

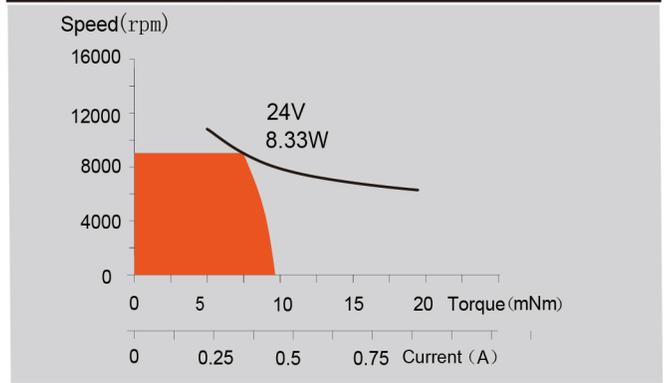
Motor Data

|    | Motor model           |           |                       | SBR175912B | SBR175924B |
|----|-----------------------|-----------|-----------------------|------------|------------|
| 1  | Nominal voltage       | V         | V                     | 12         | 24         |
| 2  | No load speed         | rpm       | Wnl                   | 12300      | 11000      |
| 3  | No load current       | mA        | InI                   | 500        | 200        |
| 4  | Nominal speed         | rpm       | Wc                    | 10500      | 8500       |
| 5  | Nominal torque        | mNm       | Tc                    | 10         | 9          |
| 6  | Nominal current       | A         | Ic                    | 1.17       | 0.49       |
| 7  | Output power          | W         | Pc                    | 11.31      | 8.33       |
| 8  | Stall torque          | mNm       | Tmax                  | 51.24      | 30.8       |
| 9  | Stall current         | A         | Imax                  | 6          | 1.68       |
| 10 | Max. efficiency       | %         | $\eta_{max}$          | 80         | 70         |
| 11 | Terminal resistance   | $\Omega$  | Rt                    | 2          | 14.3       |
| 12 | Terminal inductance   | L         | mH                    | 4.5        | 6          |
| 13 | Torque constant       | mNm / A   | Kt                    | 8.54       | 18.35      |
| 14 | Speed constant        | rpm / V   | Kn                    | 1118       | 520        |
| 15 | Speed torque gradient | rpm / mNm | $\Delta n / \Delta T$ | 150.05     | 240.1      |

Specifications

|    |                                    |            |              |
|----|------------------------------------|------------|--------------|
| 1  | ambient temperature                | Ta         | -20~+65 °C   |
| 2  | max. winding temperature           | Tcoilmax   | +85 °C       |
| 3  | max. speed                         | Nmax       | 13530 rpm    |
| 4  | axial play                         | $\Delta t$ | 0.05-0.15 mm |
| 5  | number of pole pairs               | 2p         | 1            |
| 6  | number of commutator segments      |            | 3            |
| 7  | weight of motor                    | Wt         | 74 g         |
| 8  | Max. axial load (dynamic)          |            | 0.8N         |
| 9  | Max. force for press fits (static) |            | 15N          |
| 10 | Max. radial load, 4 mm from flange |            | 1.4N         |

Operating Range



Terminal definitions

