

# Cost-effective AC Servo Motors (100W/200W/400W)

## Introduction

The ACM series AC servo motors offer high performance with wide output range from 100W to 1500W\*. Mounting is compatible with most popular AC servo motors on the market. The ACM series are widely used in small and medium automation machines and equipments, such as inkjet printers, CNC routers, electronics manufacturing equipments, special NC machines, pick and place devices, packing devices, and etc. Standard model comes with a standard 2500-line encoder with differential encoder signals (A, B, Index), and Hall Sensors with standard Hall signals (U, V, W).



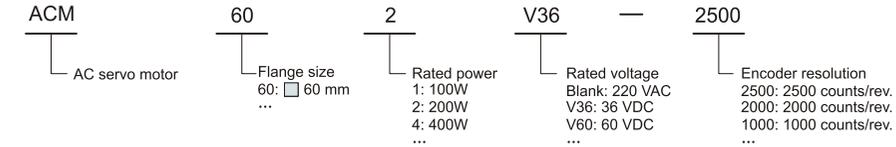
100W AC Servo Motors

200W AC Servo Motors

400W AC Servo Motors

\*Motors whose rated powers are higher than 400W are coming soon.

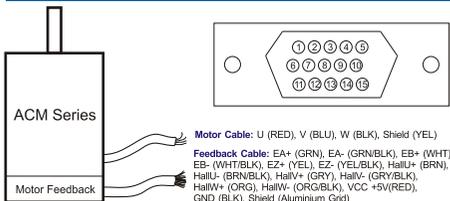
## Part Number



## Electrical Specifications (Visit [www.leadshine.com](http://www.leadshine.com) for information about other servo motors.)

Model	ACM601V36	ACM602V36(A)	ACM602V60(A)	ACM604V60	ACM604	ACM602V36-01	ACM604V60-01
Rated Voltage (V)	36	36	60	60	220	36	60
Rated Power (W)	100	200	200	400	400	200	400
Rated Torque (N.M)	0.318	0.64	0.64	1.27	1.27	0.64	1.27
Peak Torque (N.M)	0.95	1.91	1.91	3.82	3.82	1.92	3.81
Rated Speed (RPM)	3000	3000	3000	3000	3000	3000	3000
Peak Speed (RPM)	4000	4000	4000	4000	5000	4000	4000
Rated Current (A)	4	7.6	4.7	8.4	2.8	7.6	8.4
Peak Current (A)	11	22	14	25	8.5	22	25
Torque Const. (N.M/A)	0.0866	0.0918	0.15	0.161	0.49	0.084	0.151
Back EMF Const. (V/RPM)	3.03 x10 <sup>-3</sup>	3.213x10 <sup>-3</sup>	5.24x10 <sup>-3</sup>	5.54x10 <sup>-3</sup>	17x10 <sup>-3</sup>	3.2x10 <sup>-3</sup>	5.5x10 <sup>-3</sup>
Resistance (ohm)	0.38	0.16	0.38	0.19	1.42	0.39	0.28
Inductance (mH)	0.91	0.41	1.07	0.59	6	0.33	0.34
Inertia (kgm <sup>2</sup> x 10 <sup>-4</sup> )	0.1032	0.176 (0.296)	0.176 (0.296)	0.3549	0.3549	0.32	0.46
Allowable radial load (N)	78.6	245	245	245	245	245	245
Allowable axial load (N)	38.2	68	68	74	74	68	74
Flange Size (mm)	60	60	60	60	60	60	60
Mounting Diameter (mm)	70	70	70	70	70	70	70
Shaft Diameter (mm)	8	11 (14)	11 (14)	14	14	11	14
Motor Length (mm)	86.7	100.7	100.7	127.8	127.8	123	143
Pole Pairs (-)	4	4	4	4	4	4	4
Encoder Res. (counts/rev.)	2500 (optional)	2500 (optional)	2500 (optional)	2500 (optional)	2500 (optional)	2500 (optional)	2500 (optional)
Mass (Kg)	0.701	0.966	0.984	1.463	1.48	0.95	1.48
Ambient Temperature (°C)	0~40	0~40	0~40	0~40	0~40	0~40	0~40

## Motor Wires

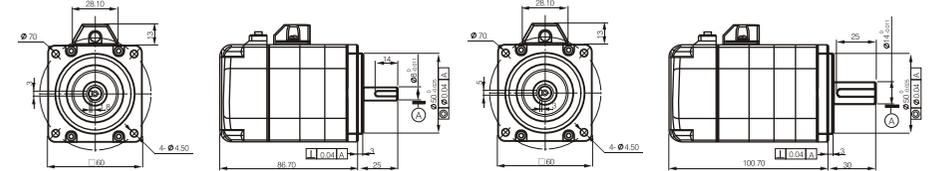


## Motor Feedback (D-sub, 15 pin, male)

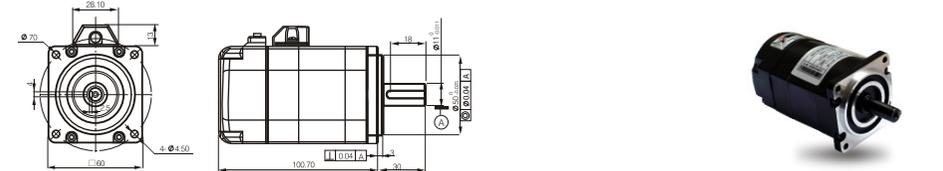
Pin	Description	Pin	Description	Pin	Description
1	EA+	6	Shield	11	EA-
2	EB+	7	EZ+	12	EB-
3	GND	8	EZ-	13	Vcc
4	HallV+	9	HallV+	14	HallV-
5	HallU+	10	HallV-	15	HallU-

## Mechanical Specifications (Unit: mm 1 inch = 25.4 mm)

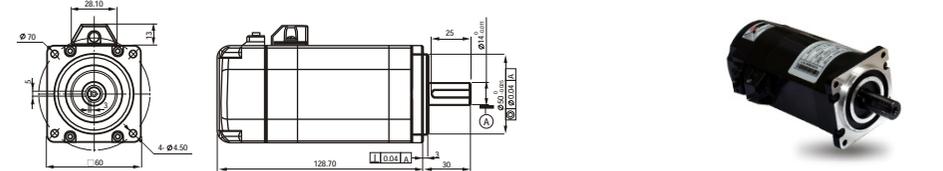
(a) Mechanical specifications of the ACM601V36 (100W) (b) Mechanical specifications of the ACM602V36A and the ACM602V60A (200W)



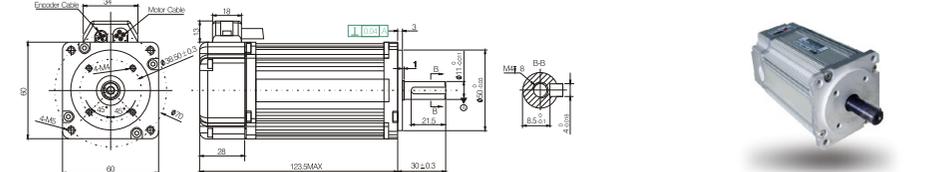
(c) Mechanical specifications of the ACM602V36 and the ACM602V60 (200W)



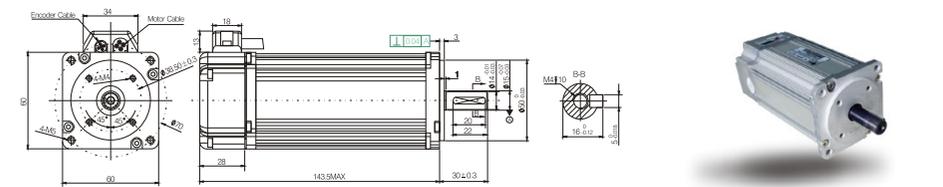
(d) Mechanical specifications of the ACM604V60 and the ACM604 (400W)



(e) Mechanical specifications of the ACM602V36-01 (200W)



(f) Mechanical specifications of the ACM604V60-01 (400W)



## Order Information

Part	Model	Description
ACM Series Motors	ACM601V36	AC Servo Motor, Rated Voltage: 36 VDC, Rated Power: 100W, Shaft Diameter: 8 mm
	ACM602V36	AC Servo Motor, Rated Voltage: 36 VDC, Rated Power: 200W, Shaft Diameter: 11 mm
	ACM602V36A	AC Servo Motor, Rated Voltage: 36 VDC, Rated Power: 200W, Shaft Diameter: 14 mm
	ACM602V60	AC Servo Motor, Rated Voltage: 60 VDC, Rated Power: 200W, Shaft Diameter: 11 mm
	ACM602V60A	AC Servo Motor, Rated Voltage: 60 VDC, Rated Power: 200W, Shaft Diameter: 14 mm
	ACM604V60	AC Servo Motor, Rated Voltage: 60 VDC, Rated Power: 400W, Shaft Diameter: 14 mm
	ACM604	AC Servo Motor, Rated Voltage: 220 VDC, Rated Power: 400W, Shaft Diameter: 14 mm
	ACM602V36-01	AC Servo Motor, Rated Voltage: 36 VDC, Rated Power: 200W, Shaft Diameter: 11 mm
	ACM604V60-01	AC Servo Motor, Rated Voltage: 60 VDC, Rated Power: 400W, Shaft Diameter: 14 mm