

| Model | Max Torque | Max Reverse <br> Torque | Max Rotation <br> Speed |
| :---: | :---: | :---: | :---: |
| FFD-25FS-R103 | $1 \pm 0.1 \mathrm{Nm}$ <br> $(10 \pm 1 \mathrm{kgfcm})$ | Clockwise | 30 RPM |


| Max Cycle <br> Rate | Operating <br> Temperature | Weight | Body \& Cap <br> Material | Cap <br> Color |
| :---: | :---: | :---: | :---: | :---: |
| 13 cycles $/ \min$. | $-10 \sim 60^{\circ} \mathrm{C}$ <br> $(90 \% \mathrm{RH})$ | $13 \pm 2 \mathrm{~g}$ | POM | Black |

* Rated torque is measured at a rotation speed of 20 rpm at $20-25^{\circ} \mathrm{C}$


## HOW TO USE THE DAMPER

1. The damper generates torque in both the clockwise and counter-clockwise directions. (A one-way clutch is built in inside the damper.)
2. Please make sure that the shaft attached to a damper has a bearing, as the damper itself is not fitted with one.

| Shaft's external dimensions | $\varnothing 6{ }_{-0.03}^{0}$ |
| :--- | :---: |
| Surface hardness | HRC55 or higher |
| Quenching depth | 0.5 mm or higher |
| Surface roughness | 1.0 Z or lower |
|  |  |
| Chamfer end <br> (Damper insertion side) <br> (orRO.2~RO.3) |  |

3. It can be used as a free-stop for a load that is smaller than the rated torque.
4. Please refer to the recommended dimensions in the chart when creating a shaft for attachment to the damper. Using a shaft outside of the recommended dimensions may cause the shaft to slip out.
5. To insert a shaft into the damper, insert the shaft while spinning it in the opposite direction of the damper's direction of torque generation.
(Do not force the shaft in from a regular direction. This may damage the built-in oneway clutch.)
