

# Rotary Dashpots

## ● Kinetrol rotary dashpots

Kinetrol rotary dashpots are precision fluid damping devices which give a smooth resistance to shaft rotation which increases with angular velocity. Two types of dashpot are available to suit a wide range of applications.

### ■ Vane dashpots

Vane dashpots give a restricted travel and high damping rate suitable for applications with reciprocating motions.

### ■ Continuous rotation dashpots

Continuous rotation dashpots give less damping rate but unlimited travel.

## ● Silicone Fluid (Polydimethyl Siloxane - DC200 or equivalent)

Silicone fluid is used as the damping medium because of its stable viscous properties. Dashpots are normally vacuum filled and sealed for life.

## ● Rigorous 100% inspection

Kinetrol's rigorous quality programme, approved to ISO 9001, ensures that each unit is manufactured to high standards. Every dashpot is tested to ensure that it gives the specified rate.



Certificate No. FM22163

## Vane Dashpots



### Angle of travel:

60°	(model KD)
215°	(model LA)
220°	(model LE)
220°	(model LX)
240°	(model LB)

### Maximum torque:

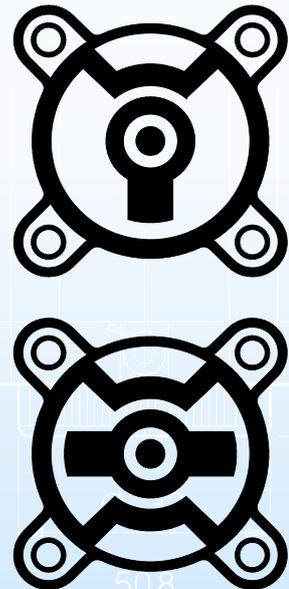
28 Nm	(model KD)
40 Nm	(model LA)
160 Nm	(model LB)
545 Nm	(model LE)
640 Nm	(model LX)
960 Nm	(model LH)

### Maximum rate:

450 Nm/rad/s	(model KD)
300 Nm/rad/s	(model LA)
400 Nm/rad/s	(model LB)
12000 Nm/rad/s	(model LE)
18000 Nm/rad/s	(model LX)
18000 Nm/rad/s	(model LH)

Adjustable versions available

The vane dashpot is a displacement damper. As the vane on the shaft rotates between fixed vanes on the body, silicone fluid is displaced through controlled clearances from one side of the vane to the other. Damping can be in both directions or valves can be fitted to give damping in one direction only. On the KD unit, shaft sealing is by a cylindrical rubber seal which is bonded both to the shaft and to the body to give a hermetic seal. All other vane dashpots use a lip seal.



## Continuous Rotation Dashpots



### Unlimited travel

### Maximum torque:

0.4 Nm	(model N-CRD)
1.5 Nm	(model Q-CRD)
6 Nm	(model X-CRD)
7 Nm	(model S-CRD)
45 Nm	(model T-CRD)

### Effective rate:

up to 20 Nm/rad/s (T-CRD)

Adjustable versions available

Continuous rotation dashpots give viscous damping by shearing thin layers of silicone fluid between the concentric surfaces of a rotor and a fixed stator. Damping is normally in both directions. The shaft is sealed with a lip seal. Damping is adjusted by varying the effective thickness of the sheared layer of fluid by moving the stator relative to the rotor.

