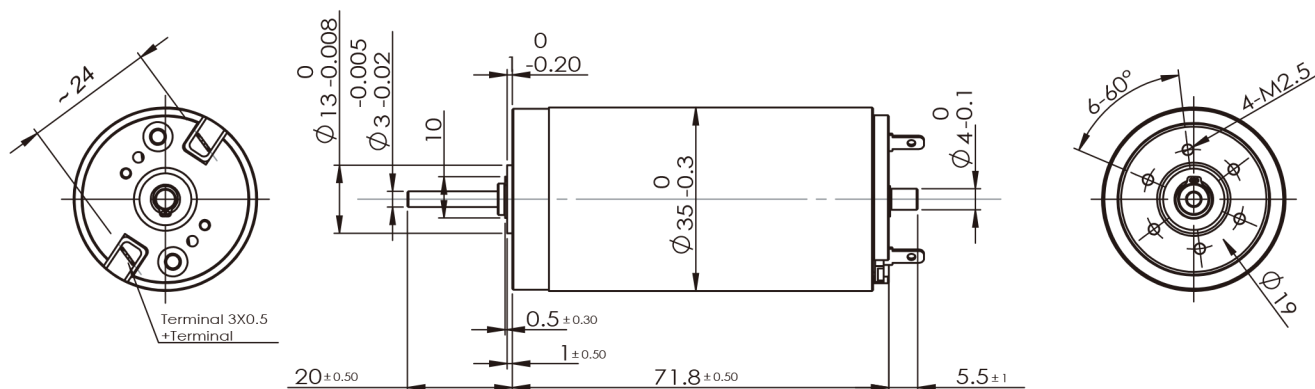




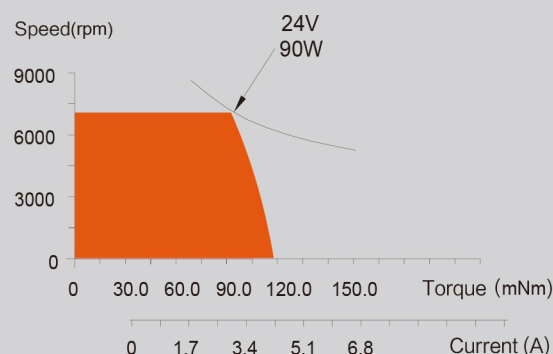
## Motor Data

| Motor model              |                  |                  | DR357112G | DR357115G | DR357124G | DR357130G | DR357148G |
|--------------------------|------------------|------------------|-----------|-----------|-----------|-----------|-----------|
| 1 Nominal voltage        | V                | V                | 12        | 15        | 24        | 30        | 48        |
| 2 No load speed          | rpm              | Wnl              | 7200      | 7270      | 8000      | 7270      | 8100      |
| 3 No load current        | mA               | Inl              | 330       | 220       | 190       | 124       | 59        |
| 4 Nominal speed          | rpm              | Wc               | 6550      | 6580      | 7200      | 6490      | 7000      |
| 5 Nominal torque         | mNm              | Tc               | 89.4      | 97        | 119       | 97.2      | 97        |
| 6 Nominal current        | A                | Ic               | 5.6       | 4.9       | 4.17      | 2.62      | 1.7       |
| 7 Output power           | W                | Pc               | 61        | 66        | 90        | 66        | 72        |
| 8 Stall torque           | mNm              | Tmax             | 950       | 981       | 1200      | 973       | 777       |
| 9 Stall current          | A                | I <sub>max</sub> | 60        | 50        | 42        | 25        | 13.8      |
| 10 Max. efficiency       | %                | η <sub>max</sub> | 87        | 90        | 90        | 85        | 85        |
| 11 Terminal resistance   | Ω                | R <sub>t</sub>   | 0.2       | 0.3       | 0.57      | 1.2       | 3.48      |
| 12 Torque constant       | mNm / A          | K <sub>t</sub>   | 15.8      | 19.62     | 28.5      | 38.9      | 56.3      |
| 13 Speed constant        | rpm / V          | K <sub>n</sub>   | 602       | 486       | 335       | 246       | 169       |
| 14 Speed torque gradient | rpm / mNm        | Δn / ΔT          | 7.24      | 7.1       | 6.36      | 7.57      | 10        |
| 15 Terminal inductance   | mH               | L                | 0.05      | 0.08      | 0.24      | 0.35      | 0.95      |
| 16 Rotor inertia         | gcm <sup>2</sup> | J                | 68.2      | 68.2      | 79.4      | 68.2      | 68.2      |

## Specifications

|                                       |                      |              |
|---------------------------------------|----------------------|--------------|
| 1 ambient temperature                 | T <sub>a</sub>       | -20~+65 °C   |
| 2 max. winding temperature            | T <sub>coilmax</sub> | +85 °C       |
| 3 max. speed                          | N <sub>max</sub>     | 8910 rpm     |
| 4 axial play                          | Δt                   | 0.05-0.15 mm |
| 5 number of pole pairs                | 2p                   | 1            |
| 6 number of commutator segments       |                      | 13           |
| 7 weight of motor                     | W <sub>t</sub>       | 340g         |
| 8 Max. axial load (dynamic)           |                      | 5.6N         |
| 9 Max. force for press fits (static)  |                      | 110N         |
| 10 Max. radial load, 4 mm from flange |                      | 28N          |

## Operating Range



## SMJ Modular System

