



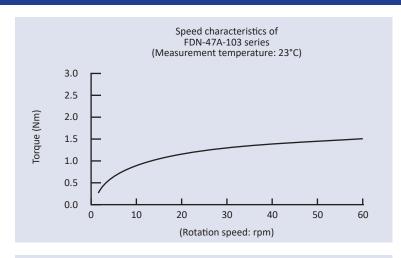
## **SPECIFICATIONS**

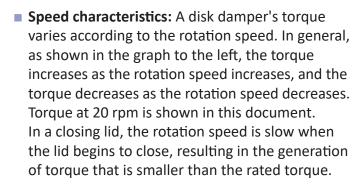
Model	Rated Torque	Damping Direction	Max Rotation Speed
FDN-47A-L103	1±0.2Nm (10±2kgfcm)	Counter- clockwise	50 RPM

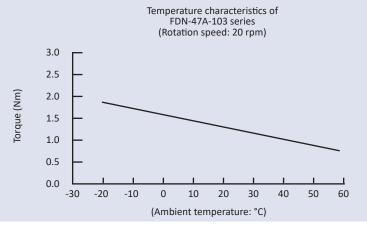
Max Cycle	Operating	Weight	Body	Rotor (Shaft)	Oil
Rate	Temperature		Material	Material	Type
12 cycles/min.	-10 ~ 50°C	55g	Iron	Nylon/glass fiber composite	Silicone Oil

Note) Rated torque is measured at a rotation speed of 20rpm at 23°C±3°C

## **DAMPING CHARACTERISTICS**



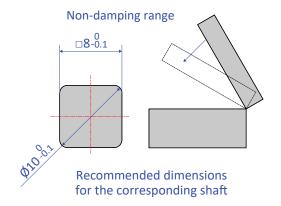




Temperature characteristics: Damper torque (rated torque in this document) varies according to the ambient temperature. As the temperature increases, the torque decreases, and as the temperature decreases, the torque increases. This is because the viscosity of the silicone oil inside the damper varies according to the temperature. The graph to the left illustrates the temperature characteristics.

## **USING THE DAMPER**

Shafts external dimensions	Ø6mm - Ø5.97mm		
Surface hardness	HRC55 or higher		
Quenching depth	0.5mm or higher		
Surface roughness	1.0Z or lower		
Chamfer end (Damper insertion side)	CO.2~CO.3 (or RO.2~RO.3)		



- FDN-47A dampers may generate torque clockwise or counter-clockwise.
- Please make sure that a shaft attached to a damper has a bearing, as the damper itself is not fitted with one.
- Please refer to the chart when creating a shaft for the FDN-47A disk damper. Not using the recommended shaft dimensions may cause the shaft to slip out.
- To insert a shaft into FDN-47A, insert the shaft while spinning it in the idling direction of the one-way clutch. (Do not force the shaft in from the regular direction. This may damage the one-way clutch.)