

Vane damper

Also called limited angle damper, inside has two vanes attached to the rotation shaft, acting as a valve. When rotating the shaft, the vanes will also move at the same time, creating resistance in one direction only. And the silicone oil flows gradually through the one-way valve, generating rotational torque.

Due to the internal structure, the vane damper has a maximum working angle, eg. 110°, it is up to different damper designs.

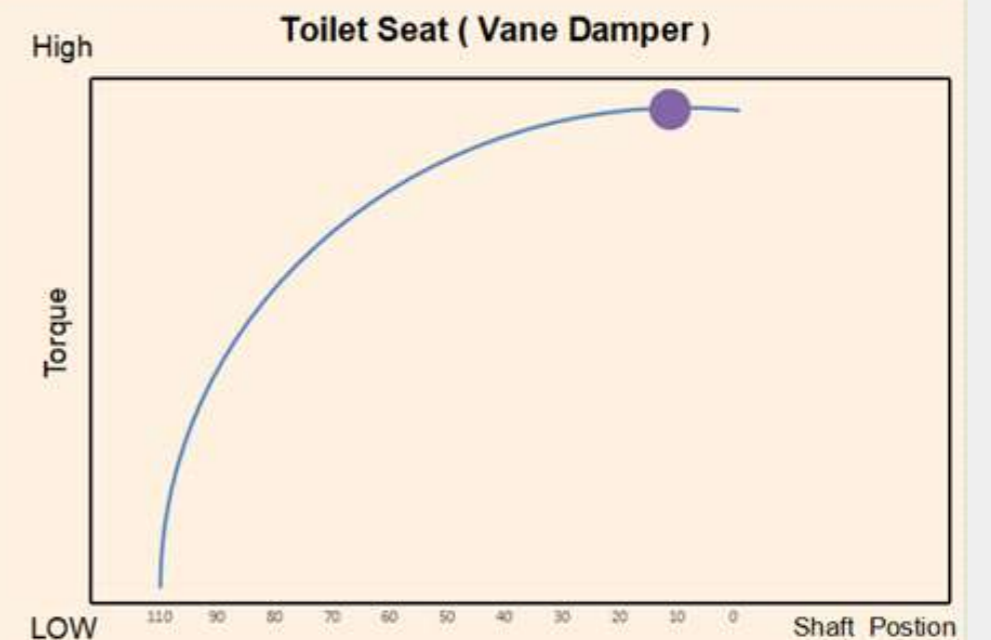
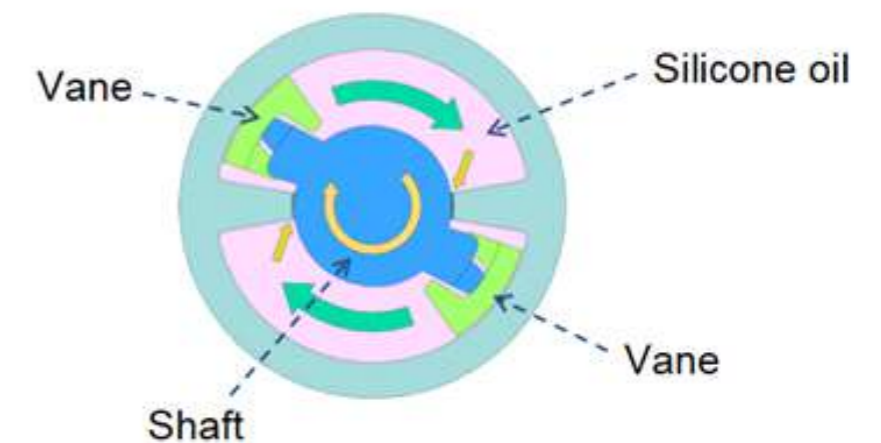
Torque: It changes at every angle, like the toilet seat damper, it reaches max torque at 0 degrees.

Damping direction: The limited angle damper is the one-way damper, which means it has damping in one direction and almost no damping in another direction.

Note:

1. It is best to minimize the assembly clearance of the damper and the counterpart as if the assembly clearance is too large, it will affect the damping effect.
2. The vane damper can NOT be used as a stopper.

CW Direction Damping



Washing machine

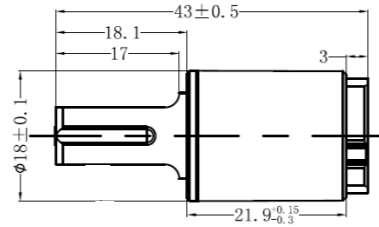
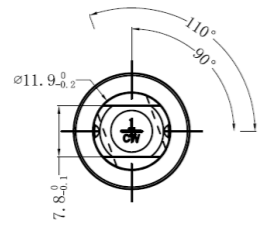


Toilet seat



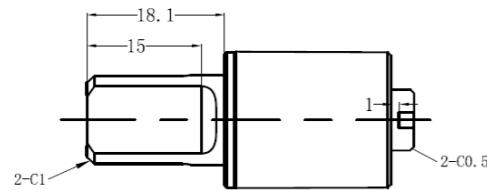
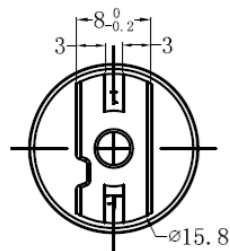
Chafing dishes

PR-T095A-One way (Φ18mm)

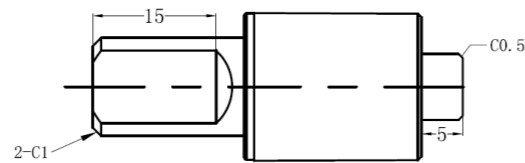
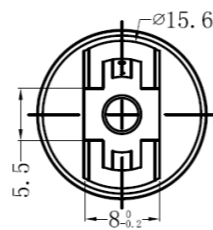
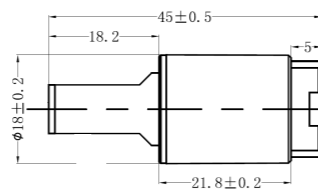
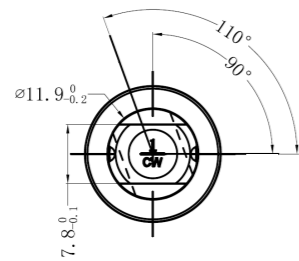


Torque	5-30KGF.CM
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Working Angle	110°
Static Storage Temperature	-40°C - 110°C
Dynamic Working Temperature	-5°C - 50°C
Body Material	PBT/ PA66
Shaft Material	PA66/ Zinc Alloy
Oil	Silicone Oil



PR-T095C-One way (Φ18mm)

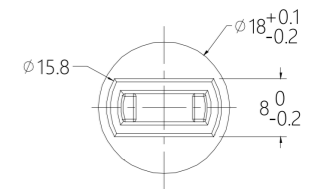
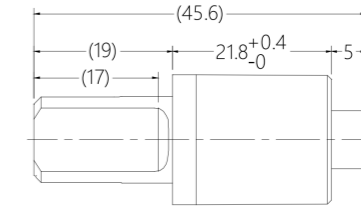
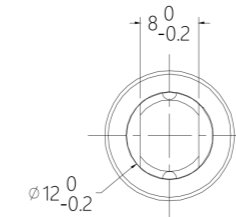
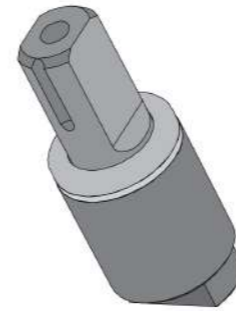


Torque	5-45 KG.F.CM
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Working Angle	Static Storage Temperature	Dynamic Working Temperature	Body Material	Shaft Material	Oil
110°	-40°C - 110°C	-5°C - 50°C	PBT/ PA66	PA66/ Zinc Alloy	Silicone Oil

Remarks:
Compared with T095C, T095F is different in working angle 0-180°; T095M is of shaft diameter 7.8±0.1mm.

JP-DN18A-One way(Φ18mm)

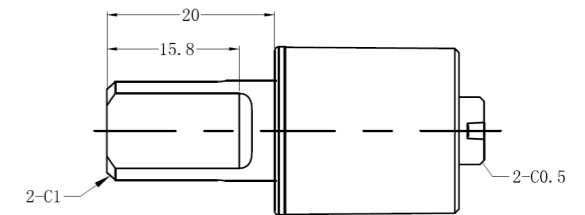
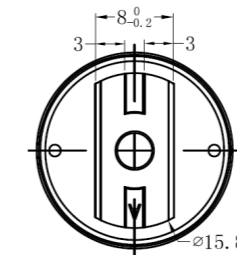
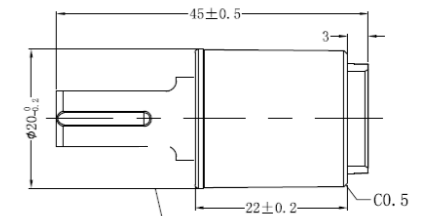
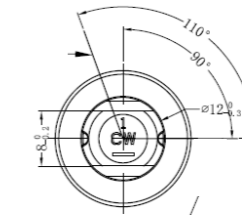


Torque	8-25 KG.F.CM
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Working Angle	Static Storage Temperature	Dynamic Working Temperature	Body Material	Shaft Material	Oil
110°	-20°C - 80°C	-10°C - 50°C	PBT	PA	Silicone Oil

Remarks:
Compared with DN18A, the body length of DN18Q is 19.8mm, and the shaft length is 21mm.

PR-T098D-One way(Φ20mm)

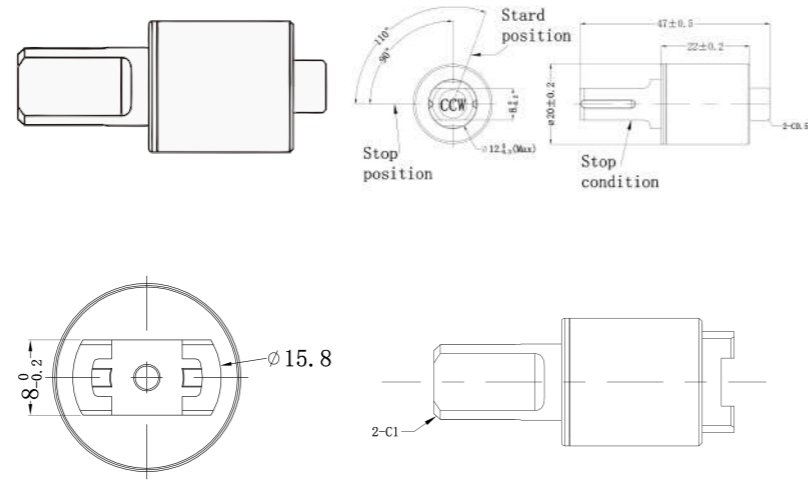


Torque	8-55 KG.F.CM
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Working Angle	Static Storage Temperature	Dynamic Working Temperature	Body Material	Shaft Material	Oil
110°	-40°C - 110°C	-5°C - 50°C	PBT/ PA66	PA66/ Zinc Alloy	Silicone Oil

Remarks:
Compared with T098D, the body diameter of T098A is 19.6mm. The end attachment of T098C is 5mm in height.

PR-T098E-One way(Φ20mm)

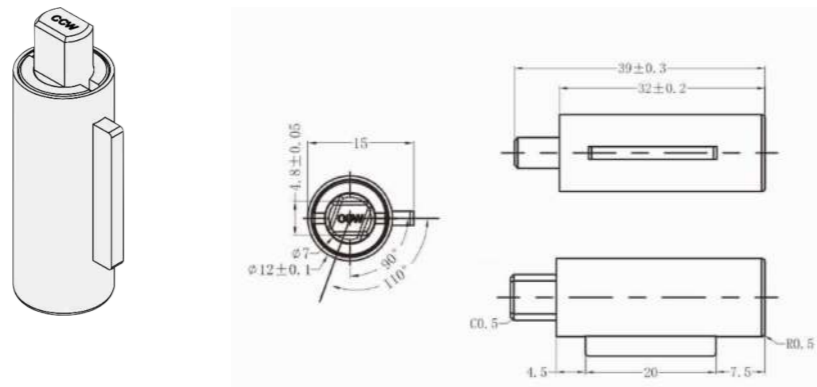


Torque

8-55 KGF.CM

Working Angle	Static Storage Temperature	Dynamic Working Temperature	Body Material	Shaft Material	Oil
110°	-40°C - 110°C	-5°C - 50°C	PA66	PA66/ Zinc Alloy	Silicone Oil

PR-T099A-One way (Φ12mm)

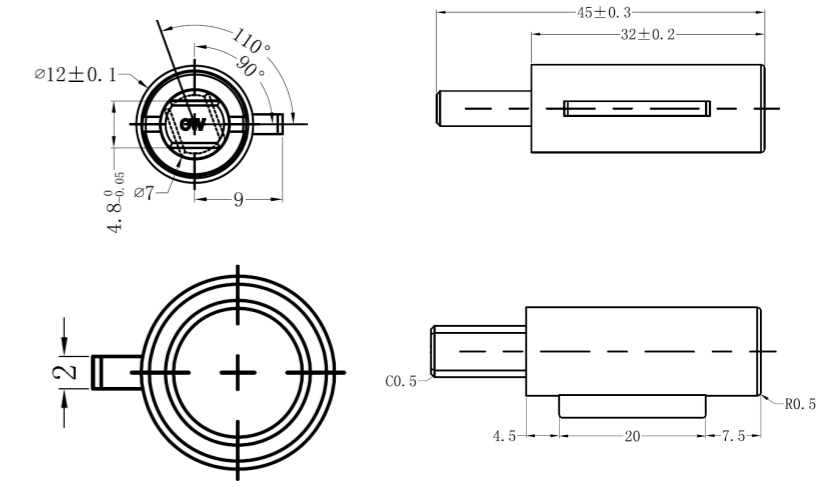


Torque

6-30 KGF.CM

Working Angle	Static Storage Temperature	Dynamic Working Temperature	Body Material	Shaft Material	Oil
110°	-40°C - 110°C	-20°C - 80°C	Zinc Alloy	Zinc Alloy	Silicone Oil

PR-T099C-One way (Φ12mm)



Torque

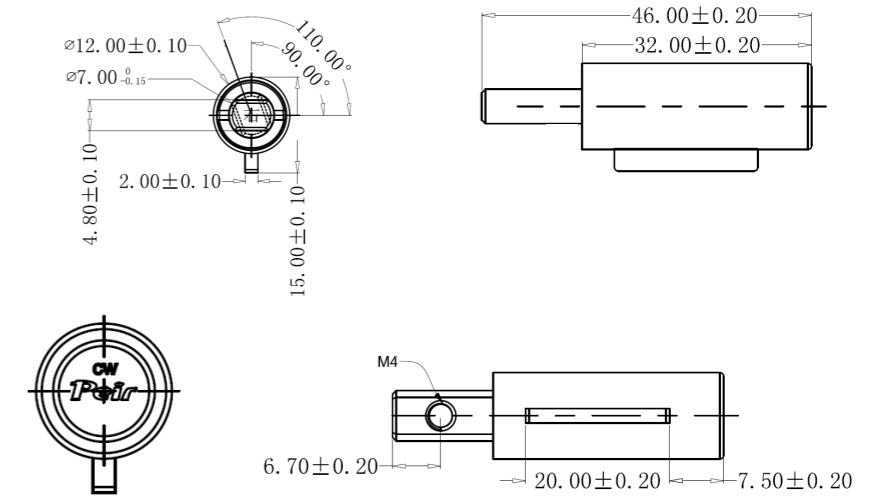
10-30 KGF.CM

Working Angle	Static Storage Temperature	Dynamic Working Temperature	Body Material	Shaft Material	Oil
110°	-40°C - 110°C	-20°C - 80°C	Zinc Alloy	Zinc Alloy	Silicone Oil

Remarks:

Compared with T099C, the shaft of T099A is shorter, 7mm in length; T099Q is based on C, only special with R angle on rib.

PR-T099E-One way (Φ12mm)



Torque

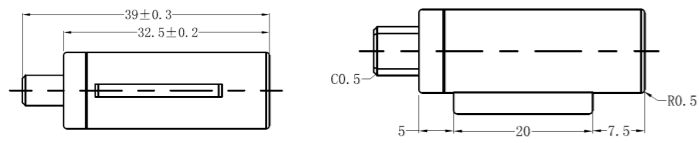
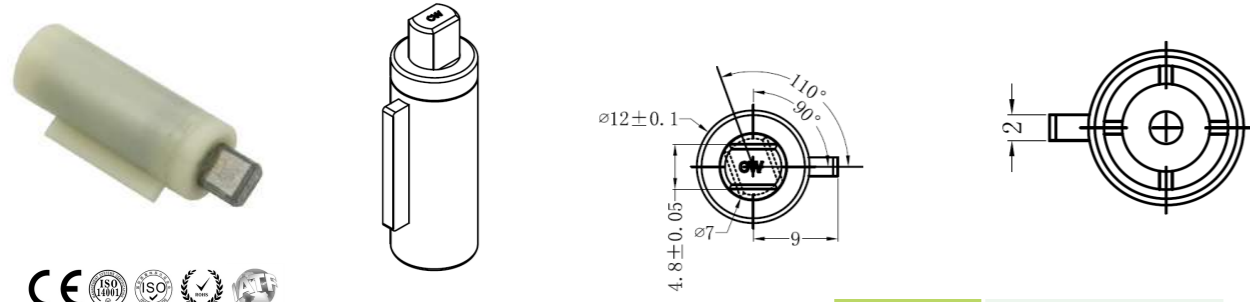
10-40 KGF.CM

Working Angle	Static Storage Temperature	Dynamic Working Temperature	Body Material	Shaft Material	Oil
110°	-40°C - 110°C	-20°C - 80°C	Zinc Alloy	Zinc Alloy	Silicone Oil

Remarks:

Compared with T099E, the shaft length of T099D is different, with size 12±0.2mm; T099N is different in working angle, 0-100°; T099R is different in the position of threaded hole.

PR-T099B-One way (Φ12mm)

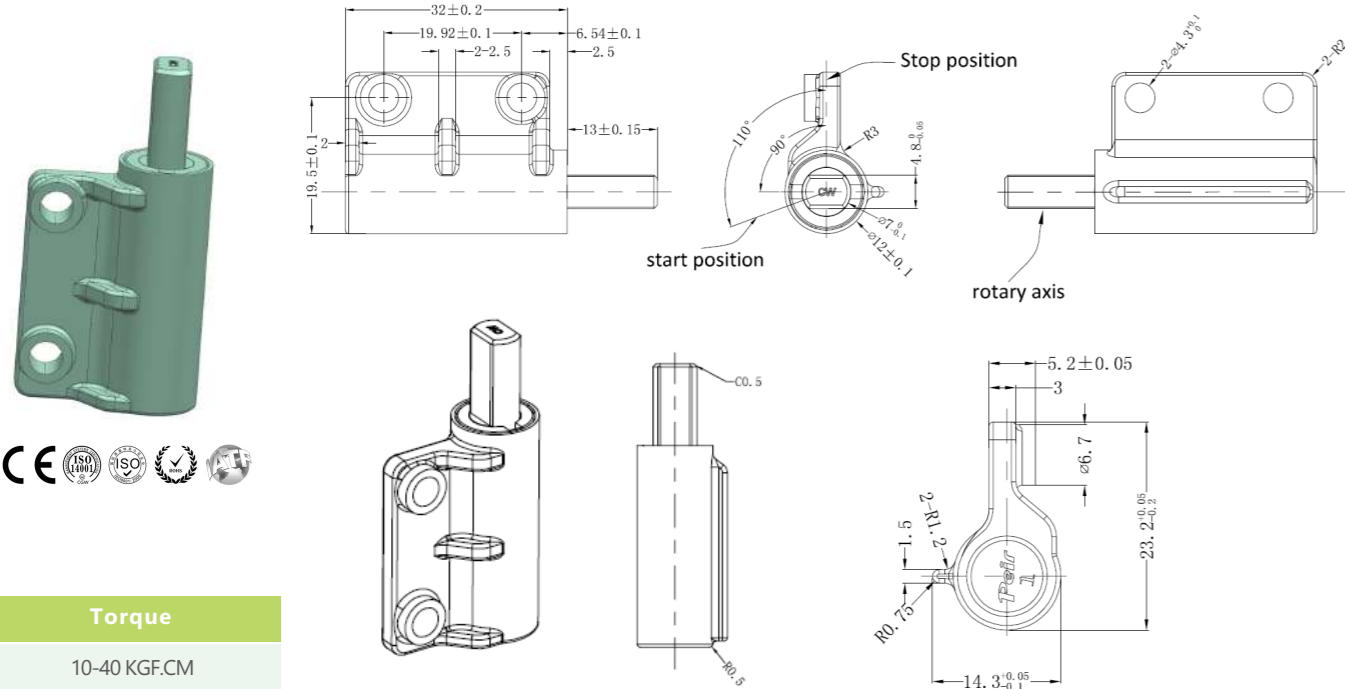


Torque	3-15KGF.CM
Working Angle	110°
Static Storage Temperature	-40°C - 110°C
Dynamic Working Temperature	-5°C - 50°C
Body Material	PA66
Shaft Material	Zinc Alloy
Oil	Silicone Oil

Remarks:

Compared with T099B, shaft length of T099X is 10mm, the torque is 3-20KGF.CM.

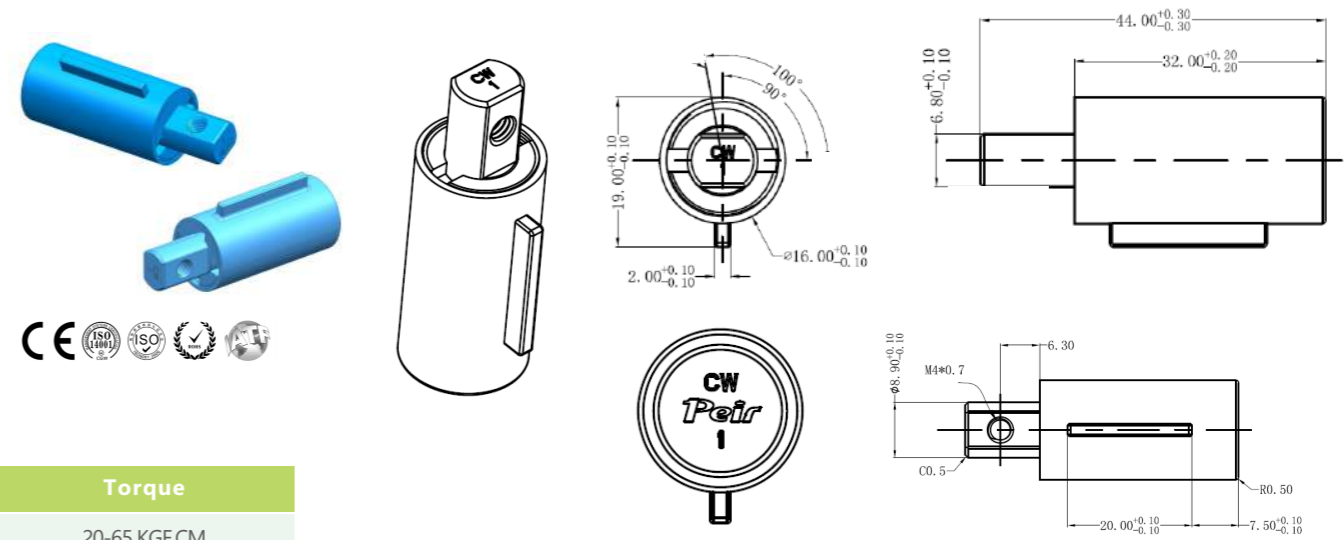
PR-T099W-One way (Φ12mm)



Torque	10-40 KGF.CM
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Working Angle	Static Storage Temperature	Dynamic Working Temperature	Body Material	Shaft Material	Oil
110°	-40°C - 110°C	-20°C - 80°C	Zinc Alloy	Zinc Alloy	Silicone Oil

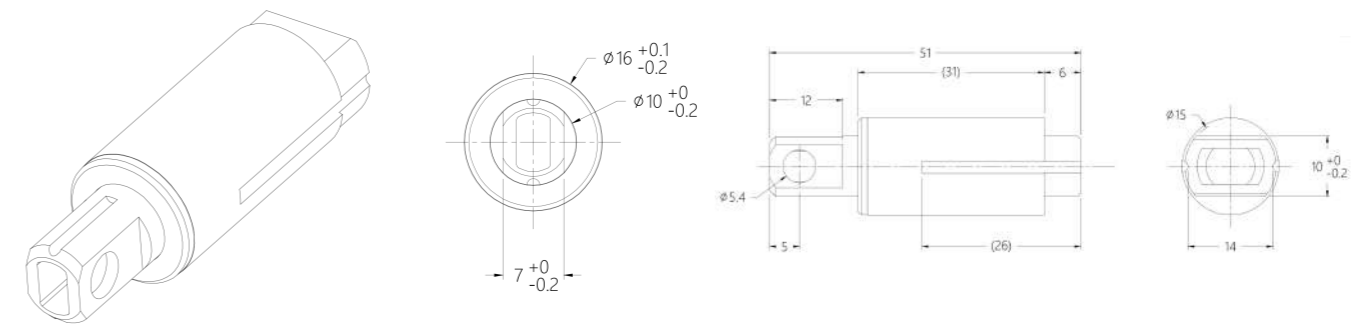
PR-T099M-One way (Φ16mm)



Torque	20-65 KGF.CM
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Working Angle	Static Storage Temperature	Dynamic Working Temperature	Body Material	Shaft Material	Oil
100°	-40°C - 110°C	-20°C - 80°C	Zinc Alloy	Zinc Alloy	Silicone Oil

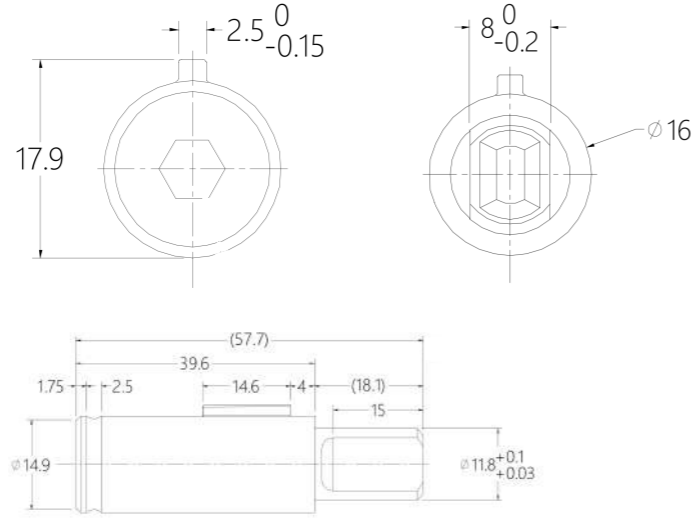
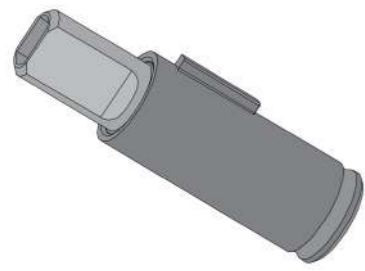
JP-DN16A-One way (Φ16mm)



Torque	10-25 KGF.CM
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Working Angle	Static Storage Temperature	Dynamic Working Temperature	Body Material	Shaft Material	Oil
110°	-20°C - 60°C	-5°C - 40°C	PBT	Zinc Alloy	Silicone Oil

JP-DN16E-One way (Φ16mm)



Torque

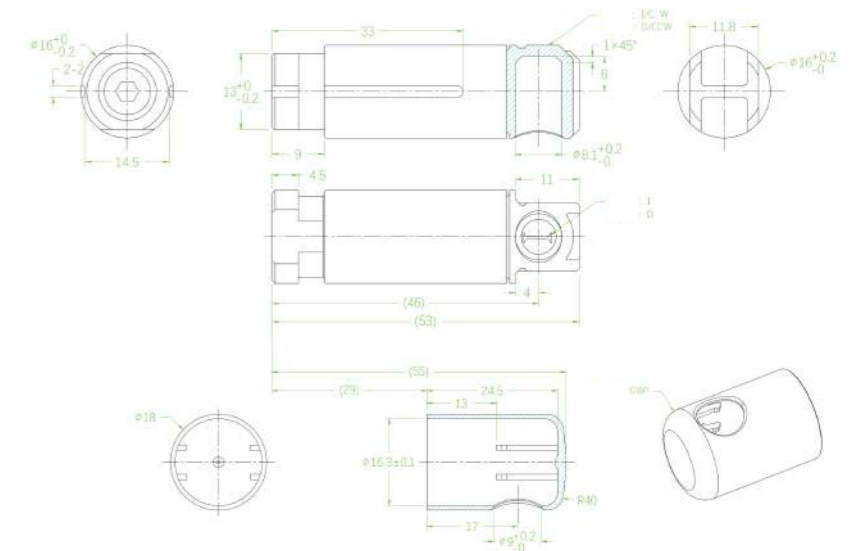
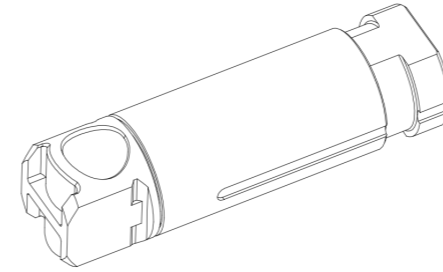
10-40 KGF.CM

Working Angle	Static Storage Temperature	Dynamic Working Temperature	Body Material	Shaft Material	Oil
110°	-20°C - 80°C	-10°C-50°C	Zinc Alloy	Zinc Alloy	Silicone Oil

Remarks:

Compared with DN16E, the wing of DN16F is 16mm and different place.

JP-DN16P-One way (Φ16mm)

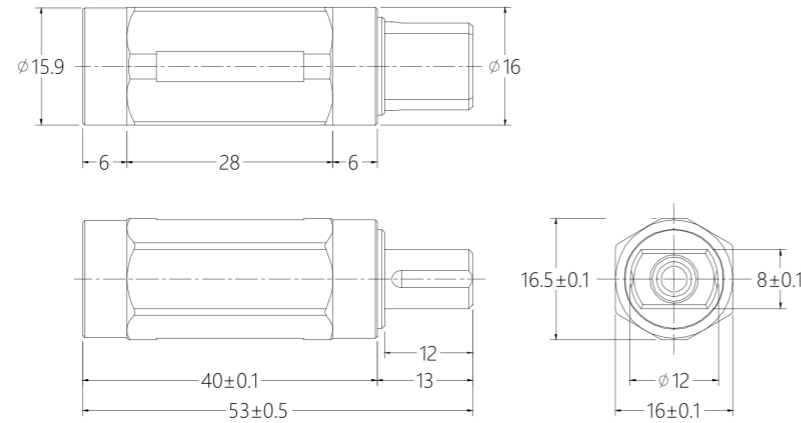
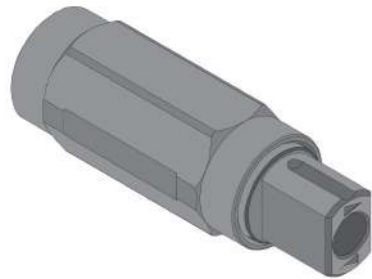


Torque

8-35 KGF.CM

Working Angle	Static Storage Temperature	Dynamic Working Temperature	Body Material	Shaft Material	Oil
110°	-20°C - 80°C	-10°C-50°C	Zinc Alloy	Zinc Alloy	Silicone Oil

JP-DP16A-One way (16*16.5mm)

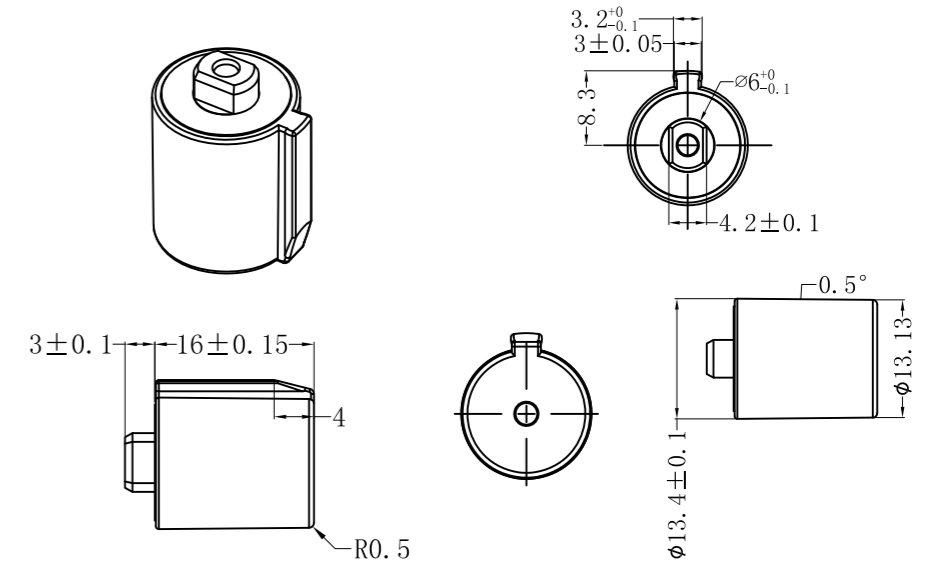
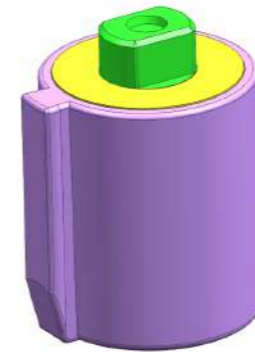


Torque

20-40 KGF.CM

Working Angle	Static Storage Temperature	Dynamic Working Temperature	Body Material	Shaft Material	Oil
200°	-20°C - 80°C	-10°C-50°C	Zinc Alloy	Zinc Alloy	Silicone Oil

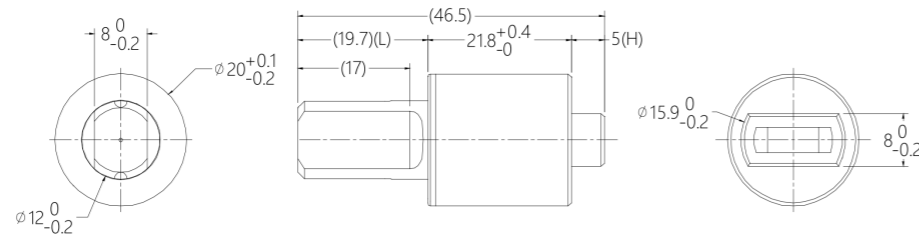
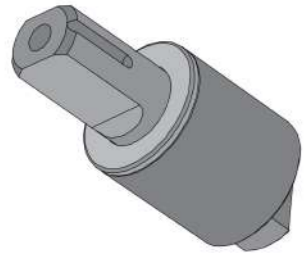
PR-T025-Two way (Φ13.4mm)



Torque 500-1500 GF.CM

Static Storage Temperature	Dynamic Working Temperature	Body Material	Shaft Material	Oil
-40°C-110°C	-5°C-50°C	PC	POM	Silicone Oil

JP-DN20A-One way (Φ20mm)

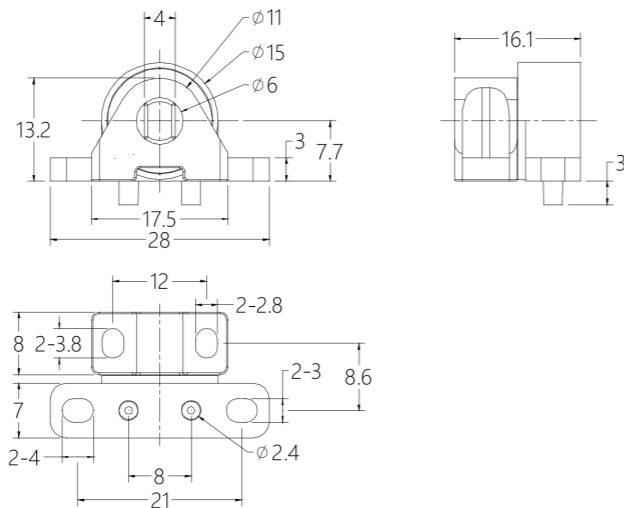
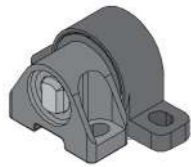


Torque
8-30 KGF.CM

Working Angle	Static Storage Temperature	Dynamic Working Temperature	Body Material	Shaft Material	Oil
110°	-20°C - 80°C	-10°C-50°C	PBT	PA	Silicone Oil

Remarks:
Compared with DN20E, the bottom length of DN20S is 3mm. DN20B has higher torque 20-40KGF.CM with zinc alloy shaft.

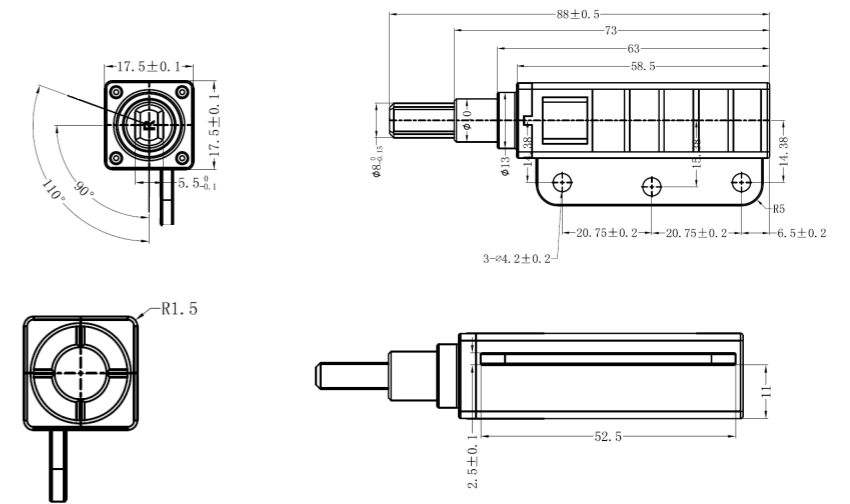
JP-DP15A-Two way (Φ15mm)



Torque
2-6 KGF.CM

Working Angle	Static Storage Temperature	Dynamic Working Temperature	Body Material	Shaft Material	Oil
100°	-20°C - 80°C	-10°C-50°C	PBT	PA	Silicone Oil

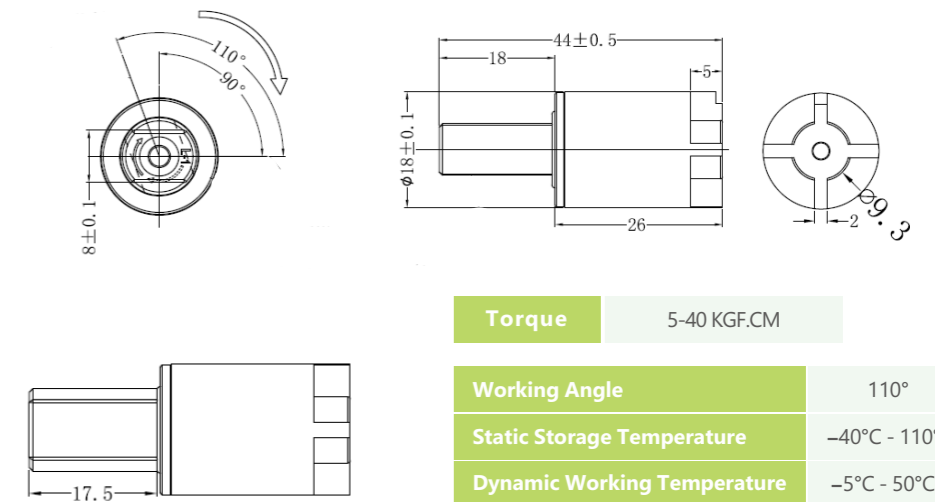
PR-T118D-One way (17.5*17.5mm)



Torque
10-50 KGF.CM

Working Angle	Static Storage Temperature	Dynamic Working Temperature	Body Material	Shaft Material	Oil
110°	-40°C - 110°C	-5°C - 50°C	PA66 - GF40	Zinc Alloy	Silicone Oil

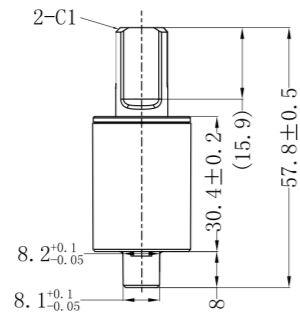
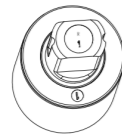
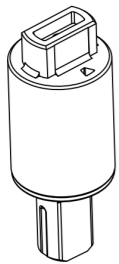
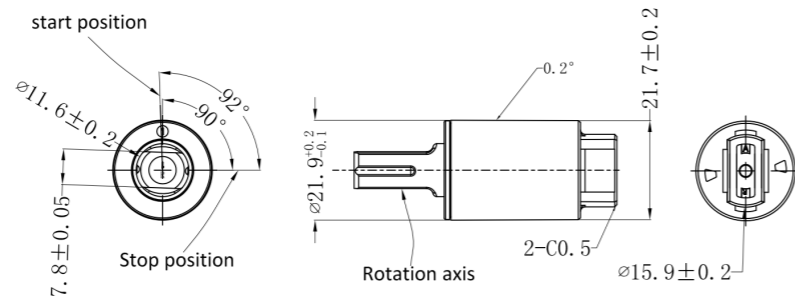
PR-T086A-One way (Φ18mm)



Torque
5-40 KGF.CM

Working Angle	Static Storage Temperature	Dynamic Working Temperature	Body Material	Shaft Material	Oil
110°	-40°C - 110°C	-5°C - 50°C	PBT	Zinc Alloy	Silicone Oil

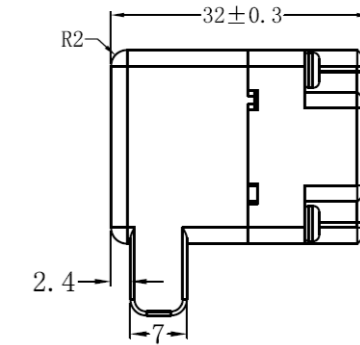
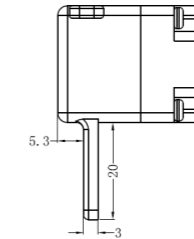
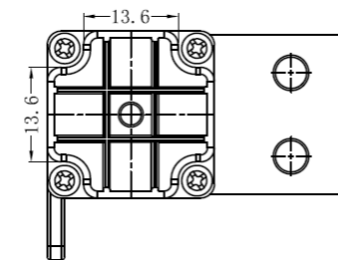
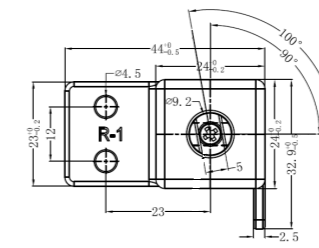
PR-T097A-One way ($\Phi 21.9\text{mm}$)



Torque 20-90 KGF.CM

Working Angle	92°
Static Storage Temperature	-40°C - 110°C
Dynamic Working Temperature	-5°C - 50°C
Body Material	PA66
Shaft Material	Zinc Alloy
Oil	Silicone Oil

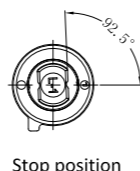
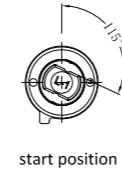
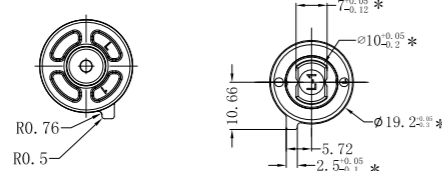
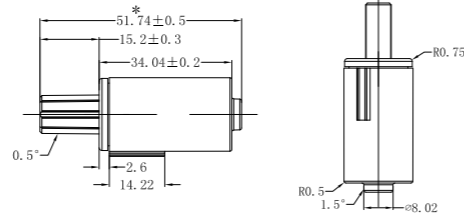
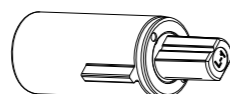
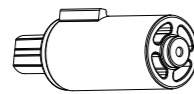
PR-T093A-One way (24*44mm)



Torque 10-25 KGF.CM

Working Angle	100°
Static Storage Temperature	-40°C - 110°C
Dynamic Working Temperature	-5°C - 50°C
Body Material	PA66
Shaft Material	PA66
Oil	Silicone Oil

PR-T083A-One way ($\Phi 19.2\text{mm}$)

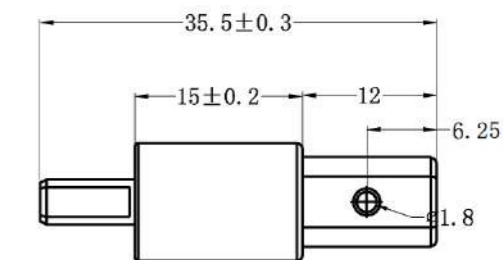
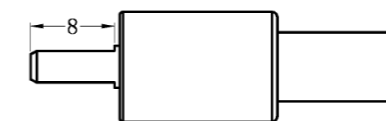
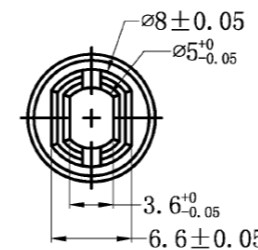
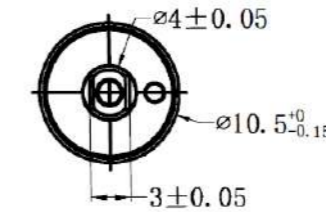


Torque

5-40 KGF.CM

Working Angle	Static Storage Temperature	Dynamic Working Temperature	Body Material	Shaft Material	Oil
115°	-40°C - 110°C	-5°C - 50°C	PA66-GF	Zinc Alloy	Silicone Oil

PR-T60-One way ($\Phi 10.5\text{mm}$)



Torque 60-300 GF.CM

Static Storage Temperature	-40°C - 110°C
Dynamic Working Temperature	-5°C - 50°C
Body Material	PC
Shaft Material	POM
Oil	Silicone Oil