Eddy Current Damper

U R Rao Satellite Centre (URSC) of Indian Space Research Organisation (ISRO) has developed Eddy current Damper, a deployment rate control device. It is passive in nature and makes use of the resistive eddy currents developed when a nonmagnetic conductive disc rotates in a magnetic field. The damper employs a gear train to amplify the resistive torque generated. The damper is used to control the deployment rate of the solar array and bring down the latch up shock on the panels. The resistive torque developed is proportional to the rate of rotation of the disc and hence rate of deployment of the panels is self-regulating.

Salient Features

- Very high damping rate.
- Wide temperature range.
- Non contact type and good reliability.
- Good temperature stability.

Major Specifications

Salient Damper Specifications	
Damping Rate	0.9, 2.2, 2.8 kgf-cm/rad/s
Mass	0.5 kg
Magnet Type	Samarium cobalt
Gear type	Spur gear / Planetary

Technology Transfer

URSC-ISRO offers to transfer this technology of Eddy current Damper developed by URSC to industries in India with adequate experience and facilities. Industries interested in obtaining know how may write giving details of their present activities, infrastructure and facilities.

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