

Brushless Torque Motors

DB-3730-B-1ES SPECIFICATIONS @ 25°C

| Size Constants | Value | Units |
|--|----------|----------------------|
| Peak Torque, T_P | 179 | oz-in |
| Motor Constant, K_M | 14.9 | oz-in/ \sqrt{W} |
| Number of Poles | 10 | |
| Number of Phases | 1 | |
| Weight | 11.3 | oz (nom) |
| Motor Inertia, J_M | 2.60E-02 | oz-in-s ² |
| Friction Torque, T_F | 4.5 | oz-in |
| Electrical Time Constant, τ_E | 0.33 | ms |
| Mechanical Time Constant, τ_M | 16.67 | ms |
| Temperature Rise, Housed TPR' | 5.9 | °C/W |
| Sensors | No | |
| Winding Constants | Value | Units |
| Torque Sensitivity, K_T | 47.0 | oz-in/amp |
| Back EMF, K_E | 0.332 | V per rad/s |
| Terminal Resistance, R_M | 10.0 | ohms (nom) |
| Terminal Inductance, L_M | 3.3 | mH (nom) |
| Voltage, Stalled at Peak Torque, V_P | 38.1 | volts |
| Amps at Peak Torque, I_P | 3.81 | amps |

DB-3730-B-1ES Typical Outline Drawing

