Friction Damper

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

FFD-25FS/FW/SS/SW Series

RoHS Compliant

●Products specification might be changed without notice.

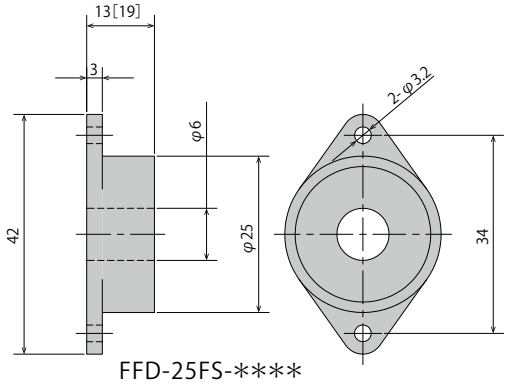
Specifications

Model	Max. torque	Max. reverse torque
FFD-25FS-R102	0.1±0.01〔N•m〕	Clockwise
FFD-25FS-L102	(1±0.1 kgf•cm)	Counter-clockwise
FFD-25FS-R502	0.5±0.05〔N•m〕	Clockwise
FFD-25FS-L502	(5±0.5 kgf•cm)	Counter-clockwise
FFD-25FS-R103	1±0.1〔N•m〕	Clockwise
FFD-25FS-L103	(10±1 kgf•cm)	Counter-clockwise
FFD-25FW-R103	1±0.1〔N•m〕	Clockwise
FFD-25FW-L103	(10±1 kgf•cm)	Counter-clockwise
FFD-25FW-R153	1.5±0.15〔N•m〕	Clockwise
FFD-25FW-L153	(15±1.5 kgf•cm)	Counter-clockwise
FFD-25FW-R203	2±0.2〔N•m〕	Clockwise
FFD-25FW-L203	(20±2 kgf•cm)	Counter-clockwise

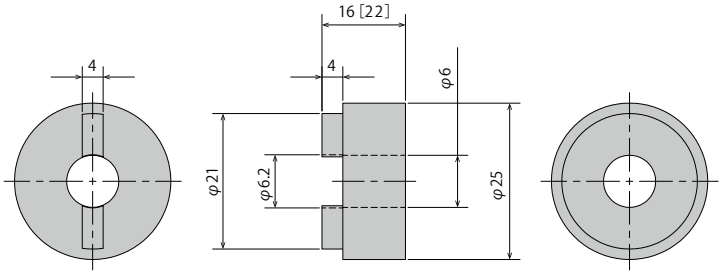
Model	Max. torque	Max. reverse torque
FFD-25SS-R102	0.1±0.01〔N•m〕	Clockwise
FFD-25SS-L102	(1±0.1 kgf•cm)	Counter-clockwise
FFD-25SS-R502	0.5±0.05〔N•m〕	Clockwise
FFD-25SS-L502	(5±0.5 kgf•cm)	Counter-clockwise
FFD-25SS-R103	1±0.1〔N•m〕	Clockwise
FFD-25SS-L103	(10±1 kgf•cm)	Counter-clockwise
FFD-25SW-R103	1±0.1〔N•m〕	Clockwise
FFD-25SW-L103	(10±1 kgf•cm)	Counter-clockwise
FFD-25SW-R153	1.5±0.15〔N•m〕	Clockwise
FFD-25SW-L153	(15±1.5 kgf•cm)	Counter-clockwise
FFD-25SW-R203	2±0.2〔N•m〕	Clockwise
FFD-25SW-L203	(20±2 kgf•cm)	Counter-clockwise

*) Rated torque is measured at a rotation speed of 20rpm at 20˜25℃

∗Max. rotation speed 30rpm
∗Max. cycle rate 13cycle/min
∗Operating temperature −10～60℃ (90%RH)
∗Body and cap material POM
∗Cap colour R:Black L:White
∗Weight FFD-25FS 13±2g
FFD-25FW 24±2g
FFD-25SS 12±2g
FFD-25SW 23±2g



FFD-25FS-∗∗∗∗
(Dimension of FFD-25FW-∗∗∗∗ are in [ ])

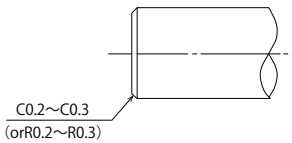


FFD-25SS-∗∗∗∗
(Dimension of FFD-25SW-∗∗∗∗ are in [ ])

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	$\varphi\ 6_{-0.03}^{0}$
Surface hardness	HRC55 or higher
Quenching depth	0.5mm or higher
Surface roughness	1.0Z or lower
Chamfer end (Damper insertion side)	

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 oneway clutch.)