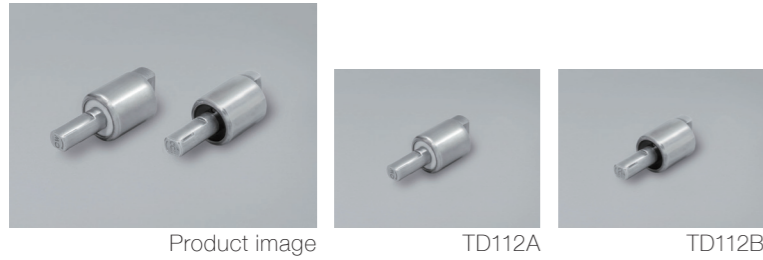


Product lineup



Features

- Compact design made with zinc alloy
- Shaft is thinner than that of plastic rotary dampers
- High rigidity achieved by the use of zinc alloy
- High torque up to 3 N·m
- Using the attachment, the form of TD112 will be the same as TD99

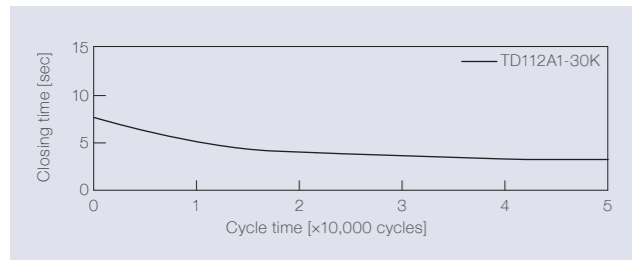
Product name	Torque [N·m] (lbf·in)	Damping direction	Cap color
TD112A1-15K	1.5 (13.28)	CW	Natural
TD112A1-20K	2.0 (17.70)		
TD112A1-25K	2.5 (22.13)		
TD112A1-30K	3.0 (26.55)		

Product name	Torque [N·m] (lbf·in)	Damping direction	Cap color
TD112B1-15K	1.5 (13.28)	CCW	Black
TD112B1-20K	2.0 (17.70)		
TD112B1-25K	2.5 (22.13)		
TD112B1-30K	3.0 (26.55)		

Long shaft is also available (Shaft length 15mm → 22mm) The products with the attachment have "-AT1" at the end of the product name.

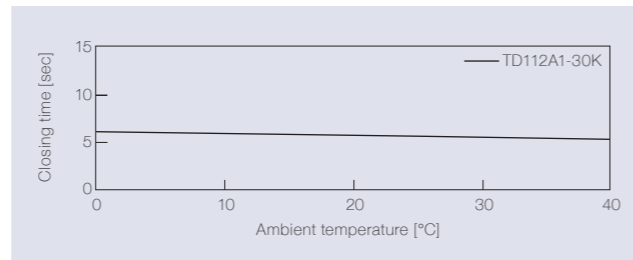
Product specifications

Durability



Torque	3.0 N·m (26.55 lbf·in)
Radial load	N/A
Angle range of closing time	70 to 0 deg.
Temperature	23 ± 2°C (73.4 ± 35.6°F)
Durability	50,000 cycles

Temperature characteristics



Measured according to the performance management testing method shown below after leaving in each designated ambient temperature for over one hour.

Performance management testing method

As the torque of partial rotation angle dampers is not consistent, the closing time measurement jig is used for the performance tests.

[Operation during measurement]

(Secures the housing of a rotary damper and moves its shaft)

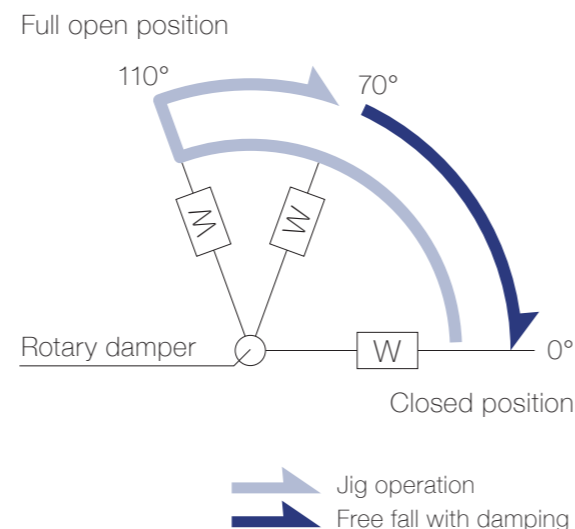
All rotary dampers are managed by the following closing time test.

Test mode [110° → 70° (Pause) → (Free fall with damping) → 0°]

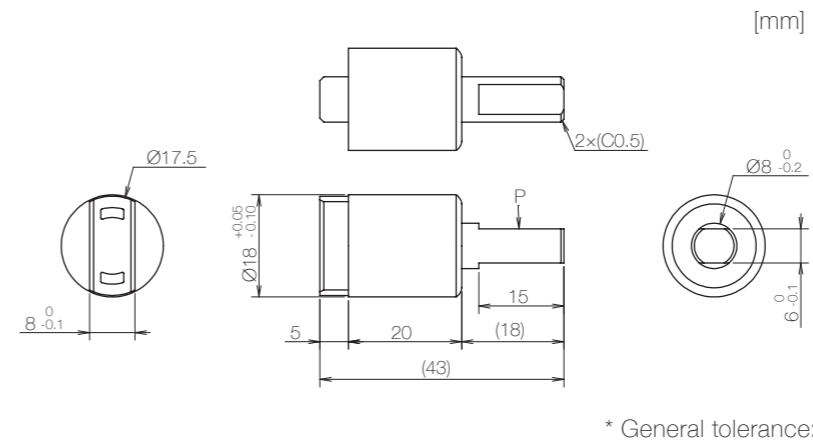
* Horizontal plane: 0°

Inspection specification before shipping

Type	Preset torque [N·m] (lbf·in)	Closing time
15K	1.5 (13.28)	3 to 10 sec
20K	2.0 (17.70)	
25K	2.5 (22.13)	
30K	3.0 (26.55)	



Product information



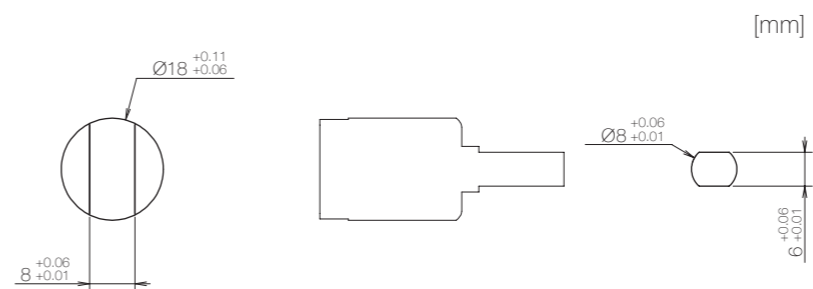
* General tolerance: ±0.3

- Opening angle: 110°
- Product weight: Approx. 30 g
- Allowable radial load (P): 19.6 N

Main materials

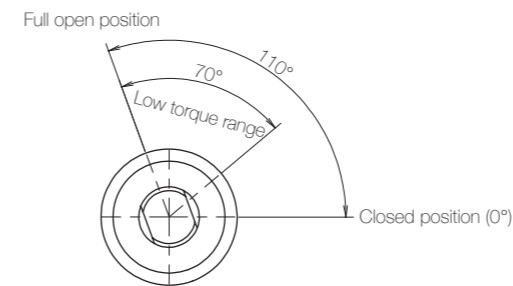
Housing	Zinc alloy(ZDC)
Cap	Plastic (PBT)
Shaft	Zinc alloy (ZDC)

Dimensions related to mounting

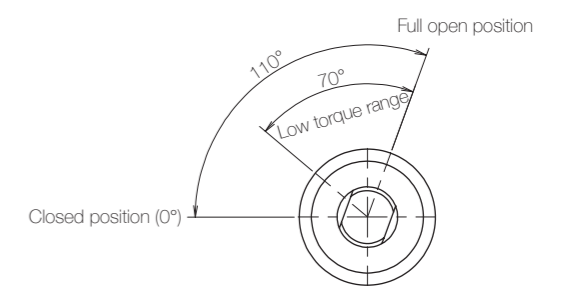


Opening angle

TD112A



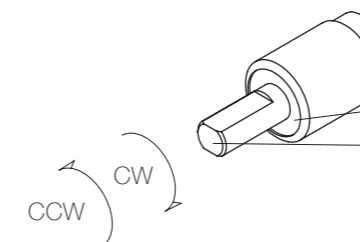
TD112B



* Shaft position at the time of shipping: Closed position

Damping directions

Rotation directions of the shaft to which torque is applied



* Housing secured / Shaft rotatable

Damping direction	Cap color
CW	Natural
CCW	Black

Damping direction	Engraved mark
CW	CW
CCW	CCW