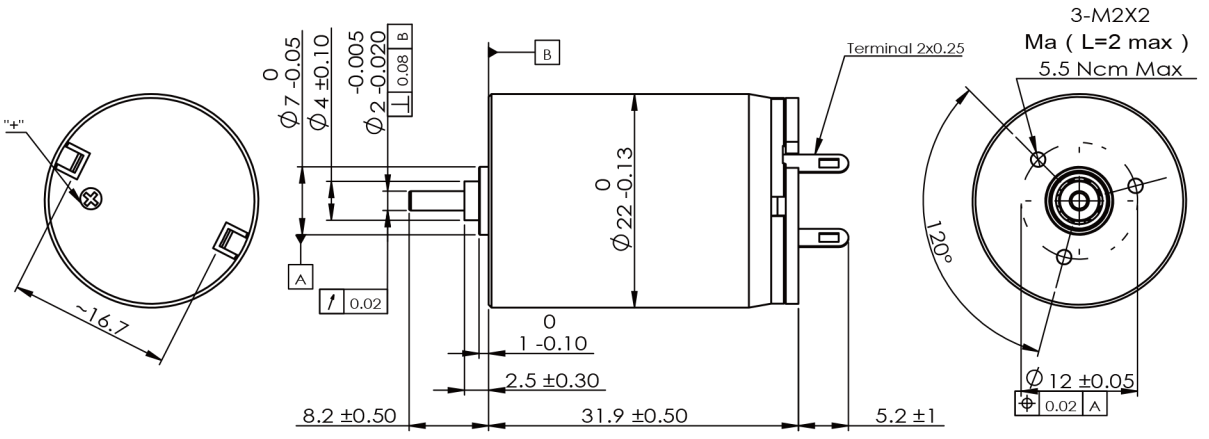
# DR2232B | Graphite Brush



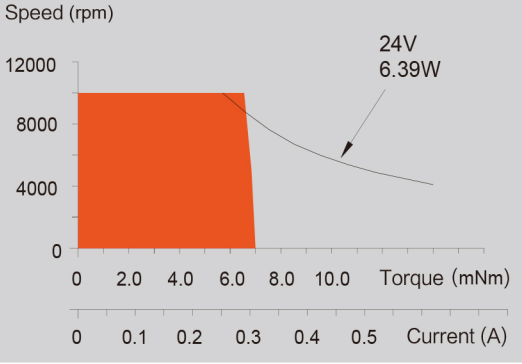

## Motor Data

| | Motor model | | | DR223206B | DR223212B | DR223218B | DR223224B | DR223236B | DR223248B |
|---|---|---|---|---|---|---|---|---|---|
| 1 | Nominal voltage | V | V | 6 | 12 | 18 | 24 | 36 | 48 |
| 2 | No load speed | rpm | Wnl | 7000 | 11000 | 11000 | 11500 | 9650 | 9130 |
| 3 | No load current | mA | Inl | 36 | 26 | 16 | 20 | 12 | 10 |
| 4 | Nominal speed | rpm | Wc | 4650 | 7680 | 7300 | 8840 | 6500 | 5920 |
| 5 | Nominal torque | mNm | Tc | 4.05 | 6.7 | 7 | 6.9 | 7 | 6.9 |
| 6 | Nominal current | A | Ic | 0.5 | 0.65 | 0.45 | 0.35 | 0.2 | 0.14 |
| 7 | Output power | W | Pc | 2 | 5.39 | 5.36 | 6.39 | 4.76 | 4.28 |
| 8 | Stall torque | mNm | Tmax | 11.9 | 21.7 | 20.4 | 28.6 | 21.9 | 20 |
| 9 | Stall current | A | Imax | 1.46 | 2.11 | 1.32 | 1.45 | 0.63 | 0.41 |
| 10 | Max. efficiency | % | ηmax | 65 | 72 | 72 | 73 | 72 | 71 |
| 11 | Terminal resistance | Ω | Rt | 4.1 | 5.7 | 13.6 | 16.5 | 57.1 | 117 |
| 12 | Torque constant | mNm / A | Kt | 8.1 | 10.3 | 15.4 | 19.7 | 34.72 | 48.74 |
| 13 | Speed constant | rpm / V | Kn | 1179 | 925 | 618 | 486 | 275 | 196 |
| 14 | Speed torque gradient | rpm / mNm | Δn / ΔT | 590 | 494 | 525 | 385 | 441 | 457 |
| 15 | Terminal inductance | mH | L | 0.11 | 0.14 | 0.3 | 0.9 | 1.25 | 2.68 |
| 16 | Rotor inertia | gcm² | J | 4.1 | 4.3 | 4.16 | 4.17 | 4.06 | 4 |

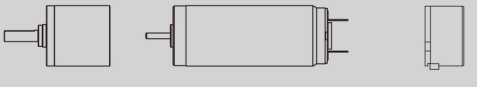
## Specifications

| | | | |
|---|---|---|---|
| 1 | ambient temperature | Ta | -20~+65 ℃ |
| 2 | max. winding temperature | Tcoilmax | +125℃ |
| 3 | max. speed | Nmax | 12650 rpm |
| 4 | axial play | Δt | 0.05-0.15 mm |
| 5 | number of pole pairs | 2p | 1 |
| 6 | number of commutator segments | | 5 |
| 7 | weight of motor | Wt | 54 g |
| 8 | Max. axial load (dynamic) | | 3N |
| 9 | Max. force for press fits (static) | | 45N |
| 10 | Max. radial load, 4 mm from flange | | 12N |

## Operating Range




## SMJ Modular System



Planetary Gearhead
Model number P22H
Outside Diameter φ22
Torque 0.021~1.2N·m
See page 49

Encoder
1000 CPT
3 Channels
see page 46