

ENIDINE Innovations

New Rotary Rate Control Products from Enidine Viscous Speed Governor (VSG) for Heavy-Duty Rotary Control



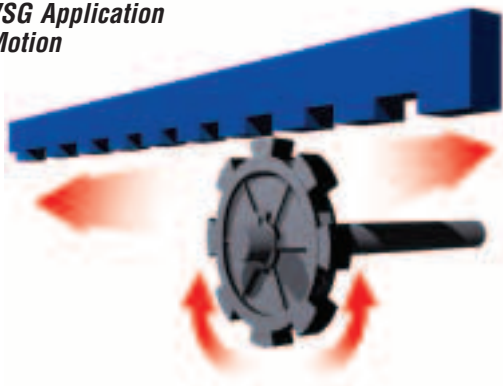
VSG leads the expansion of our core product offering

The VSG's simple, lightweight rugged construction provides reliable performance for numerous industrial applications. The VSG controls rotation of shafts and hinged loads by using silicone-based viscous shearing technology. An inner rotor is surrounded by silicone fluid within the stationary housing. As the shaft rotates, the inner rotor shears the silicone fluid providing resistance and smooth motion. Fluid viscosity of each VSG is selected after considering variables such as the components size, weight, spring assist and desired cycle time.

Common Applications

- Overhead and rolling steel fire doors, grilles, and shutters
- Conveying - braking of free conveyor rollers and ramps
- Material Handling - hoist integration, free-fall load protection
- Steering Control - resistance offers over-steering protection
- Amusement Industry - limiting sway and range of motion
- Industrial Safety - controlling shaft or hinged loads
- Marine Applications - 100% high-tech, non metallic construction

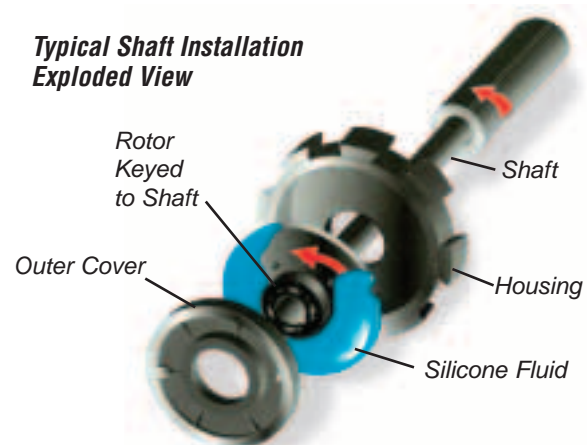
Typical VSG Application Lateral Motion



Features and Benefits

- Safely and quietly controls rotary motion
- Provides consistent speed control through 360° of rotation, in both directions
- Handles linear motion via simple rack and pinion integration
- Industry standard shaft and keyway mounting configurations
- Wide range of ambient operating conditions - indoor or outdoor, -40° F to +200° F (-40° C to +95° C)
- Customer-specified performance over a wide range of operating RPM
- Maintenance-free - no adjustments required

Typical Shaft Installation Exploded View



Ideally suited for the Rolling Overhead and Fire Door Control

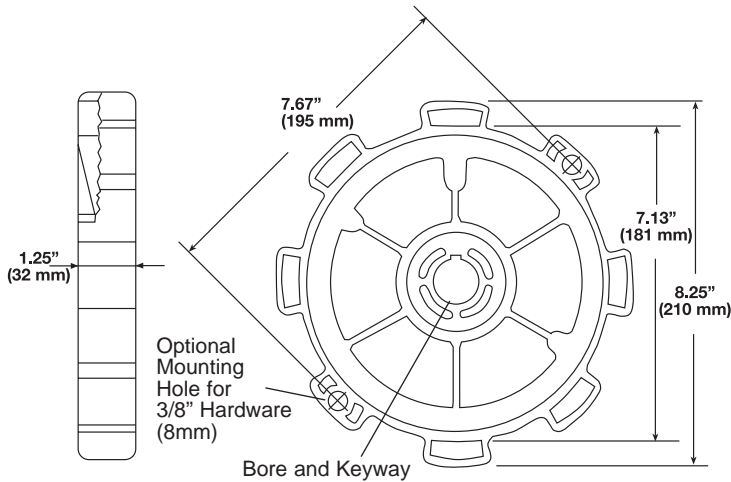
In new and retrofit applications, a single VSG can be installed on rolling doors by simply mounting to the keyed door shaft per the original door manufacturer's instructions. Unlike noisy ratcheting devices, the VSG requires no adjustments during installation or while in-service and can control the closing and opening speed of most large doors. Multiple governors can be used to handle over-sized doors.

Currently in use by most major door manufacturers, the patented VSG meets industry standards outlined by Underwriters Laboratory, Warnock Hersey and Factory Mutual. It has passed the 3-hour fire door burn test and conforms to numerous industry standards.

ENIDINE

An IMC Company

Dimensional Data



Ordering Information

Specify Part Number
(example: **A715477-005**)

715477-
Base

A = 1" x 1/4"
C = 1-1/4" x 1/4"
E = 1-1/4" x 3/8"
F = 1-1/2" x 3/8"
M = Ø32mm x 10mm

005
010
030
060
100
300
600

Specify Required
Shaft-Bore x Keyway

Specify Required
Fluid Viscosity x '000

Performance Characteristics

Breakaway Torque Requirements:

35 in-lbs. (4 Nm.) for fluids 1K, 5K, 10K (cSt.)
50 in-lbs. (5.6 Nm.) for fluids 30K and 60K (cSt.)
70 in-lbs. (8 Nm.) for fluids 100K+ (cSt.)

Dynamic Torque: Refer to Selection Guides Below.
(Torque values +/- 10%)

Operating Temperature: -40° F to +200° F
(-40° C to +95° C)

Listings/Labels:



CLASSIFIED



CLASSIFIED



Warnock Hersey
LISTED

Description

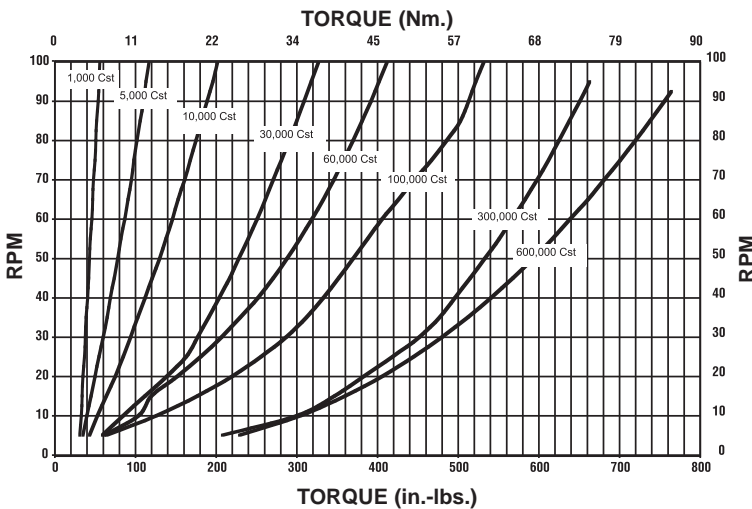
Material: High Performance
Polymer Composite

Weight: 2.0 lbs. (1.0 Kg.)

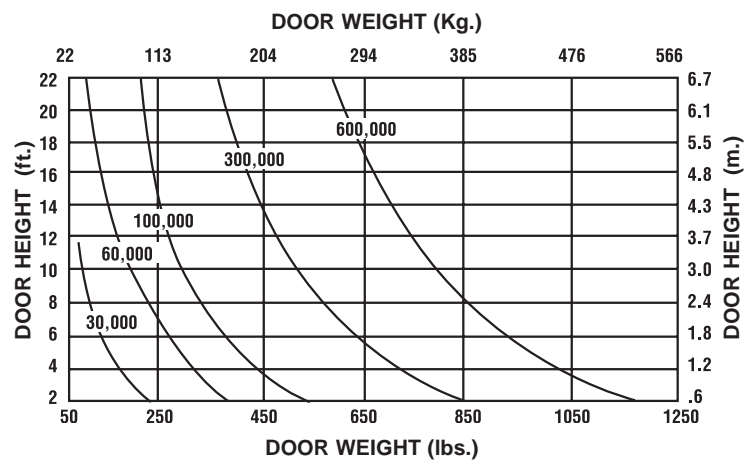
Damping Medium: Silicone Fluid available in:
1K, 5K, 10K, 30K, 60K
100K, 300K, 600K cSt.

OEM Application: Govern Descent of
Rolling Steel Fire Doors

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



QUICK SELECTION GUIDE FOR ROLLING STEEL DOOR WITH SPRING KICK SILICONE VISCOSITY (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