

## MTM-116-11B

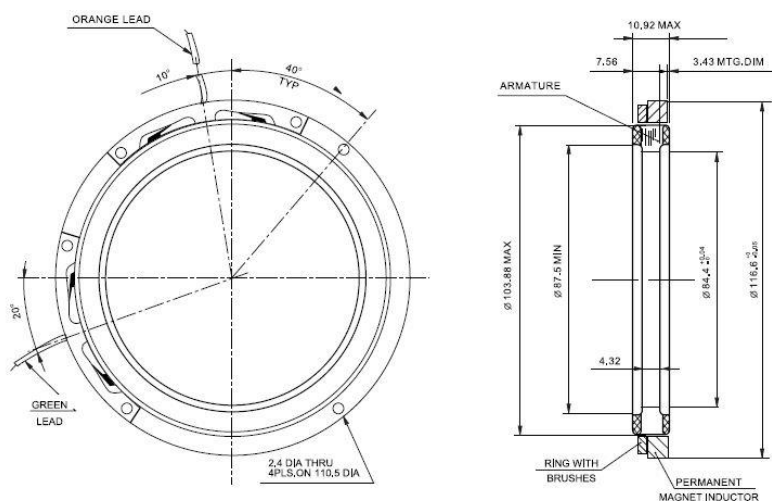
**MTM-116-11B** is a direct-drive DC torque motor. It is a permanent rare earth magnet, with continuous rotation and armature excited. The MTM-116-11B have usage where very high torque to power, volume and weight ratios are needed. These applications include missile and aircraft actuators, diagnostic medical instrumentation, ground and airborne radar antennas.



## Specifications

| Parameters                         | Units              | Values                |
|------------------------------------|--------------------|-----------------------|
| Peak Torque (Tp)                   | Nm                 | 0.99                  |
| No load speed (wNL)                | rad/sec            | 80                    |
| Total breakaway torque (TF)        | Nm                 | $4.24 \times 10^{-2}$ |
| Ripple torque (TR)                 | %(avg.to pk.)      | 5                     |
| Temperature rise                   | °C/Watts           | 3                     |
| Max. allowable winding temperature | °C                 | 150                   |
| Moment of inertia (JM)             | grXcm <sup>2</sup> | 3250                  |
| Weight                             | gr                 | 275                   |
| Damping factor at 25°C (FO)        | Nm/rad/sec         | $1.2 \times 10^{-2}$  |
| Elect. Time constant at 25°C (TE)  | Sec                | $2 \times 10^{-4}$    |

| Parameter               | Unit         | Value | Tolerance |
|-------------------------|--------------|-------|-----------|
| Resistance at 25°C (Rm) | Ohm          | 6.1   | ±12.5%    |
| Torque sensitivity (Kt) | Nm/A         | 0.266 | ±10%      |
| Back EMF constant (Kb)  | Volt/rad/sec | 0.3   | ±10%      |
| Inductance (Lm)         | mH           | 0.9   | ±30%      |

**MTM-116-11B****Drawing**

***All dimensions are in mm***

**For Additional Information**

To learn more about the **MTM-116-11B**  
or other MTC products, contact MTC on  
**+972 4 998 7772** or by email **marketing@mtcind.com**