

| SPECIFICATIONS |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Model Rated Torque Damping <br> Direction <br> Max Rotation <br> Speed Max Cycle <br> Rate  <br> FRT-C2-301-G1 $(30 \pm 8.0) \times 10^{-3} \mathrm{Nm}$ <br> $(300 \pm 80 \mathrm{gfcm})$ Both <br> directions <br> 50 RPM 10 cycles/ <br> min.  |  |  |  |  |  |


| Operating <br> Temperature | Weight | Body \& Cap <br> Material | Rotating Shaft <br> Material | Gear <br> Material | Oil <br> Type |
| :---: | :---: | :---: | :---: | :---: | :---: |
| $0 \sim 50^{\circ} \mathrm{C}$ | 3.5 g | Polycarbonate | Polyacetal | Polyacetal | Silicone <br> Oil |

Note 1) Rated torque measured at a rotation speed of 20 rpm at $23^{\circ} \mathrm{C}$
Note 2) Gear model number has G1 at the end
Note 3) Torque can be customized by changing the oil viscosity

- There are dampers that generate torque in both directions and one-way torque in the clockwise direction or counter clockwise direction when the rotating axle is viewed from the top


## GEAR SPECIFICATIONS

| Model | Type | Tooth <br> Profile | Module | Pressure <br> Angle | Number <br> of Teeth | Pitch Circle <br> Diameter | Weight <br> (damper+gear) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| G1 | Shifted <br> Spur Gear | Involute | 0.8 | $20^{\circ}$ | 11 | $\varnothing 8.8$ | $3.5 \mathrm{~g}(3.2 \mathrm{~g}+0.3 \mathrm{~g})$ |

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.

