



# ADEPT MOTORS<sup>TM</sup>

## Induction Gear Motor

180 watt

Frame Size: 90 x 90 mm

Continuous rating, TEFC Aluminum body

Rotates in clockwise or counter clockwise direction.

Direction of rotation can be reversed Overruns for a few rotation after supply is cut off

Speeds are 2880 / 1440 RPM and further low speeds with gearbox Terminal box or open lead wires for connection



Model	Output Power W	Frequency Hz	Supply Voltage V	Current A	Starting Torque Kg.cm	Rated Torque Kg.cm	Rated Speed RPM	Capacitor $\mu$ F
90 IW 4G180	180	60	Single phase 110 V	3.0	5.0	5.7	3000	18
90 IX 4G180	180	50	Single phase 230 V	1.2	6.0	6.9	2700	4
90 IY 4G180	180	60	Three phase 230 V	1.2	12.3	11.1	1500	
90 IY 4G180	180	50	Three phase 230 V	1.2	15.9	15.9	1350	
90 IY 4G180	180	50	Three phase 415 V	1.2	15.9	15.9	1350	

### Gear motor Torque Table:

The maximum permissible torque is 200. kg.cm

50 HZ

Unit: kg.cm

RPM	500	416	300	250	200	166	120	100	83	60	50	41	30	25	20	16	15	13	10	8.3
Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
Output Torque	36	42	60	70	88	106	135	160	192	200	200	200	200	200	200	200	200	200	200	200

60 HZ

Unit: kg.cm

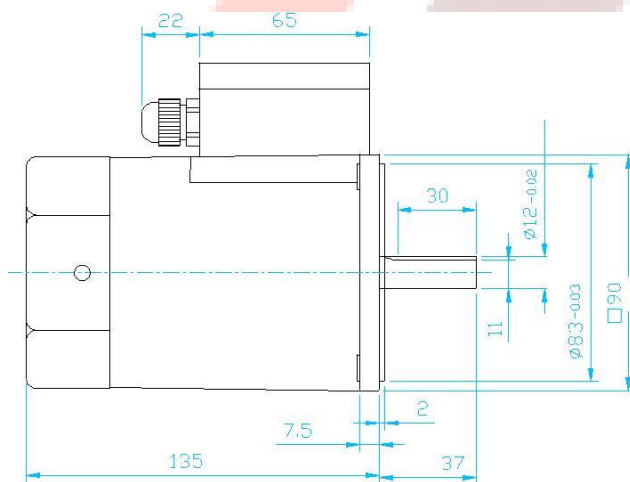
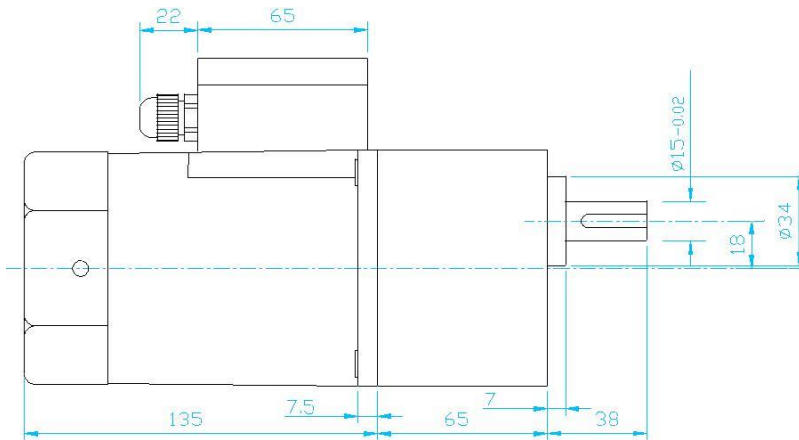
RPM	600	500	360	300	240	200	144	120	100	72	60	50	36	30	24	20	18	15	12	10
Gear Ratio	3	3.6	5	6	7.5	9	12.5	15	18	25	30	36	50	60	75	90	100	120	150	180
Output Torque	28	34	48	56	72	86	106	128	154	194	200	200	200	200	200	200	200	200	200	200

The Gearheads are sold separately.

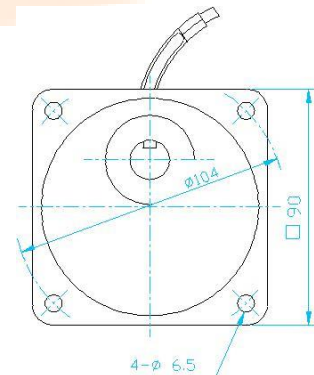
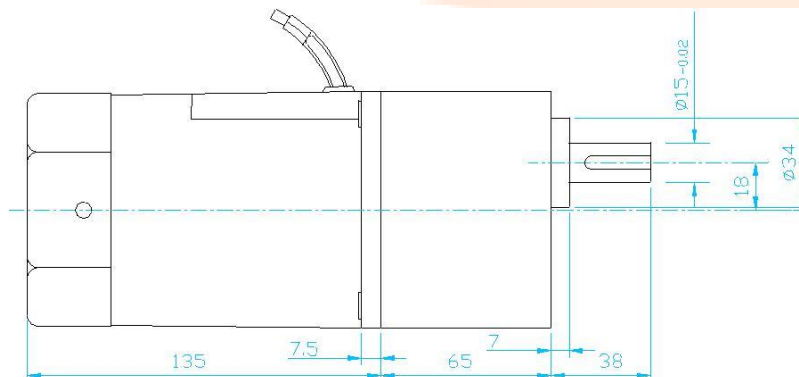


## Dimensions

### Motor, Gearbox with Terminal Box



### Motor, Gearbox with Lead wires





## Wiring Diagram for Single Phase Motors

<p>Short Black wires and connect as shown to rotate the motor in clockwise direction</p> <p>To change the direction, flip SW to CCW</p>	<p>Red wires are for running winding &amp; Black wires are for starting winding</p> <p>To change the direction, interchange Black wires or Red wires</p>

## Wiring Diagram for Three Phase Motors

<p><b>Star Connection</b></p>	<p><b>Delta Connection</b></p>
<p>To change the direction, interchange any two wires between U, V &amp; W</p> <p>For 415 Volt supply, wires are connected as shown. Short White, Black &amp; Blue wire as shown. And then insulate properly.</p>	<p>To change the direction, interchange any two wires between U, V &amp; W</p> <p>For 230 Volt 3 Ph. supply, wires are connected as shown.</p>