

AC Servo Motors

ELM Series

- Power range: 100W - 2kW
- Voltage: 220vac
- Feedback: 17-Bit, 23-Bit absolute encoder
- Frame size: 40mm, 60mm, 80mm, 130mm



Part Numbers

ELM - 0750 L H 80 F - SS

| Series Num | |
|------------------|--|
| ELM series motor | |

| Rated Output Power | |
|--------------------|-------|
| 0100 | 100W |
| 0200 | 200W |
| 0400 | 400W |
| 0750 | 750W |
| 0850 | 850W |
| 1000 | 1000W |
| 1300 | 1300W |
| 1500 | 1500W |
| 1800 | 1800W |
| 2000 | 2000W |

| Encoder Type | |
|--------------|----------------------------|
| F | 17-Bit incremental |
| L | 23-Bit multi-turn absolute |

| Inertia Ratio | |
|---------------|--------|
| L | Low |
| M | Medium |
| H | High |

| Motor Connector Type | |
|----------------------|--------------------------|
| SS | 9-Pin Plastic Connector |
| H | Plug Aviation Connector |
| HH2 | 6-Pin Aviation Connector |
| HD | Special Type Connector |

| | Shaft Type | | Brake | | Oil Seal | |
|---|------------|--------|-------|----|----------|----|
| | Rotary | Keyway | Yes | No | Yes | No |
| A | • | | • | | • | |
| B | • | | | • | • | |
| C | • | | • | | | • |
| D | • | | | • | | • |
| E | | • | • | | • | |
| F | | • | | • | • | |
| G | | • | • | | | • |
| H | | • | | • | | • |

| Frame Size | |
|------------|-------|
| 40 | 40mm |
| 60 | 60mm |
| 80 | 80mm |
| 130 | 130mm |

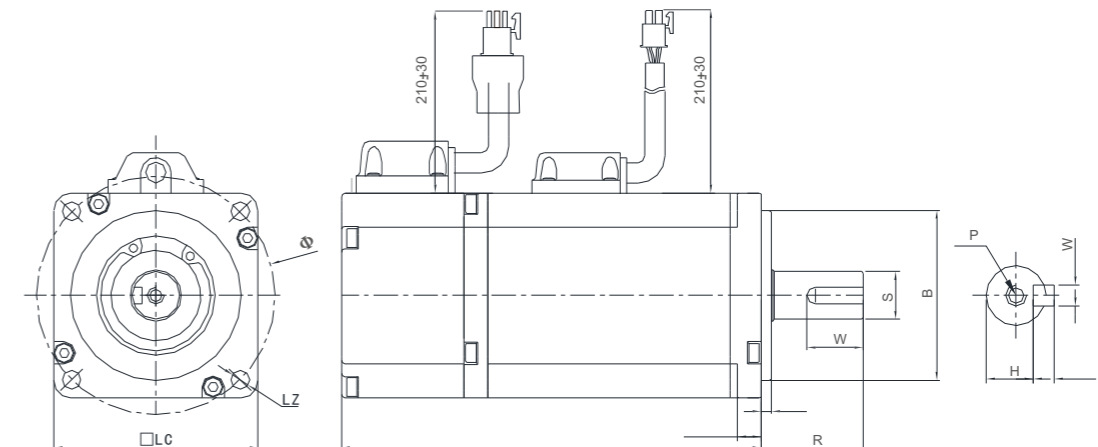
Servo Motors with 17-Bit Encoder

• Models

| ELM Series | 0100FL40H-**- | 0200FL60H-**- | 0400FM60H-**- | 0750FM80H-**- | 1000FM80H-**- | |
|---|--|---------------|---------------|---------------|---------------|------|
| | 0100FL40G-**- | 0200FL60G-**- | 0400FM60G-**- | 0750FM80G-**- | 1000FM80G-**- | |
| Frame Size [mm] | 40 | 60 | | 80 | | |
| Rated Power [w] | 100 | 200 | 400 | 750 | 1000 | |
| Voltage [VAC] | 220 | | | | | |
| Rated Torque [Nm] | 0.32 | 0.64 | 1.27 | 2.39 | 3.18 | |
| Rated Current [A] | 1.1 | 1.7 | 2.8 | 4.9 | 5.7 | |
| Rated Speed [r/min] | 3000 | 3000 | 3000 | 3000 | 3000 | |
| Peak Torque [Nm] | 0.96 | 1.92 | 3.81 | 7.17 | 9.52 | |
| Peak Current [A] | 3.3 | 5.1 | 8.4 | 14.7 | 17.1 | |
| Max Speed [r/min] | 6000 | 5000 | 5000 | 5000 | 5000 | |
| Torque Const [Nm/A] | 0.290 | 0.376 | 0.454 | 0.488 | 0.558 | |
| Voltage Const [V/krpm] | 20.5 | 26.3 | 30.2 | 33.5 | 36.2 | |
| Resistance [Ω] | 14.3 | 6.7 | 3.61 | 1.08 | 1.07 | |
| Inductance [mH] | 14.8 | 21.3 | 11.5 | 6.1 | 6.9 | |
| Inertia [kgm ² *10 ⁻⁴] | 0.046 | 0.2 | 0.436 | 1.43 | 1.63 | |
| Oil Seal | X | X | X | X | X | |
| Encoder | 17-Bit Incremental | | | | | |
| Structure | Totally Enclosed, Natural Cooling(IP rating: IP54) | | | | | |
| Mass (kg) | Standard | 0.47 | 1.01 | 1.42 | 2.57 | 2.83 |
| | With Brake | 0.59 | 1.38 | 1.71 | 3.24 | 3.5 |
| Length(mm) | Standard | 79 | 78.5 | 105.5 | 114 | 126 |
| | With Brake | 109 | 105 | 131.5 | 143 | 155 |
| Permissible Load for the Shaft | L [mm] | 22.5 | 27 | 27 | 27 | 32 |
| | Radial [N] | 78 | 245 | 245 | 245 | 392 |
| | Thrust [N] | 54 | 74 | 74 | 74 | 147 |

-SS/-HH2 Connector Selectable

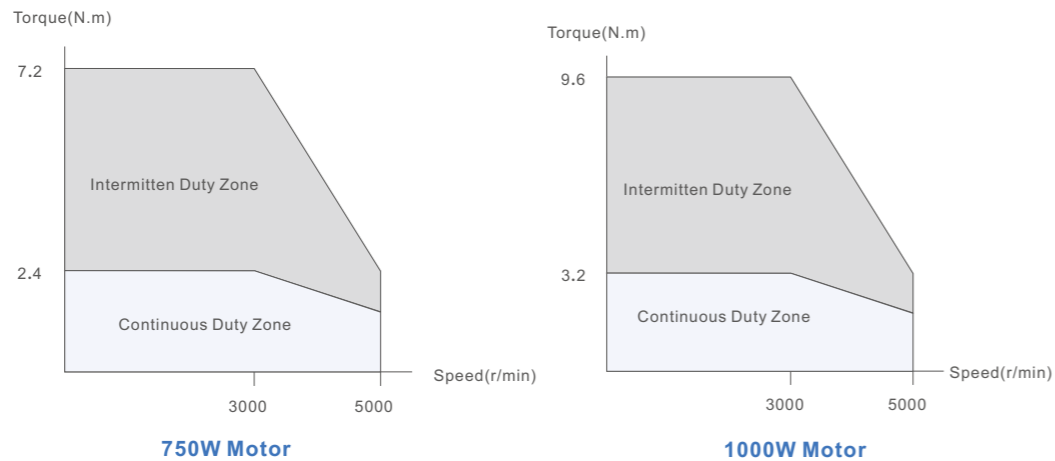
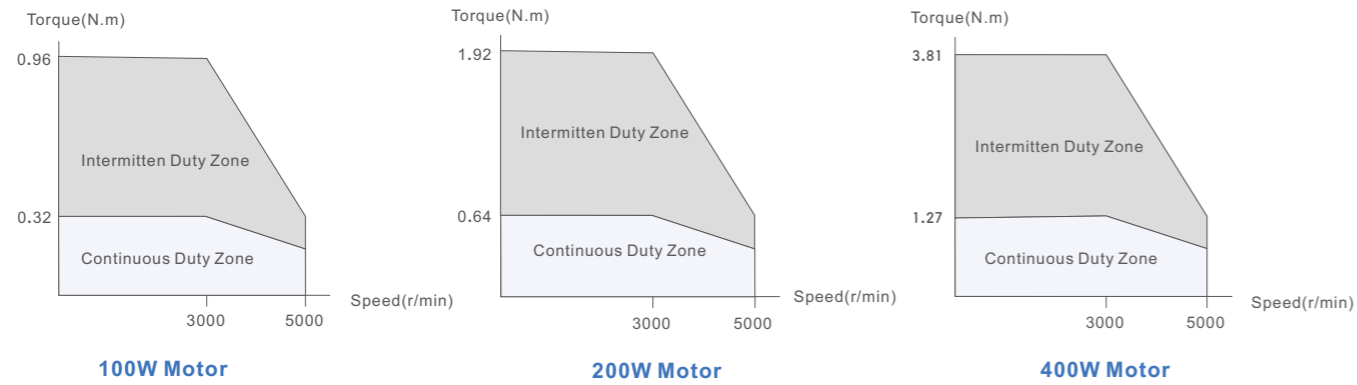
• Dimensions



| Motor Series | LC (mm) | LZ (mm) | LA (mm) | S (mm) | LB (mm) | LL (mm) | LR (mm) | LE (mm) | LG (mm) | LW (mm) | RH (mm) | W (mm) | T (mm) | TP (mm) |
|------------------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|---------|--------|--------|---------|
| ELM0100FL40H-**- | 40 | Φ4.5 | 46 | Φ8 | Φ30 | 79 | 25 | 2.5 | 5 | 15.5 | 6.2 | 3 | 3 | M3T6 |
| ELM0100FL40G-**- | 40 | Φ4.5 | 46 | Φ8 | Φ30 | 109 | 25 | 2.5 | 5 | 15.5 | 6.2 | 3 | 3 | M3T6 |
| ELM0200FL60H-**- | 60 | Φ5.5 | 70 | Φ14 | Φ50 | 78.5 | 30 | 3 | 7 | 16.5 | 11 | 5 | 5 | M5T8 |
| ELM0200FL60G-**- | 60 | Φ5.5 | 70 | Φ14 | Φ50 | 105 | 30 | 3 | 7 | 16.5 | 11 | 5 | 5 | M5T8 |
| ELM0400FM60H-**- | 60 | Φ5.5 | 70 | Φ14 | Φ50 | 105.5 | 30 | 3 | 7 | 16.5 | 11 | 5 | 5 | M5T8 |
| ELM0400FM60G-**- | 60 | Φ5.5 | 70 | Φ14 | Φ50 | 131.5 | 30 | 3 | 7 | 16.5 | 11 | 5 | 5 | M5T8 |
| ELM0750FM80H-**- | 80 | Φ7 | 90 | Φ19 | Φ70 | 114 | 35 | 3 | 8 | 25 | 15.5 | 6 | 6 | M5T12 |
| ELM0750FM80G-**- | 80 | Φ7 | 90 | Φ19 | Φ70 | 143 | 35 | 3 | 8 | 25 | 15.5 | 6 | 6 | M5T12 |
| ELM1000FM80H-**- | 80 | Φ6.5 | 90 | Φ19 | Φ70 | 126 | 35 | 3 | 8 | 25 | 15.5 | 6 | 6 | M6T10 |
| ELM1000FM80G-**- | 80 | Φ6.5 | 90 | Φ19 | Φ70 | 155 | 35 | 3 | 8 | 25 | 15.5 | 6 | 6 | M6T10 |

-SS/-HH2 Connector Selectable

• Torque-Speed Curves



Servo Motors with 23-Bit Encoder

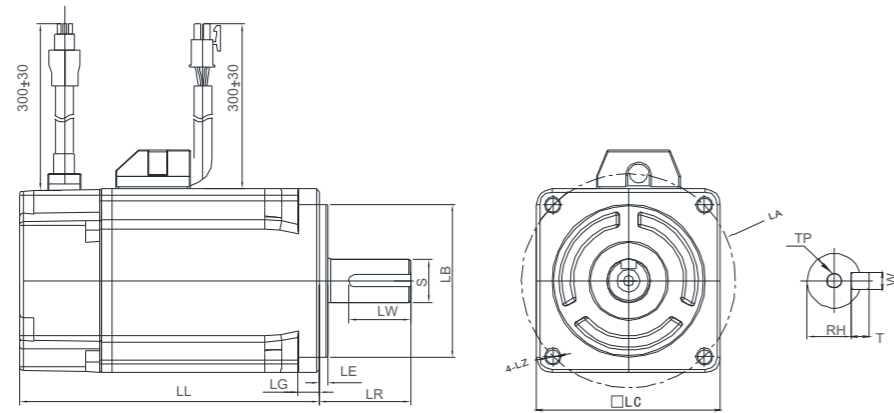
• Models

| ELM Series | 0100LL40F-**- | 0200LH60F-**- | 0400LH60F-**- | 0750LH80F-**- |
|---|--|---------------|---------------|---------------|
| | 0100LL40E-**- | 0200LH60E-**- | 0400LH60E-**- | 0750LH80E-**- |
| Frame Size [mm] | 40 | 60 | | 80 |
| Rated Power [w] | 100 | 200 | 400 | 750 |
| Voltage [VAC] | 220 | | | |
| Rated Torque [Nm] | 0.32 | 0.64 | 1.27 | 2.4 |
| Rated Current [A] | 1.1 | 1.9 | 3.2 | 5.1 |
| Rated Speed [r/min] | 3000 | 3000 | 3000 | 3000 |
| Peak Torque [Nm] | 0.96 | 1.92 | 3.81 | 7.2 |
| Peak Current [A] | 3.3 | 5.7 | 9.6 | 15.3 |
| Max Speed [r/min] | 6500 | 6500 | 6500 | 6500 |
| Torque Const [Nm/A] | 0.290 | 0.337 | 0.397 | 0.471 |
| Voltage Const [V/krpm] | 14.8 | 21.8 | 22.6 | 28.8 |
| Resistance [Ω] | 12.4 | 6.3 | 2.64 | 1.00 |
| Inductance [mH] | 12.25 | 12.2 | 7.9 | 5.8 |
| Inertia [kgm ² *10 ⁻⁴] | 0.048 | 0.29 | 0.56 | 1.56 |
| Oil seal | √ | √ | √ | √ |
| Encoder | 23-Bit multi-turn absolute | | | |
| Structure | Totally Enclosed, Natural Cooling(IP Rating: IP65) | | | |
| Mass (kg) | Standard | 0.48 | 0.8 | 1.2 |
| | With Brake | 0.75 | 1.3 | 1.6 |
| Length(mm) | Standard | 80.7 | 73.1 | 89.5 |
| | With Brake | 114.7 | 103.6 | 120.2 |
| Permissible Load for the Shaft | L [mm] | 22 | 27.2 | 27.2 |
| | Radial [N] | 68 | 245 | 245 |
| | Thrust [N] | 58 | 98 | 98 |

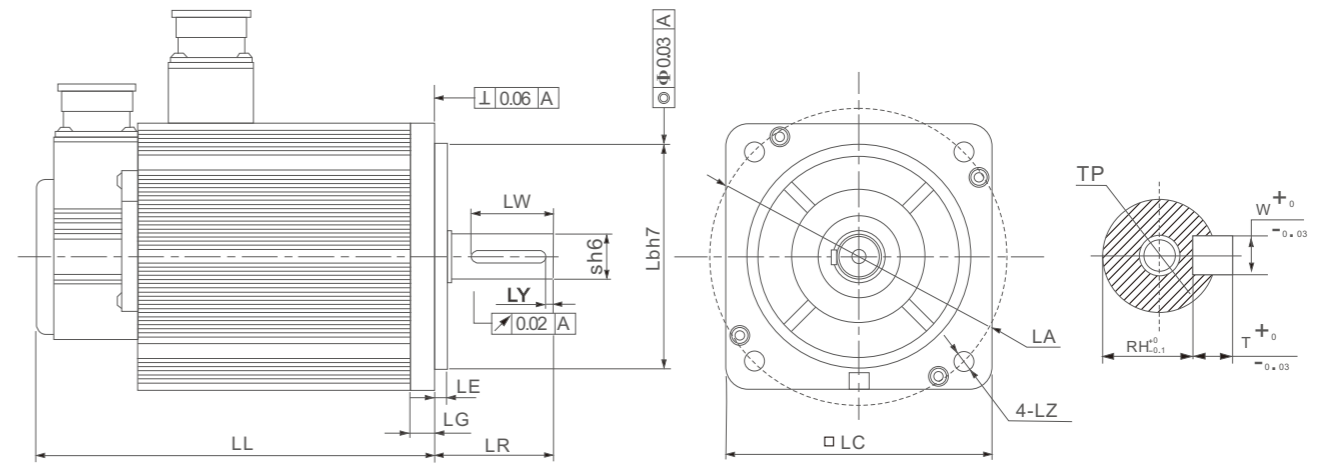
-SS/-HH2 Connector Selectable

| ELM Series | 0850LH130F-HD | 1000LM130F-H | 1300LH130F-HD | 1500LM130F-H | 1800LH130F-HD | 2000LM130F-H | |
|---|--|--------------|---------------|--------------|---------------|--------------|-----|
| | 0850LH130E-HD | 1000LM130E-H | 1300LH130E-HD | 1500LM130E-H | 1800LH130E-HD | 2000LM130E-H | |
| Frame Size [mm] | 130 | | | | | | |
| Rated Power [w] | 850 | 1000 | 1300 | 1500 | 1800 | 2000 | |
| Voltage [VAC] | 220 | | | | | | |
| Rated Torque [Nm] | 5.4 | 4 | 8.4 | 6 | 11.5 | 7.7 | |
| Rated Current [A] | 6.5 | 4 | 9.5 | 6 | 9 | 7.5 | |
| Rated Speed [r/min] | 1500 | 2500 | 1500 | 2500 | 1500 | 2500 | |
| Peak Torque [Nm] | 16.2 | 12 | 25.2 | 18 | 34.5 | 22 | |
| Peak Current [A] | 19.5 | 12 | 28.5 | 18 | 27 | 21 | |
| Max Speed [r/min] | 3000 | 3000 | 3000 | 3000 | 3000 | 3000 | |
| Torque Const [Nm/A] | 0.831 | 1000 | 0.884 | 1000 | 1.278 | 1.027 | |
| Voltage Const [V/krpm] | 62.23 | 72 | 60.1 | 65 | 87 | 68 | |
| Resistance [Ω] | 11 | 2.76 | 0.5 | 1.27 | 0.68 | 1.01 | |
| Inductance [mH] | 4.94 | 6.42 | 3.0 | 3.87 | 4.26 | 2.94 | |
| Inertia [kgm ² *10 ⁻⁴] | 13.8 | 8.5 | 20.59 | 12.6 | 30.15 | 15.3 | |
| Oil Seal | ✓ | ✓ | ✓ | ✓ | ✓ | ✓ | |
| Encoder | 23bit Multi-turn Absolute Encoder | | | | | | |
| Structure | Totally Enclosed, Natural Cooling(IP rating: IP65) | | | | | | |
| Mass (kg) | Standard | 8 | 62 | 10.3 | 7.4 | 12.4 | 8.3 |
| | With Brake | 10 | 7.5 | 12.3 | 8.9 | 14.4 | 9.9 |
| Length(mm) | Standard | 145 | 166 | 165 | 179 | 192 | 241 |
| | With Brake | 172 | 223 | 192 | 236 | 219 | 249 |
| Permissible Load for the Shaft | L [mm] | 51 | 52 | 51 | 52 | 51 | 52 |
| | Radial [N] | 300 | 460 | 460 | 460 | 530 | 460 |
| | Thrust [N] | 147 | 202 | 202 | 202 | 270 | 202 |

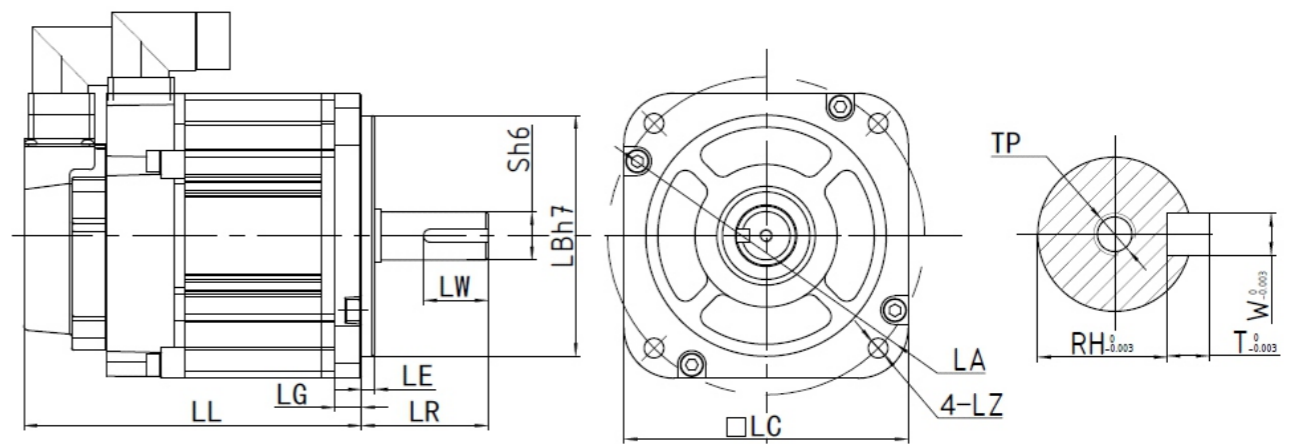
• Dimensions



| Motor Series | LC (mm) | LZ (mm) | LA (mm) | S (mm) | LB (mm) | LL (mm) | LR (mm) | LE (mm) | LG (mm) | LW (mm) | RH (mm) | W (mm) | T (mm) | TP (mm) |
|-----------------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------------------|
| ELM0100LL40F-** | 40 | Φ4.5 | 46 | Φ8 | Φ30 | 80.7 | 25 | 3 | 6.5 | 15.5 | 6.2 | 3 | 3 | M3 ⁺ 6 |
| ELM0100LL40E-** | 40 | Φ4.5 | 46 | Φ8 | Φ30 | 114.7 | 25 | 3 | 6.5 | 15.5 | 6.2 | 3 | 3 | M3 ⁺ 6 |
| ELM0200LH60F-** | 60 | Φ5.5 | 70 | Φ14 | Φ50 | 73.1 | 30 | 2.8 | 7 | 22.5 | 11 | 5 | 5 | M5 ⁺ 10 |
| ELM0200LH60E-** | 60 | Φ5.5 | 70 | Φ14 | Φ50 | 103.6 | 30 | 2.8 | 7 | 22.5 | 11 | 5 | 5 | M5 ⁺ 10 |
| ELM0400LH60F-** | 60 | Φ5.5 | 70 | Φ14 | Φ50 | 89.5 | 30 | 2.8 | 7 | 22.5 | 11 | 5 | 5 | M5 ⁺ 10 |
| ELM0400LH60E-** | 60 | Φ5.5 | 70 | Φ14 | Φ50 | 120.2 | 30 | 2.8 | 7 | 22.5 | 11 | 5 | 5 | M5 ⁺ 10 |
| ELM0750LH80F-** | 80 | Φ7 | 90 | Φ19 | Φ70 | 95.7 | 35 | 3 | 8.5 | 25 | 15.5 | 6 | 6 | M5 ⁺ 12 |
| ELM0750LH80E-** | 80 | Φ7 | 90 | Φ19 | Φ70 | 130.7 | 35 | 3 | 8.5 | 25 | 15.5 | 6 | 6 | M5 ⁺ 12 |

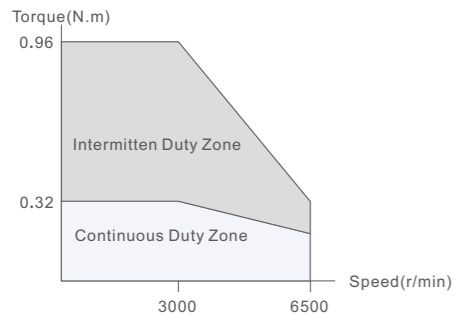


| Motor Series | LC (mm) | LZ (mm) | LA (mm) | S (mm) | LB (mm) | LL (mm) | LR (mm) | LE (mm) | LG (mm) | LW (mm) | LY (mm) | RH (mm) | W (mm) | T (mm) | TP (mm) |
|-----------------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------------------|
| ELM1000LM130F-H | 130 | Φ9 | 145 | Φ22 | Φ110 | 166 | 57 | 5 | 14 | 40 | 2.5 | 18.5 | 6 | 6 | M6 ⁺ 20 |
| ELM1000LM130E-H | 130 | Φ9 | 145 | Φ22 | Φ110 | 223 | 57 | 5 | 14 | 40 | 2.5 | 18.5 | 6 | 6 | M6 ⁺ 20 |
| ELM1500LM130F-H | 130 | Φ9 | 145 | Φ22 | Φ110 | 179 | 57 | 5 | 14 | 40 | 2.5 | 18.5 | 6 | 6 | M6 ⁺ 20 |
| ELM1500LM130E-H | 130 | Φ9 | 145 | Φ22 | Φ110 | 236 | 57 | 5 | 14 | 40 | 2.5 | 18.5 | 6 | 6 | M6 ⁺ 20 |
| ELM2000LM130F-H | 130 | Φ9 | 145 | Φ22 | Φ110 | 192 | 57 | 5 | 14 | 40 | 2.5 | 18.5 | 6 | 6 | M6 ⁺ 20 |
| ELM2000LM130E-H | 130 | Φ9 | 145 | Φ22 | Φ110 | 249 | 57 | 5 | 14 | 40 | 2.5 | 18.5 | 6 | 6 | M6 ⁺ 20 |

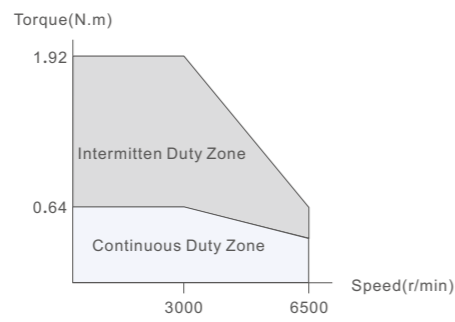


| Motor Series | LC (mm) | LZ (mm) | LA (mm) | S (mm) | LB (mm) | LL (mm) | LR (mm) | LE (mm) | LG (mm) | LW (mm) | RH (mm) | W (mm) | T (mm) | TP (mm) |
|------------------|---------|---------|---------|--------|---------|---------|---------|---------|---------|---------|---------|--------|--------|--------------------|
| ELM0850LH130F-HD | 130 | Φ8.5 | 145 | Φ19 | Φ110 | 145 | 57 | 6 | 12 | 30 | 16 | 5 | 5 | M5 ⁺ 12 |
| ELM0850LH130E-HD | 130 | Φ8.5 | 145 | Φ19 | Φ110 | 172 | 57 | 6 | 12 | 30 | 16 | 5 | 5 | M5 ⁺ 12 |
| ELM1300LH130F-HD | 130 | Φ8.5 | 145 | Φ22 | Φ110 | 165 | 57 | 6 | 12 | 30 | 18.5 | 6 | 6 | M5 ⁺ 12 |
| ELM1300LH130E-HD | 130 | Φ8.5 | 145 | Φ22 | Φ110 | 192 | 57 | 6 | 12 | 30 | 18.5 | 6 | 6 | M5 ⁺ 12 |
| ELM1800LH130F-HD | 130 | Φ8.5 | 145 | Φ24 | Φ110 | 192 | 57 | 6 | 12 | 30 | 20.5 | 8 | 7 | M5 ⁺ 12 |
| ELM1800LH130E-HD | 130 | Φ8.5 | 145 | Φ24 | Φ110 | 219 | 57 | 6 | 12 | 30 | 20.5 | 8 | 7 | M5 ⁺ 12 |

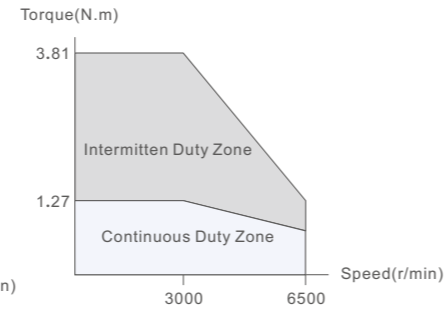
Torque-Speed Curves



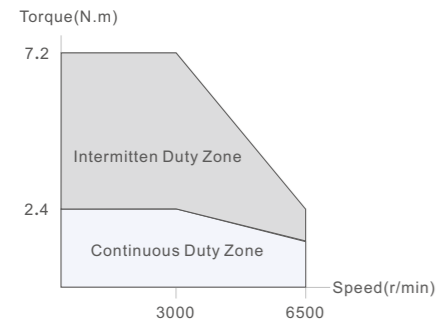
100W Motor



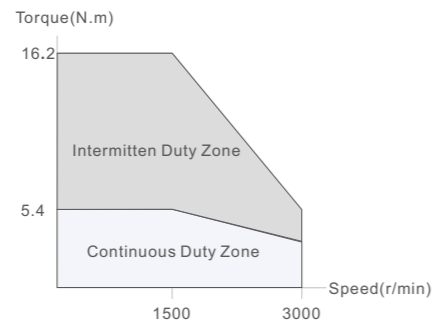
200W Motor



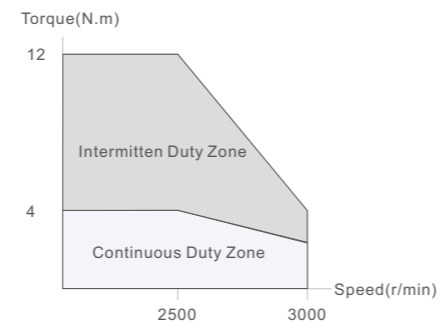
400W Motor



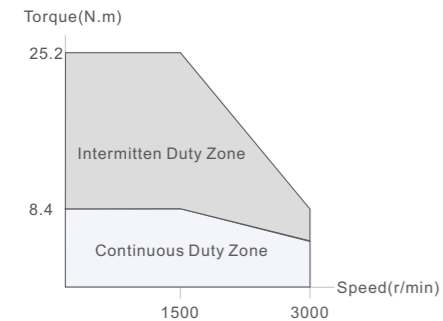
750W Motor



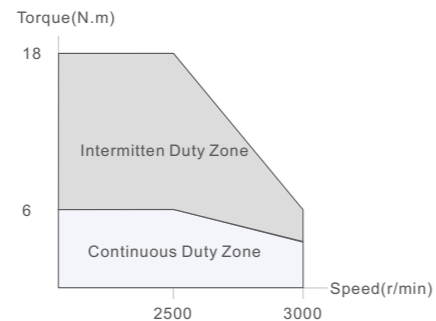
850W Motor



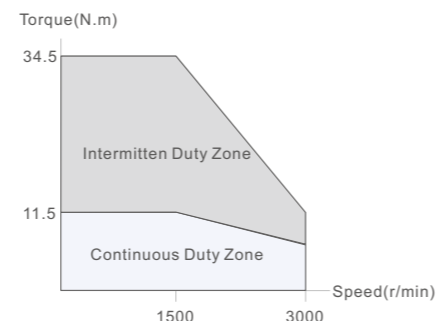
1000W Motor



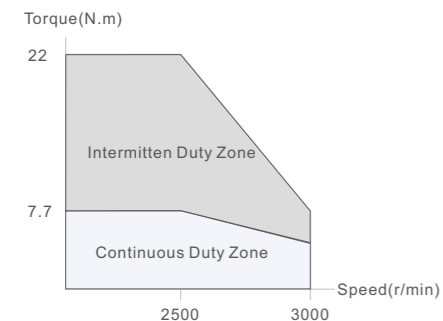
1300W Motor



1500W Motor



1800W Motor



2000W Motor

Accessories

Each servo drive comes with:

- (1) Power Connector
- (2) Signal Connector
- (3) Press Rod

Extension Cables

Power Cable

- Length options: 1.5M, 3M, 5M, 7M, 10M, 13M
- Connector options: Plastic plug Optional: Injection plug



Encoder Cable

- Length options: 1.5M, 3M, 5M, 7M, 10M, 13M
- Connector options: Plastic plug Optional: Injection plug



Brake Cable

- Length options: 1.5M, 3M, 5M, 7M, 10M, 13M
- Connector options: Plastic plug Optional: Injection plug



Cable Details

Cables for motors of 80mm frame size and below

- (1) CABLE-RZ*M*-S1(V3.0) Power Cable



Configuration Cable

- Connect the drive to computer
- The interface standard is USB
- Mode: CABLE-USB1M5, CABLE-L6TS1M5



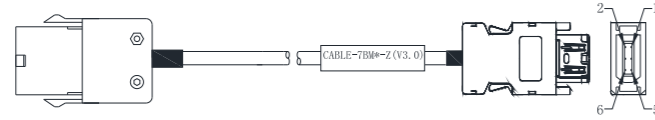
RS485/EtherCAT Communication Cable

- Model: CABLE-TX0M2-BUS
- Length options: 1.5M, 3M, 5M, 7M, 10M, 13M



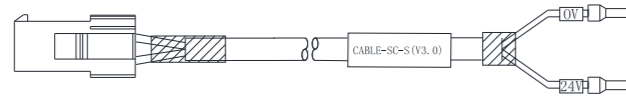
| Accessories Details | | | | |
|---------------------|------------------------------------|-------|-----------------|-------|
| Part No. | Model No. | Mount | Components | Notes |
| 11600371 | 4pin 172159-1 LS-17215901-AMP RoHS | 1 | 4 Plastic Shell | |
| 11600353 | 170362-1 RoHS AMP | 4 | 4 Pin Needle | |

(2) CABLE-7BM*M*-Z(V3.0) Encoder Cable



| Accessories Details | | | | |
|---------------------|------------------------------------|-------|--------------------------|-------|
| Part No. | Model No. | Mount | Components | Notes |
| 11600372 | 9pin 172161-1 LS-17216101-AMP RoHS | 1 | 9 Pin Plastic Shell | |
| 11600354 | 170361-1 RoHS AMP | 5 | 9 Pin Needle | |
| 11600383 | SC-06 SC-06 RoHS | 1 | Encoder-Drive(Connector) | |

(3) CABLE-SC*M*-S1(V3.0) Brake Cable



| Accessories Details | | | | |
|---------------------|------------------------------------|-------|---------------------|------------------------------------|
| Part No. | Model No. | Mount | Components | Notes |
| 11600369 | 2pin 172157-1 LS-17215701-AMP RoHS | 1 | 2 Pin Plastic Shell | Only optional for motor with brake |
| 11600353 | 170362-1 RoHS AMP | 2 | 2 Pin Needle | Only optional for motor with brake |

Injection plug cables for motor of 80mm frame size and below

(1) CABLE-RZ*M*-HH2 Power Cable



| Accessories Details | | | | |
|---------------------|--|-------|----------------|-------|
| Part No. | Model No. | Mount | Components | Notes |
| 11600548 | GM-1311/S-4B female 4 pin 13A OD:5-7.6mm GLM | 1 | Injection Plug | |
| 11600549 | GM-1310/P-4B male 4 pin 13A OD:5-7.6mm GLM | 1 | Injection Plug | |

(2) CABLE-7BM*M*-HH2 Encoder Cable



| Accessories Details | | | | |
|---------------------|---|-------|--------------------------|-------|
| Part No. | Model No. | Mount | Components | Notes |
| 11600546 | GM-1311/S-6A female 6 pin 5A OD:5-7.6mm GLM | 1 | Injection Plug | |
| 11600547 | GM-1310/P-6A male 6 pin 5A OD:5-7.6mm GLM | 1 | Injection Plug | |
| 11600383 | SC-06 SC-06 RoHS | 1 | Econder-Drive(Connector) | |

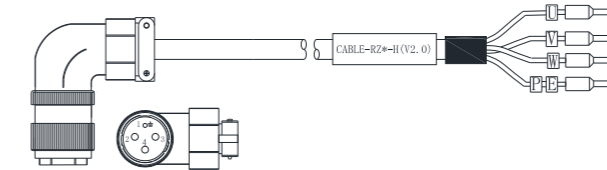
(3) CABLE-SC*M*-HH2 Brake Cable



| Part No. | Model No. | Mount | Components | Notes |
|----------|---|-------|----------------|------------------------------------|
| 11600544 | GM-1311/S-2 female 2 pin 13A OD:5-7.6mm GLM | 1 | Injection Plug | Only optional for motor with brake |
| 11600545 | GM-1310/P-2 male 2 pin 13A OD:5-7.6mm GLM | 1 | Injection Plug | Only optional for motor with brake |

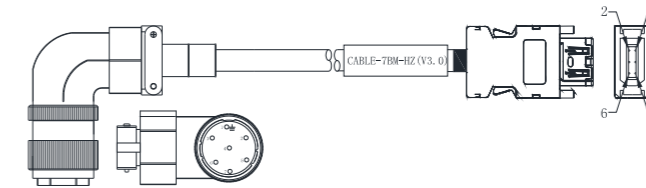
Accessories of Motor with 130mm Size

(1) CABLE-RZ*M*-H(V2.0) Power Cable



| Part No. | Model No. | Mount | Components | Notes |
|----------|----------------------|-------|---------------|-------|
| 11600072 | 4P OD: 9.5mm RoHS MG | 1 | Aviation Plug | |

(2) CABLE-7BM*M*-HZ(V3.0) Encoder Cable



| Part No. | Model No. | Mount | Components | Notes |
|----------|-------------------|-------|----------------------------|-------|
| 11600383 | SC-06 SC-06 RoHS | 1 | Encoder - Drive(connector) | |
| 11600076 | OD: 6.5mm RoHS MG | 1 | Aviation Plug | |

(3) CABLE-SC*M*-H(V3.0) Brake Cable



| Part No. | Model No. | Mount | Components | Notes |
|----------|------------|-------|---------------|------------------------------------|
| 11600070 | 3 PIN RoHS | 1 | Aviation Plug | Only optional for motor with brake |

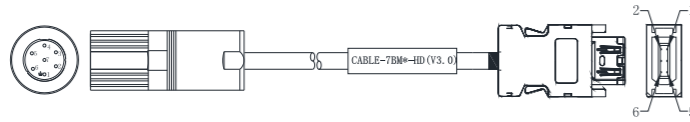
Accessories of Motor with 130mm Size for Engraving Machine

(1) CABLE-RZ*M*-HD(V2.0) Power Cable



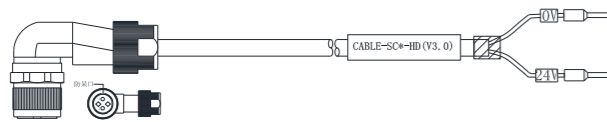
| Part No. | Model No. | Mount | Components | Notes |
|----------|--------------|-------|---------------|-------|
| 11600077 | 4pin RoHS HD | 1 | Aviation Plug | |

(2) CABLE-7BM*M*-HD(V3.0) Encoder Cable



| Part No. | Model No. | Mount | Components | Notes |
|----------|------------------|-------|----------------------------|-------|
| 11600079 | 7pin RoHS HD | 1 | Aviation Plug | |
| 11600383 | SC-06 SC-06 RoHS | 1 | Encoder - Drive(connector) | |

(3) CABLE-SC*M*-HD(V3.0) Brake Cable



| Part No. | Model No. | Mount | Components | Notes |
|----------|--------------|-------|---------------|------------------------------------|
| 11600078 | 2pin RoHS HD | 1 | Aviation Plug | Only optional for motor with brake |

Ordering Information

• Servo Motors with 17-Bit Encoders

| Frame (mm) | NO. | Length (mm) | Diameter (mm) | Servo Drive | Power Cable | Encoder Cable | Brake Cable |
|------------|----------------------|-------------|---------------|--------------------------------------|----------------|----------------|---------------|
| 40 | ELM0100FL40H-SS | 79 | Φ8 | | | | |
| | ELM0100FL40G-SS | 109 | | | | | CABLE-SC*M*-S |
| 60 | ELM0200FL60H-SS MS20 | 78.5 | Φ14 | EL8-EC400Z ELP-*400Z EL6-*400Z | CABLE-RZ*M*-S1 | CABLE-7BM*M*-Z | |
| | ELM0200FL60G-SS MS20 | 105 | | | | | CABLE-SC*M*-S |
| | ELM0400FM60H-SS MS20 | 105.5 | | | | | CABLE-SC*M*-S |
| | ELM0400FM60G-SS MS20 | 131.5 | | | | | CABLE-SC*M*-S |
| 80 | ELM0750FM80H-SS MS20 | 114 | Φ19 | EL8-EC750Z ELP-*750Z EL6-*750Z | CABLE-RZ*M*-S | | |
| | ELM0750FM80G-SS MS20 | 143 | | | | | CABLE-SC*M*-S |
| | ELM1000FM80H-SS MS20 | 126 | | | | | CABLE-SC*M*-S |
| | ELM1000FM80G-SS MS20 | 155 | | | | | CABLE-SC*M*-S |

| Frame (mm) | NO. | Length (mm) | Diameter (mm) | Servo Drive | Power Cable | Encoder Cable | Brake Cable |
|------------|------------------|-------------|---------------|--------------------------------------|-----------------|------------------|-----------------|
| 40 | ELM0100FL40H-HH2 | 79 | Φ8 | | | | |
| | ELM0100FL40G-HH2 | 109 | | | | | CABLE-SC*M*-HH2 |
| 60 | ELM0200FL60H-HH2 | 78.5 | Φ14 | EL8-EC400Z ELP-*400Z EL6-*400Z | CABLE-RZ*M*-HH2 | CABLE-7BM*M*-HH2 | |
| | ELM0200FL60G-HH2 | 105 | | | | | CABLE-SC*M*-HH2 |
| | ELM0400FM60H-HH2 | 105.5 | | | | | CABLE-SC*M*-HH2 |
| | ELM0400FM60G-HH2 | 131.5 | | | | | CABLE-SC*M*-HH2 |
| 80 | ELM0750FM80H-HH2 | 114 | Φ19 | EL8-EC750Z ELP-*750Z EL6-*750Z | CABLE-RZ*M*-HH2 | | |
| | ELM0750FM80G-HH2 | 143 | | | | | CABLE-SC*M*-HH2 |
| | ELM1000FM80H-HH2 | 126 | | | | | CABLE-SC*M*-HH2 |
| | ELM1000FM80G-HH2 | 155 | | | | | CABLE-SC*M*-HH2 |

• Servo Motors with 23-Bit Encoders

| Frame (mm) | NO. | Length (mm) | Diameter (mm) | Servo Drive | Power Cable | Encoder Cable | Brake Cable | | | |
|------------|-----------------|-------------|---------------|--------------------------------------|----------------|---|--------------------------------------|---------------|---------------|--|
| 40 | ELM0100LL40F-SS | 80.7 | Φ8 | EL8-EC400Z ELP-*400Z EL6-*400Z | CABLE-RZ*M*-S1 | CABLE-7BM*M*-Z CABLE-7BMA*M*-Z (23bit Multi-turn absolute encoder) | | | | |
| | ELM0100LL40E-SS | 114.7 | | | | | CABLE-SC*M*-S | | | |
| 60 | ELM0200LH60F-SS | 73.1 | Φ14 | | | | | | | |
| | ELM0200LH60E-SS | 103.6 | | | | | | | CABLE-SC*M*-S | |
| | ELM0400LH60F-SS | 89.5 | | | | | | | | |
| | ELM0400LH60E-SS | 120.2 | | | | | | | CABLE-SC*M*-S | |
| 80 | ELM0750LH80F-SS | 95.7 | Φ19 | | | | EL8-EC750Z ELP-*750Z EL6-*750Z | CABLE-RZ*M*-S | | |
| | ELM0750LH80E-SS | 130.7 | | | | | | | CABLE-SC*M*-S | |

| Frame (mm) | NO. | Length (mm) | Diameter (mm) | Servo Drive | Power Cable | Encoder Cable | Brake Cable | | | |
|------------|------------------|-------------|---------------|--------------------------------------|-----------------|------------------|--------------------------------------|--|-----------------|--|
| 40 | ELM0100LL40F-HH2 | 80.7 | Φ8 | EL8-EC400Z ELP-*400Z EL6-*400Z | CABLE-RZ*M*-HH2 | CABLE-7BM*M*-HH2 | | | | |
| | ELM0100LL40E-HH2 | 114.7 | | | | | CABLE-SC*M*-HH2 | | | |
| 60 | ELM0200LH60F-HH2 | 73.1 | Φ14 | | | | | | | |
| | ELM0200LH60E-HH2 | 103.6 | | | | | | | CABLE-SC*M*-HH2 | |
| | ELM0400LH60F-HH2 | 89.5 | | | | | | | | |
| | ELM0400LH60E-HH2 | 120.2 | | | | | | | CABLE-SC*M*-HH2 | |
| 80 | ELM0750LH80F-HH2 | 95.7 | Φ19 | | | | EL8-EC750Z ELP-*750Z EL6-*750Z | | | |
| | ELM0750LH80E-HH2 | 130.7 | | | | | | | CABLE-SC*M*-HH2 | |

| Frame (mm) | NO. | Length (mm) | Diameter (mm) | Servo Drive | Power Cable | Encoder Cable | Brake Cable | |
|------------|-----------------|-------------|---------------|---|-------------------------|-----------------|------------------------------------|---------------|
| 130 | ELM1000LM130F-H | 166 | Φ22 | EL8-EC1000Z ELP-*1000Z EL6-*1000Z | CABLE-RZ*M*-H (V1.1) | CABLE-7BM*M*-HZ | | |
| | ELM1000LM130E-H | 223 | | | | | CABLE-SC*M*-H | |
| | ELM1500LM130F-H | 179 | | ELP-*1500Z | | | | |
| | ELM1500LM130E-H | 236 | | | | | CABLE-SC*M*-H | |
| | ELM2000LM130F-H | 192 | | ELP-*2000Z | | | CABLE-RZ*M*-H (V2.0) (flexible) | |
| | ELM2000LM130E-H | 249 | | | | | | CABLE-SC*M*-H |

| Frame (mm) | NO. | Length (mm) | Diameter (mm) | Servo Drive | Power Cable | Encoder Cable | Brake Cable | |
|------------|------------------|-------------|---------------|---|--------------------------|---------------------------|----------------|--|
| 130 | ELM0850LH130F-HD | 145 | Φ19 | EL8-EC1000Z ELP-*1000Z EL6-*1000Z | CABLE-RZ*M*-HD (V2.0) | CABLE-7BM*M*-HD (V3.0) | | |
| | ELM0850LH130E-HD | 172 | Φ19 | | | | CABLE-SC*M*-HD | |
| | ELM1300LH130F-HD | 165 | Φ22 | ELP-*1500Z | | | | |
| | ELM1300LH130E-HD | 192 | | | | | CABLE-SC*M*-HD | |
| | ELM1800LH130F-HD | 192 | Φ24 | ELP-*2000Z | | | | |
| | ELM1800LH130E-HD | 219 | | | | | CABLE-SC*M*-HD | |

EL8 AC Servo Systems



High performance:

- Up to 3.2kHz velocity bandwidth , excellent position following capability
- Safety Torque Off

Power Range: 0.1 - 7.5kW

Voltage Input:

- 220VAC 1ph input, 380VAC 3ph input

Motor:

- 40-180mm flange size with 17bit/23bit encoder

Command source:

- EtherCAT / Pulse+Direction

Inputs / Outputs:

- MAX Pulse input: 500 kHz
- 4 programable digital inputs
- 3 programable digital outputs
- Encoder ABZ output

Position Mode

Velocity Mode

ELP AC Servo Systems



Power Range: 0.1 - 2.0kW

Voltage Input: 220VAC 1/3ph input

Motor:

- 40-130mm flange size with 17bit/23bit encoder

Command source:

- Pulse+Direction / Analog input / Modbus RTU / EtherCAT
- PR Mode
 - Programable 16-segment position table,
 - Support positioning/homing/ limit/ quick stop/ JOG...

Inputs and Outputs:

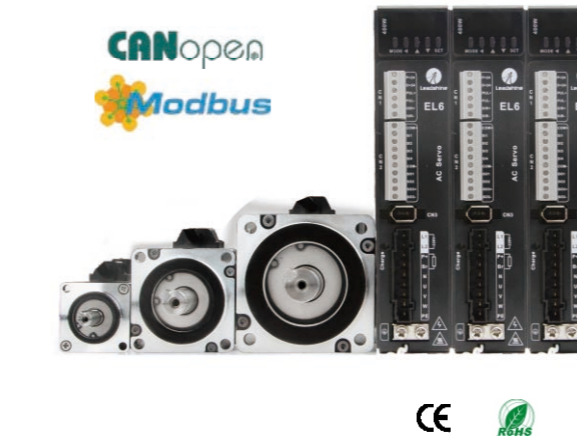
- MAX Pulse input: 500 kHz
- 9 programable digital inputs
- 6 programable digital outputs
- Encoder ABZ output
- 10 ~ +10Vdc Analog input

Position Mode

Velocity Mode

Torque Mode

EL6 AC Servo Systems



Power Range: 0.1 - 1.0kW

Voltage Input: 220VAC 1ph input

Motor: 40-130mm flange size with 17bit/23bit encoder

Features:

- Automatic motor identification
- Notch filter, Damping filter

Command source:

- Pulse+Direction / Modbus RTU / CANopen
- PR Mode
 - Programable 16-segment position table,
 - Support positioning/homing/ limit/ quick stop/ JOG...

Inputs and Outputs:

- MAX Pulse input: 500 kHz
- 4 programable digital inputs
- 3 programable digital outputs
- Encoder ABZ output

Position Mode