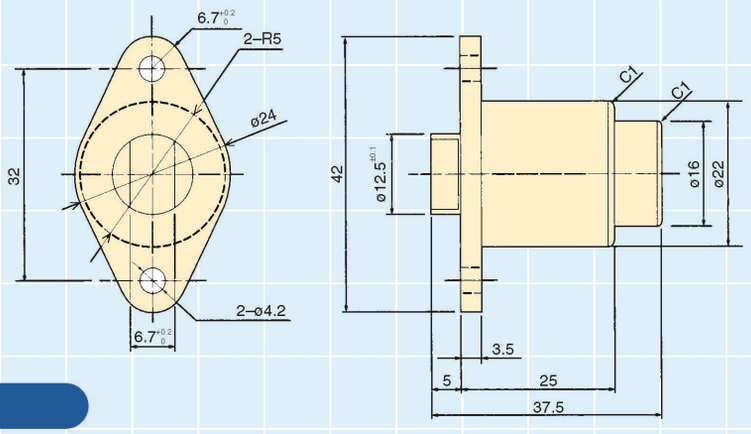
Soft Silent Safety

FRX-A1 Series

RoHS Compliant

Leading Damper [Uni-Directional] Fixed



<Specifications>

Model	Rated torque	Damping direction
FRX-A1-R203	2 ± 0.5 N·m (20 ± 5 kgf·cm)	Clockwise
FRX-A1-L203		Counter-clockwise

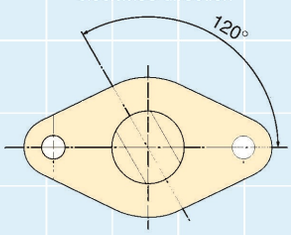
Note) Rated torque is measured at 23±2°C

*Max. rotation speed	50rpm
*Max. cycle rate	10 cycle/min
*Operating temperature	0~50°C
*Weight	16±2g
*Main body material	Polyacetal (POM)
*Rotating shaft material	Polyphenylene Sulphide (PPS)
*Oil type	Silicone oil

How to Use the Damper

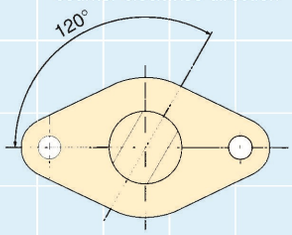
1. There are two types of damper torque: clockwise and counter-clockwise.
2. Please make sure that the rotating shaft has a bearing, as the damper itself is not fitted with one.
3. When connecting the rotating shaft to the damper, please ensure a tight fit between them. Without a tight fit, the lid may not slow down properly when closing.
4. Do not use the damper as a stopper. An external stopper must be attached at the rotation completion position.
5. Please see the diagrams to the right for the damper's working angles. Rotating this damper beyond this angle will cause damage to the damper.

Torque generated in clockwise direction



FRX-A1-R203

Torque generated in counter-clockwise direction



FRX-A1-L203

Working angle of a leading damper

Damper Characteristics

1. Temperature characteristics
   A leading damper's torque varies according to the operating environment. In general, as shown in the graph to the right, the torque decreases as the ambient temperature increases, and the torque increases as the ambient temperature decreases. This is because the viscosity of silicone oil inside the damper varies according to the temperature. When the temperature returns to normal, the torque will return to normal as well.