

Integrated Servo



product features

1. Isolation of the CANOPEN communication, in compliance with the CiA301 V4.2.0 specification.
 - A. Supports SDO, TPDO, and RPDO.
 - B. Support for speed mode, position mode (contour mode, interpolation mode).
 - C. Support heartbeat production and consumption
2. A 15-bit absolute encoder with one-lap pulses up to 32,768.
3. Multi-stage DD motor structure, large torque output.
4. Motor, driver, encoder integration.
5. Low noise, low vibration, high-speed positioning, high reliability.
6. FOC field directional vector control, support position / speed closed loop.
7. Works at zero lag given a pulse state, following a zero lag.
8. The 16-bit electronic gear function.
9. A CANOPEN upper computer is provided to monitor motor status and modify parameters.
10. Position mode, support the pulse + direction signal, the encoder follows
11. Speed mode, support for PWM duty cycle signal speed modulation
12. With blocking rotation, overcurrent protection, overpressure protection.
13. Low power consumption and multiple cycles of absolute value:
 - A. The all-in-one servo 485 / CAN communication version can add multiple loop function.
 - B. When the motor has a power supply, there is an internal charging circuit to charge the battery.
When the motor is powered off, the consumed battery current is only 0.07mA.
 - C. After the motor has no power supply, the motor shaft is driven to rotate to wake up the encoder and continue to remember the position.
 - D. Multi-lap memory range-60,000 to 60,000 laps.
 - E. Simple to set the origin, go to any position can be placed as the origin.
 - F. A variety of ways back to zero: communication back to zero, power automatically back to zero, output zero signal.
 - G. Error protection: battery power loss alarm.

Motor parameter table

Model parameter		57AIM15	57AIM15H	57AIM30	57AIM30H
source	voltage	24~36VDC	24~36VDC	24~36VDC	24~36VDC
	current	2.2A	2.2A	4.4A	4.4A
parameter of electric machine	torsion	0.48NM	0.24NM	0.96NM	0.48NM
	rated speed	1000RPM	2500RPM	1000RPM	2500RPM
	maximum speed	1500RPM	3000RPM	1500RPM	3000RPM
	power	50W	50W	100W	100W
	weight	0.39KG	0.39KG	0.55KG	0.55KG
Feedback encoder (two option)		1			
cooling-down method		natural cooling			
Position control mode	Maximum input pulse frequency	500KHz			
	Pulse instruction mode	Pulse + direction, phase A + B phase			
	Electronic gear ratio	Set a range of 1~65535 compared to 1~65535			
	Location sampling frequency	2KHz			
defensive function		Block turn alarm, overpressure alarm, overcurrent alarm			
Communication interface (optional one)		RS485 (modbusRTU 19200,8,N,1) Canopen (1M)			
service environment	ambient temperature	-20~40°			
	The motor allows for the maximum temperature of the temperature	85°			
	humidity	5~95%			

Interface definition

1. Power interface

Terminal serial number	name	function
1	+V	DC power supply positive electrode, + 24V~36V. Positive and negative connection will directly short circuit the power supply, and may also

		damage the drive
2	GND	DC power supply ground. Positive and negative connection will directly short circuit the power supply, and may also damage the drive

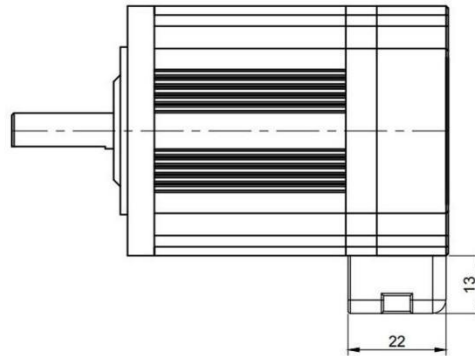
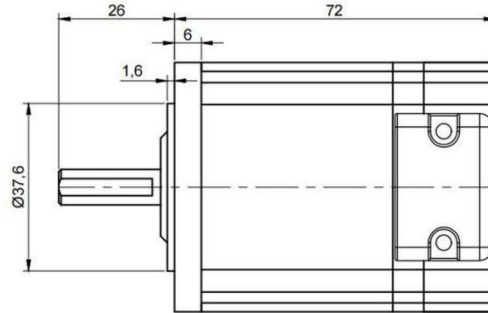
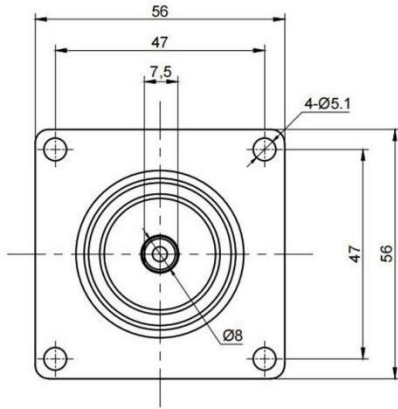
2. Communication and output interface

DB9 male head									
1	2	3	4	5		6	7	8	9
PU+	PU-	DIR+	DIR-	WR+		ZO	COM	CANL	CANH
blue	bluish dark color	hispid arthraxon	Green black	skewbald		yellow	black and white	palm	white

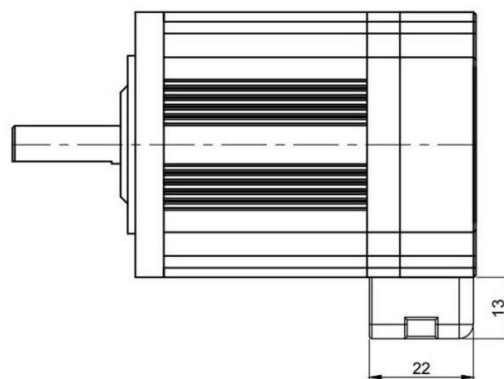
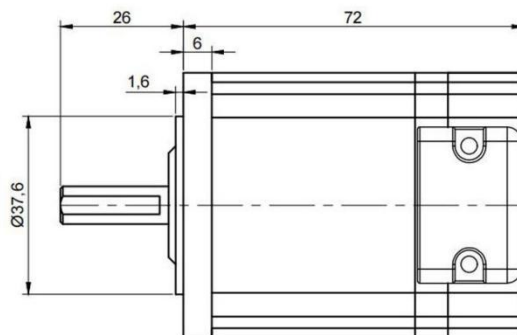
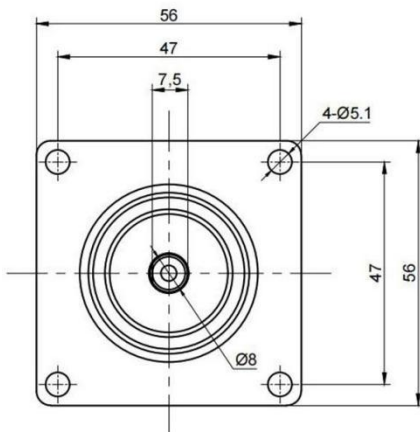
Terminal serial number	name	function
1	PU+	Pulse control signal: the pulse rising edge is effective; 3.3-5 V at PU-high level, and 0~0.5V at low level. To reliably respond to the pulse signal, the pulse width should be greater than 1.2s. Use + 12V or + 24V with string resistance.
2	PU-	
3	DIR+	Direcentration signal: high / low level signal. To ensure reliable direction of motor, direction signal shall precede the pulse signal A minimum of 5s was established.DIR-3. 3-5 V at high levels and 0~0.5V at low levels.
4	DIR-	
5	WR+	Alarm signal output, internal is photocoupled NPN output. Normal is high resistance, alarm to the COM conduction.
6	ZO	Encoder zero-point output. There is a zero-point signal optical coupling NPN output guide communication signal.
7	COM	The output signal is in common with the 485 power supply.
8	CANL	The Can communication port, the CANL, Built-in isolation power supply.
9	CANH	Can communication port CANH, Built-in isolation power supply.

Overall size

57AIM15L:



57AIM30L:



57AIM30BL(With Brake):

