01 iSV Series
Integrated Servos

Leadtronker's iSV series integrated servos are one of the most compact servo systems available on the market. An iSV integrated servo has a servo motor (PMSM or BLDC optional) and an advanced DSP servo drive. At very compact size and with all components integrated, the iSV series servos can save mounting space, eliminate encoder connection and motor wiring time, increase reliability, and lower cable and labor cost. The drive takes step & direction, RS485 or CANopen commands, and is capable of outputting in position and fault signals back to the master controller or external devices for complete system controls.

Rated Power

90W - 180W	25W - 75W	100W - 400W
NEMA23(57mm)	NEMA17(42mm)	NEMA24(60mm)
iSV5709V36	iSV4203V24	iSV6010V36
iSV5713V36	iSV4205V24	iSV6020V36
iSV5718V36	iSV4208V24	iSV6040V60

1.1 Features

- **Highly Integrated,** Servo motor + advanced DSP servo drive
- FOC-SVPWM technologies
- Lower labor cost
- Lower cable cost
- Support step & direction, RS485 or CANopen commands
- Built-in pulse generator for the tuning and self-test
- Compact size, Save mounting space

Lower Labor Cost + **Lower Cable Cost** + **Increase Reliability** + **Save Mounting Space**
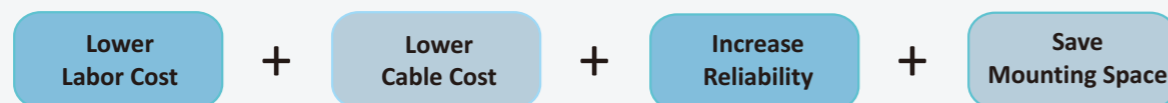
1.2 Typical Applications

Suitable for small to medium automation machinery and equipment, such as large format printers, engraving machines, electronics manufacturing equipment, pick and place machines, packing machines, etc. Particularly suited to applications require high speed, high precision, high reliability, low motor noise and with DC power input at highly compact size.

Printing Machines

Electronic Manufacturing

Packing Machines

High Precision · Highly Cost-effective · Compact Size · Quick Response · High Speed

Integrated Servo Systems

CNC Machines

Pick and place Machines

1.3 Part Number

iSV 57 13 V36 − 01 − 1000 − C
① ② ③ ④ ⑤ ⑥ ⑦

①	Series	iSV: iSV Series integrated servos			
②	Frame Size	57: NEMA23 (57mm)	42: NEMA17(42mm)	60: NEMA24 (60mm)	
③	Rated Power	03: 25W 05: 50W 08: 75W 09: 90W			
		10: 100W 13: 130W 18: 180W 20: 200W 40: 400W			
④	Rated Voltage	V36: 36VDC	V24: 24VDC	V60: 60VDC	
⑤	Flange Type	Blank: standard 01: Type01		*See more details in "mechanical specifications" section.	
⑥	Encoder Resolutions	1000: 1000-line			
⑦	Communication Type	Blank: Step & Direction	R: RS485	C: CANopen	

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您 原厂+的服务
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1.4 Specifications

Electrical Specifications (Integrated Drives)

Parameters	iSV5709V36 / iSV5709V36-01	iSV5713V36 / iSV5713V36-01	iSV5718V36 / iSV5718V36-01
Operating Voltage (VDC)	20 to 50, and 36 recommended	20 to 50, and 36 recommended	20 to 50, and 36 recommended
Maximum Continuous Current (A)	6	6	6
Pulse Input Frequency (kHz)	200 / 500 software configurable	200 / 500 software configurable	200 / 500, software configurable
Logical Signal Voltage (VDC)	5 - 24	5 - 24	5 - 24
Logical Signal Input Current (mA)	7 - 16	7 - 16	7 - 16
Isolation Resistance (MΩ)	100	100	100

Motor Specifications

| Parameters	iSV5709V36 / iSV5709V36-01	iSV5713V36 / iSV5713V36-01	iSV5718V36 / iSV5718V36-01
Rated Voltage (VDC)	36	36	36
Rated Power (W)	90	130	180
Rated Torque (Nm)	0.30	0.45	0.6
Peak Torque (Nm)	0.90	1.1	1.5
Rated Speed (RPM)	3000	3000	3000
Peak Speed (RPM)	4000	4000	4000
Encoder Resolution (Line)	1000 (4000ppr)	1000 (4000ppr)	1000 (4000ppr)
Weight (kg)	0.95	1.25	1.54

Operating Environment

Cooling		Natural cooling or Forced cooling
Operating Environment	Environment	Avoid dust, oil fog and corrosive gases
	Ambient Temperature	0 to +40 °C (32 °F to 104 °F).
	Humidity	40% RH to 90%RH, no condensation
	Vibration	5.9 m/s² MAX
	Operating Temperature (Heat Sink)	70 °C (158 °F) Max
Storage Temperature		-20 °C to 65 °C (-4 °F to 149 °F)
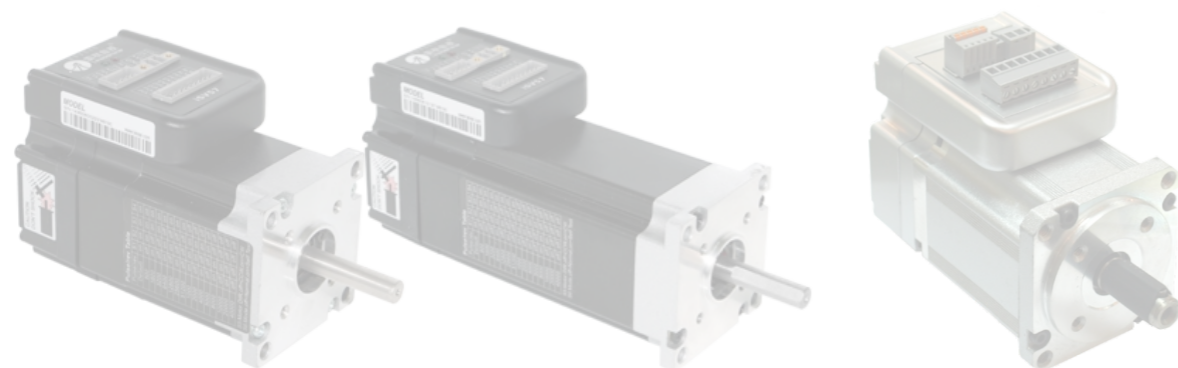
Available time for the iSV42xx and iSV60xx is to be determined.
Please contact Leadtronker or visit Leadtronker's website at www.leadtronker.com for the latest information about the iSV series integrated servos.

1.5 Operation Modes

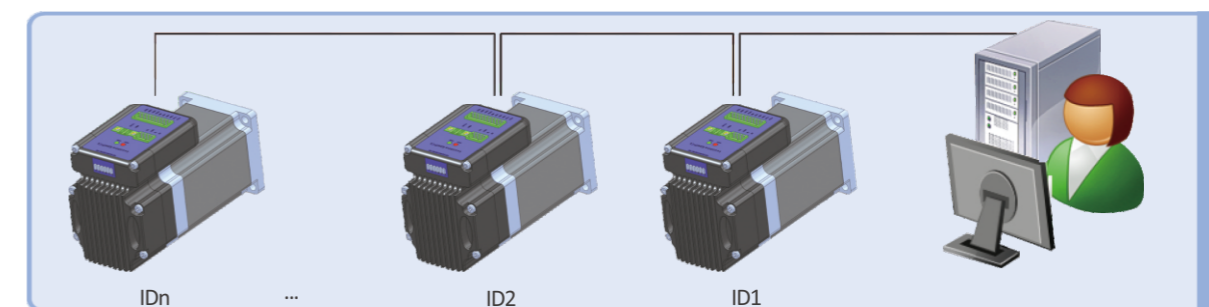1. Step & Direction

Motion Controller
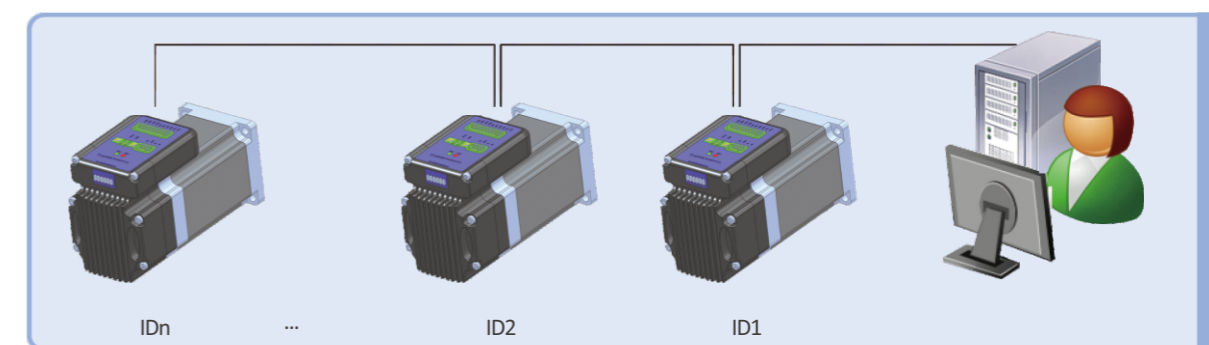
Step & Direction
CW / CCW Pulse
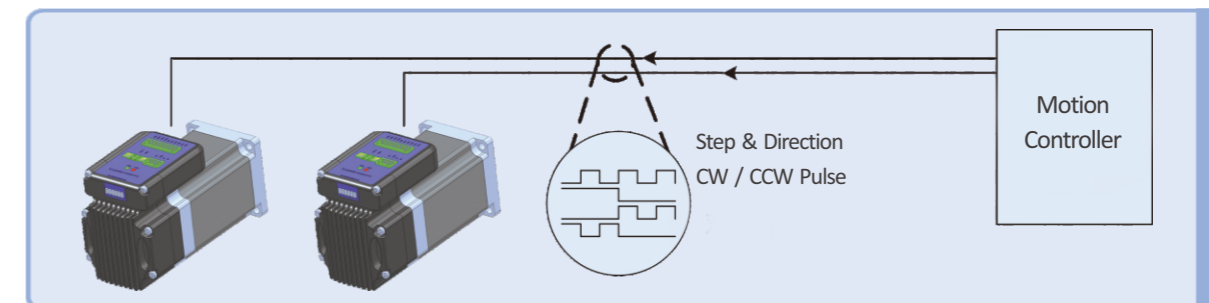
● Support step & direction and CW/CCW pulse commands
● Compatible with 5 to 24 V command signals

2. RS485

IDn ... ID2 ID1

● One host up to 32 drives
● Can be used with either 2-wire (half-duplex) or 4-wire RS485 (full-duplex) implementation
● DLL is available for API function calling
● Easy to wire and build multi-axis systems

3. CANopen

IDn ... ID2 ID1

● One host up to 127 drives
● CANopen standards: CiA Standard 301 (DS301), CiA Standard 402 (DSP402)
● Up t 1 Mbit/sec speeds possible
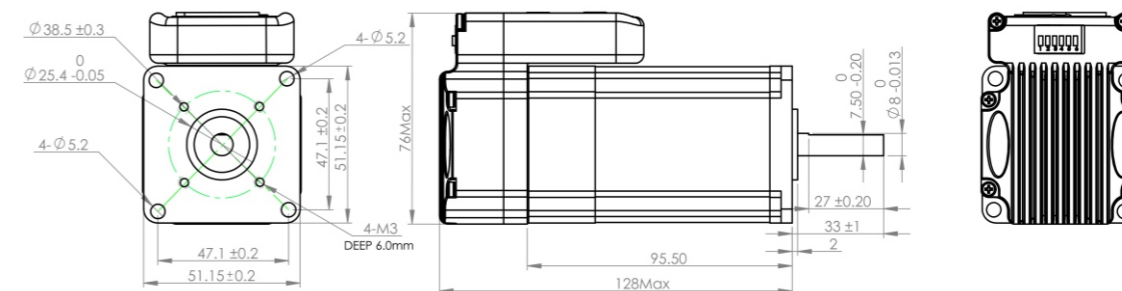● Easy to wire and build multi-axis systems

1.6 Mechanical Specifications

Units: mm   1 inch = 25.4 mm

●iSV5709V36-01-1000

●iSV5709V36-1000
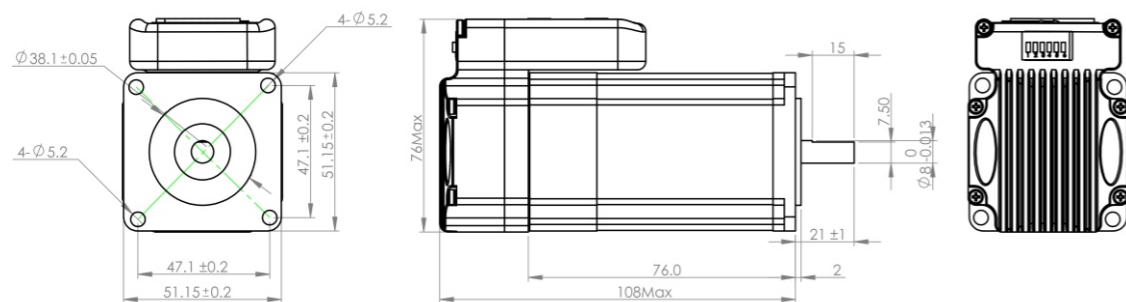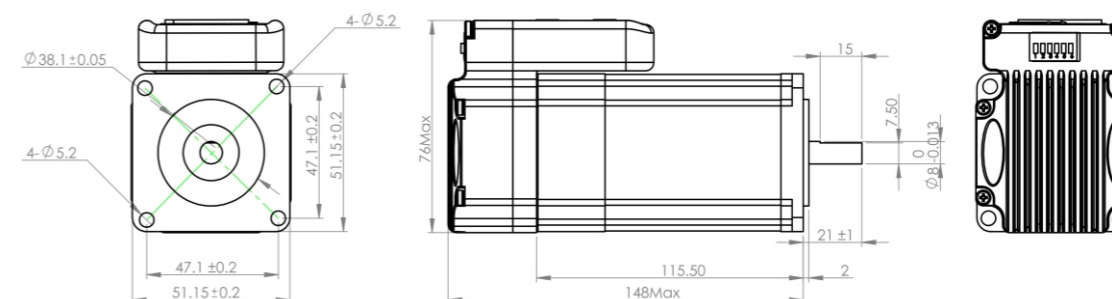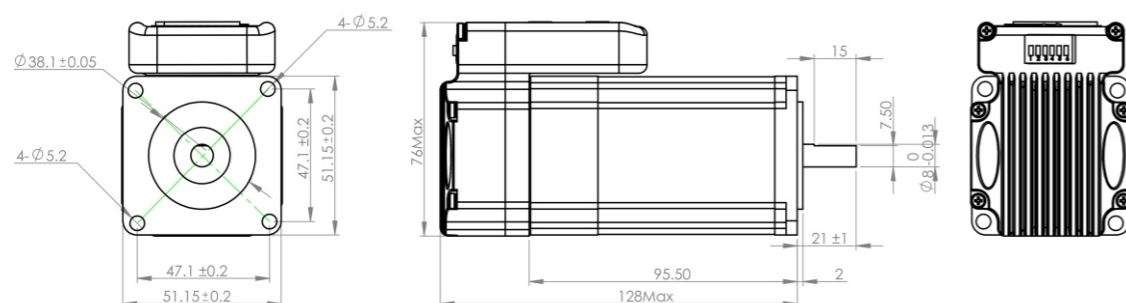

●iSV5713V36-01-1000
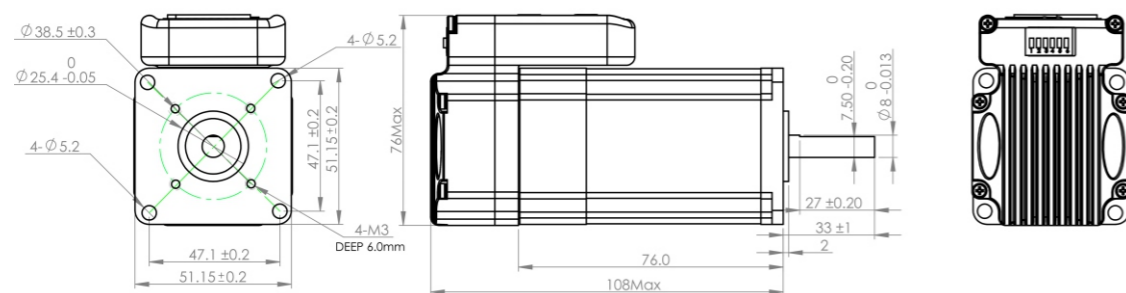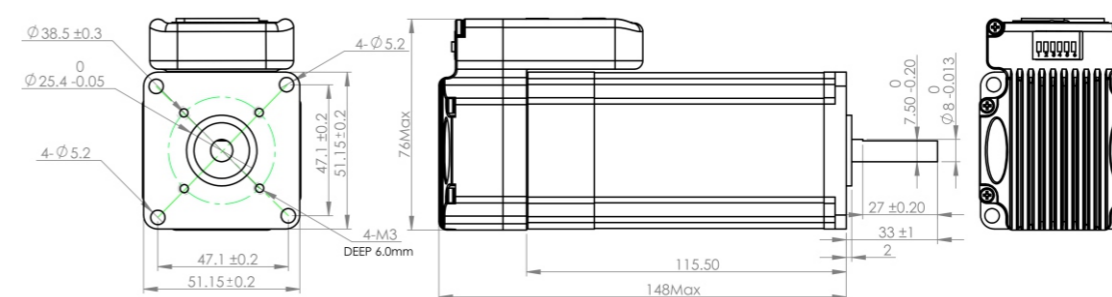

●iSV5713V36-1000

●iSV5718V36-01-1000

●iSV5718V36-1000

Installation Notes:

(1) Do not give strong impact shock to the motor shaft.

(2) The motors are not water proof. Please contact Leadshine if you need a water proof product.

(3) Keep the ambient temperature within the permissible temperature range (0 to 40 °C) for the product. Use force cooling methord if necessary.

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