



## **SPECIFICATIONS**

| Model         | Rated Torque                                | Max Rotation<br>Speed | Max Cycle<br>Rate  |  |
|---------------|---|-----------------------|--------------------|--|
| FRT-E2-100-G1 | (1.0±0.5)X10 <sup>-3</sup> Nm<br>(10±5gfcm) | 50 RPM                | 10 cycles/<br>min. |  |

| Operating   | · · · · · · · · · · · · · · · · · · · |               | Rotating Shaft | Gear       | Oil             |
|-------------|---------------------------------------|---------------|----------------|------------|-----------------|
| Temperature |                                       |               | Material       | Material   | Type            |
| 0 ~ 50°C    | 0.41g                                 | Polycarbonate | Polyacetal     | Polyacetal | Silicone<br>Oil |

Note 1) Rated torque measured at a rotation speed of 20rpm at 23°C

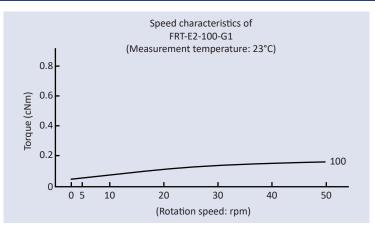
Note 2) Models with gears bear G1 or G2 at the end

Note 3) Torque can be customized by changing the oil viscosity

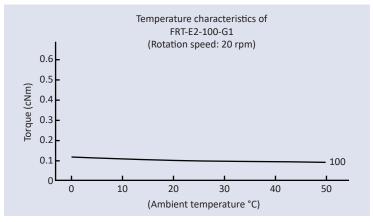
## **GEAR SPECIFICATIONS**

| Model | Туре                  | Tooth<br>Profile | Module | Pressure<br>Angle | Number<br>of Teeth | Pitch Circle<br>Diameter | Weight<br>(damper+gear) |
|-------|-----------------------|------------------|--------|-------------------|--------------------|--------------------------|-------------------------|
| G1    | Standard<br>Spur Gear | Involute         | 0.6    | 20°               | 10                 | ø6                       | 0.41g (0.32g+0.09g)     |

## DAMPING CHARACTERISTICS



■ Speed characteristics: A rotary damper's torque varies according to the rotation speed. In general, as shown in the graph above, the torque increases as the rotation speed increases, and the torque decreases as the rotation speed decreases. In addition, please note that the starting torque slightly differs from the rated torque.



■ Temperature characteristics: A rotary damper's torque varies according to the ambient temperature. In addition, as shown in the graph above, the torque decreases as the ambient temperature increases, and the torque increases as the ambient temperature decreases. This is because the viscosity of the silicone oil inside the damper varies according to the temperature. When the temperature returns to normal, the torque will return to normal as well.