TD102 Continuous rotation

RoHS compliant

Product lineup

Product image

TD102W1-40

TD102W1-150

Features

- Outer mounting diameter of Ø 14.9 mm (Small diameter and thin type)
- Bidirectional rotary damper
- The mounting flange corresponds to the bottom face
- The shaft colors enable identification of the torque

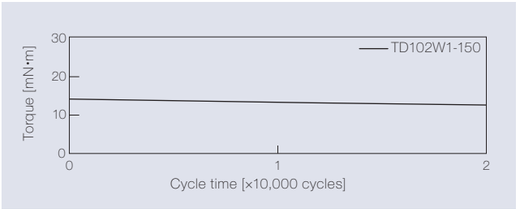
Product name	Torque [mN·m] (lbf·in)	Damping direction	Shaft color
TD102W1-25	2.5 ± 1.0 (0.02 ± 0.01)	Bidirectional	White
TD102W1-40	4.0 ± 1.0 (0.04 ± 0.01)		Yellow
TD102W1-60	6.0 ± 1.5 (0.05 ± 0.01)		Purple

Product name	Torque [mN·m] (lbf·in)	Damping direction	Shaft color
TD102W1-80	8.0 ± 1.5 (0.07 ± 0.01)	Bidirectional	Green
TD102W1-120	12.0 ± 2.0 (0.11 ± 0.02)		Black
TD102W1-150	15.0 ± 2.5 (0.13 ± 0.02)		Red

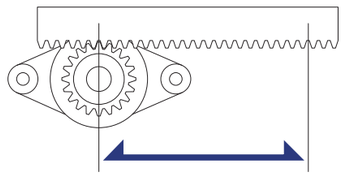
The torque of all rotary dampers is measured at a rotational speed of 20 min^{-1}.
The products without gear have "(G-L)" at the end of the product name.
One direction rotary dampers are not available.

Product specifications

Durability

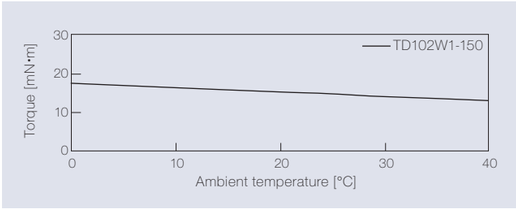


Measurement of torque at a rotation speed of 20 min^{-1}



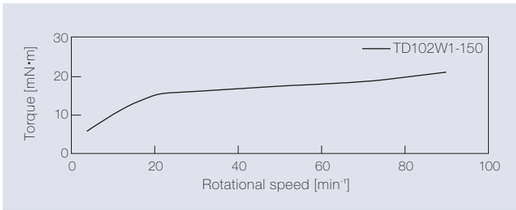
Test method	Rack-and-pinion
Travel speed	16 mm / sec
Pinion rotation speed	30 min^{-1}
Damper rotation frequency	Two rotation in the CW and CCW directions, respectively
Durability	20,000 cycles

Temperature characteristics



The torque achieved during rotation at 20 min^{-1} in the designated ambient temperature is shown.

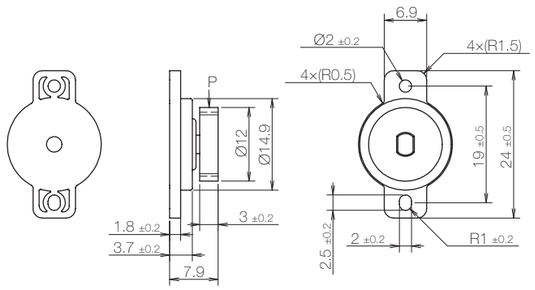
Speed characteristics



Product information

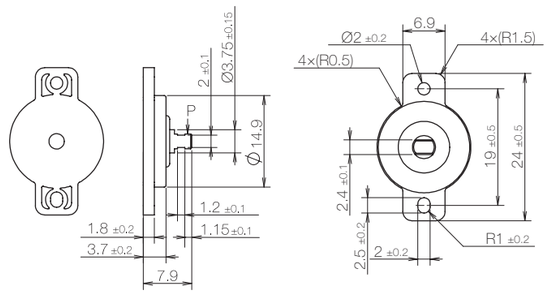
TD102

[mm]



TD102 (G-L)

[mm]



* General tolerance: ±0.3

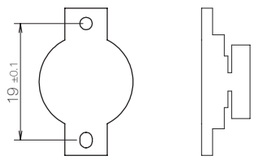
Gear specifications

Type	Standard spur gear
Tooth profile	Involute and full depth tooth
Module	0.8
Pressure angle	20°
Number of teeth	13
P.C.D[mm]	Ø 10.4
Addendum modification	–
Base tangent length/Number	3.68 / 2

- Product weight: Approx. 1.5 g (With gear)
- Allowable radial load (P): 2.0 N

Main materials

Housing	Plastic (PC)
Cap	Plastic (PC)
Gear	Plastic (POM)
Shaft	Plastic (POM)

Dimensions related to mounting

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