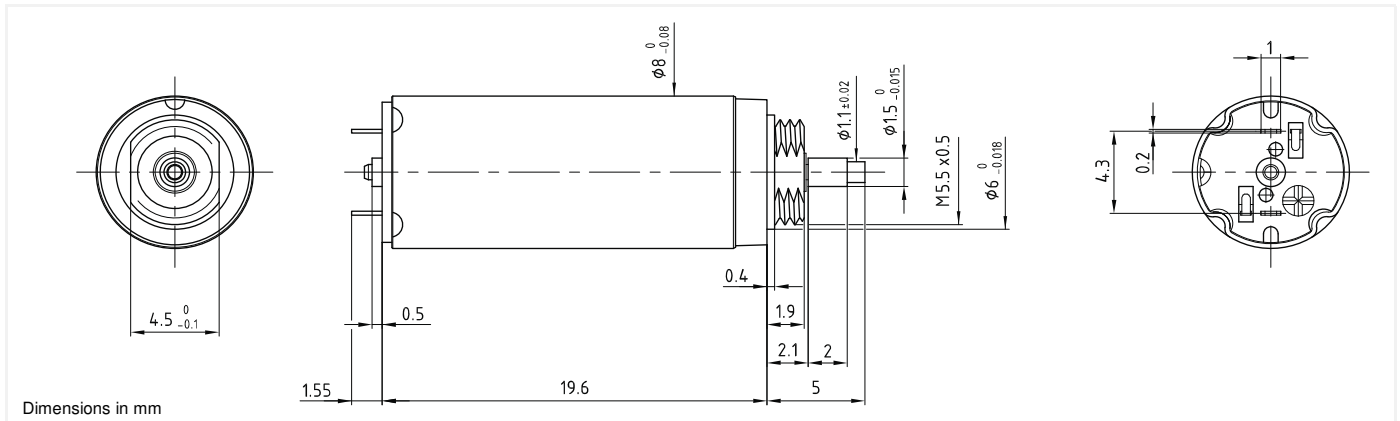


08G61

Precious metal commutation

Ø8mm

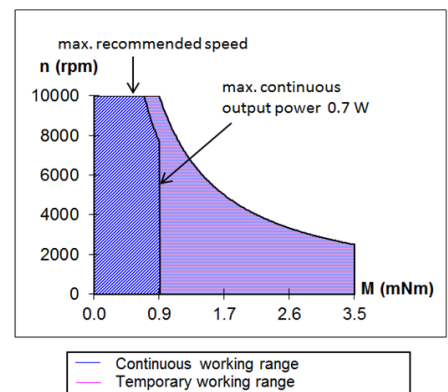
0.95 mNm



08G61 \*\*\*\* .3

| Electrical Data                         | ****                | 107   | 205C        |                             |
|---|---------------------|---|-------------|-----------------------------|
| 1 Nominal Voltage                       | V                   | 3   | 9           | Volt                        |
| 2 No-Load Speed                         | $n_0$               | 9,780   | 11,760      | rpm                         |
| 3 No-Load Current                       | $I_0$               | 6.0   | 2.5         | mA                          |
| 4 Terminal Resistance                   | R                   | 11.8  | 54.0        | $\Omega$                    |
| 5 Output Power                          | $P_{2max.}$         | 0.6   | 0.7         | W                           |
| 6 Stall Torque                          | mNm                 | 0.73 (0.11)   | 1.2 (0.17)  | mNm (oz-in)                 |
| 7 Efficiency                            | $\eta_{max.}$       | 72  | 77          | %                           |
| 8 Max Continuous Speed                  | $n_{e max.}$        | 10,000  | 10,000      | rpm                         |
| 9 Max Continuous Torque                 | $M_{e max.}$        | 0.8 (0.14)  | 0.95 (0.14) | mNm (oz-in)                 |
| 10 Max Continuous Current               | $I_{e max.}$        | 0.29  | 0.13        | A                           |
| 11 Back-EMF Constant                    | $k_E$               | 0.30  | 0.75        | mV/rpm                      |
| 12 Torque Constant                      | $k_M$               | 2.86  | 7.20        | mNm/A                       |
| 13 Motor Regulation                     | $R/k^2$             | 1,440.0   | 1,040.0     | $10^3/Nms$                  |
| 14 Friction Torque                      | $T_F$               | 0.02 (0.01)   | 0.02 (0.01) | mNm (oz-in)                 |
| 15 Rotor Inductance                     | L                   | 0.03  | 0.16        | mH                          |
| 16 Mechanical Time Constant             | $t_m$               | 5.0   | 3.6         | ms                          |
| 17 Rotor Inertia                        | J                   | 0.04  | 0.04        | $g.cm^2$                    |
| General Data                            |                     |   |             |                             |
| 18 Thermal Resistance (rotor/body)      | $R_{th1} / R_{th2}$ | 18/85   |             | $^{\circ}C/W$               |
| 19 Thermal Time Constant (rotor/stator) | $t_{w1}/t_{w2}$     | 5/100   |             | S                           |
| 20 Operating Temperature Range:         | motor               | -30 $^{\circ}C$ to 85 $^{\circ}C$ (-22 $^{\circ}F$ to 185 $^{\circ}F$ ) |             | $^{\circ}C$ ( $^{\circ}F$ ) |
|   | rotor               | 100 $^{\circ}C$ (212 $^{\circ}F$ )                                      |             | $^{\circ}C$ ( $^{\circ}F$ ) |
| 21 Shaft Load Max.:                     |                     | With sleeve bearings  |             |                             |
| (2 mm from bearing)                     | -radial             | 0.5 (1.8)   |             | N (oz)                      |
|   | -axial              | 30 (107.9)  |             | N (oz)                      |
| 22 Shaft Play:                          | -radial             | <0.015 (0.0006)   |             | mm (inch)                   |
|   | -axial              | 0.100 (0.0039)  |             | mm (inch)                   |
| 23 Weight                               | g                   | 4.6 (0.17)  |             | g (oz)                      |

| Execution Table |              |
|-----------------|--------------|
| Gearbox         | Single Shaft |
| R10             | 5            |
| MR2             | Upon Request |



V121616