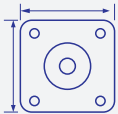


# 03

## ACM Series AC Servo Motors Low-medium Voltage (36, 60 VDC)

The ACM series low-medium voltage AC servo motors offer high performance with modes ranging from 100W to 400W. Mounting is compatible with most AC servo motors on the market. Standard models come with a standard 2500-line or 1000-line differential encoder with index slits (A, B, Z), and Hall Sensors (U, V, W). When driven by Leadshine ACS series servo drives, the ACM series motors meet application requirements from as low as 1 rpm to as high as 4000 rpm.



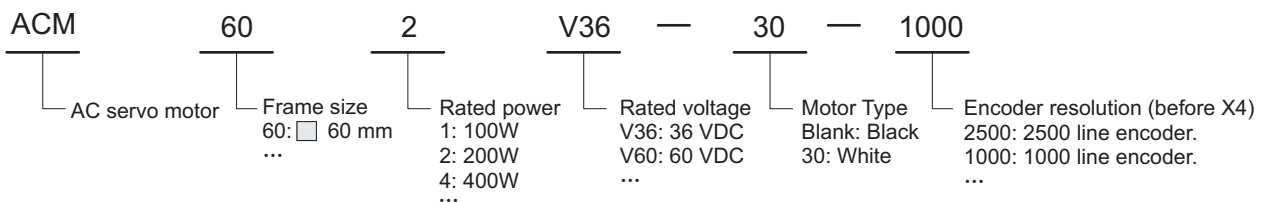
**Frame Size** 60 mm (NEMA24)



**Rated Power** 100 W, 200 W, 400 W

### 3.1

## ACM Series Part Number



### 3.2

## ACM Series Electrical Specifications

Model	ACM601V36	ACM602V36(A)*	ACM602V60(A)*	ACM604V60	ACM602V36-30	ACM604V60-30
Rated Voltage (V)	36	36	60	60	36	60
Rated Power (W)	100	200	200	400	200	400
Rated Torque (N.M)	0.318	0.64	0.64	1.27	0.64	1.27
Peak Torque (N.M)	0.95	1.91	1.91	3.82	1.92	3.81
Rated Speed (RPM)	3000	3000	3000	3000	3000	3000
Peak Speed (RPM)	4000	4000	4000	4000	4000	4000
Rated Current (A)	4	7.6	4.7	8.4	7.6	8.4
Peak Current (A)	11	22	14	25	22	25
Torque Const. (N.M/A)	0.0866	0.0918	0.15	0.161	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>	3.2x10 <sup>-3</sup>	5.5x10 <sup>-3</sup>
Resistance (ohm)	0.38	0.16	0.38	0.19	0.39	0.28
Inductance (mH)	0.91	0.41	1.07	0.59	0.33	0.34
Inertia (kgm <sup>2</sup> x 10 <sup>-4</sup> )	0.1032	0.176 (0.178)	0.176 (0.178)	0.3549	0.32	0.46
Allowable radial load (N)	78.6	245	245	245	245	245
Allowable axial load (N)	38.2	68	68	74	68	74
Flange Size (mm)	60	60	60	60	60	60
Mounting Diameter (mm)	70	70	70	70	70	70
Shaft Diameter (mm)	8	11 (14)	11 (14)	14	11	14
Motor Length (mm)	86.7	100.7	100.7	127.8	123	143
Pole Pairs (-)	4	4	4	4	4	4
Encoder Res. (counts/rev.)	2500 **	2500 **	2500 **	2500 **	1000 **	1000 **
Mass (Kg)	0.701	0.966	0.984	1.463	0.95	1.48
Ambient Temperature (°C)	0~40	0~40	0~40	0~40	0 to 40	0 to 40

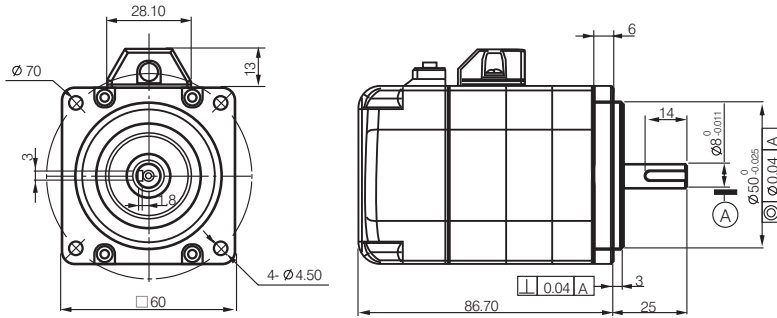
\* The ACM602V36(A) means two models. The ACM602V36 and ACM602V36A which is different from the former in inertia and shaft diameter. See the table.

\*\* Standard. Other configurations available, see Part Number.

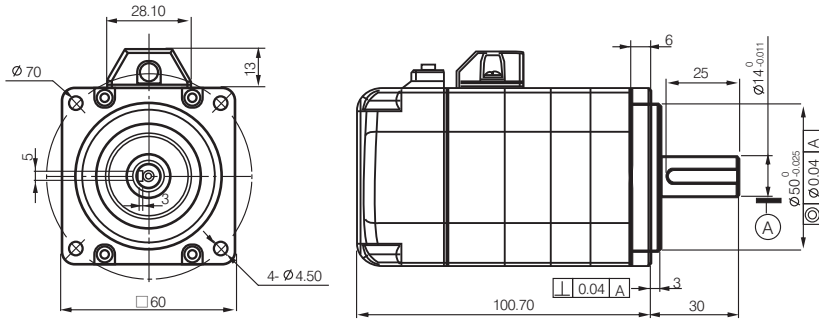
# 3.3 ACM Series Mechanical Specifications

Unit: mm 1 inch = 25.4 mm

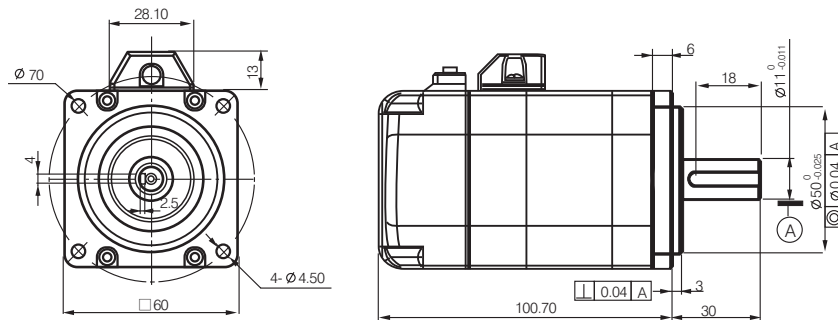
(a) Mechanical specifications of the ACM601V36 (100W)



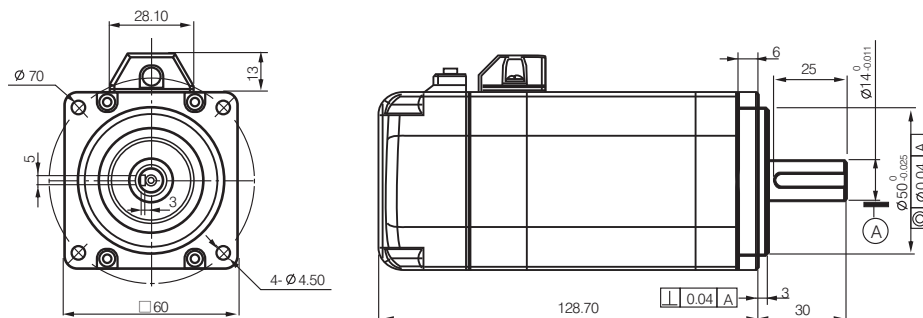
(b) Mechanical specifications of the ACM602V36A and ACM602V60A (200W)



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



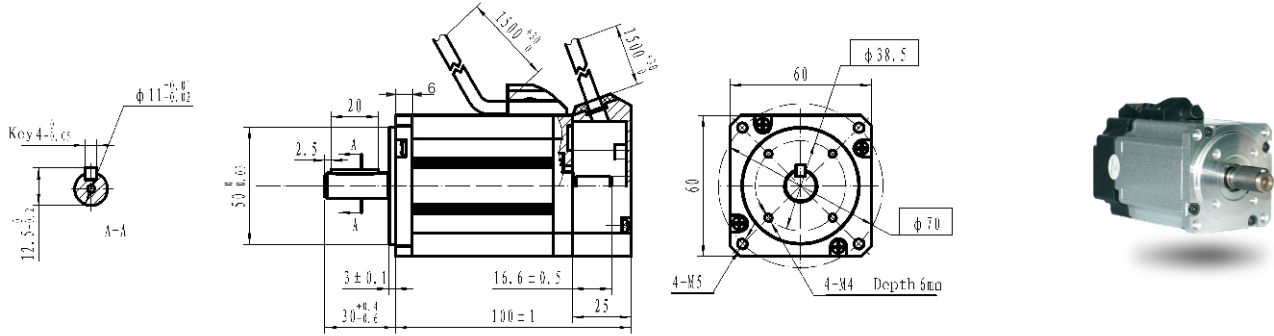
(d) Mechanical specifications of the ACM604V60 (400W)



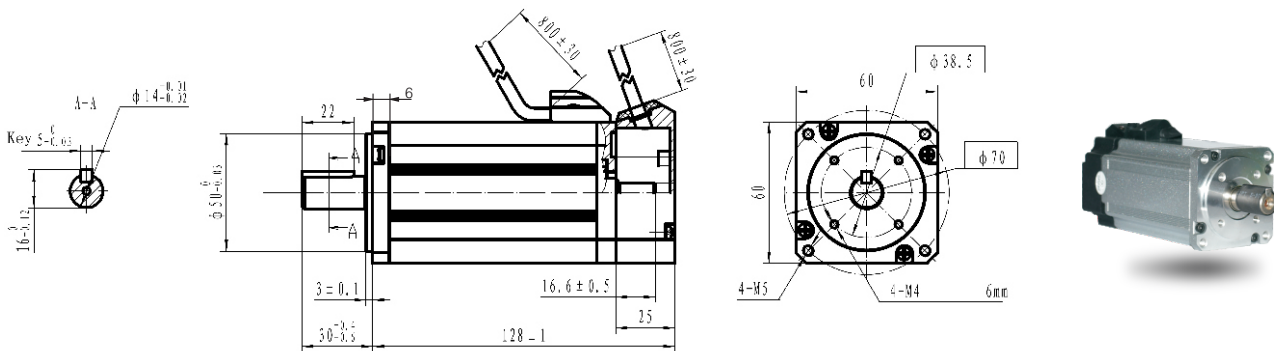
## 3.3 ACM Series Mechanical Specifications (Con't)

Unit: mm 1 inch = 25.4 mm

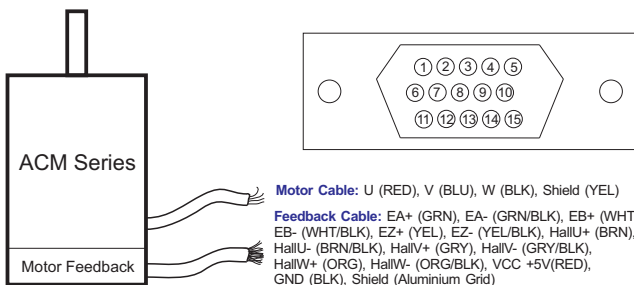
(e) Mechanical specifications of the ACM602V36-30 (200W)



(f) Mechanical specifications of the ACM604V60-30 (400W)



## 3.4 ACM Series Motor and Encoder Cables



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	HallW+	9	HallV+	14	HallW-*
5	HallU+	10	HallV-*	15	HallU-*

**Note:**

Standard connectors of the motor, encoder and hall sensor cables are for Leadshine's matching servo drives. They can be customized for your servo drives.

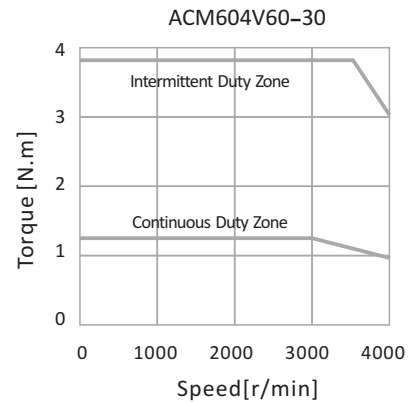
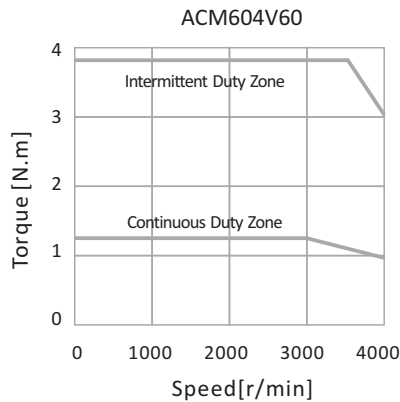
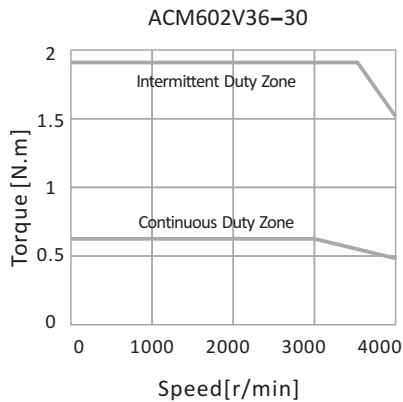
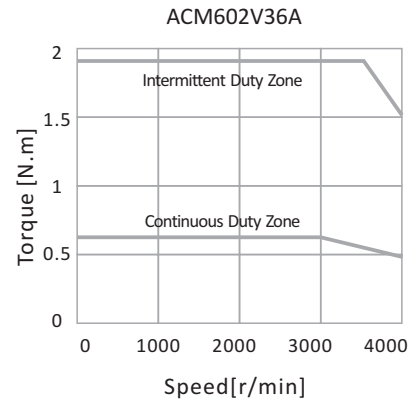
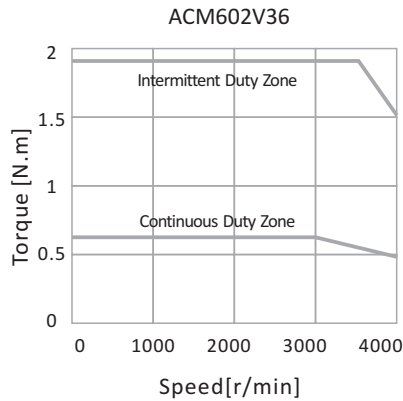
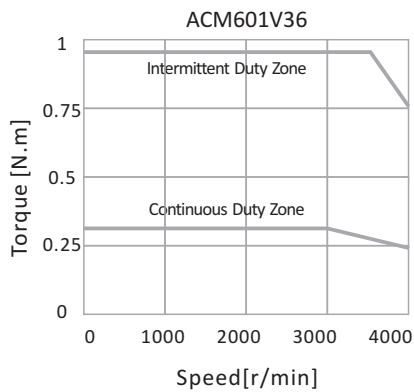
\* These signals are only available for 2,500-line encoder, and for 1,000-line encoder these signals are NOT available (NC).

## 3.5 ACM Series Speed–Torque Curves

### Matching Drive

ACS806

480 W



## 3.6 ACM Series Order Information

Models	Matching Drives
100 W AC Servo Motors	ACS806
200 W AC Servo Motors	ACS806
400 W AC Servo Motors	ACS806