

AC Servo Drives

ELP Series

- Power range: 100W - 2kW
- 220 Vac input
- Automatic motor identification
- Easy tuning
- Built-in dynamic brake



ELP Series AC servo products are high performance AC digital servo which is designed for position / velocity / torque high accurate control, power range up to 2kW and it can provide intelligent performance with easy tuning process.

Combined with abundant features like MFC, vibration suppression, Multi-mode filter function, etc. It provides machines a compact size, low tuning works, but high resolution encoder up to 23 Bits, which can be used for high accuracy applications.

ELP-D Version ELP-D Series Drive

Position Mode

- 5V differential pulse/24V single-ended pulse
- 17bit/23bit incremental encoder
- Built-in dynamic brake
- New configuration software-Motion Studio

Modbus

ELP-RS Version ELP-RS Series Drive

Position/Velocity/Torque Mode

- RS485 based on Modbus
- 16paths Motion-PR Mode
- 17bit Incremental Encoder / 23bit Multi-turn Absolute Encoder
- Built-in dynamic brake
- New configuration software-Motion Studio

EtherCAT

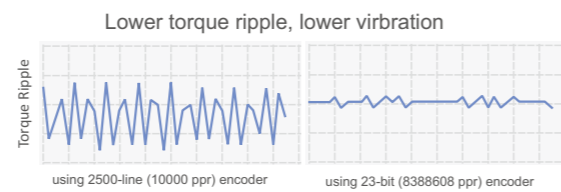
ELP-EC Version ELP-EC Series Drive

Position/Velocity/Torque Mode

- EtherCAT—Cia402, CoE
- 14 Inputs and 6 outputs
- 17bit Incremental Encoder / 23bit Multi-turn Absolute Encoder
- Built-in dynamic brake
- New configuration software-Motion Studio

High Precision

- Up to 23bit(8388608 ppr) high resolution encoder.
- Motors come with up to 23bit (8388608 ppr) high resolution encoders are also available for applications require higher precision, smoother movement and lower torque ripple



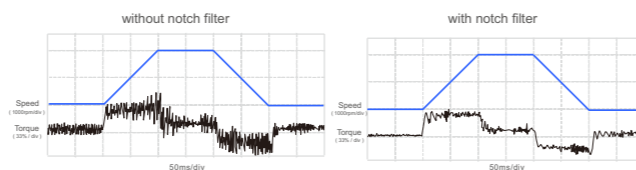
Excellent Position Following Capability

- By adopting load identification and torque feedforward advanced control algorithms, very small velocity ripple and position following error can be achieved. It is a great feature of the ELP when multi-axis synchronization such as interpolations are required.



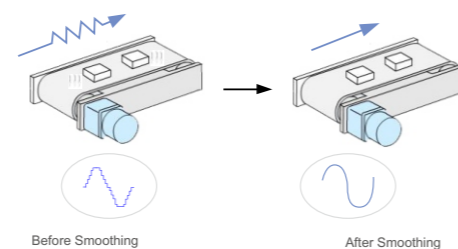
Vibration Suppression

- Adaptive filter makes the notch filter frequency automatically follow the machine resonance frequency.
- Can suppress vibration occurring at both starting and stopping in low stiffness machine.
- Suppress vibration frequency up to 1500 Hz.

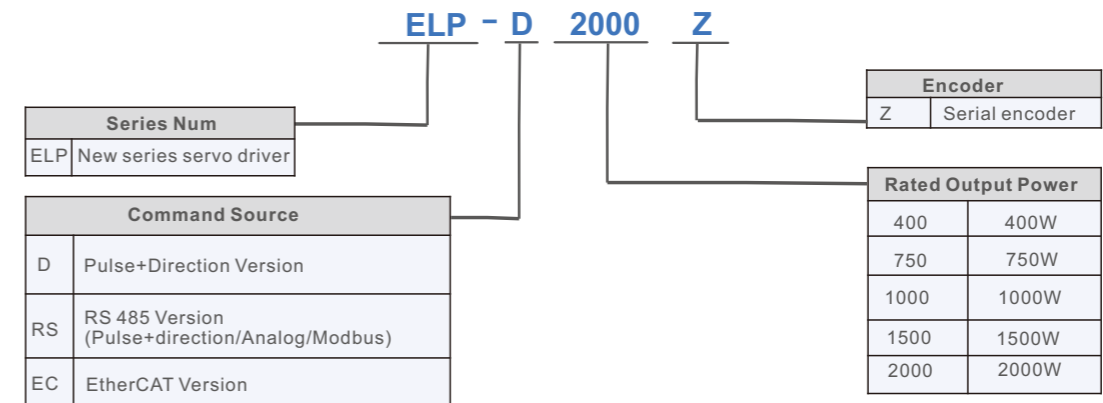


Command Signal Smoothing

- Command signal smoothing can soften the effect of immediate change in velocity and direction, delivering smoother movement and longer lifetime.



Part Numbers



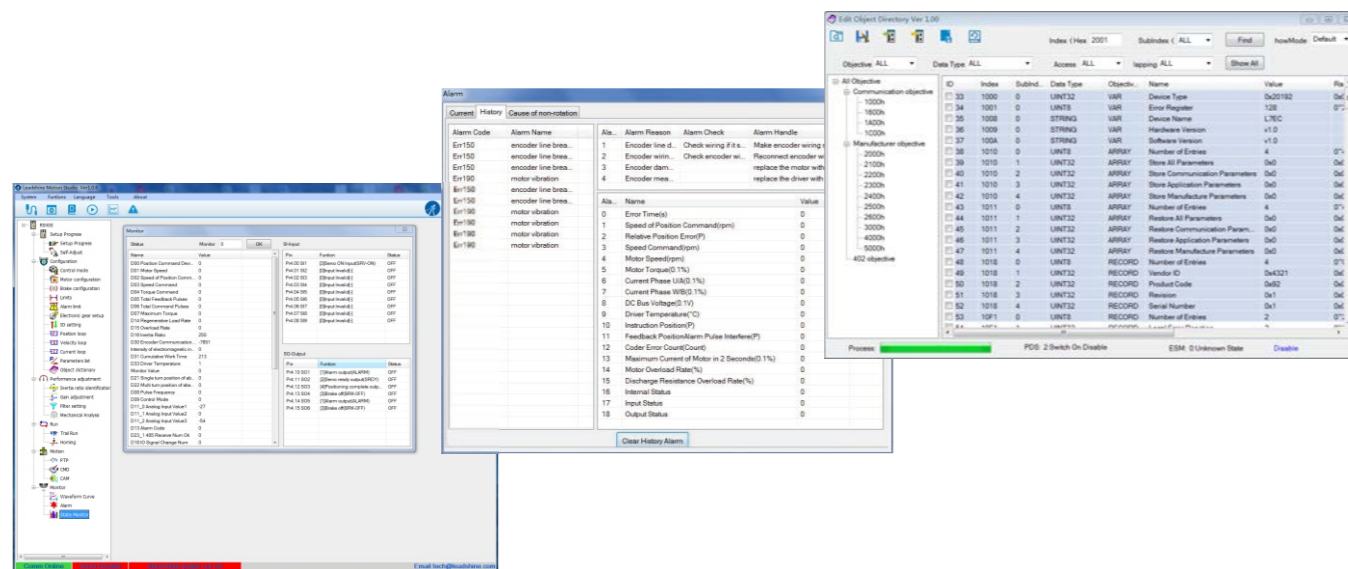
Specifications

Servo drive model	ELP-*400Z	ELP-*750Z	ELP-*1000Z	ELP-*1500Z	ELP-*2000Z
Rated output power	400W	750W	1000W	1500W	2000W
Rated output current [A]	2	5.5	7	9.5	12
Max output current [A]	8.5	16.5	21	28.5	36
Dimensions(mm)	40*175*156	50*175*156	50*175*156	80*175*175	80*175*175
Main power	1-phase 190Vac – 240Vac , 50/60Hz			1 or 3-phase 190Vac – 240Vac,50/60Hz	
Control power	1-phase 190Vac–240Vac, 50/60Hz				
Control mode	IGBT SVPWM sinusoidal wave control				
Feedback mode	17bit single-turn incremental encoder/23bit multi-turn absolute encoder				
Input pulse	0-500kHz,5V differential input				
Position bandwidth	200HZ				
Electronic gear ratio	1~8388608/1~8388608				
Analog input	-10~10Vdc,input resistance 20KΩ, no isolation				
Velocity bandwidth	500HZ				
Input signal	DI: 9 programable digital inputs, allows sink connection Servo enable, over-travel inhibition, gain switching, command pulse inhibition, speed zero clamp, deviation counter clear, alarm clear				
Output signal	DO: 6 programable digital outputs Alarm output, servo-ready, at-speed, zero-detection, velocity coincidence				
Encoder signal output	A phase, B phase, Z phase, long-distance drive mode output				
Alarm function	Over-voltage, under-voltage, over-current, over-load, encoder error, position deviation error, brake alarm, limit alarm, over-speed error etc.				
Debug software	All setting values of current loop, velocity loop , position loop can be modified and saved with Motion Studio software , all setting values can be downloaded and uploaded				
Communication interface	USB : Based on Modbus protocol (according to USB2.0 specification) RS485				
Brake mode	Built-in brake resistor or external resistor				
Adapt load inertia	Less than 30 times motor inertia				
weight	About 1.5-3Kg				

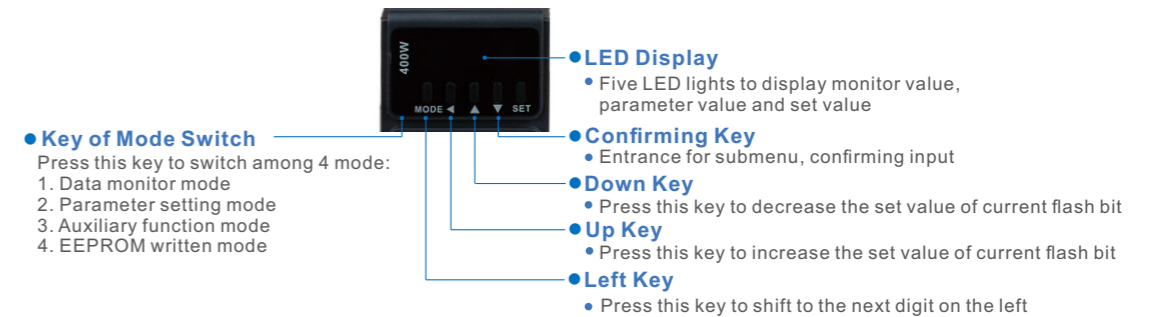
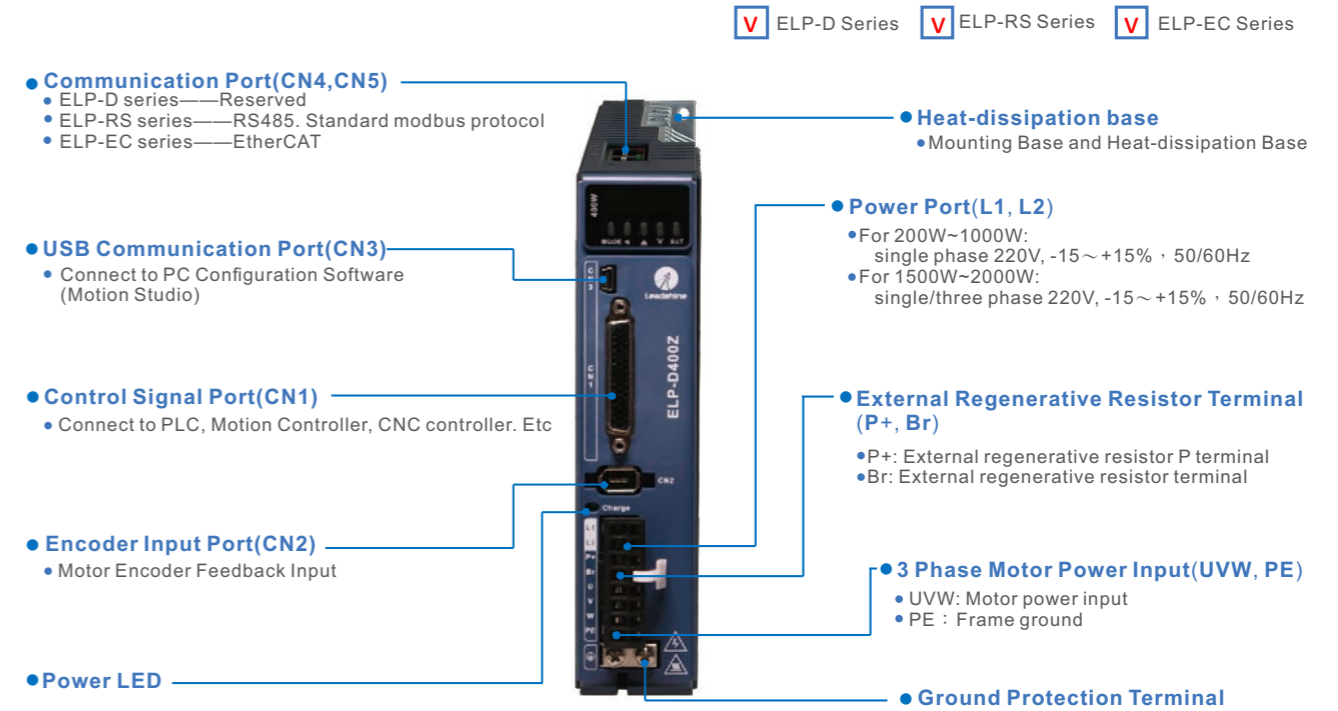
Servo drive series	ELP-D***Z	ELP-RS***Z	ELP-EC***Z
Control mode	<ul style="list-style-type: none"> Position control JOG 	<ul style="list-style-type: none"> Position control Velocity control Torque control Built-in PR mode Modbus RTU JOG 	<ul style="list-style-type: none"> CSP(Cyclic Synchronous Position) CSV(Cyclic Synchronous Velocity) CST(Cyclic Synchronous Torque) PP(Profile Position) PV(Profile Velocity) PT(Profile Torque) HM(Homing)
Encoder output	5V Differential, 0-500kHz 24Vsingle-ended,0-200kHz	5V Differential, 0-500kHz 24Vsingle-ended,0-200kHz	--
Digital input	9 programable digital inputs (allows sink connection/ source connection)	9 programable digital inputs (allows sink connection/ source connection)	14 programable digital inputs (allows sink connection/source connection) 2 differential (for capture probe)
Digital output	6 programable digital outputs (4 single-ended, 2 differential)		
Analog input		2 analog input: -10 ~ +10Vdc	
Network	--	Modbus RTU (RJ 45)	EtherCAT (RJ45)
Maximum frequency Of pulse input	5V Differential, 500kHz 24Vsingle-ended, 200kHz	5V Differential, 500kHz 24Vsingle-ended, 200kHz	--

Motion Studio - New Configuration Software

- Information such as parameter setting and monitoring are consolidated easily just by connecting a personal computer to servo drive.
- Display parameter setting in list or visual formats, and set parameters by selecting from the drop down list
- Adjust control gain finely on the [Tuning] window manually for better performance.
- State monitoring and 4 channel wave showing with high accuracy.
- Easy to set the values of object dictionary for drive with EtherCAT version.
- Easy to read/save/download/compare/reset all parameters.



Servo Drive Connectors and Terminals



External Regenerative Resistor

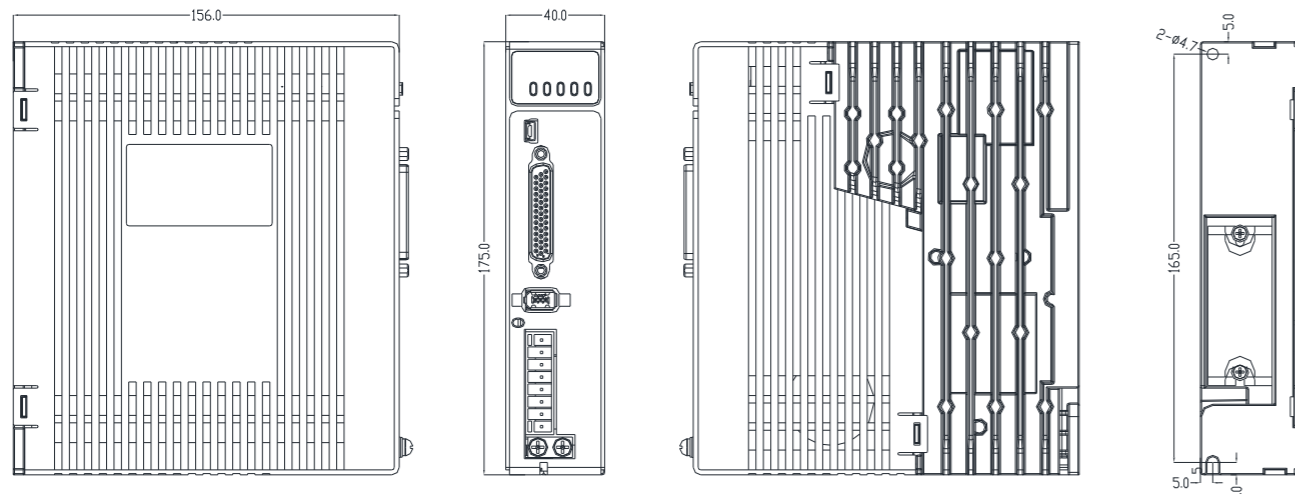
Type	Power	Resistance
RXLG-50W	50W	100Ω
RXLG-100W	100W	100Ω
RXLG-200W	200W	50Ω
RXLG-400W	400W	50Ω
RXLG-800W	800W	50Ω

Drive Mechanical Specifications

Unit: mm

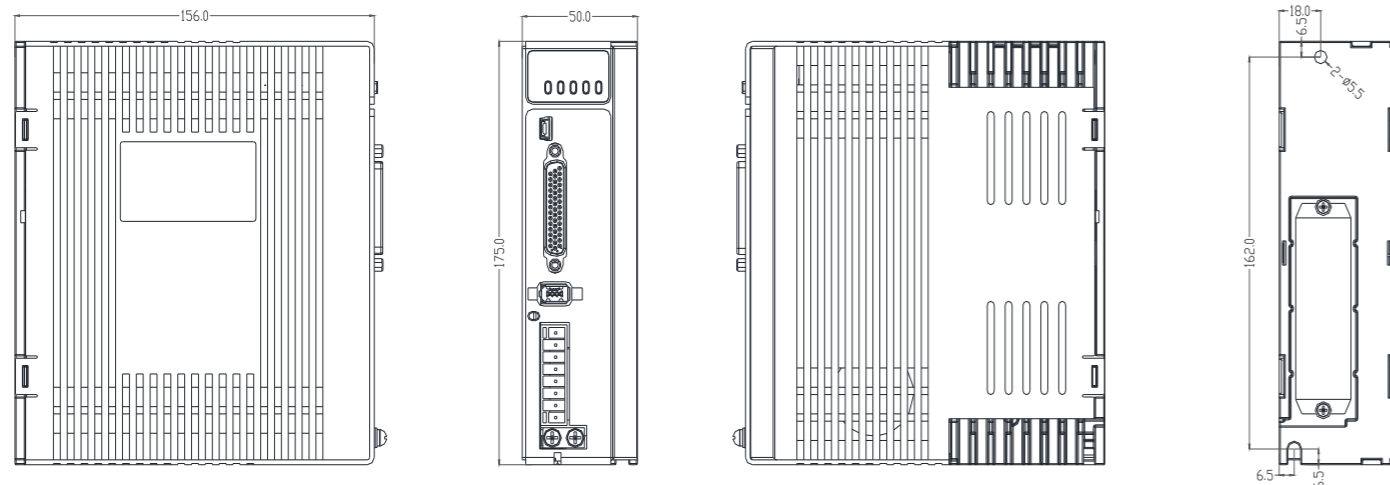
• 200W/400W

ELP-D Series
 ELP-RS Series
 ELP-EC Series



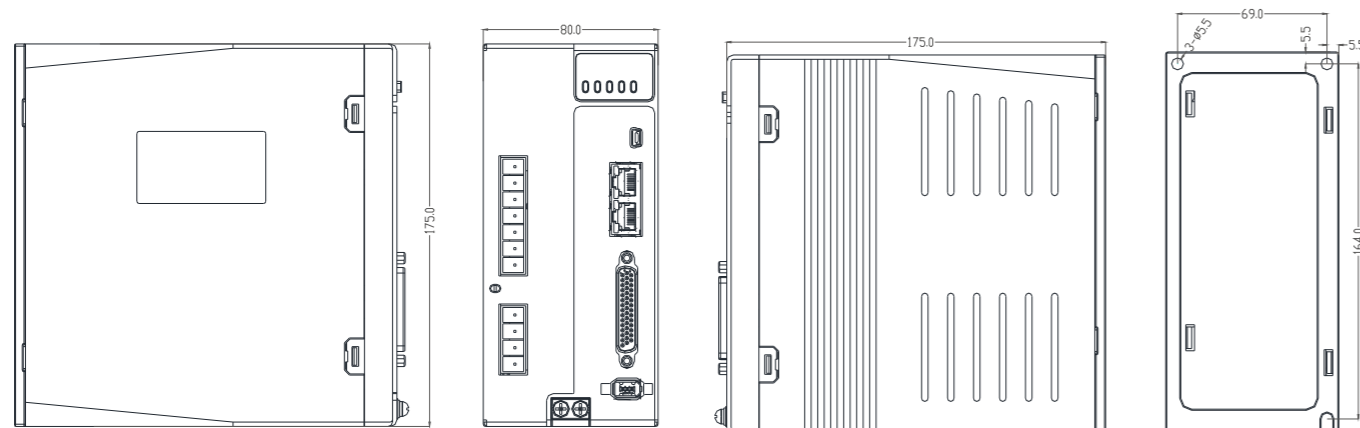
• 750W/1000W

ELP-D Series
 ELP-RS Series
 ELP-EC Series



• 1500W/2000W

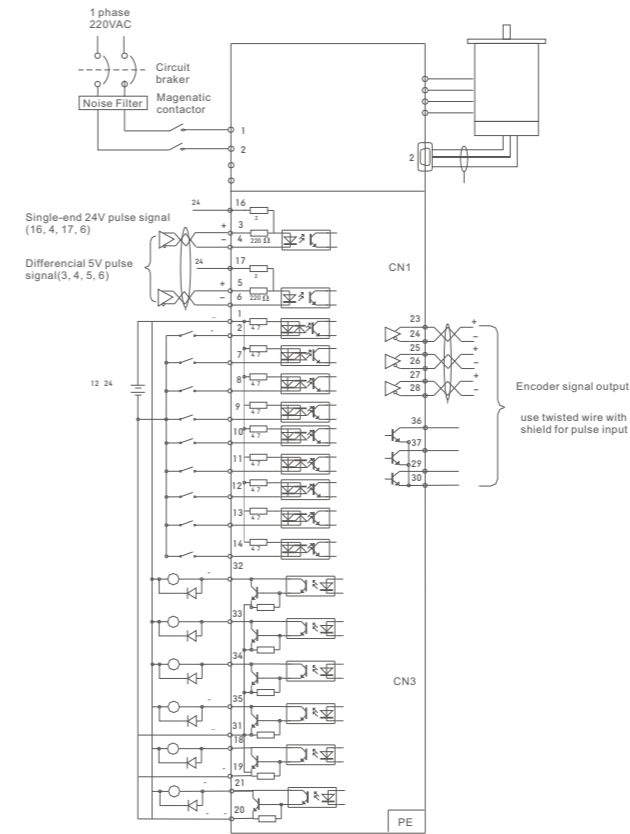
ELP-RS Series
 ELP-EC Series



Drive Connections

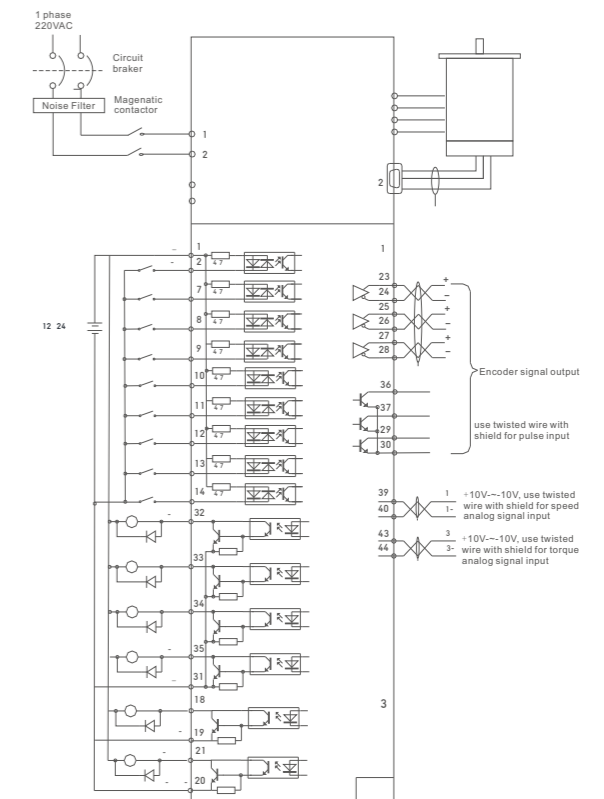
• Positional Control

ELP-D Series
 ELP-RS Series
 ELP-EC Series



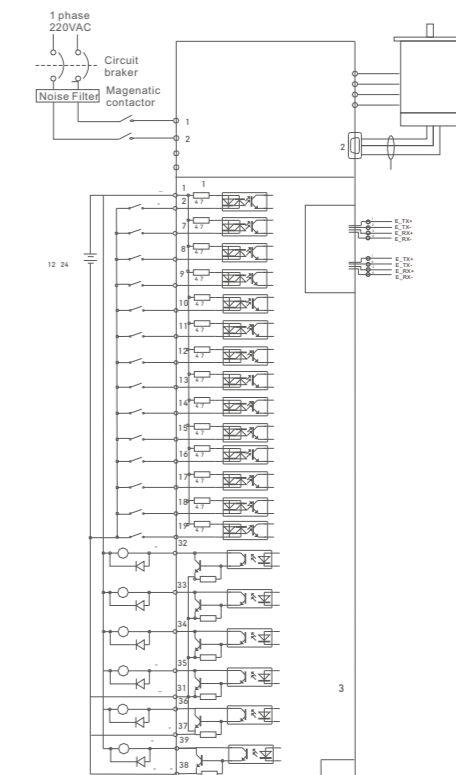
• Torque/Velocity Control

ELP-D Series
 ELP-RS Series
 ELP-EC Series



• EtherCAT Control

ELP-D Series
 ELP-RS Series
 ELP-EC Series

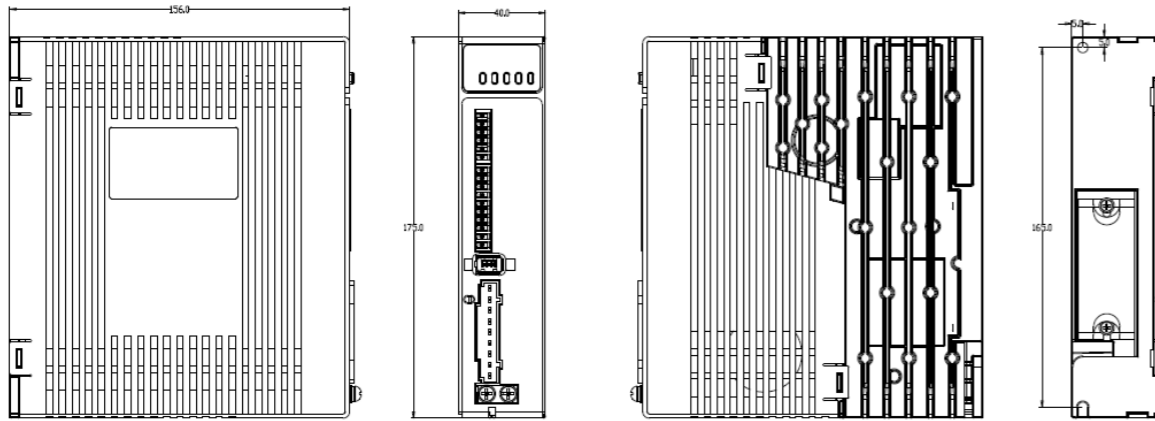


Drive Mechanical Specifications

Unit: mm

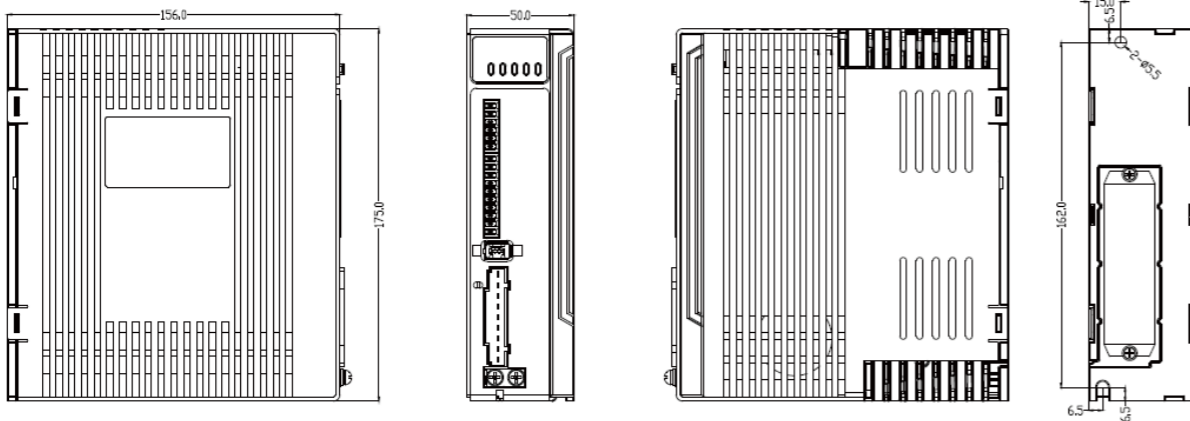
• 400W

EL6-D Series EL6-RS Series EL6-CAN Series



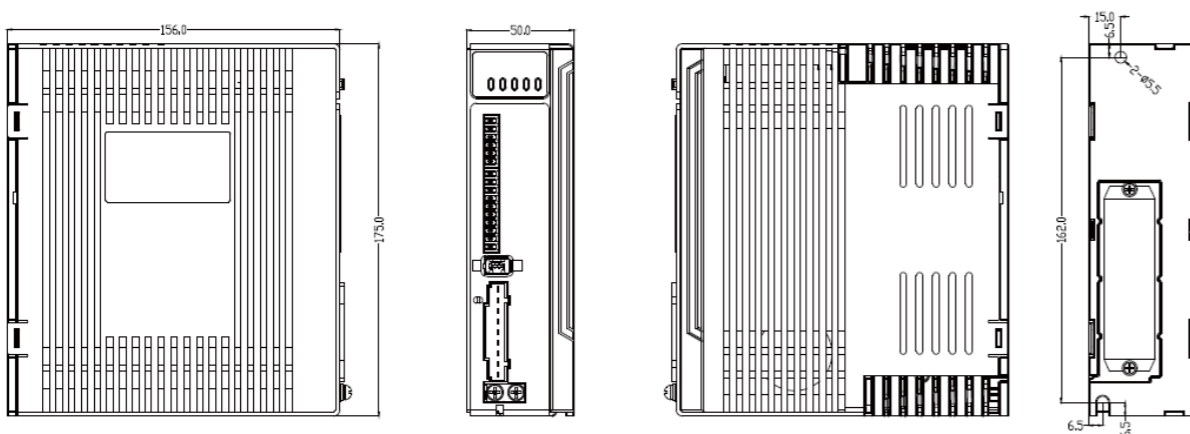
• 750W

EL6-D Series EL6-RS Series EL6-CAN Series



• 1000W

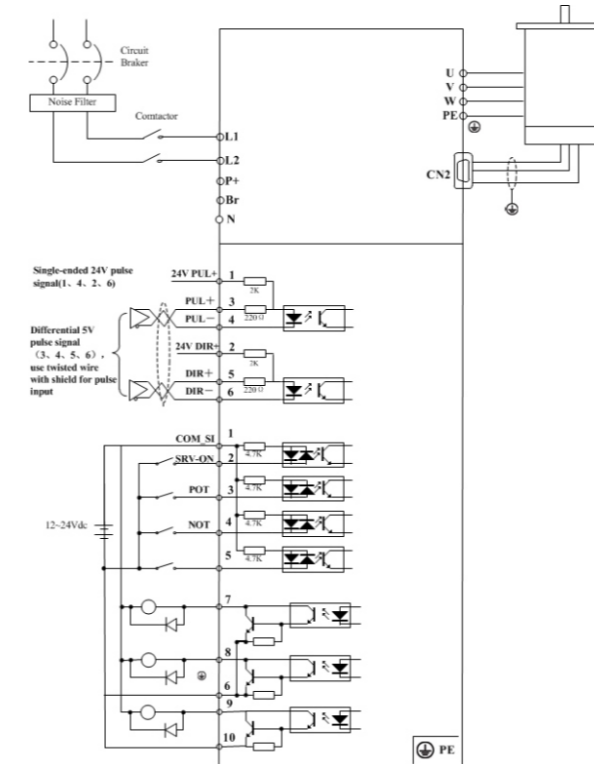
EL6-D Series EL6-RS Series EL6-CAN Series



Drive Connections

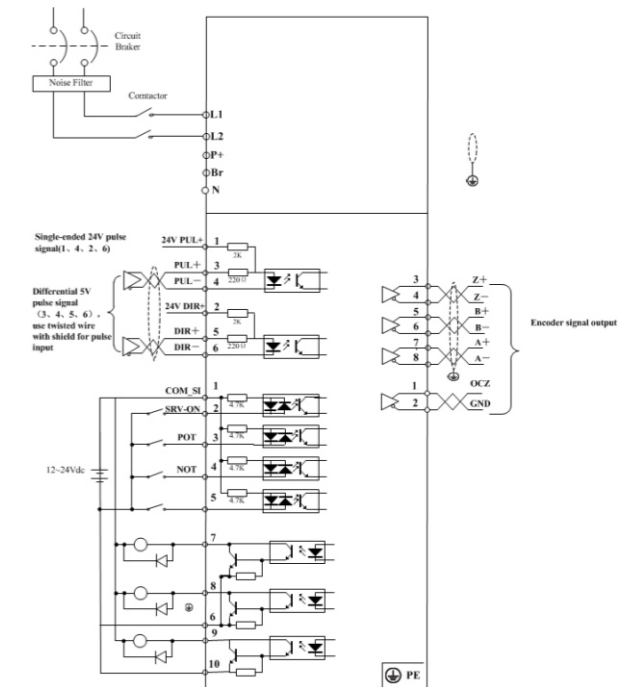
• Positional Control

EL6-D Series EL6-RS Series EL6-CAN Series



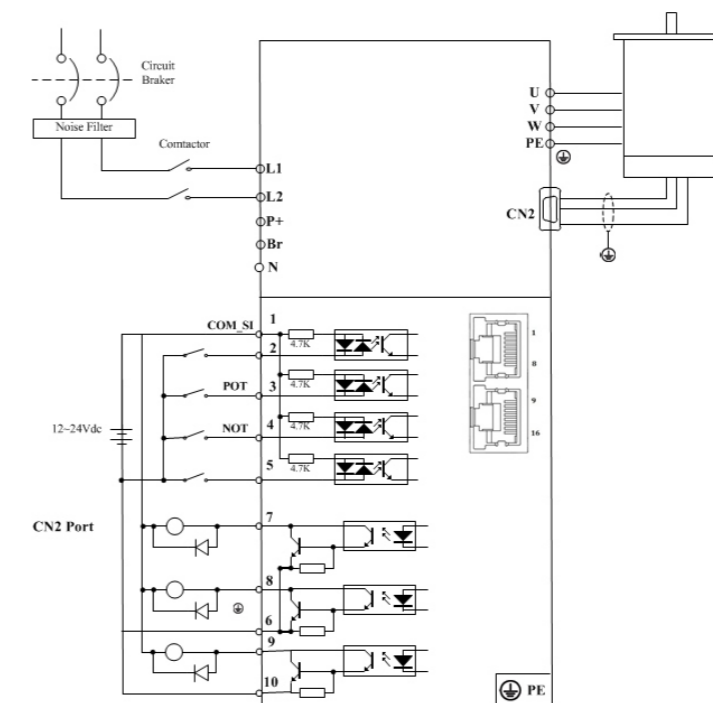
• Torque/Velocity Control

EL6-D Series EL6-RS Series EL6-CAN Series



• CANopen Control

EL6-D Series EL6-RS Series EL6-CAN Series



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

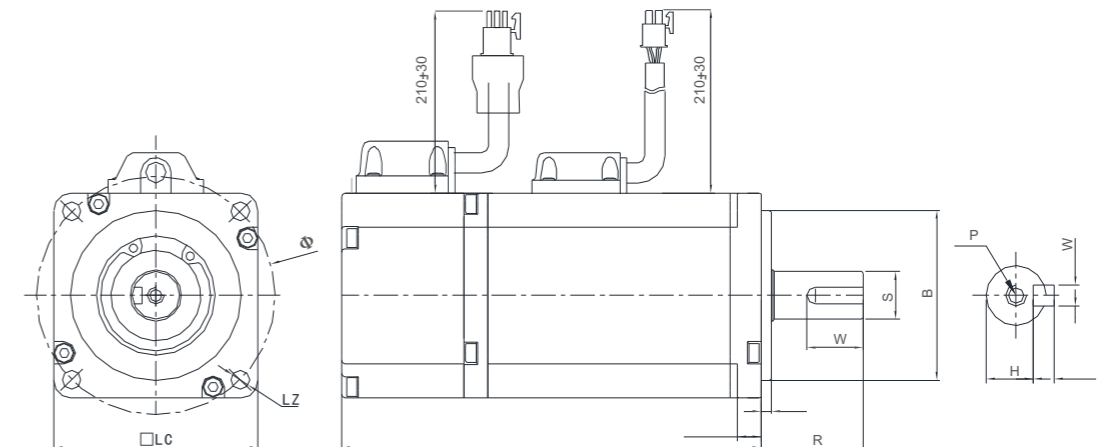
Servo Motors with 17-Bit Encoder

• 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

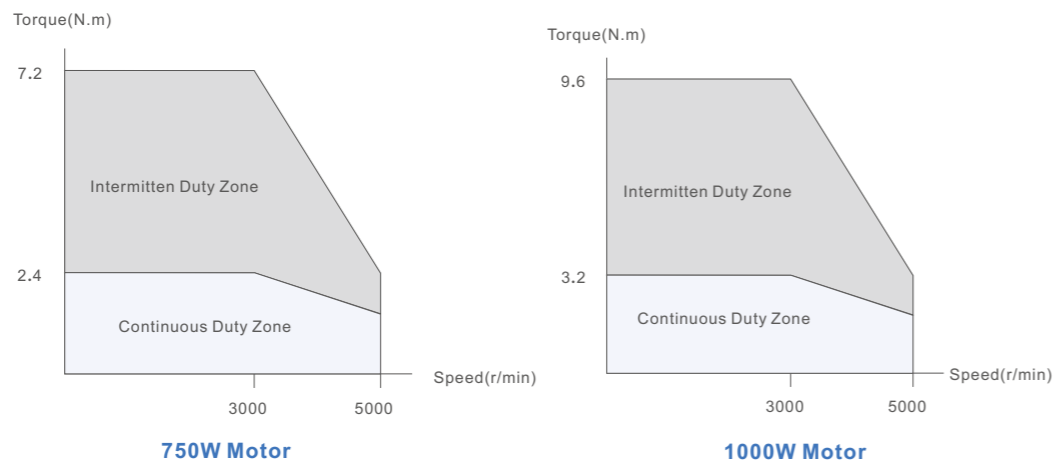
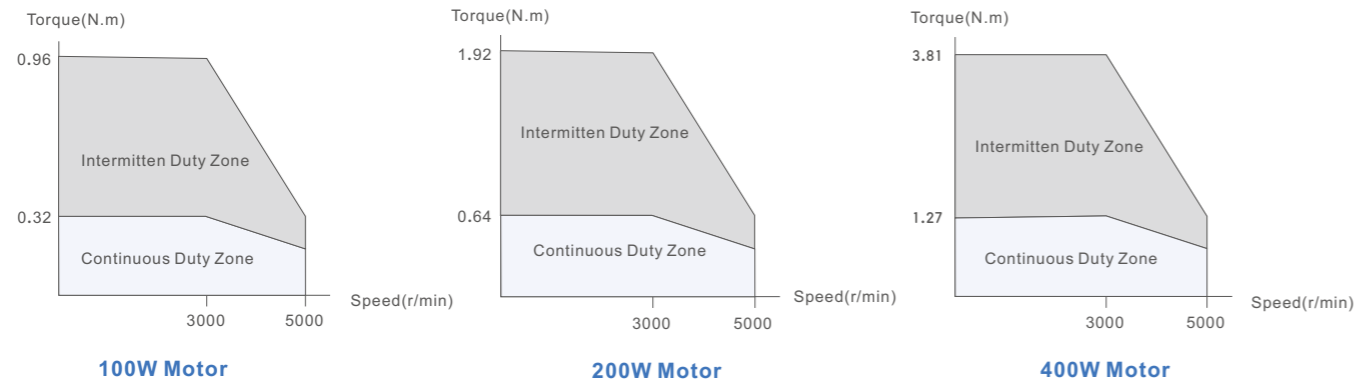
• Dimensions



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

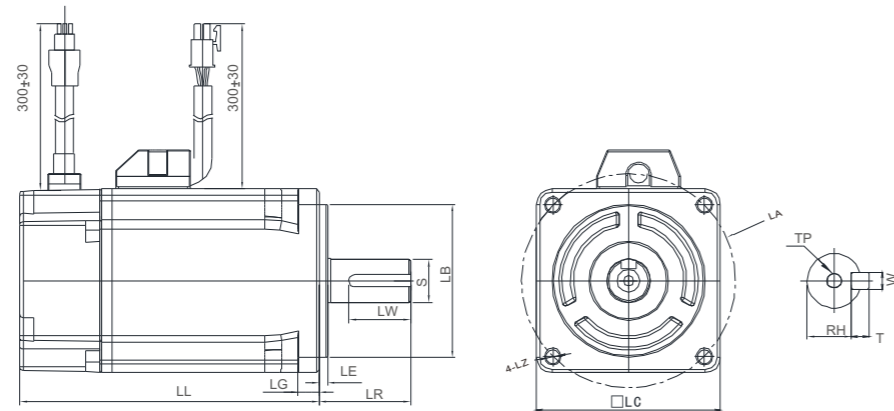
• Models

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

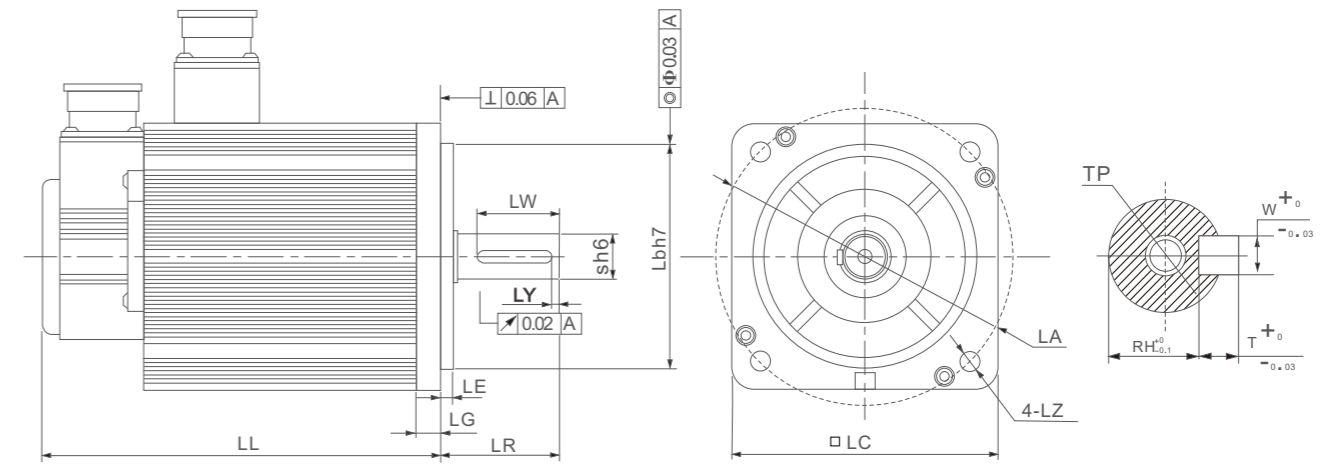
-SS/-HH2 Connector Selectable

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

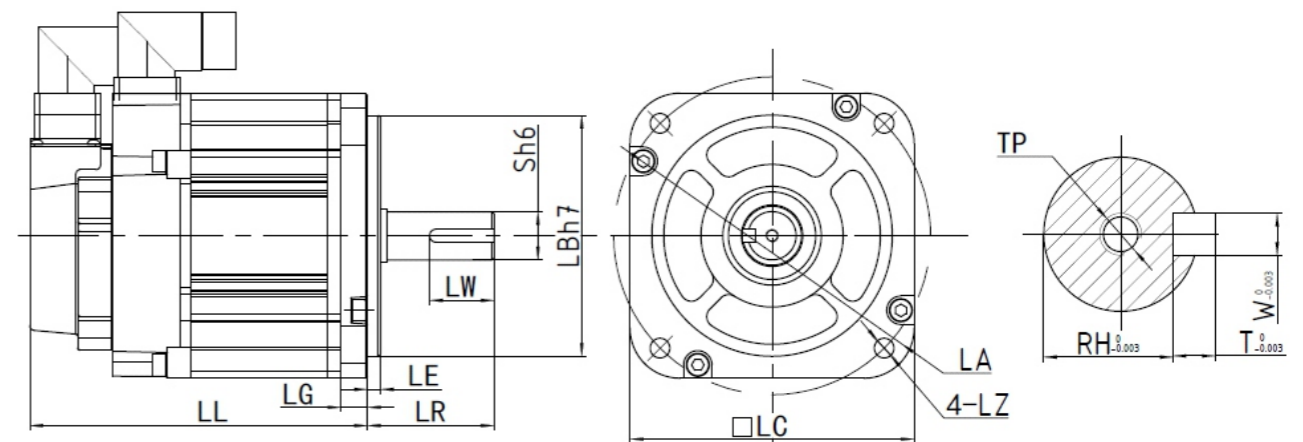
• Dimensions



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

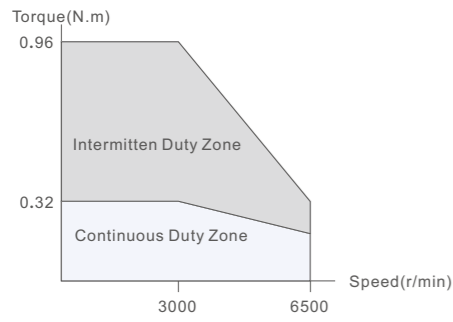


Motor Series	LC (mm)	LZ (mm)	LA (mm)	S (mm)	LB (mm)	LL (mm)	LR (mm)	LE (mm)	LG (mm)	LW (mm)	LY (mm)	RH (mm)	W (mm)	T (mm)	TP (mm)
ELM1000LM130F-H	130	Φ9	145	Φ22	Φ110	166	57	5	14	40	2.5	18.5	6	6	M6 ⁺ 20
ELM1000LM130E-H	130	Φ9	145	Φ22	Φ110	223	57	5	14	40	2.5	18.5	6	6	M6 ⁺ 20
ELM1500LM130F-H	130	Φ9	145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

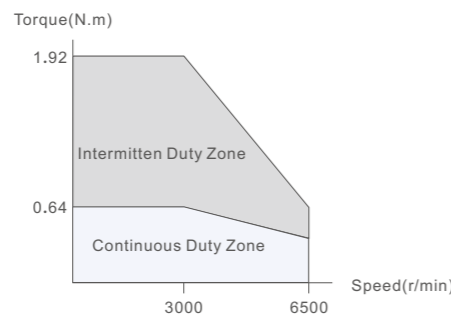


Motor Series	LC (mm)	LZ (mm)	LA (mm)	S (mm)	LB (mm)	LL (mm)	LR (mm)	LE (mm)	LG (mm)	LW (mm)	RH (mm)	W (mm)	T (mm)	TP (mm)
ELM0850LH130F-HD	130	Φ8.5	145	Φ19	Φ110	145	57	6	12	30	16	5	5	M5 ⁺ 12
ELM0850LH130E-HD	130	Φ8.5	145	Φ19	Φ110	172	57	6	12	30	16	5	5	M5 ⁺ 12
ELM1300LH130F-HD	130	Φ8.5	145	Φ22	Φ110	165	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

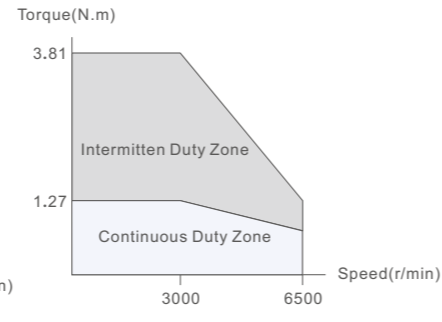
Torque-Speed Curves



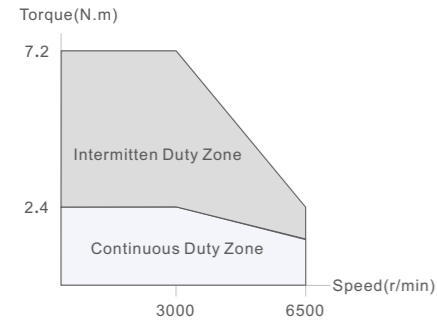
100W Motor



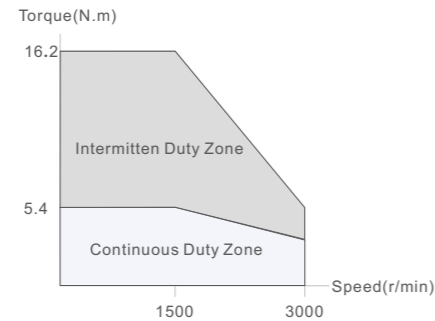
200W Motor



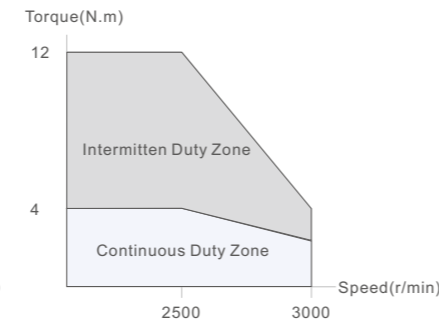
400W Motor



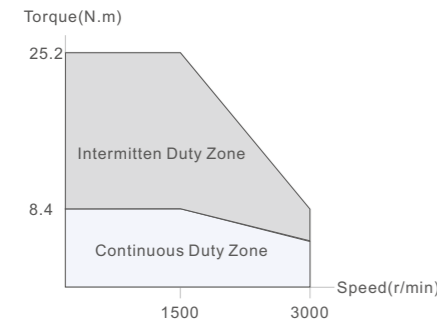
750W Motor



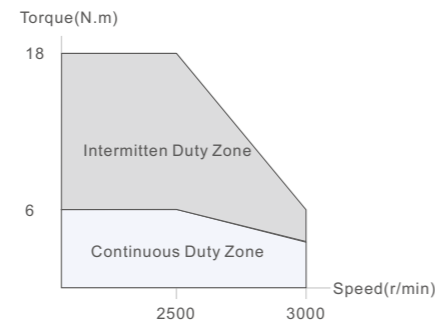
850W Motor



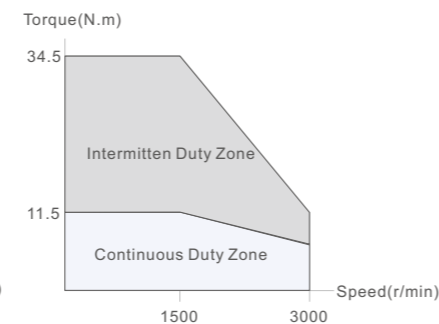
1000W Motor



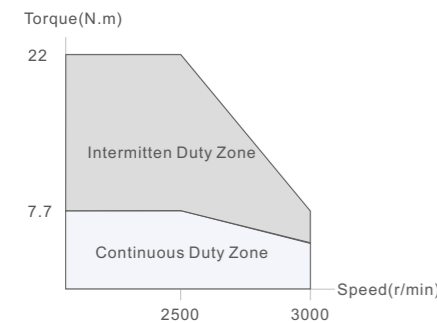
1300W Motor



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



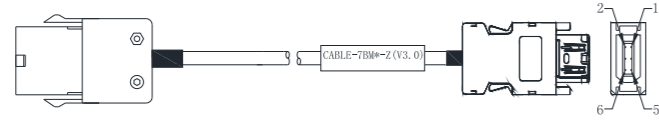
RS485/EtherCAT Communication Cable

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



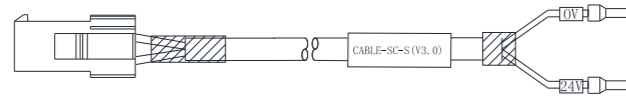
Accessories Details				
Part No.	Model No.	Mount	Components	Notes
11600371	4pin 172159-1 LS-17215901-AMP RoHS	1	4 Plastic Shell	
11600353	170362-1 RoHS AMP	4	4 Pin Needle	

(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)	

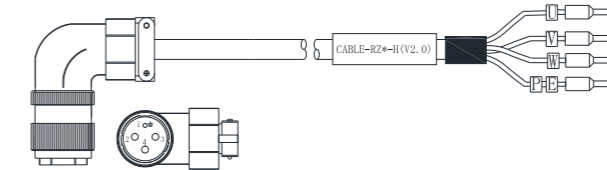
(3) CABLE-SC*M*-HH2 Brake Cable



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

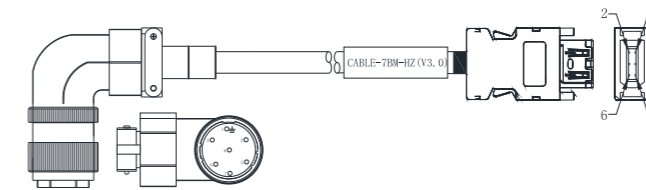
Accessories of Motor with 130mm Size

(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

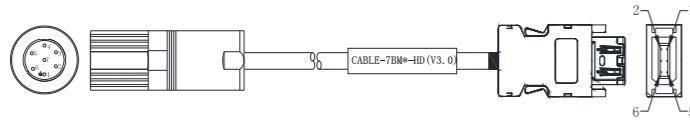
Accessories of Motor with 130mm Size for Engraving Machine

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



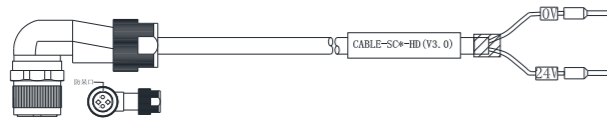
Part No.	Model No.	Mount	Components	Notes
11600077	4pin RoHS HD	1	Aviation Plug	

(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