

Friction Damper

Bi-Directional Uni-Directional
 Adjustable type Self-adjusting

Fixed Type

FFD-28FS/FW/SS/SW Series

RoHS Compliant

●Products specification might be changed without notice.



Specifications

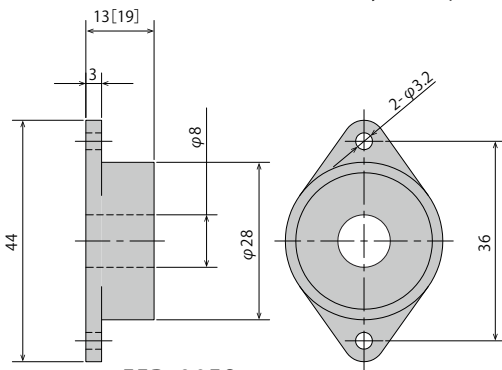
Model	Max. torque	Max. reverse torque	Model	Max. torque	Max. reverse torque
FFD-28FS-R102	0.1±0.01 [N·m]	Clockwise	FFD-28SS-R102	0.1±0.01 [N·m]	Clockwise
FFD-28FS-L102	(1±0.1 kgf·cm)	Counter-clockwise	FFD-28SS-L102	(1±0.1 kgf·cm)	Counter-clockwise
FFD-28FS-R502	0.5±0.05 [N·m]	Clockwise	FFD-28SS-R502	0.5±0.05 [N·m]	Clockwise
FFD-28FS-L502	(5±0.5 kgf·cm)	Counter-clockwise	FFD-28SS-L502	(5±0.5 kgf·cm)	Counter-clockwise
FFD-28FS-R103	1±0.1 [N·m]	Clockwise	FFD-28SS-R103	1±0.1 [N·m]	Clockwise
FFD-28FS-L103	(10±1 kgf·cm)	Counter-clockwise	FFD-28SS-L103	(10±1 kgf·cm)	Counter-clockwise
FFD-28FW-R103	1±0.1 [N·m]	Clockwise	FFD-28SW-R103	1±0.1 [N·m]	Clockwise
FFD-28FW-L103	(10±1 kgf·cm)	Counter-clockwise	FFD-28SW-L103	(10±1 kgf·cm)	Counter-clockwise
FFD-28FW-R153	1.5±0.15 [N·m]	Clockwise	FFD-28SW-R153	1.5±0.15 [N·m]	Clockwise
FFD-28FW-L153	(15±1.5 kgf·cm)	Counter-clockwise	FFD-28SW-L153	(15±1.5 kgf·cm)	Counter-clockwise
FFD-28FW-R203	2±0.2 [N·m]	Clockwise	FFD-28SW-R203	2±0.2 [N·m]	Clockwise
FFD-28FW-L203	(20±2 kgf·cm)	Counter-clockwise	FFD-28SW-L203	(20±2 kgf·cm)	Counter-clockwise

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

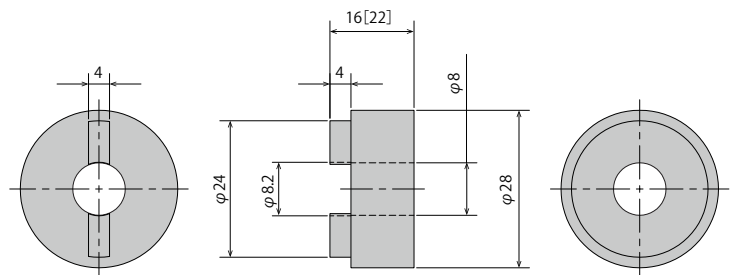
- * Max. rotation speed 30rpm
- * Max. cycle rate 13cycle/min
- * Operating temperature - 10 ~ 60°C
(90%RH)
- * Body and cap material POM

25°C

- * Cap colour R:Black L:White
- * Weight FFD-28FS 14 ± 2g
- FFD-28FW 27 ± 2g
- FFD-28SS 14 ± 2g
- FFD-28SW 25 ± 2g



FFD-28FS-****
 (Dimension of FFD-28FW-**** are in [])



FFD-28SS-****
 (Dimension of FFD-28SW-**** 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.

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.

Shaft's external dimensions	φ 8 ⁰ _{-0.03}
Surface hardness	HRC55 or higher
Quenching depth	0.5mm or higher
Surface roughness	1.0Z or lower
Chamfer end (Damper insertion side)	

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.)