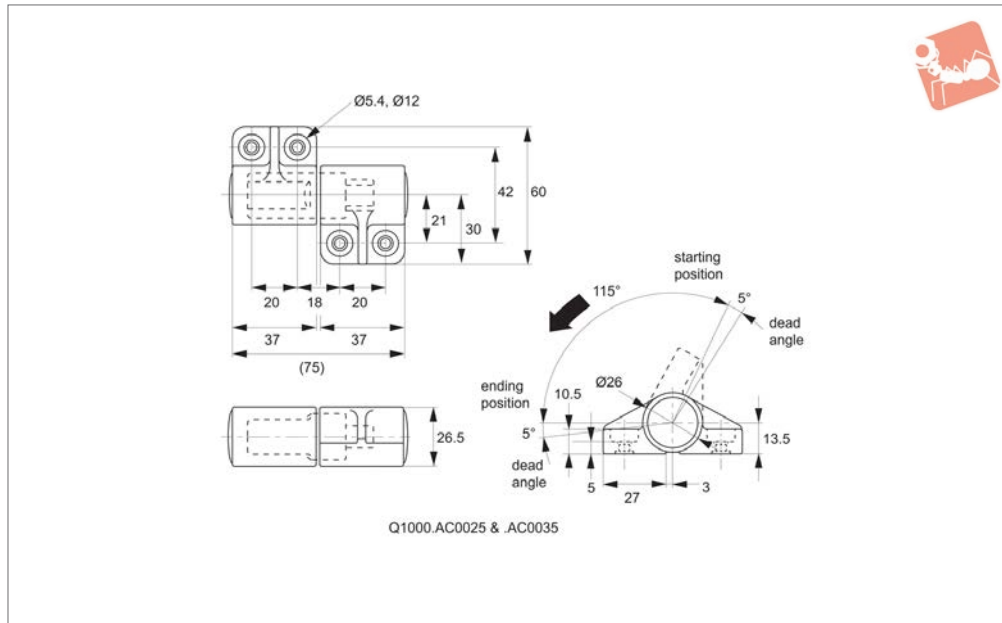




Soft Closing Hinge Set - Complete with torque dampers - 115° operating angle

Torque Dampers



Q1000

TORQUE DAMPERS

Material

Body: stainless steel, AISI 304.
Pin: PBT plastic. Bracket: PBT plastic with polypropylene cap.

Technical Notes

115° operating angle, additional 5° dead angle at start/end position.
Tested to over 100,000 cycles.

Temperature range -20° to 60°C.

Tips

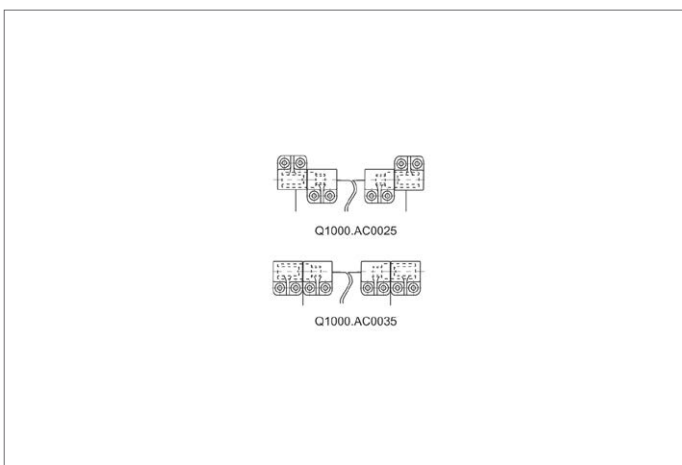
Provide smooth and quiet motion of lids, covers etc. Ideal for special purpose machines, air conditioning units etc. For further details of torque damper used in hinge refer to part Q0400. Sold as a matching pair (left/right).

Important Notes

Torque calculation:

$T \text{ (Kgf.cm)} = W \text{ (Kg)} \times 0.5 \times H \text{ (cm)}$.
W (Kg) is weight of cover/lid, H (cm) is distance between fulcrum and cover/lid's opening edge.

Order No.	Damping direction	Contains damper	Operating angle	Torque/pair kgf/cm
Q1000.AC0025	1 x Clockwise 1 x Anti-Clockwise	1 off Q0400.AC0010 & Q0400.AC0110	115°	30 - 50
Q1000.AC0035	1 x Clockwise 1 x Anti-Clockwise	1 off Q0400.AC0020 & Q0400.AC0120	115°	50 - 70





Wixroyd torque dampers offer controlled opening and closing of lids, drawers, covers and much more, they provide a wide range of solutions for a variety of applications creating smooth movement and function.

Though unnoticed in many applications, torque dampers are a vital part of many products bringing quality, safety and durability. Torque dampers provide quality movement enhancing both touch and feel.

Operating principle

Torque dampers utilise the movement of fluid forced from one chamber to another via a rotor. Dampening speed is dependent upon the viscosity of the fluid and the diameter of the fluid aperture.

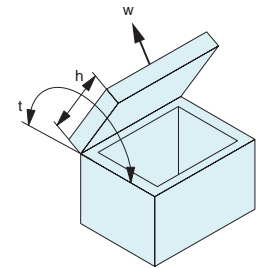
Torque calculation

To calculate the torque for your application, the following measurements are necessary.

$$t \text{ (torque)} = w \times 0.5 \times h$$

h = length from pivot point to end of lid (cm)

w = weight of the lid (Kg)



Torque force stated per product (see individual product pages), is the maximum torque to which the specified part can be exposed before the dampening force yields and hence dampening is overcome.

Table of torque dampers: Torque ranges

Part no.	Torque damper range	Torque Kgf.cm	Torque Kgf.cm														
			10	20	30	40	50	60	70	80	90	100	110	120	130	140	150
 Q0400	 Starting position (Dead angle) 5°, Ending position (Dead angle) 115°, 5°	15 - 35		█	█												
 Q0420	 Starting position (Dead angle) 5°, Ending position (Dead angle) 120°, 5°	10 - 25		█	█												
 Q0422	 Starting position (Dead angle) 5°, Ending position (Dead angle) 110°, 5°	10 - 35		█	█												
 Q0430	 Starting position (Dead angle) 5°, Ending position (Dead angle) 125°, 5°	20 - 30			█	█											
 Q0440	 Starting position (Dead angle) 5°, Ending position (Dead angle) 120°, 125°, 5°	8 - 25		█	█												
 Q0460	 Starting position (Dead angle) 5°, Ending position (Dead angle) 110°, 5°	10 - 18		█	█												
 Q0462	 Starting position (Dead angle) 5°, Ending position (Dead angle) 110°, 5°	10 - 30		█	█												
 Q1000	 Starting position (Dead angle) 5°, Ending position (Dead angle) 115°, 5°	30 - 70				█	█	█									
 Q1002	 Starting position (Dead angle) 5°, Ending position (Dead angle) 115°, 5°	60 - 140							█	█	█	█	█				
 Q1010	 Starting position (Dead angle) 5°, Ending position (Dead angle) 120°, 125°, 5°	30 - 50				█	█										
 Q1050	 Starting position (Dead angle) 5°, Ending position (Dead angle) 120°, 5°	20 - 50				█	█										
 Q1060	 Starting position (Dead angle) 5°, Ending position (Dead angle) 120°, 5°	61 - 81								█	█						