# ENIDINE Innovations

## New Rotary Rate Control Products from Enidine

## *Rotary Viscous Damper (RVD) for Precision Rotary Control*



### *Features and Benefits*

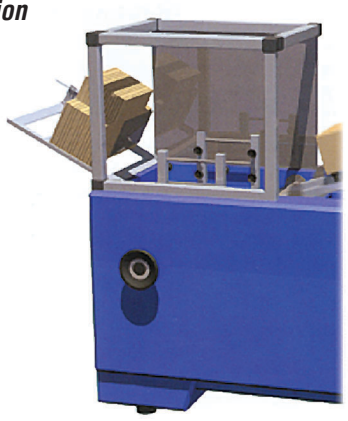
- Safely and quietly controls rotary motion
- Low initial breakaway friction for precision torque control
- Provides consistent speed control through 360° of rotation, in both directions
- Compact, shaft-ready mounting design includes anti-rotation keyway
- Controls linear motion through simple mechanical integration
- Wide range of ambient operating conditions – indoor or outdoor, -20°F to +200°F (-30°C to +95°C)
- Customer-specified performance through 3 – 40 in-lbs. (0.4 – 4.5 Nm.) of Torque per unit
- Maintenance-free – no adjustments required

### RVD expands our rotary motion control capabilities

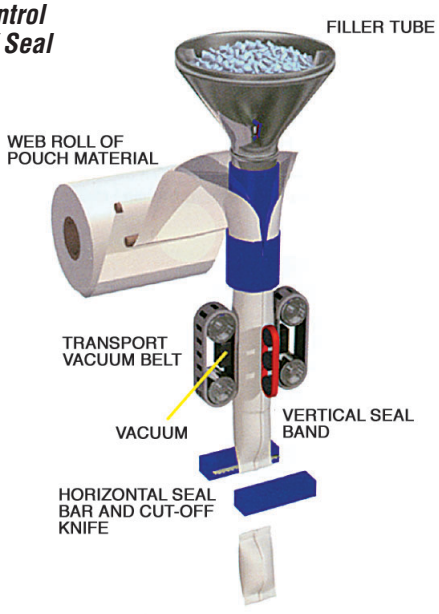
Rotary Viscous Dampers provide smooth control in applications that require continuous or intermittent positioning, forward, reverse and fixed path motion. The RVD design combines low breakout friction with viscous damping to control bi-directional rotary motion in numerous applications.

Each RVD contains a solid, rotating element called a "rotor". This rotor is surrounded by a thin film of silicone fluid and sealed inside a stationary housing. The RVD's rotor provides resistance by shearing the silicone fluid, controlling the desired motion.

***RVD Application***
***Tilt Damper***
***Case Erector***



***RVD Application***
***Roll Feed Control***
***Vertical Fill / Seal***



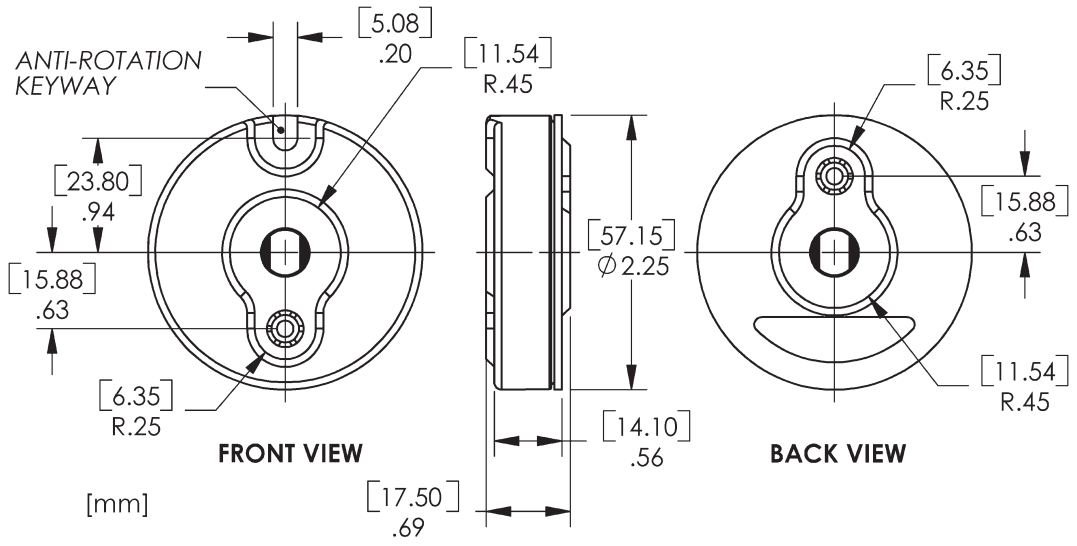

### *Common Applications*

- OEM Office Machines – Rollers, lids and platens
- Conveying – Rollers, buckets and diverting arms
- Tilt Damping – Door hinges and access panels
- Roll Feed Control – Smooth web tension control
- Amusement industry – Safety cages and machine guards
- Pneumatic turn table speed control
- Mechanical Control – Levers, knobs, hand cranks, foot pedals along with cams, springs and linkages

MAGRAL®
HIDRÁULICA E PNEUMÁTICA
www.magral.com.br - 11 6121-7202

ENIDINE
An IMC Company

# Dimensional Data




# Ordering Information

**Specify Model Number (example: RVD-010 _ )**

**RVD –** ___ ___ ___ ___

**001**
**005**
**010**
**030**
**060**
**100**
**300**
**600**

**Specify Required Fluid Viscosity x '000**

**"__"** Imperial
3/8" dia. with 1/4" flats

**"M"** Metric
9.2 mm dia. with 6.2 mm flats

**Specify Required Shaft Size**

# Description

**Material:** Housing – High impact strength Noryl® (modified phenylene oxide) resins
Rotor–Steel

**Weight:** 3.5 oz. (0.1 kg.)

**Damping Medium:** Silicone Fluid available in: 1K, 5K, 10K, 30K, 60K 100K, 300K, 600K cSt.

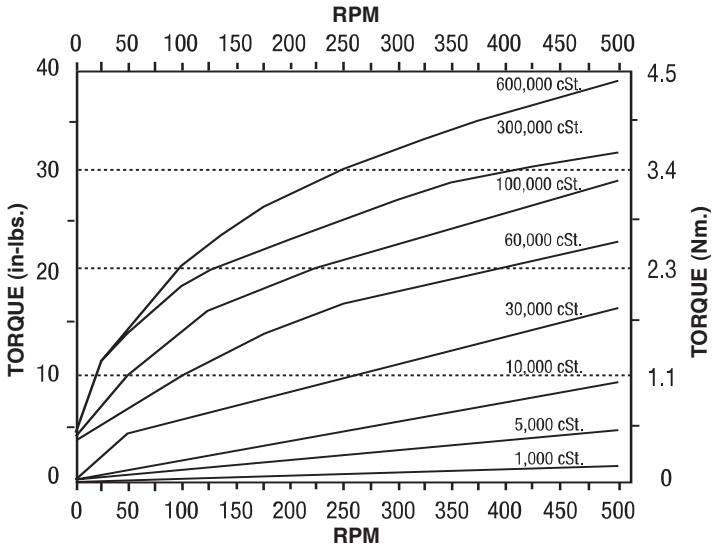
# Performance Characterisitics

**Breakaway Torque Requirements:**
3.0 in-lbs. (0.4 Nm.) for fluids 1K, 5K, 10K, 30K (cSt.)
4.5 in-lbs. (0.5 Nm.) for fluids 60K, 100K, 300K (cSt.)
6.0 in-lbs. (0.8 Nm.) for fluids 600K (cSt.)

**Dynamic Torque:** Refer to Selection Guide. (Torque values +/- 10%)

**Operating Temperature:** -20°F to +200°F (-30°C to +95°C)

**TORQUE BASED SELECTION GUIDE FOR VARIOUS SILICONE VISCOSITIES (cSt.)**





**World Headquarters**
**Enidine Incorporated**
7 Centre Drive
Orchard Park, New York 14127 • USA
Tel: +1 716 662-1900
Fax: +1 716 662-1909
Hotline: 1-800-852-8508
techsales@enidine.com
www.enidine.com

**Subsidiaries & Affiliates**
**Enidine West**
184 Technology Drive
Suite 201
Irvine, California 92618 • USA
Tel: +1 949 727 9112
Fax: +1 949 727 9107
techsales@enidine.com
www.enidine.com

**Enidine U.K.**
Patrick Gregory Road
Wolverhampton, West Midlands
WV11 3DZ • United Kingdom
Tel: +44 1902 304000
Fax: +44 1902 305676
sales@enidine.co.uk
www.enidine.co.uk

**Enidine GmbH**
Rheinauenstr, 5
79415 Bad Bellingen
Rheinweiler • Germany
Tel: +49 7635 8101-0
Fax: +49 7635 8101 99
info@enidine.de
www.enidine.de

**Enidine Co., Ltd.**
398 Chigasaki-Cho, Tsuzuki-Ku
Yokohama-Shi, Kanagawa
224-0031 • Japan
Tel: +81-45 947 1671
Fax: +81-45 947 3967
www.enidine.co.jp



MAGRAL® HIDRÁULICA E PNEUMÁTICA
www.magral.com.br - 11 6121-7202
ENIDINE An IMC Company