



Soft Silent Safety

FYN-T1 Series

RoHS Compliant

Vane Damper [Uni-Directional]

Fixed

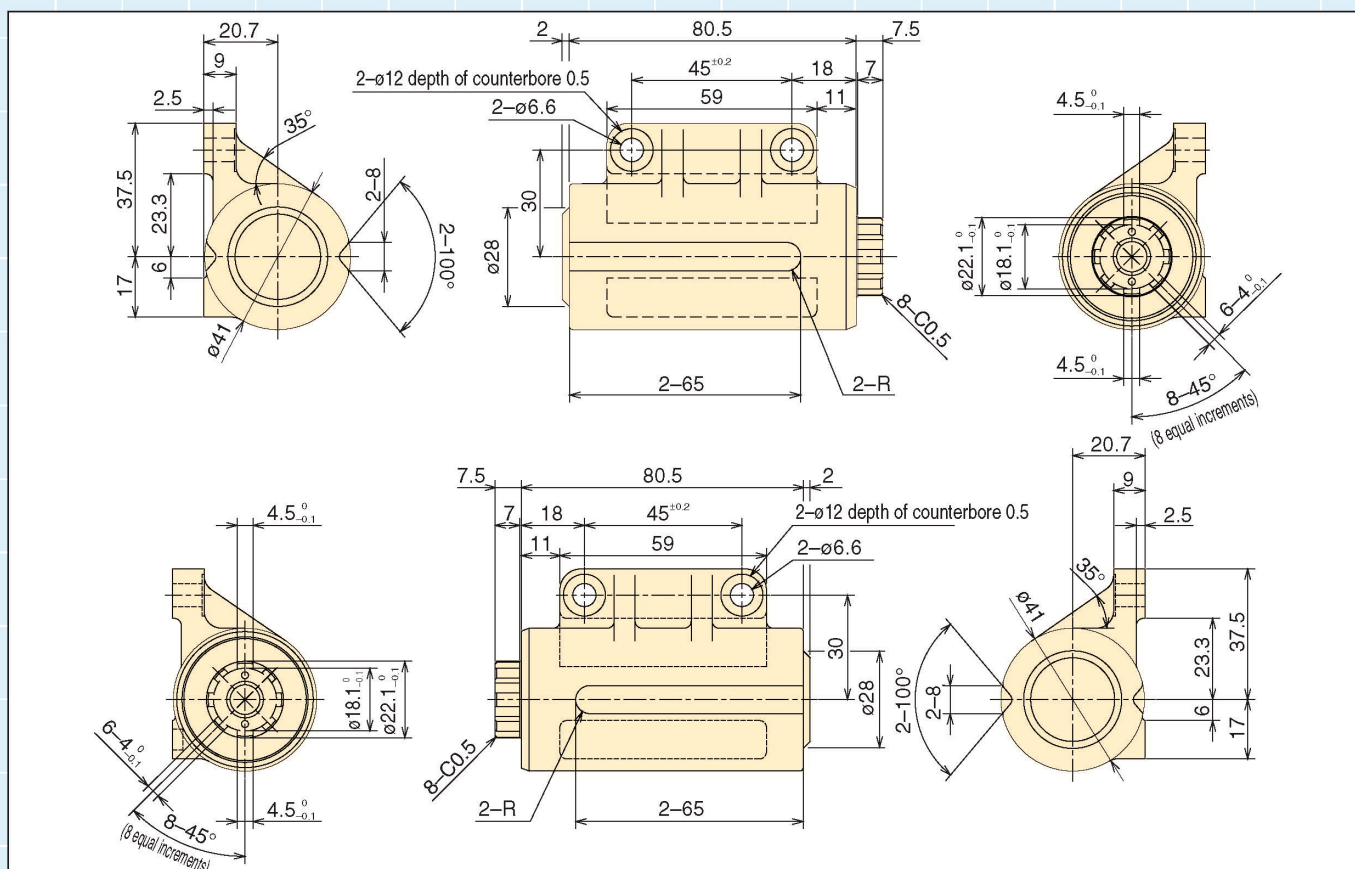


<Specifications>

Model	Max. torque	Reverse torque	Damping direction
FYN-T1-R604	60 N·m	3 N·m	Clockwise
FYN-T1-L604	(600kgf·cm)	(30kgf·cm)	Counter-clockwise

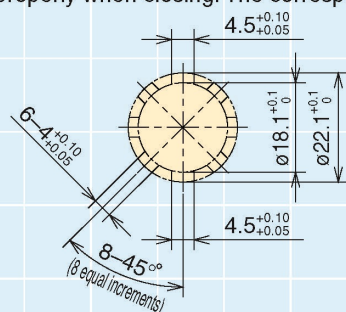
Note) Measured at 23°C±2°C

*Max. angle	110°
*Operating temperature	-5~50°C
*Weight	630±30g
*Material	Zinc die-cast (ZDC)
*Oil type	Silicone oil



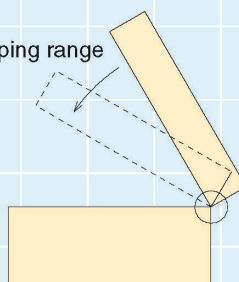
How to Use the Damper

1. When connecting the rotating shaft to the other parts, please ensure a tight fit between them. Without a tight fit, the lid will not slow down properly when closing. The corresponding dimensions for fixing the rotating shaft are as follows.



<Recommended dimensions for mounting a rotating shaft>

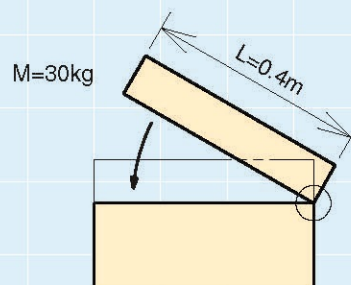
Non-damping range



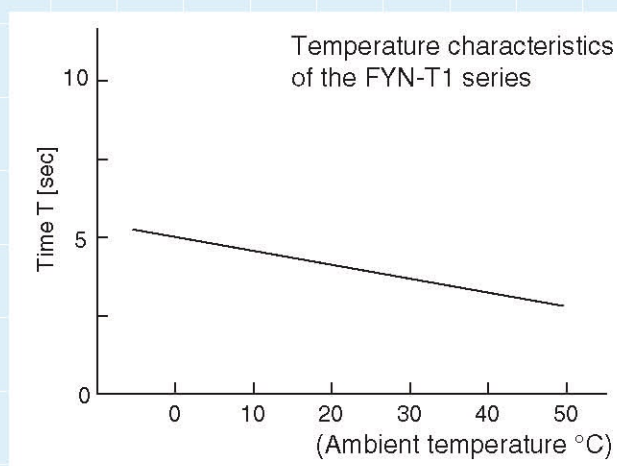
2. When using a damper on a lid, such as the one shown in the diagram, use the following selection calculation to determine the damper torque.

Example) Lid mass M : 30 kg
 Lid dimensions L : 0.4m
 Load torque : $T = 30 \times 0.4 \times 9.8 \div 2$
 $= 58.8 \text{ N}\cdot\text{m}$

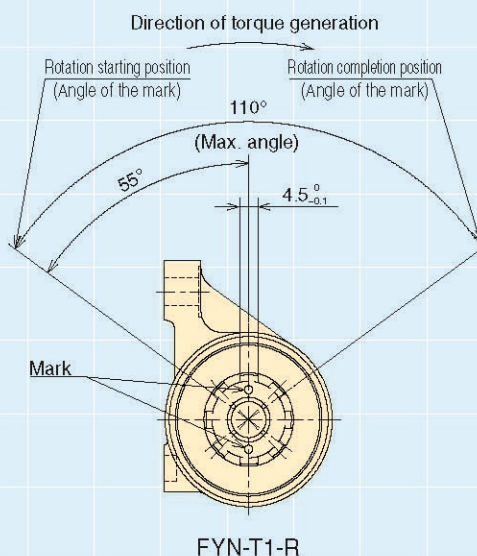
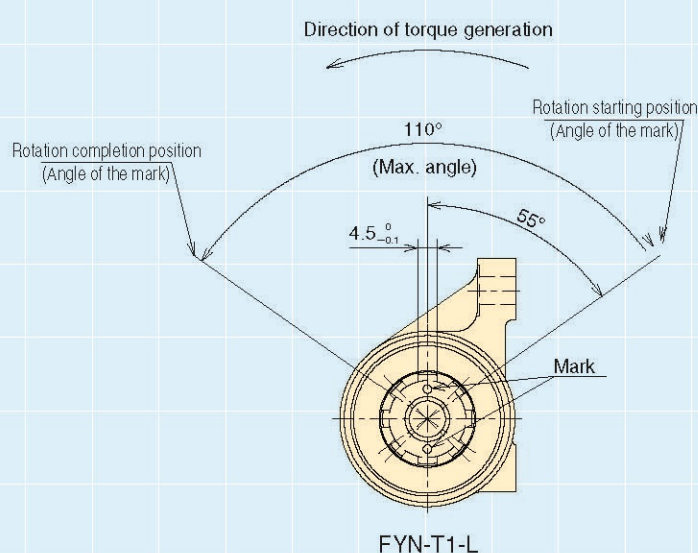
Based on the above calculation, FYN-T1-*604 is selected.



3. 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 surveyed time for the lid to close is shown in the graph to the right.



4. The damper's working angle is 110° , as shown below. Rotating the damper beyond this angle will cause damage to the damper. Please ensure that an external stopper is in place.



5. The direction in which torque is generated varies according to the model. Please select the appropriate model for your purpose.
6. The angular velocity in the reverse direction (opposite to the direction of torque generation) should be 1 rad/sec or less.