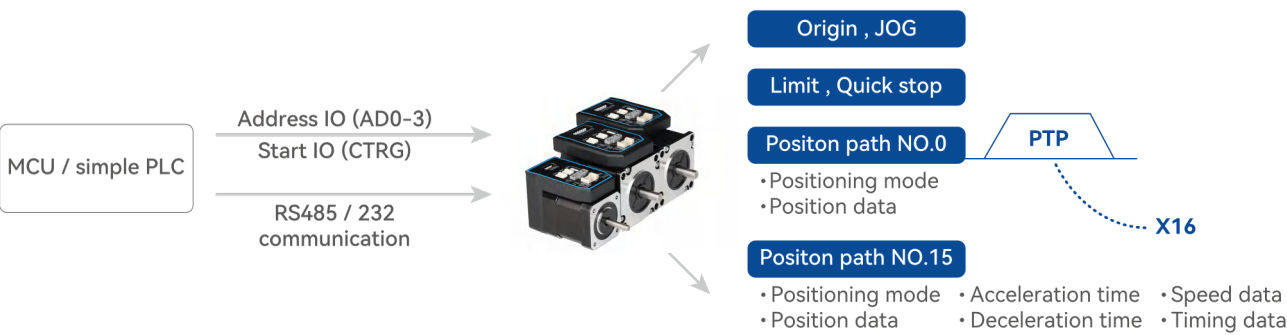


Built-in uni-axial control instruction



Models	Type & Frame	Operating Voltage (VDC)	Control Mode	Holding Torque (N.m)	Logical Voltage (VDC)	Motor Length (mm)
iEM-1703	Open Loop NEMA17	20-36	Pulse&Dir	0.3	5	64
iEM-1706		20-36		0.6	5	72
iEM-1708		20-36		0.8	5	85
iEM-RS1706		20-36	RS485 Modbus	0.6	12-24	73
iEM-RS1708		20-36		0.8	12-24	86
iEM-2313	Open Loop NEMA23	20-50	Pulse&Dir CW&CCW	1.3	5	75
iEM-2323		20-50		2.3	5	96
iEM-2321-L		20-50		2.1	5	89
iEM-2331-L		20-50	RS485 Modbus	3.1	5	109
iEM-RS2313		20-50		1.3	12-24	78
iEM-RS2323		20-50		2.3	12-24	99
iEM-2430	Open Loop NEMA24	20-50	Pulse&Dir CW&CCW	3.0	5	109
iEM-2435		20-50		3.5	5	122
iCS-1703	Closed Loop NEMA17	20-36	Pulse&Dir	0.3	5	64
iCS-1706		20-36		0.6	5	72
iCS-1708		20-36		0.8	5	85
iCS-RS1706		20-36	RS485 Modbus	0.6	12-24	73
iCS-RS1708		20-36		0.8	12-24	86
iCS-2313	Closed Loop NEMA23	20-50	Pulse&Dir CW&CCW	1.3	5	75
iCS-2323		20-50		2.3	5	96
iCS-2321-L		20-50		2.1	5	89
iCS-2331-L		20-50	RS485 Modbus	3.1	5	109
iCS-RS2313		20-50		1.3	12-24	78
iCS-RS2323		20-50		2.3	12-24	99
iCS-2430	Closed Loop NEMA24	20-50	Pulse&Dir CW&CCW	3.0	5	109
iCS-2435		20-50		3.5	5	122

Headquarters
China Leadshine Technology Co., Ltd

+86 755 26411692 +86 755 26402718
www.leadshine.com
sales@leadshine.com (Sales)
tech@leadshine.com (Technical Support)
15-20/F, Block B, Nanshan i-Valley, Shuguang Community,
Xili Town, Nanshan District, Shenzhen 518055, China

North America Office
Leadshine America, Inc.

1-949-608-7270 1-949-638-7298
www.leadshineusa.com
sales@leadshineusa.com (Sales)
support@leadshineusa.com (Technical Support)
26050 Towne Centre Dr.Foothill Ranch, CA 92610 USA



IEM/ICS Series
Integrated Stepper Motor

Introduction

IEM/ICS Series

iEM series is integrated open-loop stepper motor with Leadshine's latest digital stepper technology.

iCS series is integrated closed-loop stepper motor with 14-bit single-turn absolute encoder for smooth and jitter-free motor start-up.

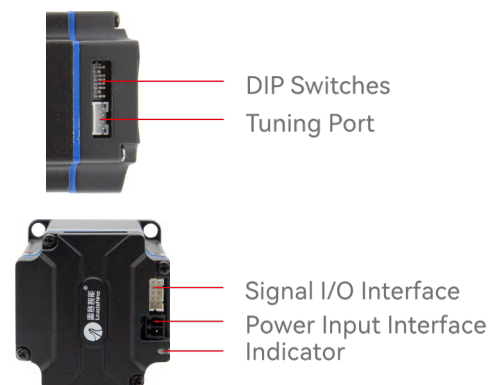
iEM and iCS series motors output torque can up to 3.5Nm and supports Modbus RS485 communication with Indexer control function. And with a more compact design, it is especially suitable for applications with strict mounting space requirements, and it is easy to use, which can further reduce customers' procurement and labor costs.



specifications

Encoder Type	Single-turn absolute magnetic encoder		
Encoder Resolution	14-bit		
Angle Calibration	Be sure to calibrate after encoder installation		
Step Angle	1.8°		
Position Accuracy	±0.09°		
Max Temperature	95° C		
Operation Environment	Temperature: -10° C ~ 50° C; Humidity: 85%RH Max		
IP Rate	IP20		
Radial Load (N) (Distance to the flange 10mm)	NEMA17	NEMA23	NEMA24
	30	75	90
Axial Load (N)	Less than motor weight		

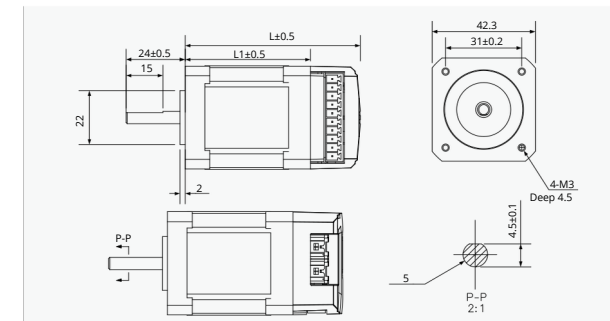
iEM & iCS Interface



Port	Description
DIP Switches	SW1-SW4: Microstep SW5: Motor Direction SW6: PUL&DIR and CW&CCW selection SW7: Smoothing filtering time SW8: Activated pulse edge for iEM series Open/closed loop control selection for iCS series
I/O Port	PUL+/-, DIR+/-, ENA+/-, ALM+/-

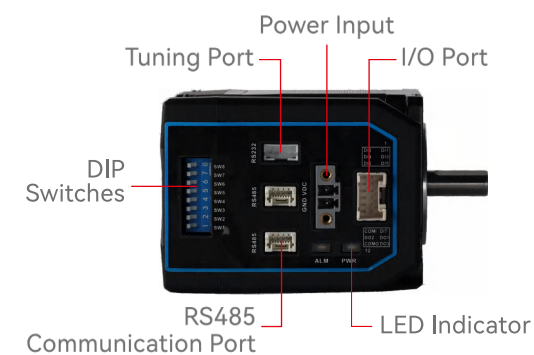
Dimensions

Unit: mm 1inch=25.4mm



Model	L1 length	L length
iCS-1703	43	64
iCS-1706	51	72
iCS-1708	64	85

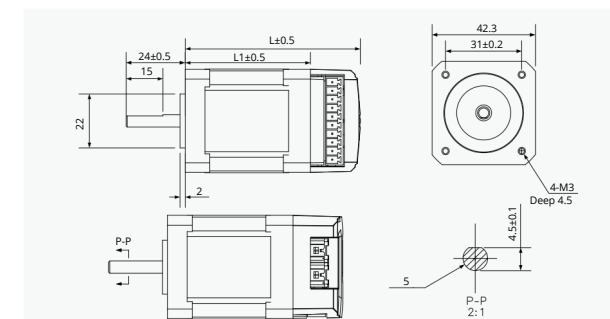
iEM-RS & iCS-RS Interface



Port	Description
DIP Switches	SW1–SW5: Node ID SW6–SW7: Baud Rate SW8: 120Ω Terminal Resistance
I/O Port	7 digital inputs, 3 digital outputs

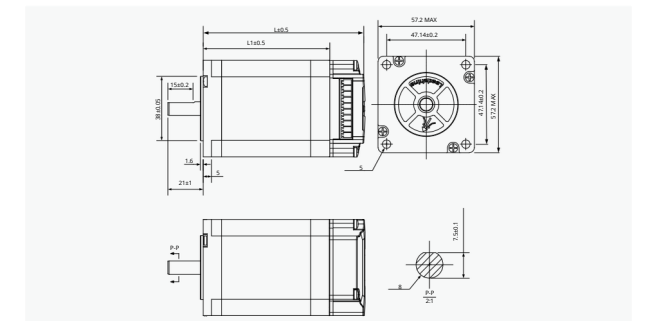
Dimensions

Unit: mm 1inch=25.4mm



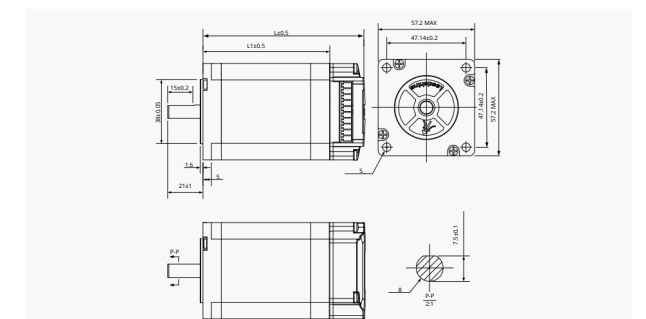
Model	L1 length
iCS-RS1706	73mm
iCS-RS1708	86mm

Unit: mm 1inch=25.4mm



Model	L1 length	L length
iCS-2113	43	64
iCS-2323	51	72
iCS-2321-L	64	85
iCS-2331-L	88	109
iCS-2430	88	109
iCS-2435	101	122

Unit: mm 1inch=25.4mm



Model	L1 length
iCS-RS2313	78mm
iCS-RS2323	99mm