

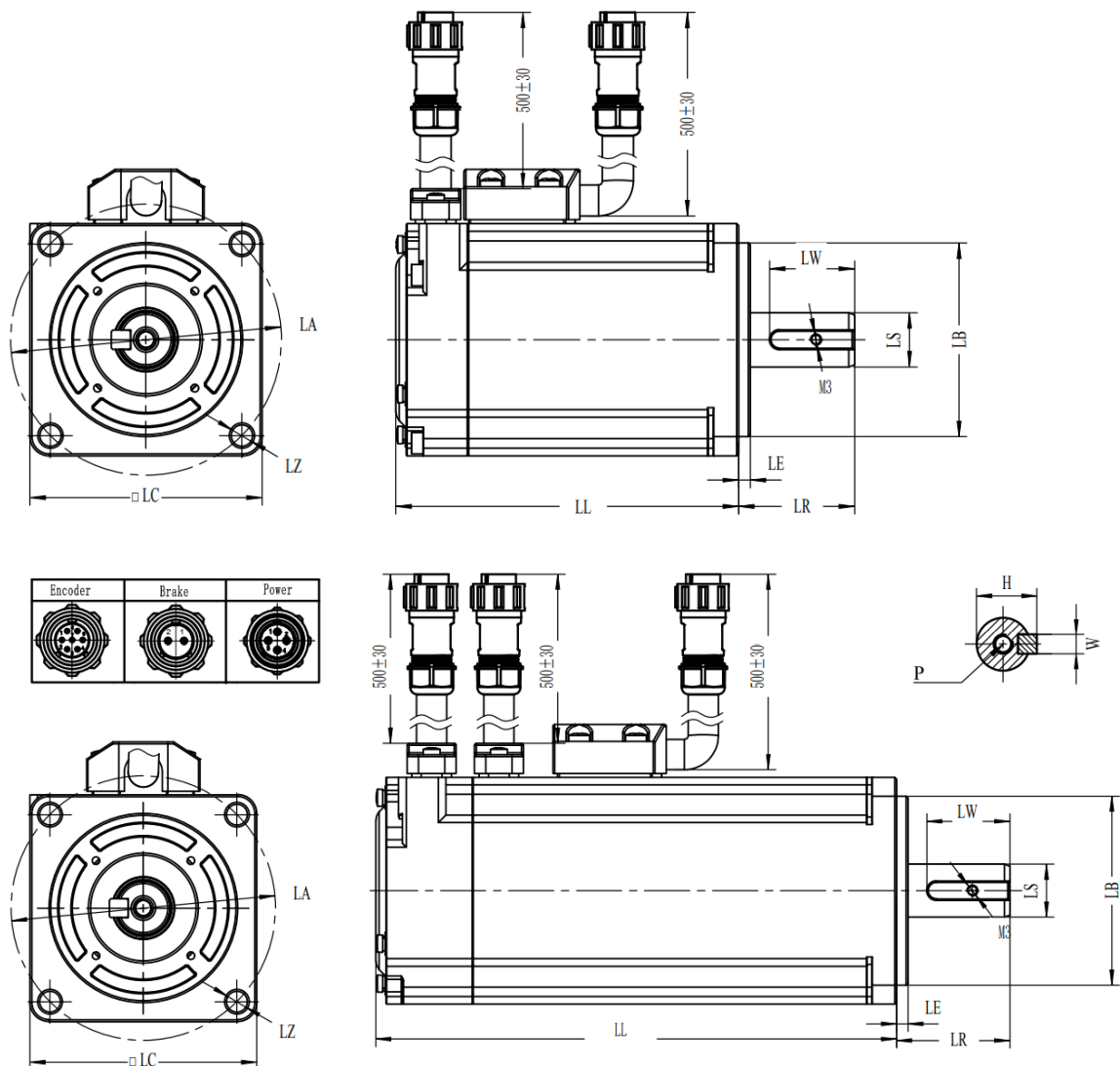
ELVM Series Servo Motors

The ELVM series is a new low voltage AC servo motor series designed of Lead Shine with power ranging from 50W to 1000W, with 2500-Line incremental encoder or 17-bit/23-bit absolute encoder, featuring short length, high overload capacity, good vibration resistance and IP65 protection.

Feature:

- ◆ PMSM construction
- ◆ Compact Design, high overload
- ◆ Insulation Class: Class F
- ◆ Protection level: IP65
- ◆ Encoder: 17 bit multi-turn absolute magnetic encoder
- ◆ Cable connector: Round connector with threaded coupling
- ◆ Optional accessory: brake

Model



Datasheet of ELVM Series Servo Motors

Motor Series	LC (mm)	LZ (mm)	LA (mm)	LS (mm)	LB (mm)	LL (mm)	LR (mm)	LE (mm)	LW (mm)	W (mm)	H (mm)	TP (mm)
ELVM6020V24FH-**-	60	Φ5.5	Φ70	Φ14	Φ50	71.6	30	2.5	22	5	16	M3 712
ELVM6020V24EH-**-	60	Φ5.5	Φ70	Φ14	Φ50	100.9	30	2.5	22	5	16	M3 712
ELVM6020V48FH-**-	60	Φ5.5	Φ70	Φ14	Φ50	71.6	30	3	22	5	16	M5 712
ELVM6020V48EH-**-	60	Φ5.5	Φ70	Φ14	Φ50	100.9	30	3	22	5	16	M5 712
ELVM6040V24FH-**-	60	Φ5.5	Φ70	Φ14	Φ50	88.6	30	3	22	5	16	M5 712
ELVM6040V24EH-**-	60	Φ5.5	Φ70	Φ14	Φ50	117.9	30	3	22	5	16	M5 712
ELVM6040V48FH-**-	60	Φ5.5	Φ70	Φ14	Φ50	88.6	30	3	22	5	16	M5 712
ELVM6040V48EH-**-	60	Φ5.5	Φ70	Φ14	Φ50	117.9	30	3	22	5	16	M5 712
ELVM6060V48FH-**-	60	Φ5.5	Φ70	Φ14	Φ50	108.6	30	3	22	5	16	M5 712
ELVM6060V48EH-**-	60	Φ5.5	Φ70	Φ14	Φ50	137.9	30	3	22	5	16	M5 712
ELVM8075V48FH-**-	80	Φ6.6	Φ90	Φ19	Φ70	90.9	35	3	25	6	21.5	M5 712
ELVM8075V48EH-**-	80	Φ6.6	Φ90	Φ19	Φ70	121.9	35	3	25	6	21.5	M5 712
ELVM80100V48FH-**-	80	Φ6.6	Φ90	Φ19	Φ70	103.9	35	3	25	6	21.5	M5 712
ELVM80100V48EH-**-	80	Φ6.6	Φ90	Φ19	Φ70	134.9	35	3	25	6	21.5	M5 712

Technical Specification

ELVM Series	6020V24FH-**-	6020V48FH-**-	6040V24FH-**-	6040V48FH-**-	6060V48FH-**-	8075V48FH-**-	80100V48FH-**-
	6020V24EH-**-	6020V48EH-**-	6040V24EH-**-	6040V48EH-**-	6060V48EH-**-	8075V48EH-**-	80100V48EH-**-
Frame Size [mm]	60					80	
Rated Power [W]	200	200	400	400	600	750	1000
Voltage [VDC]	24	48	24	48	48	48	48
Rated Torque [Nm]	0.64	0.64	1.27	1.27	1.91	2.39	3.2
Rated Current [Arms]	10	6	19.9	10	15	19	28
Rated Speed [r/min]	3000	3000	3000	3000	3000	3000	3000
Peak Torque [Nm]	1.92	1.92	3.81	3.81	5.73	7.17	9.6
Peak Current [Arms]	31	19.6	61.7	31	49.3	59	87
Max Speed [r/min]	4000	4000	4000	4000	4000	3500	3500
Torque Const [Nm/A]	0.064	0.107	0.064	0.127	0.127	0.126	0.11
Voltage Const [V/krpm]	4.1	6.9	4.1	8.3	8.3	8.4	7.6
Resistance [Ω]	0.18	0.47	0.07	0.28	0.17	0.09	0.049
Inductance [mH]	0.33	0.92	0.14	0.52	0.34	0.38	0.25
Inertia [kgm ² *10 ⁻⁴]	Standard	0.29	0.29	0.58	0.58	0.83	1.5
	With Brake	0.3	0.3	0.59	0.59	0.84	1.65
Encoder	2500-Line/17-bit Incremental Encoder						
Structure	Totally Enclosed, Natural Cooling(IP rating: IP65)						
Weight (kg)	Standard	1.03	1.03	1.32	1.32	1.59	2.21
	With Brake	1.38	1.38	1.67	1.67	2	2.79
Permissible Load for the Shaft	L [mm]	22.5	27	27	27	27	27
	Radial [N]	254	254	254	254	254	392
	Thrust [N]	74	74	74	74	74	147

Environment

Item	Storage	Installation
Temperature	-20-60°C	0-40°C
Humidity	Under 80%RH(free from condensation)	
Atmospheric environment	Indoor(no exposure)no corrosive gas or flammable gas, no oil or dust	
Altitude	Lower than 1000m	
Vibration	Less than 0.5G (4.9m/s ²) 10-60Hz (non-continuous working)	
Protection level	IP65	