

# Electromagnetic Brake Motor

**25 Watt**

Frame Size:  80 mm

Continuous Rating with Frequent Start Stop,  
Load Holding & Minimum Overrun.

Electromagnetic Fail Safe Brake (Power Off  
activated) Fitted at the Back.

Rotates in Clockwise or Counter Clockwise Direction.

Terminal Box or Lead Wires for Connection.



**Specifications:**

Model	Supply Voltage	Frequency Hz	Current A	Starting Torque N.m	Rated Torque N.m	Rated Speed RPM	Capacitor $\mu$ F
4EW4□25	Single Phase 110V	50	0.40	0.11	0.18	1200	5.0
4EX4□25	Single Phase 230V	50	0.24	0.12	0.18	1200	1.5
4EY4□25	Three Phase 230V	50	0.24	0.21	0.17	1350	—
4EY4□25	Three Phase 415V	50	0.18	0.21	0.17	1350	—

□ Type of Shaft, G - Gear, R - Round, F - Frame, C - Custom

## Gearmotor Torque Table:

The maximum permissible torque is 8 N.m

50 Hz

Unit : N.m

No Load RPM	480	400	288	240	192	160	115	96	80	57	48	40	29	24	19	16	14.4	12	9.6	8
Gear Ratio	<b>3</b>	<b>3.6</b>	<b>5</b>	<b>6</b>	<b>7.5</b>	<b>9</b>	<b>12.5</b>	<b>15</b>	<b>18</b>	<b>25</b>	<b>30</b>	<b>36</b>	<b>50</b>	<b>60</b>	<b>75</b>	<b>90</b>	<b>100</b>	<b>120</b>	<b>150</b>	<b>180</b>
Output Torque	0.43	0.52	0.72	0.87	1.1	1.3	1.8	2.2	2.6	3.3	3.9	4.7	5.8	7.0	8.0	8.0	8.0	8.0	8.0	8.0

60 Hz

Unit : N.m

No Load RPM	576	480	346	288	230	192	138	115	96	69	57	48	34	29	23	19	17	14.4	11.5	9.6
Gear Ratio	<b>3</b>	<b>3.6</b>	<b>5</b>	<b>6</b>	<b>7.5</b>	<b>9</b>	<b>12.5</b>	<b>15</b>	<b>18</b>	<b>25</b>	<b>30</b>	<b>36</b>	<b>50</b>	<b>60</b>	<b>75</b>	<b>90</b>	<b>100</b>	<b>120</b>	<b>150</b>	<b>180</b>
Output Torque	0.41	0.5	0.69	0.83	0.1	1.2	1.7	2.1	2.5	3.1	3.7	4.5	5.6	6.7	8.0	8.0	8.0	8.0	8.0	8.0

The Gear boxes are sold separately.

A coloured background indicates gear shaft rotation in same direction as motor shaft.

A white background indicates gear shaft rotation in opposite direction to the motor shaft.

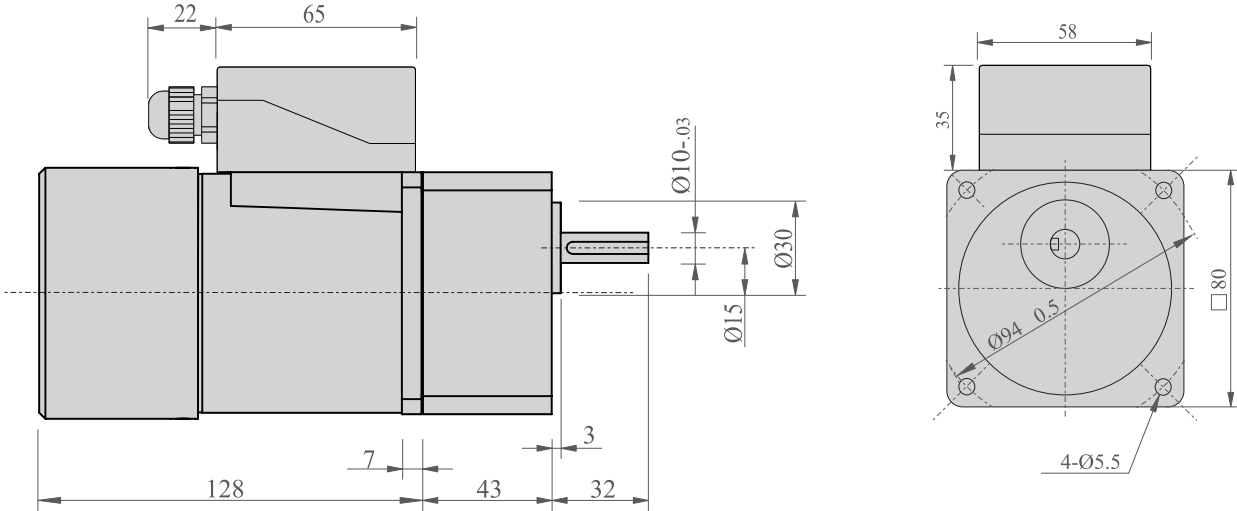
The speed of geared motor is calculated by dividing motor's no load speed by the gear ratio.

The actual speed is less than the displayed value, depending upon the load.

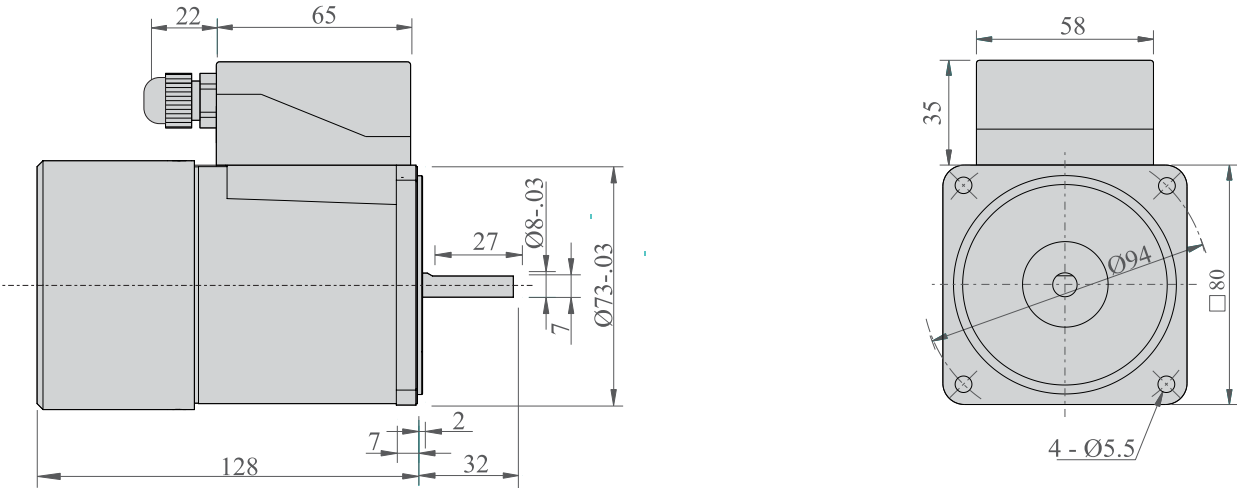
Characteristics, specifications and dimensions are subject to change without notice.

## Dimensions

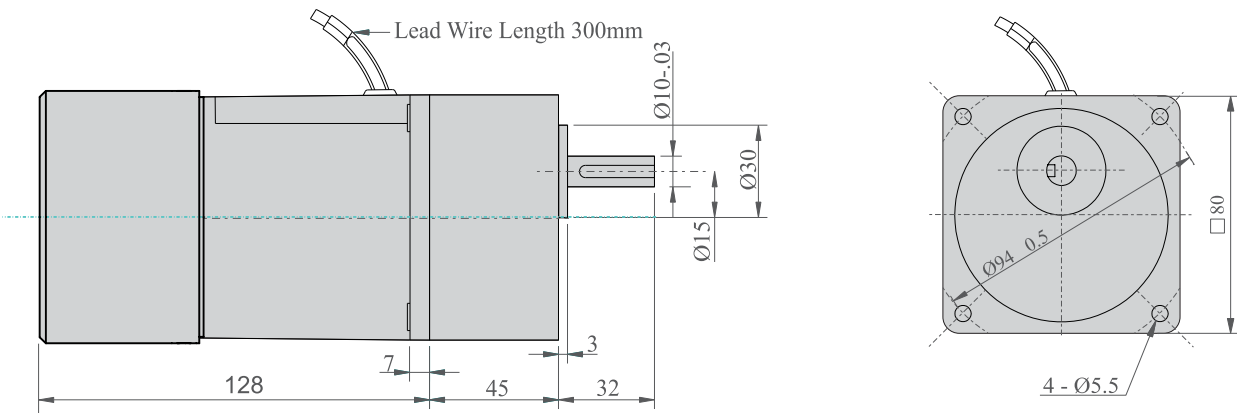
### Motor, Gearbox with Terminal Box



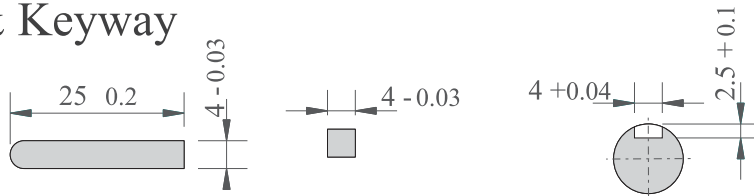
### Motor Round Shaft with Terminal Box



### Motor, Gearbox with Lead wires



## Key & Keyway

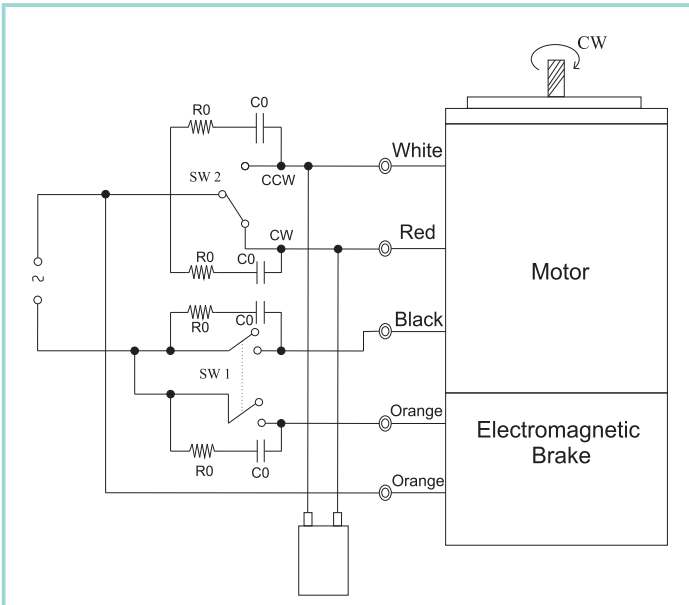


Max. Weight:  
Motor - 2.3 kg  
Gear Box - 0.75 kg

# Electromagnetic Brake Motor

## Wiring Diagram

### Wiring Diagram for Single Phase Motor

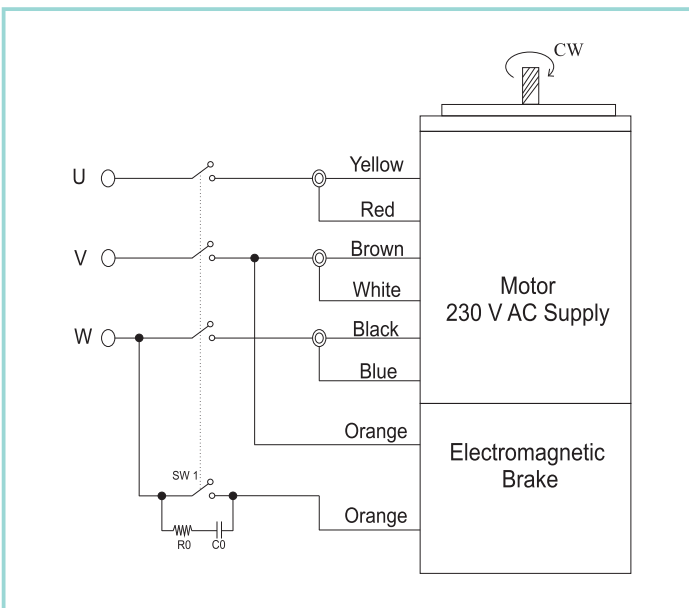


When SW1 is switched ON, Electromagnetic Brake is released & motor starts rotating. When SW1 is switched OFF then electro-magnetic brake will be applied stopping the motor immediately & holding the load.

Apply voltage on the orange brake lead wires only, to release the Electromagnetic Brake.

To change the direction of rotation, flip CW to CCW.

### Wiring Diagram for Three Phase Motor



When SW1 is switched ON, electromagnetic Brake is released & motor starts rotating. When Sw1 is switched OFF then electro-magnetic brake will be applied stopping motor immediately, holding the load.

Apply voltage on the orange brake lead wires only, to release the Electromagnetic Brake.

To change the direction of rotation, interchange any two wires between U, V & W.