

FFD

Precise braking without oil

Continuous Rotation

Damping torque 0.1 Nm to 3 Nm

In comparison to other rotary dampers, the ACE FFD product family does not need any fluid to generate the damping torque, but rather works on the principle of friction. That means temperature or speed changes have virtually no influence on the damping torque. The FFD is available in two different body variants and two types of bearings. ACE rotary dampers are maintenance-free and ready-to-install.



Technical Data

Construction size: Ø 25 mm to 30 mm

Rotational speed max.: 30 rpm

Lifetime: 30,000 cycles (1 cycle = 360° left-hand, 360° right-hand). Even after this time, the dampers still produce over approx. 80 % of their original damping moment. The service life may be significantly higher or lower, depending on the application.

Operating temperature range: -10 °C to +60 °C

Material: Outer body: Plastic

Mounting: In any position

Information to the shaft: Ø +0 / -0.03

Hardness > HRC55, surface smoothness RZ<1µm

Mounting information: Turn the shaft in the opposite direction to the brake direction to avoid damaging the freewheel mount. No axial or radial forces may be induced via the shaft.

Safety instructions: Do not use rotary dampers as supports. Provide an external guide or support.

On request: Special designs available on request.

Ordering Example

FFD-25-FS-L-102

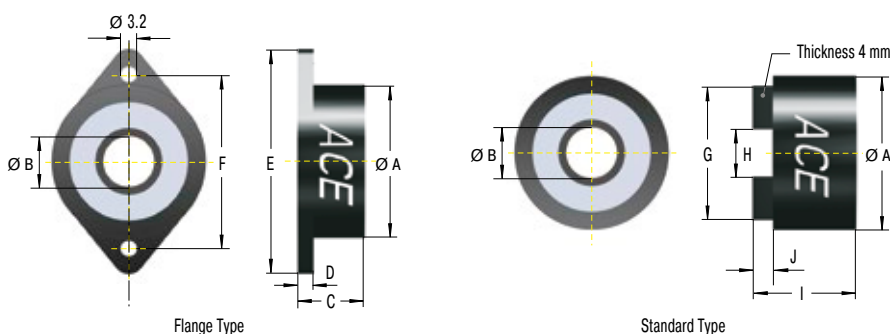
Friction Damper _____
Body Ø _____
Mounting Style (flange = F, standard = S) _____
Model (standard = S, high = W) _____
Damping Direction (right = R, left = L) _____
Damping Torque see chart _____

Complete details required when ordering

Damping torque 102 = 0.1 Nm
Damping torque 502 = 0.5 Nm
Damping torque 103 = 1.0 Nm
Damping torque 153 = 1.5 Nm
Damping torque 203 = 2.0 Nm
Damping torque 253 = 2.5 Nm
Damping torque 303 = 3.0 Nm
Note dimension C.

Model Type Prefix

FS = Mounting Style with Flange, Model standard
FW = Mounting Style with Flange, Model high
SS = Mounting Style Standard, Model standard
SW = Mounting Style Standard, Model high
Combinations with W for higher damping torque.



Performance and Dimensions

TYPES	¹ Damping torque Nm	Damping direction	Model	A mm	B mm	C mm	D mm	E mm	F mm	G mm	H mm	I mm	J mm	Weight kg
FFD-25SS	0.1/0.5/1.0	right or left	SS	25	6	13	3	42	34	21	6.2	16	4	0.012
FFD-28SS	0.1/0.5/1.0	right or left	SS	28	8	13	3	44	36	24	8.2	16	4	0.014
FFD-30SS	0.1/0.5/1.0/1.5	right or left	SS	30	10	13	3	46	38	26	10.2	16	4	0.016
FFD-25FS	0.1/0.5/1.0	right or left	FS	25	6	13	3	42	34	21	6.2	16	4	0.013
FFD-28FS	0.1/0.5/1.0	right or left	FS	28	8	13	3	44	36	24	8.2	16	4	0.014
FFD-30FS	0.1/0.5/1.0/1.5	right or left	FS	30	10	13	3	46	38	26	10.2	16	4	0.017
FFD-25SW	1.0/1.5/2.0	right or left	SW	25	6	19	3	42	34	21	6.2	22	4	0.023
FFD-28SW	1.0/1.5/2.0	right or left	SW	28	8	19	3	44	36	24	8.2	22	4	0.025
FFD-30SW	1.5/2.0/2.5/3.0	right or left	SW	30	10	19	3	46	38	26	10.2	22	4	0.030
FFD-25FW	1.0/1.5/2.0	right or left	FW	25	6	19	3	42	34	21	6.2	22	4	0.024
FFD-28FW	1.0/1.5/2.0	right or left	FW	28	8	19	3	44	36	24	8.2	22	4	0.027
FFD-30FW	1.5/2.0/2.5/3.0	right or left	FW	30	10	19	3	46	38	26	10.2	22	4	0.031

¹ The indicated damping torque refers to a rotational speed of 20 rpm and an ambient temperature of 23 °C.