

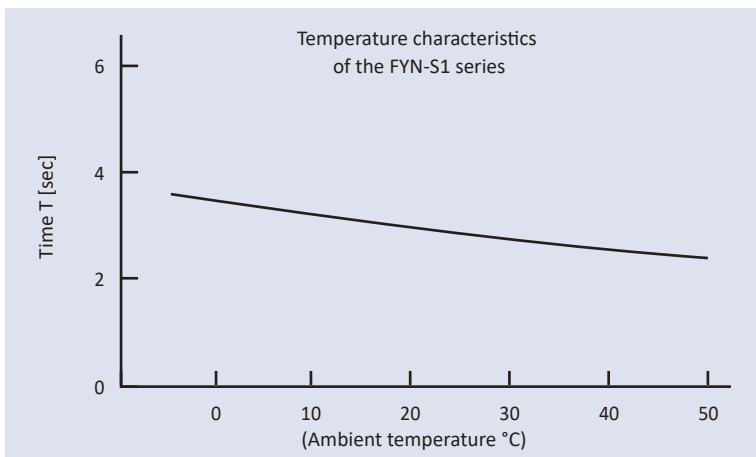


SPECIFICATIONS

Model	Max Torque	Reverse Torque	Damping Direction
FYN-S1-L104	10Nm (100kgfcm)	1.5Nm or lower (15kgfcm or lower)	Counter-clockwise

Max Angle	Operating Temperature	Weight	Body and Cap Material	Rotating Shaft Material	Oil Type
130°	-5 ~ 50°C	220±10g	Zinc die-cast (ZDC)	Polyacetal (POM)	Silicone Oil

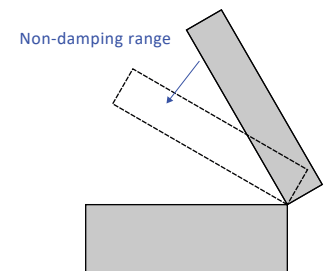
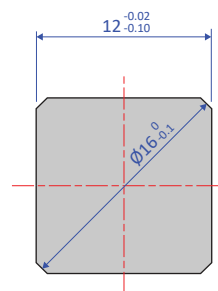
DAMPING CHARACTERISTICS



■ Damper characteristics vary according to the ambient temperature. In general, the damper characteristics become weaker as the temperature increases, and become stronger as the temperature decreases. This is because the viscosity of the oil inside the damper varies according to the temperature. When the temperature returns to normal, the damper characteristics will return to normal as well. The changes in the time it takes for the lid to close are shown in the graph to the left.

HOW TO USE THE DAMPER

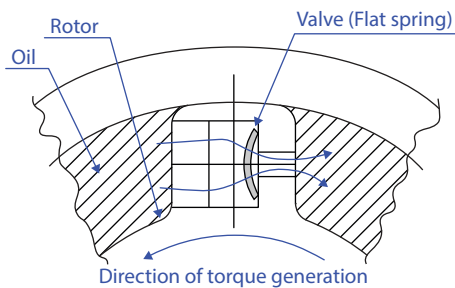
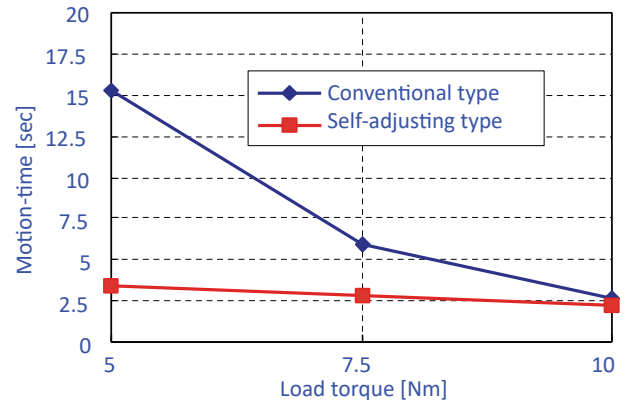
■ When using the damper, please ensure that a shaft with specified angular dimensions is inserted in the damper's shaft opening. Also, please ensure a tight fit between the shaft and the damper shaft's opening. Without a tight fit, the non-damping range becomes larger in a closing motion, etc. and it may not slow down properly. Please see the diagrams to the right for the recommended shaft dimensions for a damper.



HOW TO USE THE DAMPER

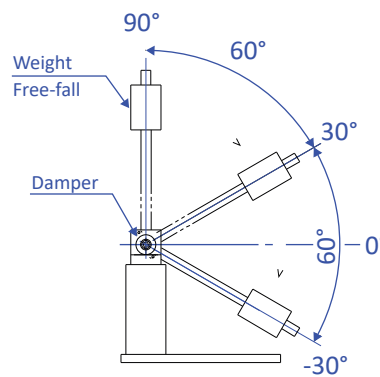
■ Operating characteristics of self-adjusting oil pressure dampers. In a conventional vane damper, the damping strength (damping constant) does not change regardless of the load torque used. Because of this, its working speed is slower when the load torque is small, and faster when the load torque is large. However, because the self-adjusting FYN-S1 series is designed to self-adjust the damping force (damping constant) according to the applied load, the working speed fluctuates less compared to conventional dampers when the applied load is altered. The acceptable range of torque is 5 ~ 10Nm. Please select your damper by referring to the motion-time graph below.

[Motion time graph]



[Operating principles of the self-adjusting type]

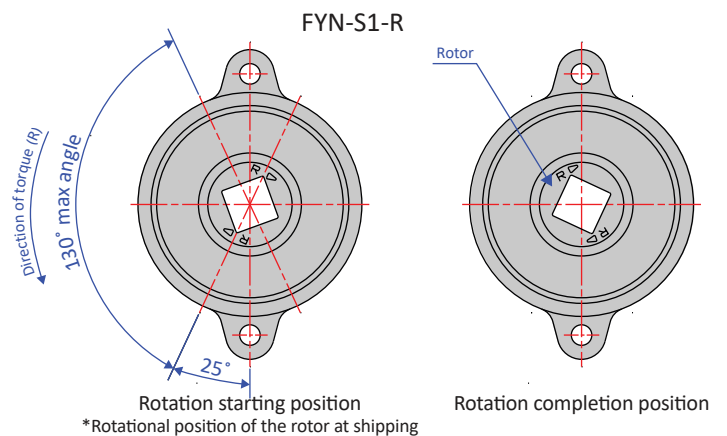
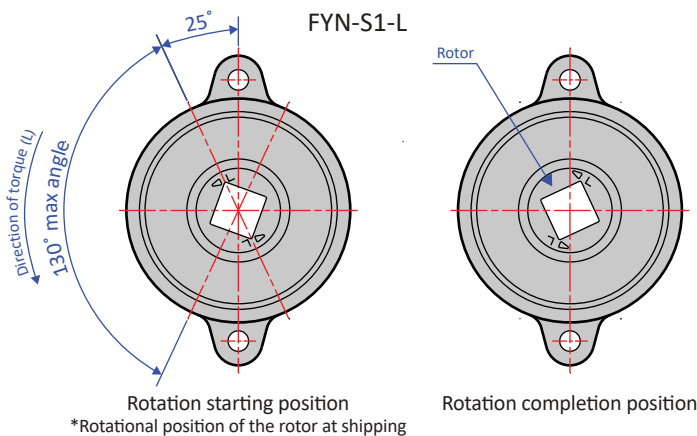
As shown in the diagram above, by changing the shape of the valve (flat spring), the amount of oil flow is altered, adjusting the damper's generated torque. (PAT.P)



[Measurement conditions for the motion-time graph]

- Load torque T 5~10Nm
- Measured angle 30°~-30°
- Measurement temp. 23°C±2°C

As the level of self-adjustment may vary depending on the range of the working angle of the actual work, please verify under actual working conditions before you select your damper.



■ Because the FYN-S1 series is a self-adjusting type, the torque cannot be adjusted manually. However, by altering the viscosity of the oil, its damper characteristics can be modified. (Please contact us, as this is a custom order.)

■ The direction in which torque is generated varies according to the model. Please select the appropriate model for your purposes.