

Viscous Speed Governors (VSG)



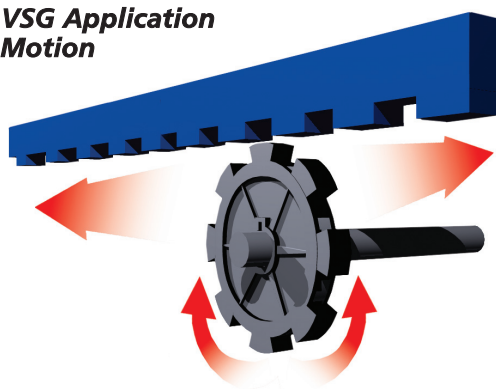
VSG leads the expansion of our core product offering

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

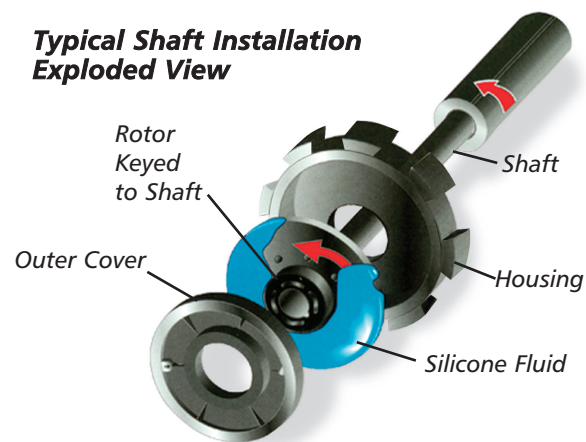
Typical VSG Application Lateral Motion



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.

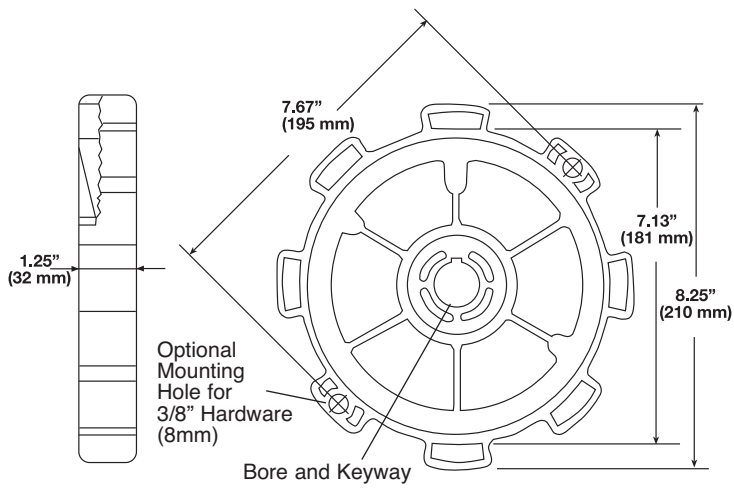
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ITT Enidine Inc. | 7 Centre Drive | Orchard Park, NY 14127, USA
 Tel.: 1 (716) 662-1900 | Fax: 1 (716) 662-1909
 www.enidine.com | www.itt.com

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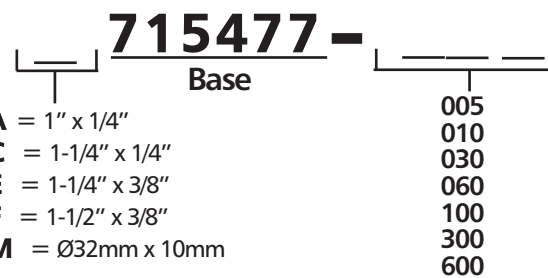


Dimensional Data



Ordering Information

Specify Part Number
(example: A715477-005)



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:



Description

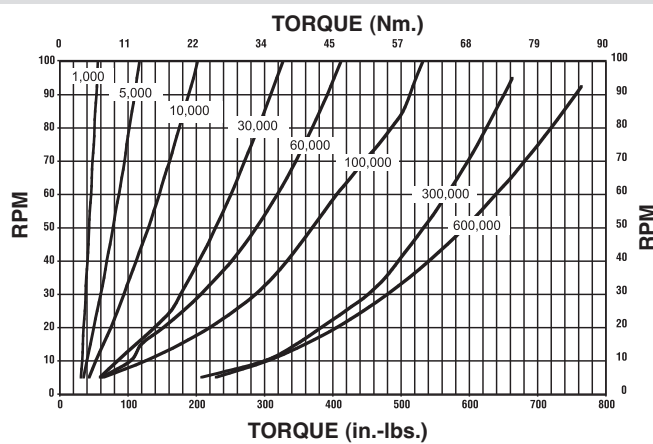
Material: High Performance Polymer Composite

Weight: 2.0 lbs. (1.0 Kg.)

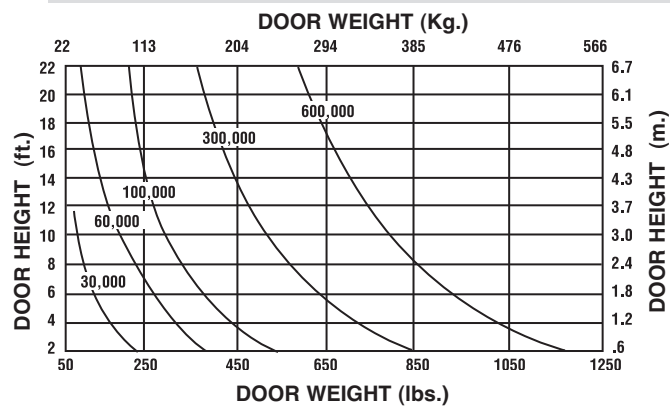
Damping Medium: Silicone Fluid available in:
1K, 5K, 10K, 30K, 60K, 100K, 300K, 600K cSt.

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.)



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