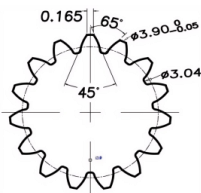
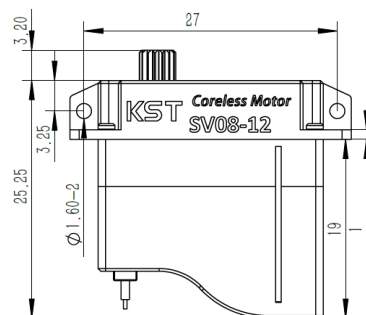
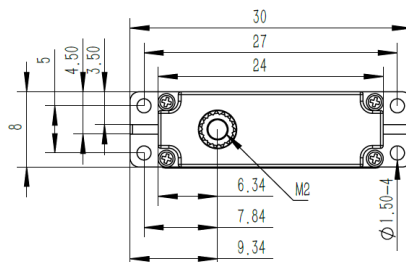


## SV08-12 Technical Specification



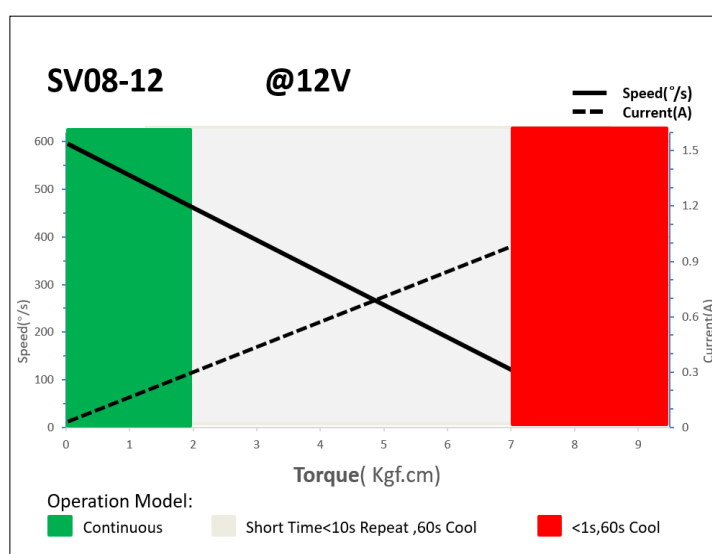
15T- 4mm Output Shaft Spline



### 1. Operating Data

|                      |                       |
|----------------------|-----------------------|
| Rated Voltage        | DC12.0V               |
| Voltage Range        | DC8.40V-13.0V         |
| Torque               | 5.00Kgf.cm@8.40V      |
|                      | 7.00Kgf.cm@12.0V      |
|                      | 8.00Kgf.cm@13.0V      |
| Speed                | 0.15sec/60°@8.40V     |
|                      | 0.10sec/60°@12.0V     |
|                      | 0.09sec/60°@13.0V     |
| Start Current        | 1.18A@12.0V           |
| Rated Torque         | 2.0kgf.cm@12.0V       |
| Rated Current        | 0.35A@12.0V           |
| Rated Speed          | 0.13sec/60°@12.0V     |
| Working Frequency    | 1520us/333Hz          |
| Default Travel Angle | ±60° =120° Total      |
| Temperature Range    | -10°C.....+65°C       |
| Soft Start           | Programmable          |
| Programmable         | Yes                   |
| Case Material        | Aluminum Alloy        |
| Motor Type           | Coreless DC Motor     |
| Gear Set Material    | Hardened Gear         |
| Position Sensor      | Potentiometer         |
| Ball Bearing         | 2BB                   |
| Case Dimensions      | 23.5*8*25.25mm ±0.2mm |
| Weight               | 11g ±10%              |

### 2. Performance



### 3. Command signal PWM Command Interface

|                            |                                                     |
|----------------------------|-----------------------------------------------------|
| Signal Voltage             | HIGH: min.3.3V, max.5.0V<br>Low: min.0.0V, max.1.5V |
| Pulse Lengths              | 900us-2100us                                        |
| Pulse Lengths for Position | 1000us/1500us/2000us                                |
|                            | -60°/ 0°/+60°                                       |

### 4. Electrical Connection

| Pin Assignment |   |        |                |
|----------------|---|--------|----------------|
| 3 2 1          | 1 | Orange | Signal         |
|                | 2 | Red    | DC+            |
|                | 3 | Brown  | DC-            |
|                |   |        | Supply Command |
|                |   |        | Supply Voltage |
|                |   |        | Supply Ground  |