



### SPECIFICATIONS

Model	Rated Torque	Max Rotation Speed	Max Cycle Rate
FRT-G2-450-G3	$(4.5 \pm 1) \times 10^{-3} \text{Nm}$ ( $45 \pm 10 \text{gfcm}$ )	50 RPM	10 cycles/min.

Operating Temperature	Weight	Body & Cap Material	Rotating Shaft Material	Gear Material	Oil Type
0 ~ 50°C	0.9g	Polycarbonate	Polyacetal	Polyacetal	Silicone Oil

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

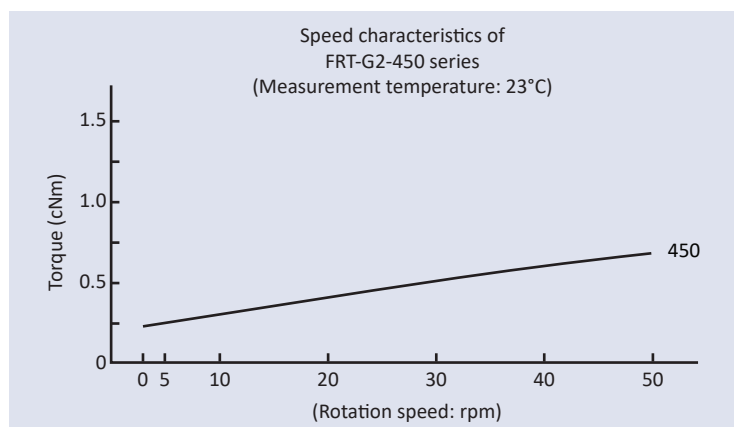
Note 2) Models with gears bear G1, G2 or G3 at the end of their model numbers

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

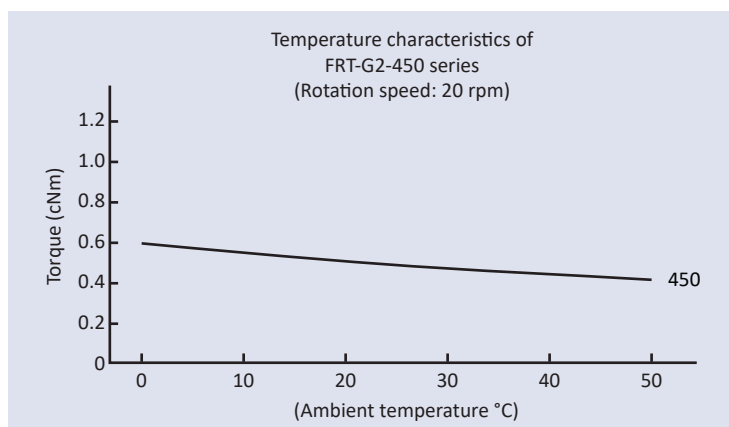
### GEAR SPECIFICATIONS

Model	Type	Tooth Profile	Module	Pressure Angle	Number of Teeth	Pitch Circle Diameter	Addendum Modification Coefficient	Weight (damper+gear)
G3	Standard Spur Gear	Involute	0.8	20°	11	ø8.8	—	0.9g (0.6g+0.3g)

### 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.