

Friction Damper

Fixed Type Bi-Directional Uni-Directional
Adjustable type Self-adjusting

FFD-30FS/FW/SS/SW Series

RoHS Compliant

● Products specification might be changed without notice.



Specifications

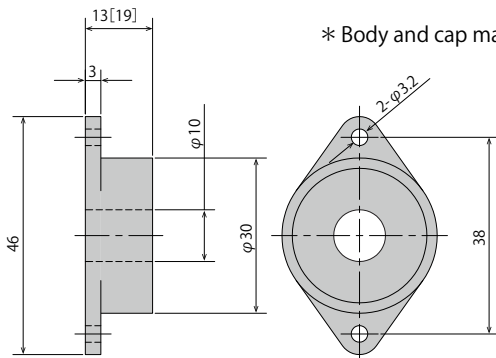
Model	Max. torque	Max. reverse torque	Model	Max. torque	Max. reverse torque
FFD-30FS-R102	0.1±0.01 [N·m] (1±0.1 kgf·cm)	Clockwise	FFD-30SS-R102	0.1±0.01 [N·m] (1±0.1 kgf·cm)	Clockwise
FFD-30FS-L102		Counter-clockwise	FFD-30SS-L102		Counter-clockwise
FFD-30FS-R502	0.5±0.05 [N·m] (5±0.5 kgf·cm)	Clockwise	FFD-30SS-R502	0.5±0.05 [N·m] (5±0.5 kgf·cm)	Clockwise
FFD-30FS-L502		Counter-clockwise	FFD-30SS-L502		Counter-clockwise
FFD-30FS-R103	1±0.1 [N·m] (10±1 kgf·cm)	Clockwise	FFD-30SS-R103	1±0.1 [N·m] (10±1 kgf·cm)	Clockwise
FFD-30FS-L103		Counter-clockwise	FFD-30SS-L103		Counter-clockwise
FFD-30FS-R153	1.5±0.15 [N·m] (15±1.5 kgf·cm)	Clockwise	FFD-30SS-R153	1.5±0.15 [N·m] (15±1.5 kgf·cm)	Clockwise
FFD-30FS-L153		Counter-clockwise	FFD-30SS-L153		Counter-clockwise
FFD-30FW-R153	1.5±0.15 [N·m] (15±1.5 kgf·cm)	Clockwise	FFD-30SW-R153	1.5±0.15 [N·m] (15±1.5 kgf·cm)	Clockwise
FFD-30FW-L153		Counter-clockwise	FFD-30SW-L153		Counter-clockwise
FFD-30FW-R203	2±0.2 [N·m] (20±2 kgf·cm)	Clockwise	FFD-30SW-R203	2±0.2 [N·m] (20±2 kgf·cm)	Clockwise
FFD-30FW-L203		Counter-clockwise	FFD-30SW-L203		Counter-clockwise
FFD-30FW-R253	2.5±0.25 [N·m] (25±2.5 kgf·cm)	Clockwise	FFD-30SW-R253	2.5±0.25 [N·m] (25±2.5 kgf·cm)	Clockwise
FFD-30FW-L253		Counter-clockwise	FFD-30SW-L253		Counter-clockwise
FFD-30FW-R303	3±0.3 [N·m] (30±3 kgf·cm)	Clockwise	FFD-30SW-R303	3±0.3 [N·m] (30±3 kgf·cm)	Clockwise
FFD-30FW-L303		Counter-clockwise	FFD-30SW-L303		Counter-clockwise

*) Rated torque is measured at a rotation speed of 20rpm at 20°

25°C

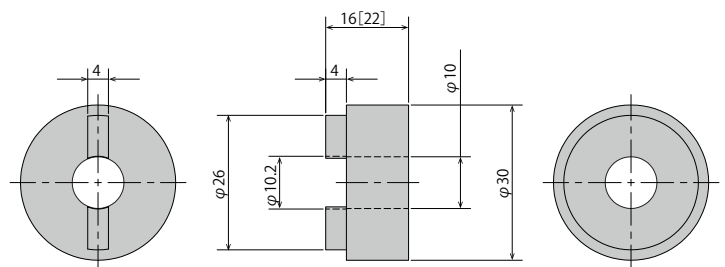
- * Max. rotation speed 30rpm
- * Max. cycle rate 13cycle/min
- * Operating temperature - 10 ~ 60°C
(90%RH)
- * Body and cap material POM

- * Cap colour R:Black L:White
- * Weight FFD-30FS 17 ± 2g
- FFD-30FW 31 ± 2g
- FFD-30SS 16 ± 2g
- FFD-30SW 30 ± 2g



FFD-30FS-****

(Dimension of FFD-30FW-**** are in [])



FFD-30SS-****

(Dimension of FFD-30SW-**** are in [])

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	$\varnothing 10_{-0.03}^0$
Surface hardness	HRC55 or higher
Quenching depth	0.5mm or higher
Surface roughness	1.0Z or lower
Chamfer end (Damper insertion side)	 C0.2~C0.3 (orR0.2~R0.3)

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 below 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