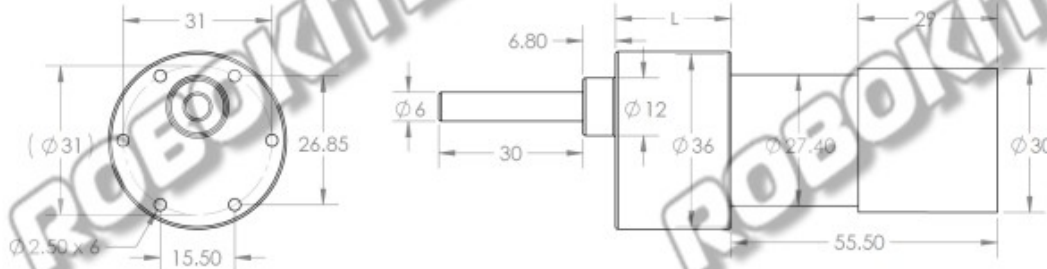


**Model Number**  
RMCS-3012

**High Torque Quad Encoder Geared DC Motor 12V 60RPM**

**Mechanical Drawing (Dimensions are in mm)**



|        |          |
|--------|----------|
| 10RPM  | L=28.5mm |
| 30RPM  | L=28.5mm |
| 60RPM  | L=26.5mm |
| 100RPM | L=26.5mm |
| 200RPM | L=25mm   |
| 300RPM | L=25mm   |
| 600RPM | L=22mm   |
| 900RPM | L=22mm   |

**Technical specifications of Motor**

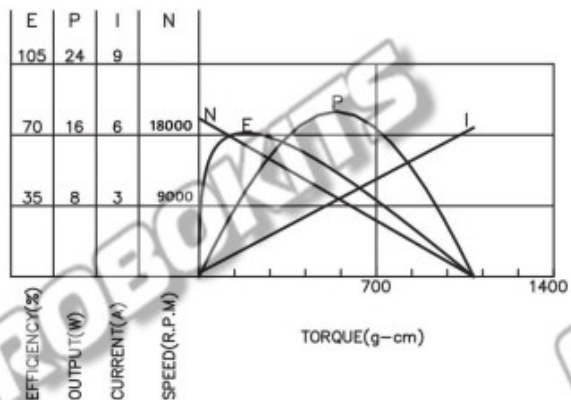
|                                   |   |
|-----------------------------------|---|
| Motor Type                        | High Torque DC Geared Motor               |
| Operating voltage                 | 12V DC                                    |
| Motor Speed at Output Shaft (RPM) | 60RPM                                     |
| Stall Torque(Kgcm)                | 38Kgcm(Gearbox Breaking Torque is 30Kgcm) |
| Rated Torque(Kgcm)                | 19Kgcm                                    |
| Gear Ratio                        | 1 : 270                                   |
| CPR at Output Shaft of Motor      | 14040                                     |
| Weight                            | 180gm                                     |

**Encoder Pinouts**

|                |                |
|----------------|----------------|
| Encoder Type   | Quad Encoder   |
| Quad Encoder   | 13 Hall Sensor |
| Base Motor CPR | 13*4=52        |
| Orange         | EncA           |
| Red            | EncB           |
| Yellow         | Motor+         |
| Green          | Motor-         |
| Brown          | +5V DC         |
| Black          | Gnd            |

**Base Motor Specifications**

|                     |                  |
|---------------------|------------------|
| Nominal voltage(V)  | 12V              |
| No-Load Speed (RPM) | 18000            |
| Rated Torque (gcm)  | 151              |
| No-load current (A) | 0.8A             |
| Load current(A)     | up to 7.5 A(Max) |



**Base Motor Characteristic Graph**



**RHINO**