



# AP MOTRONIX PRIVATE LIMITED

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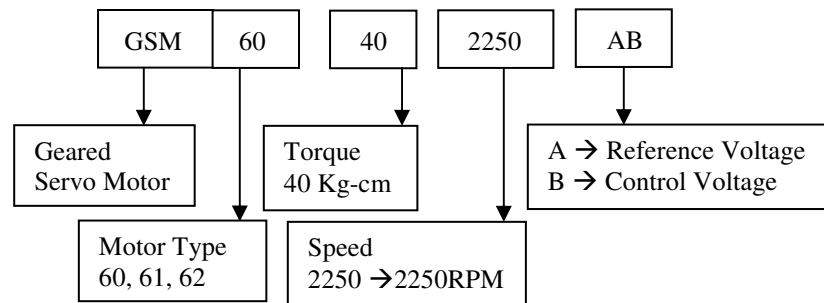
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## AC GEARED SERVOMOTOR (APM-GSM 60 SERIES)

Type GSM 60 Series AC Geared Servo Motors are permanent split capacitor induction motors. No brushes or starting switches are employed. The low inertia servo-type motor is specifically designed for servo applications requiring relatively fast response. Its two windings are referred to as the fixed or reference phase (red leads) and the control phase (black leads). In the normal mode of operation a fixed voltage is impressed on the reference phase and a variable voltage, in quadrature to reference voltage is given to the control phase. The speed and direction of rotation then depend on the magnitude and phase ( $\pm 90^\circ$ ) of control voltage. However, by using a phase splitting capacitor it is also possible to operate the motor (reversibly) from single phase supply.

### SERIES CODE:



### SPECIAL FEATURES:

- Compact size
- Low output speeds
- Quick reversibility
- High starting torque
- Dynamic braking
- Easy speed control

- Ability to withstand for continuous stalled rotor condition

### **SPECIFICATIONS:**

1. **Gear Ratio:** Motors are available with any one of the following standard gear reduction ratios of 10, 30, 100, 300, 1000, 3000. (Basic rotor speed is 2500 rpm).
2. **Windings:** Motor windings are designated by means of two letters. First letter refers to the voltage to the reference phase and the second letter to the voltage on the control phase. The letter code for voltages is as follows: A = 230V, B = 115V, C = 115-0-115V, D = 23V, E = 11.5, F = 11.5-0-11.5.

**Example:** Indicate Reference/Control phase voltages as: AA for 230V/230V.

AE for 230V/11.5V.

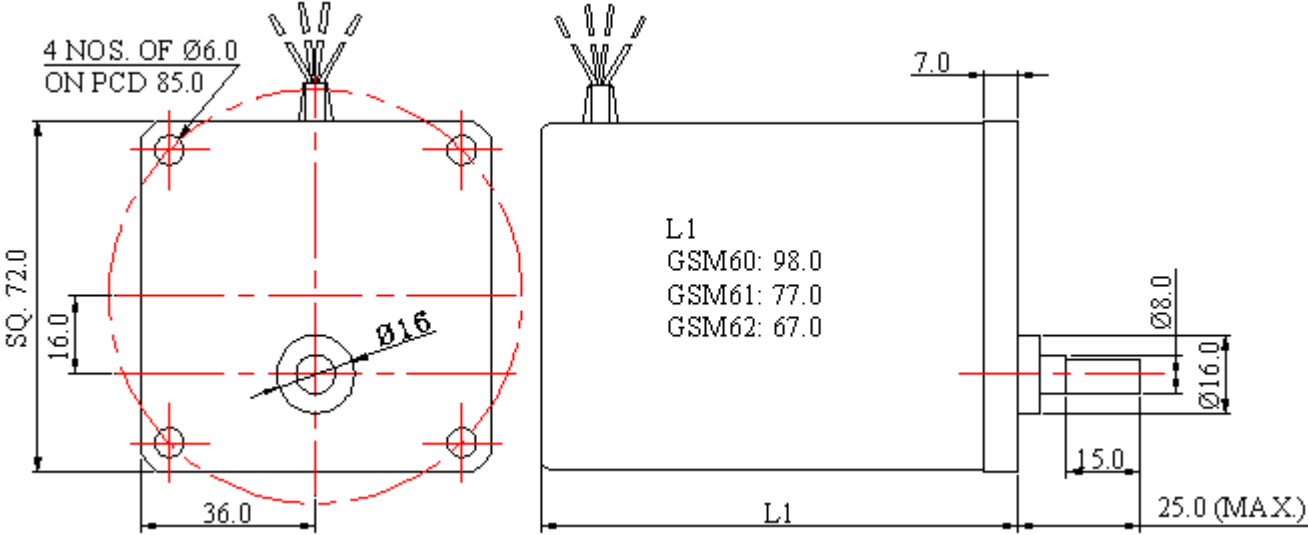
BF for 115V/11.5V-0-11.5V.

### **ELECTRICAL SPECIFICATIONS:**

Motor Type	Gear Ratio	No Load Speed (rpm)	Stall Torque (Kg-cm)	Power Input/phase (Watts)	Starting Voltage (%)	Length L1 (mm)	Weight (Kg)	Split Phase Capacitor (µFd)
GSM 60	10	250	4	18	5%	98.0	1.3	1.0
	30	83	10					
	100	25	35					
GSM 61	10	250	2	13	5%	77.0	0.8	0.47
	30	80	8					
	100	22	20					
GSM 62	10	230	1	9	10%	67.0	0.6	0.39
	30	77	2					
	100	20	6					

**Note:** For other gear ratios of 300, 1000, and 3000, the corresponding no-load speeds are 7, 2, 0.75 rpm and the torque is limited to maximum 35Kg-cm.

**MECHANICAL SPECIFICATIONS:**



**ORDERING DATA:** Clearly indicate in your purchase order the following:

**Model No.** : GSM60/61/62.

**Operating Voltages** : Reference & Control Voltages.

**Torque** : In Kg-cm.

**Speed** : In RPM.

**Special Requirement:** Please specify the number of leads (3 or 4)



