | | | | | | | | |
| Body Length | 134 | 147 | | | | | | | | | | | | | | |
| Electrical Time-constant(ms) | 4.26 | 4.10 | | | | | | | | | | | | | | |
| Encord Line Number(PPR) | 2500ppr/17bit/23bit | | | | | | | | | | | | | | | |
| Insulation Class | ClassF | | | | | | | | | | | | | | | |
| Safety Class | IP65 | | | | | | | | | | | | | | | |
| Environment | TEMPERATURE:-20°C~+40°C HUMIDITY BELOW 90% RH NO DEWING | | | | | | | | | | | | | | | |
| Motor Winding Plue | Motor Winding Leads Socket Number | U 1 | V 2 | W 3 | PE 4 | | | | | | | | | | | |
| Photoelectric Encoder Socket (15Pin) | Winding Leads Socket Number | 5V 2 | 0V 3 | B 4 | Z- 5 | U 6 | Z 7 | U- 8 | A 9 | V 10 | W 11 | V- 12 | A- 13 | B- 14 | W- 15 | PE 1 |
| Absolute Encoder Socket (7Pin) | Winding Leads Socket Number | E- 2 | E+ 3 | SD- 4 | 0V 5 | SD+ 6 | +5V 7 | PE 1 | | | | | | | | |

SERIES SERVO MOTORS

130X6 ST

DIMENSION:UNIT=mm



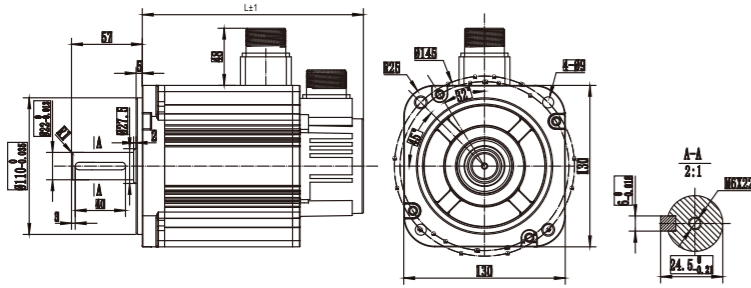
SPECIFICATIONS

| MOTER MODEL | 130X6ST-M05415 | 130X6ST-M08315 | 130X6ST-M11515 | 130X6ST-M14615 | | | | | | | | | | | | |
|--------------------------------------|---|-----------------------|-----------------------|-----------------------|---------|----------|----------|---------|---------|----------|----------|----------|----------|----------|----------|---------|
| Rated Power(kW) | 0.85 | 1.3 | 1.8 | 2.3 | | | | | | | | | | | | |
| Rated Voltage(V) | 220 | 220 | 220 | 220 | | | | | | | | | | | | |
| Rated Current(A) | 5 | 9.2 | 12 | 16 | | | | | | | | | | | | |
| Peak Current(A) | 15 | 27.6 | 36 | 40 | | | | | | | | | | | | |
| Rated Torque(N.m) | 5.39 | 8.34 | 11.5 | 14.6 | | | | | | | | | | | | |
| Peak Torque(N.m) | 16.1 | 25 | 34.5 | 36.5 | | | | | | | | | | | | |
| Rated Speed(rpm) | 1500 | 1500 | 1500 | 1500 | | | | | | | | | | | | |
| Peak Speed(rpm) | 3000 | 3000 | 3000 | 3000 | | | | | | | | | | | | |
| Line-line Resistance(Ω) | 1.24 | 0.55 | 0.4 | 0.34 | | | | | | | | | | | | |
| Line-line Inductance(mH) | 13.8 | 7.4 | 5.3 | 4.9 | | | | | | | | | | | | |
| Voltage Constant(V/1000r/min) | 63 | 56 | 54 | 64 | | | | | | | | | | | | |
| Polar Number | 5 | 5 | 5 | 5 | | | | | | | | | | | | |
| Rotor Inertia(kg.m ²) | 0.72x10 ⁻³ | 1.03x10 ⁻³ | 1.27x10 ⁻³ | 1.97x10 ⁻³ | | | | | | | | | | | | |
| Torque Coefficient(N.m/A) | 1.08 | 0.91 | 0.96 | 0.91 | | | | | | | | | | | | |
| Body Length | 152.5 | 177.5 | 177.5 | 222 | | | | | | | | | | | | |
| Body Length | 186 | 211 | 211 | 255.5 | | | | | | | | | | | | |
| Electrical Time-constant(ms) | 11.13 | 13.45 | 13.25 | 14.41 | | | | | | | | | | | | |
| Encord Line Number(PPR) | 2500ppr/17bit/23bit/rotary | | | | | | | | | | | | | | | |
| Insulation Class | ClassF | | | | | | | | | | | | | | | |
| Safety Class | IP65 | | | | | | | | | | | | | | | |
| Environment | TEMPERATURE:-20°C~+40°C HUMIDITY BELOW 90% RH NO DEWING | | | | | | | | | | | | | | | |
| Motor Winding Plue | Motor Winding Leads Socket Number | U 2 | V 3 | W 4 | PE 1 | | | | | | | | | | | |
| Photoelectric Encoder Socket (15Pin) | Winding Leads Socket Number | 5V 2 | 0V 3 | A+ 4 | B+ 5 | Z+ 6 | A- 7 | B- 8 | Z- 9 | U+ 10 | V+ 11 | W+ 12 | U- 13 | V- 14 | W- 15 | PE 1 |
| Absolute Encoder Socket (7Pin) | Winding Leads Socket Number | E- 2 | E+ 3 | SD- 4 | 0V 5 | SD+ 6 | +5V 7 | PE 1 | | | | | | | | |

SERIES SERVO MOTORS

130G6 ST

DIMENSION:UNIT=mm



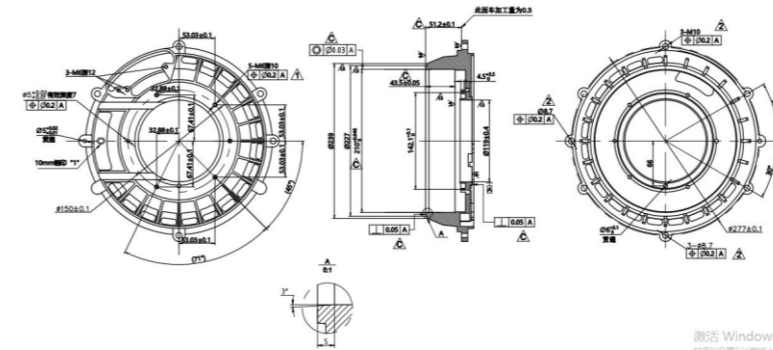
SPECIFICATIONS

| MOTER MODEL | 130G6ST-JC05415LB | 130G6ST-JC08315LB | 130G6ST-JC11515LB | 130G6ST-JC14615LB | | | | | | | | | | | | |
|--------------------------------------|--|-----------------------|-----------------------|-----------------------|----|-----|-----|----|----|----|----|----|----|----|----|----|
| Rated Power(kW) | 0.85 | 1.3 | 1.8 | 2.3 | | | | | | | | | | | | |
| Rated Voltage(V) | 220 | 220 | 220 | 220 | | | | | | | | | | | | |
| Rated Current(A) | 5.3 | 7.5 | 10.5 | 14 | | | | | | | | | | | | |
| Peak Current(A) | 15.9 | 22.5 | 31.5 | 42 | | | | | | | | | | | | |
| Rated Torque(N.m) | 5.4 | 8.34 | 11.5 | 14.6 | | | | | | | | | | | | |
| Peak Torque(N.m) | 16.2 | 25 | 34.5 | 43.8 | | | | | | | | | | | | |
| Rated Speed(rpm) | 1500 | 1500 | 1500 | 1500 | | | | | | | | | | | | |
| Peak Speed(rpm) | 3000 | 3000 | 3000 | 3000 | | | | | | | | | | | | |
| Line to line resistance (20°C) Ω | 1.25±10% | 0.78±10% | 0.49±10% | 0.34±10% | | | | | | | | | | | | |
| Inter-line inductance Iq(20°C) | 10.7±20% | 8.0±20% | 5.4±20% | 3.8±20% | | | | | | | | | | | | |
| Voltage Constant(V/1000r/min) | 64 | 65 | 64 | 63 | | | | | | | | | | | | |
| Polar Number | 5 | 5 | 5 | 5 | | | | | | | | | | | | |
| Rotor Inertia(kg.m ²) | 1.25x10 ⁻³ | 1.78x10 ⁻³ | 2.41x10 ⁻³ | 3.15x10 ⁻³ | | | | | | | | | | | | |
| Torque Coefficient(N.m/A) | 1.02 | 1.112 | 1.1 | 1.04 | | | | | | | | | | | | |
| Encoder Specifications | 17-bit Magnetic Encoder | | | | | | | | | | | | | | | |
| Insulation Class | ClassF | | | | | | | | | | | | | | | |
| Safety Class | IP65 | | | | | | | | | | | | | | | |
| Environment | TEMPERATURE:-20°C~+40°C HUMIDITY BELOW 90%RH NO DEWING | | | | | | | | | | | | | | | |
| Motor Winding Plue | Motor Winding Leads | U | V | W | PE | | | | | | | | | | | |
| | Socket Number | 2 | 3 | 4 | 1 | | | | | | | | | | | |
| Photoelectric Encoder Socket (15Pin) | Winding Leads | 5V | 0V | A+ | B+ | Z+ | A- | B- | Z- | U+ | V+ | W+ | U- | V- | W- | PE |
| | Socket Number | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | 11 | 12 | 13 | 14 | 15 | 1 |
| Absolute Encoder Socket (7Pin) | Winding Leads | E- | E+ | SD- | 0V | SD+ | +5V | PE | | | | | | | | |
| | Socket Number | 2 | 3 | 4 | 5 | 6 | 7 | 1 | | | | | | | | |

SERIES SERVO MOTORS

210 ST

DIMENSION:UNIT=mm



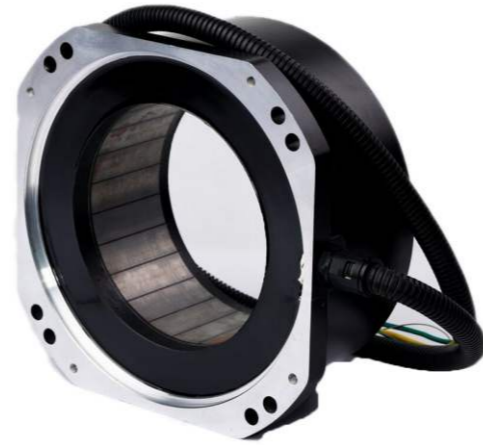
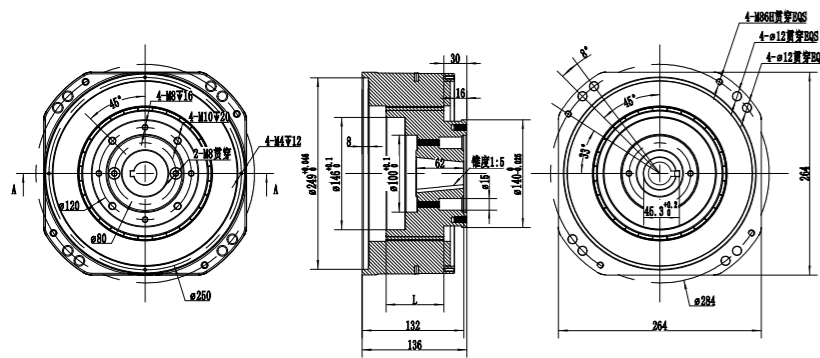
SPECIFICATIONS

| MOTER MODEL | 210ST- X38005P | 210ST- X38010P | 210ST- X100003P |
|--|--|----------------|-----------------|
| Rated Power(kW) | 1.78 | 3.57 | 3.1 |
| Rated Voltage(V) | 220 | 220 | 220 |
| Rated Current(A) | 6 | 12 | 18 |
| Rated Speed(rpm) | 500 | 1000 | 300 |
| Rated Torque(N.m) | 38 | 38 | 100 |
| Winding (inter-line) resistance (Ω) | 3.1 | 0.78 | 1.1 |
| Winding (inter-line) inductance (mH) | 52 | 11.5 | 28.4 |
| Electrical time constant (ms) | 16.6 | 14.7 | 25.8 |
| Encoder | Single-pole rotary / 17-bit Absolute Value | | |
| Insulation Class | Class F | | |
| Safety Class | Ip00 | | |
| Environment | TEMPERATURE:-20°C~+40°C HUMIDITY BELOW 90%RH NO DEWING | | |

SERIES SERVO MOTORS

260 ZQ

DIMENSION:UNIT=mm



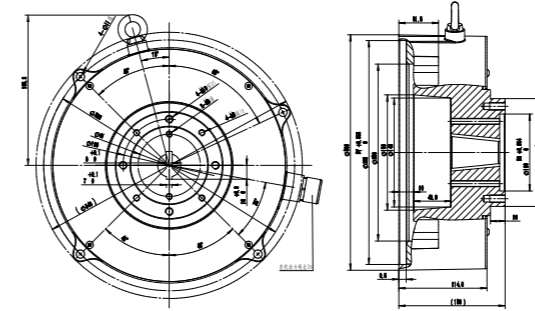
SPECIFICATIONS

| MOTER MODEL | 260ZQ-40010HB | 260ZQ-80006HB | 260ZQ-54008HB |
|-------------------|--|---------------|---------------|
| Rated Power(kW) | 4.1 | 5.0 | 4.5 |
| Rated Voltage(V) | 380 | 380 | 380 |
| Rated Current(A) | 8.5 | 10.8 | 9.8 |
| Rated Speed(rpm) | 1000 | 600 | 800 |
| Rated Speed(rpm) | 1100 | 700 | 900 |
| Rated Torque(N.m) | 40 | 80 | 54 |
| Rated Frequency | 233 | 140 | 186.6 |
| Polar Number | 14 | 14 | 14 |
| Back-EMF(V/Krp)mH | 330 | 488 | 385 |
| Insulation Class | ClassF | | |
| Safety Class | Ip54 | | |
| Environment | TEMPERATURE:-20°C~+40°C HUMIDITY BELOW 90%RH NO DEWING | | |

SERIES SERVO MOTORS

290 ZQ

DIMENSION:UNIT=mm



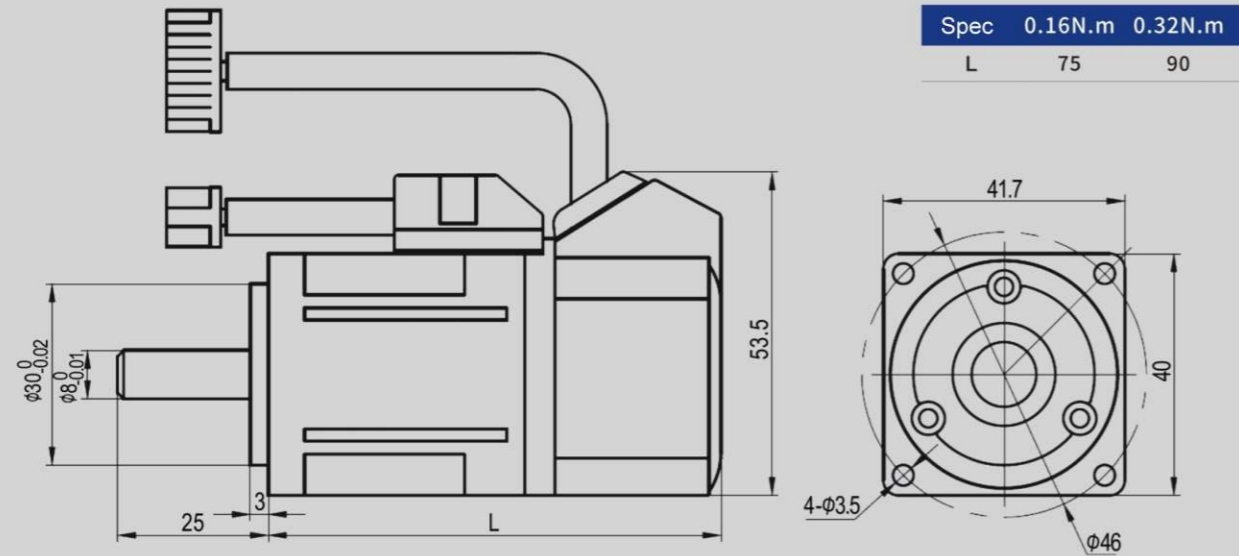
SPECIFICATIONS

| MOTER MODEL | 290ZQ—54009B |
|---------------------------------|---|
| Rated Power(kW) | 380V |
| Rated Voltage(V) | 5.0Kw |
| Rated Current(A) | 900rpm |
| Rated Speed(rpm) | 1000rpm |
| Rated Speed(rpm) | 53.7N · M |
| Rated Torque(N.m) | 9.9A |
| Rated Frequency | 210HZ |
| Electronic Inertia | 1450X10 ⁻⁴ Kg·M ² |
| Back-EMF(V/Krp)mH | 345V/Krpm |
| Polar Number | 14 |
| Line to line Resistance (20°C) | 0.34Ω±10% |
| Inter-line Inductance Iq(20°C) | 7.9mH±20% |
| Inter-line Inductance Id (20°C) | 6.8mH±20% |

40A ST

40 SERIES DC24V SERVO MOTORS

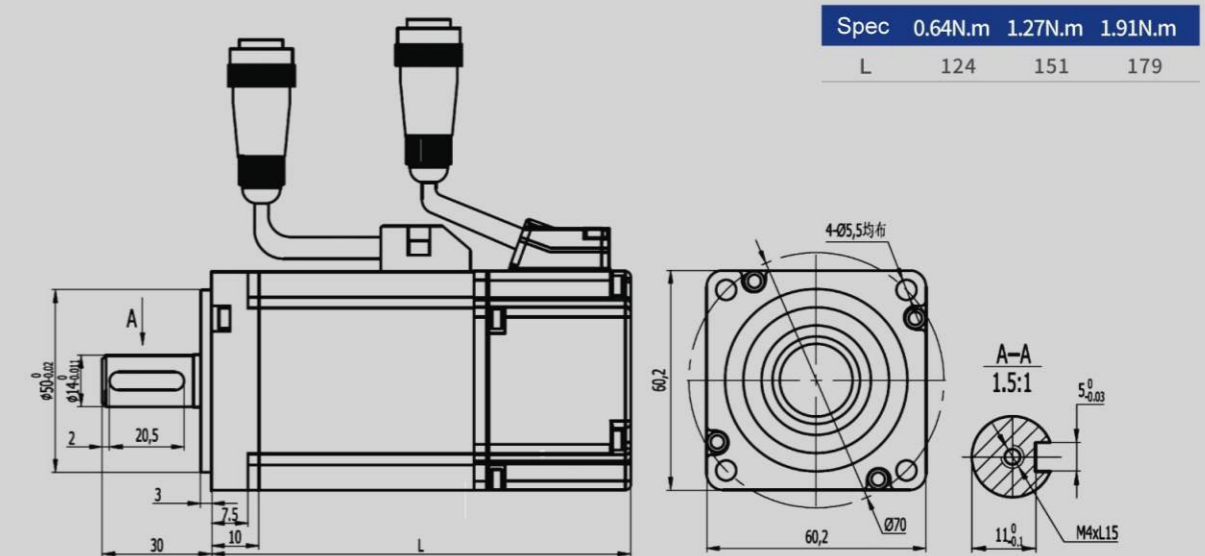
▶ DIMENSION: UNIT=mm



60A ST

60 SERIES DC24V SERVO MOTORS

▶ DIMENSION: UNIT=mm



▶ Specifications

| Motor Model | 40AST-M00130 | 40AST-M00330 |
|-----------------------------------|---|--------------------------|
| Rated Power(W) | 50 | 100 |
| Rated Voltage(V) | 24 | 24 |
| Rated Current(A) | 2.6 | 5.2 |
| Rated Speed(RPM) | 3000 | 3000 |
| Rated Torque(N.m) | 0.16 | 0.32 |
| Voltage Constant (V/1000r/min) | 4 | 4 |
| Torque Coefficient(N.m/A) | 0.067 | 0.061 |
| Rotor Inertia(KG.M ²) | 0.025 × 10 ⁻⁴ | 0.051 × 10 ⁻⁴ |
| Line-line Resistance(Ω) | 1.39 | 0.49 |
| Line-line Inductance(mH) | 1.52 | 0.71 |
| Electrical Time-constant(ms) | 1.09 | 1.45 |
| Encoder Line Number(PPR) | 2500 | 2500 |
| Insulation Class | ClassB(130°C) | ClassB(130°C) |
| Safety Class | IP64 | IP64 |
| Environment | Temperature: -20°C ~ +50°C Humidity Below 90%rh No Dewing | |

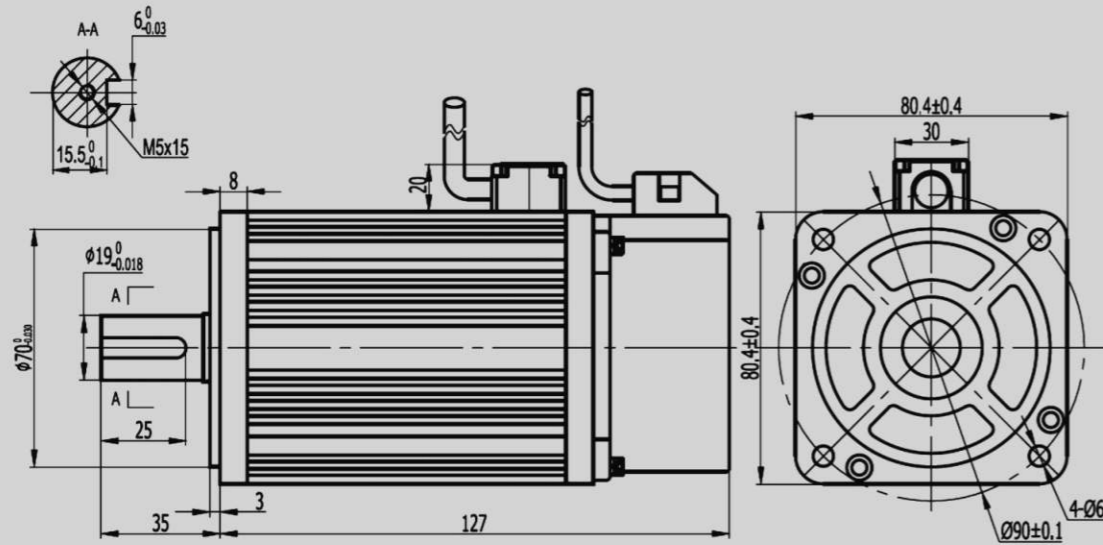
▶ Specifications

| Motor Model | 60AST-M00630 |
|-----------------------------------|---|
| Rated Power(W) | 200 |
| Rated Voltage(V) | 24 |
| Rated Current(A) | 12 |
| Rated Speed(RPM) | 3000 |
| Rated Torque(N.m) | 0.637 |
| Voltage Constant (V/1000r/min) | 4 |
| Torque Coefficient(N.m/A) | 0.053 |
| Rotor Inertia(KG.M ²) | 0.175 × 10 ⁻⁴ |
| Line-line Resistance(Ω) | 0.11 |
| Line-line Inductance(mH) | 0.42 |
| Electrical Time-constant(ms) | 3.81 |
| Encoder Line Number(PPR) | 2500 |
| Insulation Class | ClassF |
| Safety Class | IP65 |
| Environment | Temperature: -20°C ~ +50°C Humidity Below 90%rh No Dewing |

80 ST

80 SERIES DC24V SERVO MOTORS

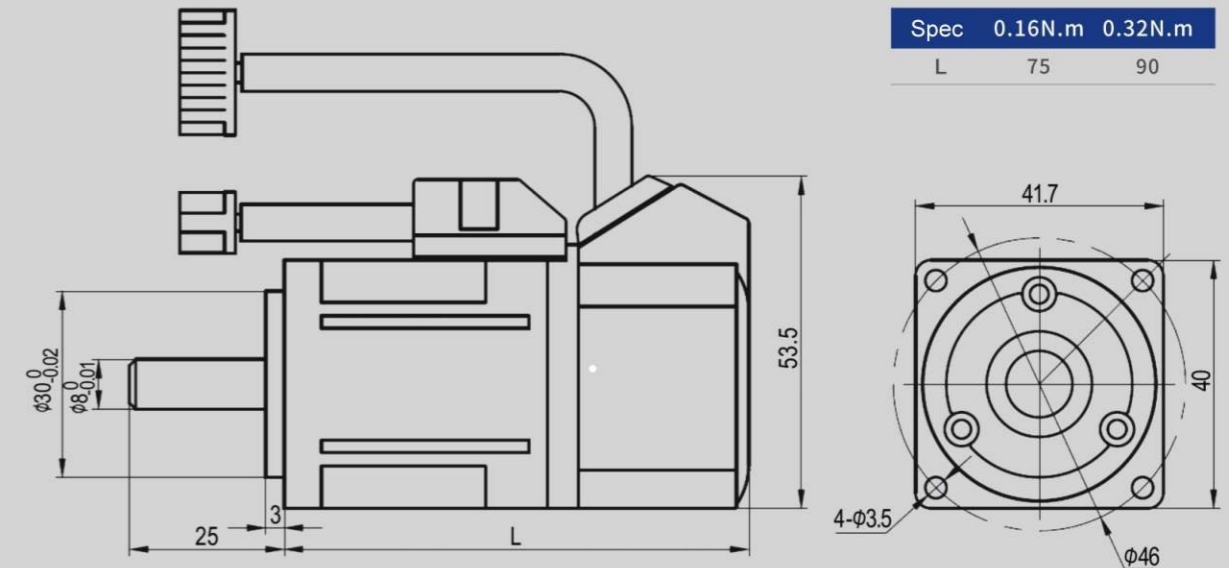
▶ DIMENSION: UNIT=mm



40A ST

40 SERIES DC48V SERVO MOTORS

▶ DIMENSION: UNIT=mm



▶ Specifications

| Motor Model | 80ST-M01330 | 80ST-M02430 |
|-----------------------------------|---|-----------------------|
| Rated Power(W) | 400 | 750 |
| Rated Voltage(V) | 24 | 24 |
| Rated Current(A) | 20 | 34 |
| Rated Speed(RPM) | 3000 | 3000 |
| Rated Torque(N.m) | 1.27 | 2.39 |
| Voltage Constant (V/1000r/min) | 4.5 | 4.6 |
| Torque Coefficient(N.m/A) | 0.063 | 0.07 |
| Rotor Inertia(KG.M ²) | 1.05×10^{-4} | 1.82×10^{-4} |
| Line-line Resistance(Ω) | 0.06 | 0.028 |
| Line-line Inductance(mH) | 0.093 | 0.054 |
| Electrical Time-constant(ms) | 1.55 | 1.93 |
| Encoder Line Number(PPR) | 2500 | 2500 |
| Insulation Class | ClassF | ClassF |
| Safety Class | IP65 | IP65 |
| Environment | Temperature: -20°C ~ +50°C Humidity Below 90%rh No Dewing | |

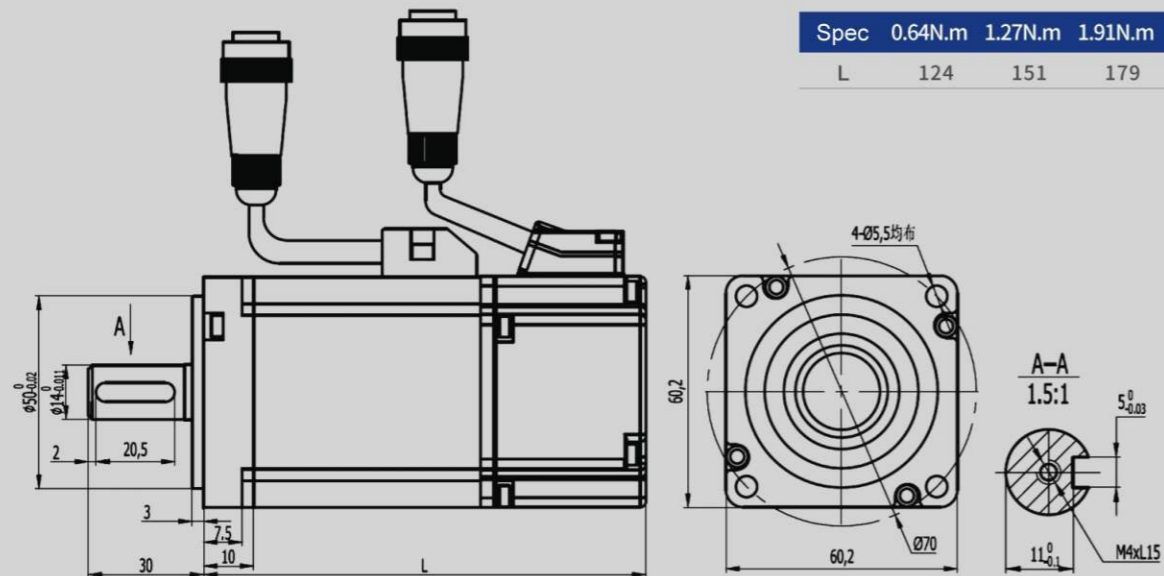
▶ Specifications

| Motor Model | 40AST-M00130 | 40AST-M00330 |
|-----------------------------------|---|------------------------|
| Rated Power(W) | 50 | 100 |
| Rated Voltage(V) | 48 | 48 |
| Rated Current(A) | 1.1 | 2.5 |
| Rated Speed(RPM) | 3000 | 3000 |
| Rated Torque(N.m) | 0.16 | 0.32 |
| Voltage Constant (V/1000r/min) | 9.2 | 8.2 |
| Torque Coefficient(N.m/A) | 0.145 | 0.128 |
| Rotor Inertia(KG.M ²) | 0.025×10^{-4} | 0.051×10^{-4} |
| Line-line Resistance(Ω) | 6.75 | 2.2 |
| Line-line Inductance(mH) | 7.5 | 3 |
| Electrical Time-constant(ms) | 1.11 | 1.36 |
| Encoder Line Number(PPR) | 2500 | |
| Insulation Class | ClassB(130°C) | |
| Safety Class | IP64 | |
| Environment | Temperature: -20°C ~ +50°C Humidity Below 90%rh No Dewing | |

60A ST

60 SERIES DC48V SERVO MOTORS

➤ DIMENSION: UNIT=mm



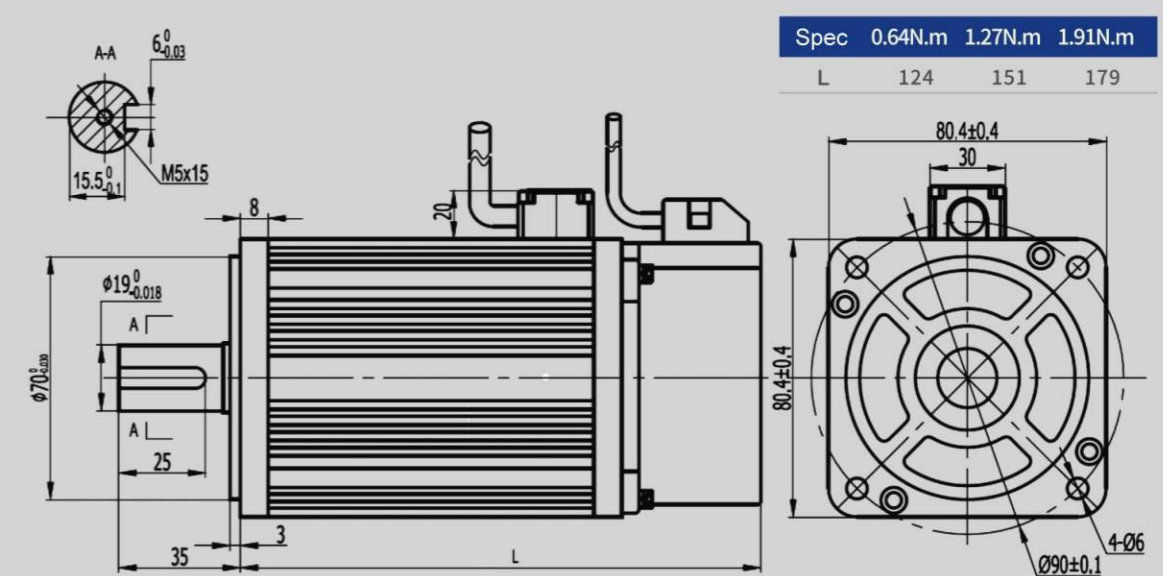
➤ Specifications

| Motor Model | 60AST - M00630 | 60AST - M01330 | 60AST - M01930 |
|-----------------------------------|---|-----------------------|-----------------------|
| Rated Power(W) | 200 | 400 | 600 |
| Rated Voltage(V) | 48 | 48 | 48 |
| Rated Current(A) | 5.7 | 11 | 14.5 |
| Rated Speed(RPM) | 3000 | 3000 | 3000 |
| Rated Torque(N.m) | 0.64 | 1.27 | 1.91 |
| Voltage Constant (V/1000r/min) | 8 | 8 | 8.5 |
| Torque Coefficient(N.m/A) | 0.112 | 0.115 | 0.132 |
| Rotor Inertia(KG.M ²) | 0.175×10^{-4} | 0.29×10^{-4} | 0.39×10^{-4} |
| Line-line Resistance(Ω) | 0.3 | 0.15 | 0.138 |
| Line-line Inductance(mH) | 1.378 | 0.708 | 0.64 |
| Electrical Time-constant(ms) | 4.59 | 4.72 | 4.64 |
| Encoder Line Number(PPR) | 2500 | | |
| Insulation Class | ClassB(130°C) | | |
| Safety Class | IP64 | | |
| Environment | Temperature: -20°C ~ +50°C Humidity Below 90%rh No Dewing | | |

80 ST

80 SERIES DC48V SERVO MOTORS

➤ DIMENSION: UNIT=mm



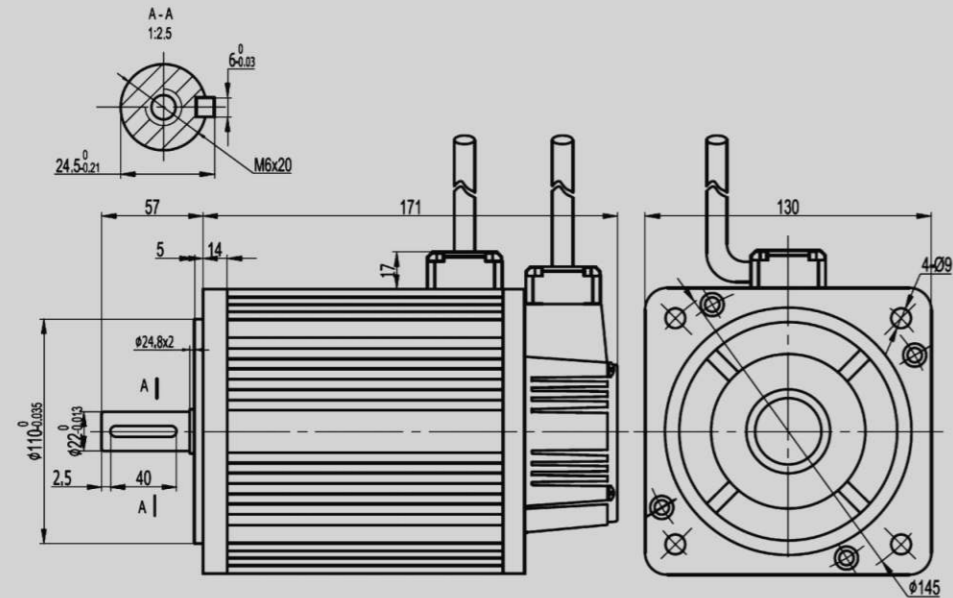
➤ Specifications

| Motor Model | 80ST-M01330 | 80ST-M02430 | 80ST-M04025 |
|-----------------------------------|---|-----------------------|-----------------------|
| Rated Power(W) | 400 | 750 | 1000 |
| Rated Voltage(V) | 48 | 48 | 48 |
| Rated Current(A) | 10.9 | 19.5 | 27 |
| Rated Speed(RPM) | 3000 | 3000 | 2500 |
| Rated Torque(N.m) | 1.27 | 2.39 | 4 |
| Voltage Constant (V/1000r/min) | 7.2 | 7.4 | 9.2 |
| Torque Coefficient(N.m/A) | 0.115 | 0.123 | 0.148 |
| Rotor Inertia(KG.M ²) | 1.05×10^{-4} | 1.82×10^{-4} | 2.97×10^{-4} |
| Line-line Resistance(Ω) | 0.15 | 0.066 | 0.053 |
| Line-line Inductance(mH) | 0.27 | 0.151 | 0.131 |
| Electrical Time-constant(ms) | 1.8 | 2.29 | 2.47 |
| Encoder Line Number(PPR) | 2500 | | |
| Insulation Class | ClassB(130°C) | | |
| Safety Class | IP64 | | |
| Environment | Temperature: -20°C ~ +50°C Humidity Below 90%rh No Dewing | | |

130 ST

130 SERIES DC48V SERVO MOTORS

► DIMENSION: UNIT=mm



► Specifications

| Motor Model | 130ST-M05030 | 130ST-M10015 | 130ST-M06030 | 130ST-M12020 | 130ST-M08030 | 130ST-M10030 |
|-----------------------------------|---|-----------------------|-----------------------|-----------------------|-----------------------|-----------------------|
| Rated Power(W) | 1500 | 1500 | 2000 | 2500 | 2500 | 3000 |
| Rated Voltage(V) | 48 | 48 | 48 | 48 | 48 | 48 |
| Rated Current(A) | 35 | 38 | 50 | 60 | 60 | 88 |
| Rated Speed(RPM) | 3000 | 1500 | 3000 | 2000 | 3000 | 3000 |
| Rated Torque(N.m) | 5 | 10 | 6.3 | 12 | 7.9 | 10 |
| Voltage Constant (V/1000r/min) | 9.80 | 17.00 | 9.40 | 12.00 | 10.00 | 7.60 |
| Torque Coefficient(N.m/A) | 0.143 | 0.263 | 0.126 | 0.181 | 0.132 | 0.11 |
| Rotor Inertia(KG.M ²) | 1.06×10^{-3} | 1.94×10^{-3} | 1.26×10^{-3} | 2.77×10^{-3} | 1.53×10^{-3} | 1.94×10^{-3} |
| Line-line Resistance(Ω) | 0.03 | 0.043 | 0.029 | 0.013 | 0.02 | 0.0077 |
| Line-line Inductance(mH) | 0.087 | 0.161 | 0.089 | 0.046 | 0.463 | 0.021 |
| Electrical Time-constant(ms) | 2.9 | 3.74 | 3.20 | 3.59 | 2.31 | 2.72 |
| Encoder Line Number(PPR) | 2500 | 2500 | 2500 | 2500 | 2500 | 2500 |
| Insulation Class | ClassB(130℃) | ClassF | ClassF | ClassF | ClassF | ClassF |
| Safety Class | IP64 | IP65 | IP65 | IP65 | IP65 | IP65 |
| Environment | Temperature: -20℃ ~ +50℃ Humidity Below 90%rh No Dewing | | | | | |

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